

The Domain of Language

Michael Fortescue

The Domain of Language
e-Book

Museum Tusulanum Press
University of Copenhagen
2002

[e-book – 2004]

Michael Fortescue: The Domain of Language; e-book

© Museum Tusulanum Press 2004

Drawings by Henrik Maribo

Composition by Ole Klitgaard

Set in Janson Text

ISBN 87 635 0213 5

Unchanged version in pdf-format of the printed book:

Michael Fortescue: The Domain of Language

© Museum Tusulanum Press 2002

Front cover by Bjørn Skaarup

Drawings by Henrik Maribo

Composition by Ole Klitgaard

Set in Janson Text

Printed in Denmark by AKA Print, Aarhus

ISBN 87 7289 706 6

For copyright permissions see Acknowledgements, p.391.

Published with support from:

The Faculty for the Humanities, University of Copenhagen

Københavns Universitets Almene Fond

The Danish Research Council for the Humanities

Museum Tusulanum Press

University of Copenhagen

Njalsgade92

DK-2300 Copenhagen S

www.mtp.dk

Contents

Preface (post hoc) 7

1. The back way in 9
2. Semiotics at gunpoint 13
3. Plumbing the depths: from phonetics to phonology 26
4. The library: where words gather 39
5. Of syntax and thumb-tacks 52
6. Feeling the way forward1 67
7. Sentenced (almost) to death: an introduction to pragmatics 88
8. A discourse concerning the family archives 102
9. Nursery talk 126
10. The kitchens: where William is witness to a right old morphophonological stew 147
11. In a manner of speaking... 170
12. Back to the apes 183
13. Birds of a feather 196
14. The historical propagation of language 209
15. Language in the wild: a forest walk 228
16. Linguistics through the ages 244
17. Pull-ups and put-downs: how to transform your life by hopping on bars 270
18. A matter of phrasing 291
19. Events come to life 304
20. The inner sanctum 329
21. The way back 349

Questions that might be asked 375

Acknowledgements 391

Preface (post hoc)

This book is intended as counter-evidence to the perception (one widespread these days) of Linguistics as the domain of dusty schoolroom grammar, where proponents of one theoretical orientation or the other spend their brief breaks in the playground bashing the other lot over the head with their favourite abstractions. The discipline may appear to outsiders as fragmented and – worse still – lacking in relevance to the real world outside its gates. I hope to show that Linguistics, in all its varied branches, can be entertaining as well as thought-provoking, and that its domain is indeed a coherent one despite all the internecine squabbling. By introducing the subject in an unconventional way – as a kind of fable (one with a historical moral even) – I hope to make the reader think for his or herself (or is that ‘him or herself?’). The usual references to the scientific literature are lacking, and exemplification of all points is made with the help of the substance of the text itself. Obviously, the book – if used pedagogically – will have to be supplemented by a standard introductory work (such as O’Grady, Dobrovolsky and Katamba’s excellent “Contemporary Linguistics”) where such information is supplied. Questions are nevertheless provided for each section which the reader, ideally, should solve before proceeding further (they are gathered at the end of the book). There is also a good deal of nonsense and irreverent (if not irrelevant) word play that needs to be cut away from the story for the core to become apparent. But this is true of the discipline itself! Distinguishing what is permanently won territory from the fluctuating gains and losses at the theoretical periphery is not an easy task for the newcomer. Best not to take anything for granted – and to form your own opinion.

1. The back way in

It looked for a moment as if a large floppy tongue was jammed at a painful angle into the space between the upright of the old arched gate and the high stone wall and was wriggling desperately to escape. But then one saw the spindly legs kicking out spasmodically below the near end of the object and heard the shouts of the two men, one on each side of the gateway, and realized that it was in fact a rolled up carpet, now partly unrolled, that they were trying to get through the gap that way. On closer inspection it became clear that the gate – closed by a rusty padlock – had long been in disuse, although its filagree metalwork, incorporating two identically plumed coats of arms, was still impressive. Less so was the state of the wall itself, partially hidden at the base by weeds and covered by straggles of ivy that had worked their way between the stones and loosened the mortar, causing the upper part next to the gate to crumble right away and leave a narrow fissure. It was through this that the two men had apparently tried to force their load after ascertaining that the way was otherwise barred. The words on the side of the van that was parked at the edge of the lane flanking the wall provided a clue as to the nature of their strange behaviour:

William Horricks & son, Carpet-fitters and (Re)Upholsterers

The two dangling feet dropped to the ground, quickly followed by a cloth cap; between the two came the assumed referent of the elder of the eponyms on the side of the van, clad in overalls. He stood there on wiry legs now, still springy from the drop, and mopped his brow in exaggerated fashion.

“Ease ’er over gentle now, Jack,” he shouted back. “I done me bit.”

“Aaagh!” was the only reply as the end of the tongue shot up in the air like the stern of a torpedoed ship then slithered out of sight down an invisible throat. It was immediately followed by a dull crash and the crepitation of loose mortar on Sundered undergrowth. A moment later, a muscular young fellow in jeans and a T-shirt stood glaring through the gate at his progenitor, foliage sticking out of his dishevelled mop of red hair.

“Brilliant. That’s probably gone and creased it permanently. It’s your fault, you stubborn old git! I told you we should have gone round to the front entrance, like everybody else!”

“Aw, stop yer yammerin’. Of course we got to use the tradesmen’s entrance. That’s what we be, tradesmen, right?”

“You’re a dreamer, you live in a past that doesn’t exist any more! This way in obviously hasn’t been used for donkey’s years – I told you that bell doesn’t work, the wire’s not even connected to anything on this side.”

“That’s as may be. I still be the zenior partner in this business, zo it be my word as goes. And I zays we got to treat our customers in the manner they ’ave the right to expect. We should be proud to be zervicin’ a real duke for once, quite a different class of volks to the usual riffraff calls themselves gentry round ’ere.”

“Don’t start in on all that again. Now that me and the carpet are on this side we might as well carry on. Just fetch the tools and get on over here.”

“Not every day d’yer get a letter from a duke,” the ancient one continued clucking to himself as he moved in a kind of springy shuffle across to the van, retrieved the heavy wooden tool box and returned with it in both hands, talking all the while. “On crested paper too! Like I zaid to Mrs ’Orricks, this be quality, Glad! You can tell it a mile orf. They knows exactly what they wants and comes right to the point, no tryin’ to cut corners or argufyin’ about price. Just instructs us to zend the pattern and the measurements straight to the best manuvacturer up north: ‘We leave that entirely to your discretion – as professionals you are doubtless the best qualified to judge’. Qualified – good that bit. Shows happreciation of professional pride.”

“It’s not as if we actually wove the thing – we’re only laying it for them,” Horricks junior grumbled. “And being paid precious little for our ‘qualified’ assistance at that. I doubt if he realizes we can do more than lay other people’s carpets for him – anyone owns a palace of this size must have heaps of ancient old chairs and draperies that are just crying out to be refurbished professionally. Probably too stingy to care though. Here, stand on the box so I can get a hold of you and pull you through... I’ll bet it wasn’t even the duke who wrote that letter. It was typed, wasn’t it, and the signature was totally illegible. Could have been his manager or someone like that who sent it for him.”

“Nay, you wait and zee,” the old one muttered as he dusted himself off after an undignified passage through the fissure, tugged by the armpits. “There be strict instructions that this ’ere carpet’s to be delivered in person to ’Is Lordship, it be vor ’is study – that be writ in the letter, bain’t it? ’E’ll want to supervise the fittin’, try it out for ’imself. It bain’t no hordinary carpet ’e’s ordered neither – don’t come cheap, a wall-to-wall deep pile Haxeminster with a personalized pattern. ’Eaven knows what it be meant to represent, mind yer – just looks like a tangled maze to me. But that be just my hignorance, I dare zay. Just think of it, though, meetin’ a real live duke in the vlesh, eh? I’ll wager ’e’ll offer us a cup of tea too! Like yer zays, we could discuss other little jobs we can do vor ’im round the place at very hadvantageous prices. That be the thing with usin’ local specialists – yer don’t ’ave to deal through an onomous manuvacturer, like...”

“You know what, you old blockhead, before you can get chatty with the aristocracy you have to be able to talk correctly. You have a thing or two to learn on that score, I’m afraid. Myself, I couldn’t give a hoot whether we’re addressed by him or not – if his sort addresses you at all it’s only to put a stamp on you and send you packing. I have nothing to discuss with a duke. I just have a job to do.”

“Now don’t you go playin’ zmart with me, lad. I knows you bin to grammar school and all – though ’ow you got that there scholarship is beyond me. I can better understand why they booted you out again. There be no way you gonna get into that Art College now. Ruinin’ yer chances in life for a daft practical joke – porridge in the organ pipes of the chapel, I aks yer!”

For a moment their bickering was suspended as the old fellow’s crooked leer was met by an involuntary grin on the part of the chip off the old blockhead.

“Not that I got no ’igh opinion of this ’igher heducation for the masses malarky mezelv – what good’s it ever done the likes of me an’ you? This bain’t yer vancy literature, this be the real world. You works ’ard and keeps yer nose to the wheel and you’ll get var enough. Maybe zome day it’ll be *your* name virst on the van stead of mine...”

“Look, can’t you get it into that thick skull of yours that this is only a temporary thing for me? I’m just helping you and Mum out for a while until I find a more suitable outlet for my creative talents. If I hadn’t been around to do all the hard work this year you’d have been out of business

already. I'll be damned if I spend the rest of my life licking up to our so-called 'betters' for the odd crumb of custom."

"Now don't you go knockin' the vamily business, you ungrateful little zod. It's bin in the 'ands of Horricks's ever zince me own gaffer's granfer's time. I can't 'elp it if big zity clearin' 'ouses and zupermarkets starts movin' in and underminin' our livelihood. To zurvive we've got to prove to our customers – the ones as counts – that we can still offer zomethink special, the personal touch, like..."

"Yeah, yeah, like the touch of the forelock, right? Come on, just stop gabbing and hand me the tool box and we'll get this carpet delivered before it starts raining in earnest."

"The tool box? But it be on the other zide, bain't it..."

A little later (after further squeezing and pushing and cursing and whining) this slight technical hitch was sorted out, and the two men hefted the carpet onto their shoulders and set off along the overgrown gravel drive that continued beyond the gate. There was an unkempt tangle of trees and bushes on both sides which partially obscured the dank sky above them. They were soon crossing a low bridge over a kind of moat that smelled of rotting weeds. The ground seemed to sway very slightly under their feet as if they were crossing a bog.

"Aw, this blasted thing be awful 'eavy..."

"How would you know? You aren't even lifting your end properly, you're just pretending..."

From below the bridge issued the unmistakable sound of frogs croaking. At least some living creatures here were content with their lot. Or were they? – one might equally well have imagined they were bursting to say something. The croaking remained as the arguing voices faded away.

2. Semiotics at gunpoint

If one looked back from the direction of the palace towards the moat, one could see the two men bearing the carpet between them as they emerged from the trees. On this side the atmosphere seemed noticeably lighter, in fact everything felt somehow more buoyant although clouds still hung low over the grounds. The place exuded a strange sense of unreality, a combination of heady lightness and somnolent indifference. There was a little cottage just beyond where the drive left the woods, and here at the window sat a motionless, leather-clad figure who at first evinced little interest in their presence. It was only as they drew level with the window that something seemed to register behind his heavy eyelids, a nervous tic started up in his left cheek, and he roused himself to action, smoothing down his pendant moustache with one hand and reaching for his shotgun with the other. He stepped out abruptly from the nearby doorway, gun at the ready, and halted the progress of the carpet-bearers with a raised palm. Five exclamation points rayed out from it.

“What are you carrying wrapped up in there? Have you got permits to be hunting in these woods?”

“We’re not hunting, we’re delivering to the palace. Who might you be?”

“As gamekeeper of these premises it is I who asks the questions, not you. You are trespassing. I repeat: have you got valid permits?”

Jack sighed and lowered the tool box and his end of the carpet, which left his father still holding his but squashed against the side of the cottage by the load, unable to free himself. His arms waved about but the end of the carpet in his face muffled his protestations while his son drew out the letter in its crested envelope.

“Here, you can see for yourself: we’re here on official business.”

“Most irregular, no one’s been this way for years,” the gamekeeper grumbled with a mere glance at the document thrust towards him. “No one except poachers of course. This hasn’t been used as the main drive since the days of the old duke’s grandsires – when they still used carriages. Back in the good old days when everyone knew his station and played by the same rules, as my own father, the previous gamekeeper, always used to tell me.”

William – who had extracted his head and neck from behind the carpet now – nodded approvingly and it looked for a moment as if the warden were going to address him as the more sympathetic of the intruders, but instead he jumped back defensively at a slight movement from Jack, who had begun tapping the crest on the raised envelope. The barrel of the gun swivelled back threateningly in his direction. Still wary, the warden took another look at the letter held out to him in Jack's shaking hand.

“Well, I'll grant you that crest looks genuine enough – it's at least an index of relevance. Come inside where I can keep an eye on you both. I'm going to ring the palace and see if you really are expected. You'd best familiarize yourselves with the rules and regulations while I'm doing that – they're on the wall at the back of my office in there.”

He ushered Jack into the diminutive entrance hall with a twitch of the gun, then turned and tugged William out from behind the carpet, pushing him none too civilly after his son. There was no room for more than one at a time in the hall, and while the officious gamekeeper lifted the phone attached to the wall there in order to ring up to the main building they retreated further inside. Here William immediately pounced on the only proper chair and clamped his arms possessively around its, breathing heavily. Jack, bending so as not to bang his head on the rafters, cast instead a begrudging glance at the printed list of regulations behind the desk:

(1a) If you do have to express yourself, there must be content behind your utterance.

(1b) If you cannot give your thought an adequate form, then there cannot be any substance in it.

Skipping several lines he read the equally cryptic injunctions:

(5c) When addressed reply; when not addressed properly change into something less casual.

(5d) On no account presume to know or try to find out the intention behind an order, just carry it out, even if it means taking it back to where you brought it from.

With a despairing shrug Jack gave up trying to make sense of this and just stood drumming his fingers impatiently on the edge of the desk as he looked around the room. It was filled with a heterogenous clutter of

objects that belied the expectation of strict discipline that the printed list produced. There was a shelf overflowing with boxes of half-opened board games and jigsaw puzzles, and another full of trophies. Beside the trophies stood a number of framed black and white photographs of, respectively, a team of mustachioed rugby players, a rowing crew with their boat before them, and a pyramid of young men in striped combination suits standing in formation on each other's shoulders. All of them looked oddly similar to the gamekeeper himself. On one of the walls a darts board bristled with tossed and unremoved darts. On the desk a game of chess seemed to have been abandoned unfinished with several of the pieces upturned, and nearby lay a table tennis racket and a shuttlecock, a bubble-blower, and some colourful building blocks, all scattered across a lower layer of jumbled playing cards and scoring slips – like last year's leaves left to rot.

“Well, they look like *bona fide* trades people, I suppose,” the muffled voice came from beyond the open door to the hall. “Iconically, that is.”

“They want to know who or what you represent,” the gamekeeper raised his voice as he poked his head round the corner, one hand over the receiver.

“We don't represent no one, we be a hindependant virm,” William began, half rising from his chair, but was interrupted impatiently:

“No, no, you don't understand what I mean. What do you *stand for*? Come on, out with it!”

“I'll tell you one thing I *won't* stand vor, mister, and that be bein' untimidated in this houtrageous vashion!”

“Then sit down and be quiet.”

There were further muffled exchanges on the phone before the gamekeeper returned, still glaring at the intruders.

“If you *are* to be allowed up to the palace – and, personally I think that would be a grave mistake on their part, given the lack of clear evidence of your roles – you'll need to know a few things about how and how not to act around here. You are obviously not used to being received in polished society. You have to play by the rules or pay the price, do I make myself clear? But first of all I am going to have to examine that object you were carrying – for all I know there's all manner of unauthorized game material concealed inside it.”

He went out and reappeared a moment later dragging the end of the carpet, his gun still tucked under one arm. There was only enough space

to fold out one corner of it onto the floor of the room into which they were all crowded.

“As I thought,” he muttered with an ominous frown as his finger traced certain curlicues in the complicated pattern. “I smell an attempt at subversion. A sign of these perfidious times. His Lordship would never order such a blatantly symbolic thing himself. Privacy is everything for him. That is his privilege, and that is what I am here to protect!”

His eyes flashed back and forth between them.

“How can you be suspicious of a work of art?,” Jack objected. “You can see the quality yourself. A bit stylized, it’s true, but -“

“A diagram and a symbol at the same time. It’s obvious to anyone who knows the shape of things round here that it’s not a perfect imitation of nature, it’s that more insidious kind of thing that can creep in the back way, passing itself off as ‘art’ and undermining the very conventions it portrays. It could pose a threat to the underlying order of the domain. What else do you think its referent is, tell me that?”

“But the letter – the order, it was signed by the duke himself!” Jack insisted.

“We reckons,” William smiled blithely.

“There’s more in a sign than meets the eye...”

“But a signature isn’t a sign – is it?”

“All right, enough fooling around. While we wait for clearance – or the opposite – from the palace I’ll fill you in on a few basics. Pull up that stool there, I’ll sit on the carpet – it’s not going anywhere until I say. Right, now I obviously have to start at the beginning for you two yokels, with the essential nature of the linguistic sign. Take this coin...” (Here he reached into his pocket and pulled out a copper coin that he tossed onto the desk – at which William’s hand shot out and grabbed the object eagerly.) “No, not literally. Give it here. Look, just like every coin has a heads side and a tails side, so does the sign have an expression side (say the head of the queen), and a content side (say the value of one penny). The currency of communication. Now, what is the information carried by this unit?”

“That the queen be worth a pretty penny...?” William ventured cautiously.

Jack rolled his eyes and nudged the old fellow to be quiet. His proclivity to literalness could be embarrassing. Unperturbed, the game-keeper continued in a severely didactic tone:

“Let us call the heads side the ‘signifier’ and the tails side the ‘signified’. We can ignore for the moment the facts that the likeness of Her Majesty on the heads side is both iconic and symbolic (she is, after all, the head of state) and the coin as a whole is indexical of trade – you can swap it for anything you like that bears the price of 1p. All the most efficacious signs are in fact semiotically mixed to some degree. I shall return to the different types of basic sign in a moment. The point is that it is a token, like the utterance of a single word, although it represents a type, the class of all such objects (or words, if you like). There is only one thing missing for a definition of its actual value, namely the recognition on the part of the person you try and palm it off on that it is indeed worth exactly one penny. It makes no difference what the metal it’s made of is worth and what the stamping of the coin actually cost to carry out, it is decreed by law that one penny is exactly what it is worth. True symbols are a matter of pure social validation. This is what allows them to be reproduced and passed on *ad infinitum*.”

“That’s all very well as regards coins, but what’s it got to do with words?”

“Well, a word has only got the value it has because of its part in a whole system of conventions – it makes no difference whether it’s spoken or written or in morse code. You could think of it this way: if the letters ‘p-e-n-n-y’ on this side represent the form of the word (ignore the ‘one’ for present purposes), then the head on the other side is its meaning, by virtue of the whole institution of the English language behind it.”

“But the queen, God bless ’er, she bain’t called Penny...,” William murmured in vague perplexity.

“No, but she *might* be.”

“S’no use. I jist can’t make ’ead or tail of all this zymbological stuff...”

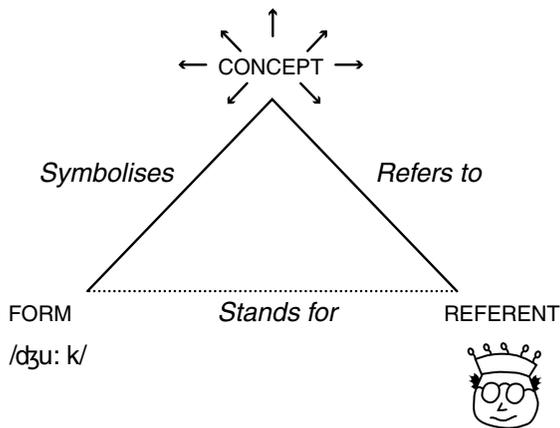
The gamekeeper continued, unperturbed, with his attempt to answer Jack’s question:

“The sign has both an ‘extension’ to which it refers in the outer world – in the case of the word ‘coin’ all the coins shaped and marked more or less like this token that are in legal circulation – and an ‘intension’, namely its value within a system of conventional exchange, as evoked in the recipient. What exactly you get for your money (to speak metaphorically of cents rather than sense). It may of course just be a coincidence, but the extension of this particular token looks like it contains itself... I leave that one to the philosophers.”

“I don’t think I quite get the ‘intention’ bit – how can a coin, or a word for that matter, have an intention? What I would really like to know is *your* intention in telling us all this.”

“I see that I was not wrong about needing to start at the beginning. Can’t you hear that the word is spelled with an ‘s’, not with a ‘t’? It refers to that aspect of a word’s meaning that concerns not so much the real world as its relationship to the meaning of other words. The other kind, spelled with a ‘t’, is a matter of the speaker’s aim in conveying the word and is what the hearer has to interpret in order to understand it fully. That is why I am telling *you*, so you’ll understand what you experience in the palace – *if* you are allowed in, that is. Everything in there is a sign of one sort or another. Well, let’s go back one step further still. The nature of the sign can be schematized as a simple triangle, like this one.” (Here he scribbled a triangle on a notebook that he drew from his pocket.) “The apex is its content, a concept – in other words everything you know and think about dukes – and the two other points are respectively its form or expression (for example a spoken word) and a suitable referent in the ‘real’ world. In the case of the word ‘duke’, for example, the latter would be an actual duke in this world, as opposed to the general concept of what it is to be a duke you have inside your head. The core of the concept is the sign’s ‘intension’ and the set of all the dukes in the world corresponds to its ‘extension’. Notice that I have drawn the base of the triangle between the form and its referent with a dotted line, to suggest the indirectness of that link (which presupposes a referring *context*).”

Figure 1



“I don’t carry no picture of no general zort of duke in me ’ead – nor of no triangle, var as I knows...,” William murmured, but the gamekeeper just went on.

“Now, let’s get back to the different types of sign. There are three principal types, in increasing order of abstractness: first the icon, which expresses a factual similarity between the content, the meaning, and the form of the sign, the vehicle of the meaning. Like a photograph. The second is the index, which expresses a factual relationship between the form and the meaning, for example of contiguity or of causality. So smoke is an index of fire – the one is symptomatic of the other, they are simply associated – just as a weathercock indicates the direction of the wind. The symbol, on the other hand, constitutes a purely arbitrary link between meaning and form – what is called ‘queen’ in one language happens to be called ‘*reine*’ or ‘*koroleva*’ or ‘*jo-oo*’ in another. Unlike the iconic use of gestures, which is unrestricted and *ad hoc*, utterly dependent on specific context, real symbols must be precisely formed according to the relevant social norms and – despite what you may hear others claim – are largely independent of contingent circumstances of utterance. They are of a ‘digital’ nature, entering into a discrete coding system of contrasting elements, whereas indexes are more unsystematized (consider a finger tracing a route on a map), and icons are typically graded, of an ‘analog’ nature (consider the degree of detail or angle of perspective of a portrait). However, observe that also language can display aspects of unsystematic gradedness, like now when I gradually raise my voice over a potentially endless string of words!”

He had in fact started to shout and bang his fist upon the desk, his face turning quite scarlet, but he soon calmed down again and continued as before:

“Not only words but other conventional signs can be symbols – say traffic lights (which are digital) and the fading of the lights before a theatrical performance (which is analogical) – and some words are not primarily symbolic but indexical, like proper names – say Penny.” (Here the gamekeeper casually tossed the coin onto the desk top, where it landed on heads.) “Or iconic – say ‘moo’ “ (William grinned and mooed to himself). “The rules of games – like those of grammar – are largely iconic, by the way, indicating how smaller units can be built up legitimately into larger ones to reflect the way things are in fact or in fantasy. Actually, there are three sub-types of icon, namely images, diagrams and

metaphors. The first of these is straight-forward, a matter of picturing something directly, but the second (the type grammars are made of) shows similarity with its source solely by virtue of reflecting the relations between its parts, however abstractly. Thus a diagram of the relationship between the sub-disciplines of Linguistics, or a ground-plan of the palace (not things you can actually ‘see’). Metaphor, on the other – that is the third – hand, reflects a parallel between meaning-form linkages across domains, as it were, usually a concrete source domain and a more abstract target one. Say the representation of (abstract) political power by a (concrete) clenched fist. “

”Now I’m getting all confused, why should there be just the three types of sign – or is it three types of three types? Why everything in threes? Besides, you yourself said earlier that the best signs are actually mixed. You’re not trying to take the metaphorical piss by any chance? I have been to grammar school, I’ll have you know...”

“When I said ‘mixed’ I meant like a dog snarling, which is both iconic – of biting – and indexical – of its emotional state. Or (to switch to a human frame of reference) like the words of a skilful orator who knows how to blend the conventional meaning of his words with political indexicality – say association with the local community – and iconic diagramming of its beliefs and prejudices. There was probably also a third thing I meant, but I forget what that was. Anyway, because I meant it then is no guarantee that I still mean it now. Meaning is negotiated via the means at hand. Symbols, especially in novel combinations – say as sentences – point towards the future, they are predicative: you can take them or leave them. Whereas icons simply reflect past experience with similar forms, and indexes operate in the here and now – talking of which, there goes the phone, it’ll be the palace.” (Here his eyes narrowed and flashed back and forth suspiciously between father and son.) “We’ll see now whether I’ve been wasting my time with you or not. Note that signs are also signals – the effect of this one, for example, is to put an end to our little exchange and summon me to the receiver.”

A minute later he returned, stroking his moustache a little sheepishly. This time without the gun, they noticed with relief.

“Well, it seems they are expecting you after all. They’re rather busy just now with tour groups and the conference going on in the west wing, but someone will meet you at the main entrance.”

They dragged the carpet back through the hall and out through the front door and were about to heave it onto their shoulders again when the gamekeeper, who had followed them out, demanded another look at the letter that Jack had waved at him. What interested him especially, it seemed, was the crest.

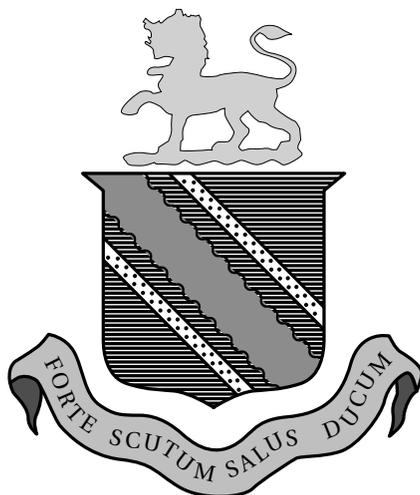


Figure 2

Shaking his head he sighed:

“It could still be forged. But the crest does at least illustrate rather well some of the points I was trying to make. It is primarily indexical of course – of His Lordship’s family – but you could also say it contains iconic and symbolic elements: the rampant lion on top does actually look like a lion (at least that’s how they imagined them back in the Middle Ages), and the family motto is of course expressed in arbitrary symbols. Also you’ll find that the belt azure, the gilt balls sinister and the furrows deflowered all played their role in the intimate history of the family. Well, I’m sorry if I’ve delayed you. But you will appreciate that where there is to be communication there has to be an arbitrator of fair play. Just follow the drive round to the left – don’t veer right, that brings you to the servants’ quarters and the stables.”

Jack had already picked up the tool box in his free hand and he and

William were about to head off as directed when he hesitated, hearing from that direction the unmistakable sound of a tennis ball being knocked about. This was interspersed with muffled shrieks of laughter.

“That doesn’t sound like servants...”

“Miss Polly’s house guests, I wouldn’t doubt,” the gamekeeper frowned. “I don’t know where she digs them up – these young people have no respect for the house rules, just gallivant around drinking His Lordship’s best champagne and peeing in the fountains, it’s disgusting. It’s no use putting up any more signs. Signs only mean something in respect to something else – the whole social fabric behind them determines the relevant concepts – and that is precisely what they flout. By the end of the day some of them are completely slurred in their speech and can hardly put together a sensible sentence.”

“Well, I zuppose the young lords and ladies gotta get their capers, to prepare ’em vor a life of privilege and responsibility an’ all,” William voiced his opinion with his neck cocked sideways from under the carpet. “They zounds game enough, no ’arm in that. Long as they keeps it in the vamily, like.”

“That’s a slur on the very notion of ‘game’,” the warden stiffened. “If we’d had more time together I would have suggested a real game – like checkers. You can play it with coins too, you know. Then you don’t just win, you win *something*. I hate having to play on my own all the time. Perhaps on your way back...”

But the two men were already heading off along the drive, with little intention – or was it intension? – of returning this way again.

After a few hundred paces they reached the fork in the drive and got their first unimpeded view of the palace; here they stopped for a moment. The noble pile looked quite different from this angle than it did from the public entrance reached via the main road. Although its impressive proportions were still apparent – the top of the central dome could just be made out above the three stories of the east wing before them – the suddenness of its appearance, without the lead-in afforded by an open vista from afar, detracted somewhat from the effect. In fact this wing – apart from the slender turret rising from the angle of the two visible facades – had a somewhat utilitarian aspect, like the anonymous back of some large seaside hotel. Even the turret was topped by a utilitarian weathercock – although on further inspection its utility seemed somewhat questionable since it was constantly swinging back and

forth between different directions ('Is it in that case really indexical?' Jack wondered, casting a doubtful look at the ambiguous sky). The drabness was particularly pronounced in the direction followed by the right-hand fork of the drive; here the way led towards an arch through a low extension of the damp-stained wall, beyond which the servants' quarters must have lain. It was from this direction that the irregular bopping of tennis balls was issuing, although the courts themselves – somewhere opposite the arch – were hidden by a nearby clump of trees. The vague clamour of youthful voices now resolved itself into actual exchanges of words, interspersed with enthusiastic woops and shrieks:

"Let ball!" – "Net!" – "Bugger the net!" – "Good shot, Bobo!" – pok – "Pity it was with the racket and not the ball though" – "Back behind the line, Priscilla sweetie" – pok – "Ow! – that got me in the eye, you rotter!" – "Toss us another bottle, old man" – pok – "Uhoh, we have a casualty!" – "Hey, how's a fellow meant to serve when all the others are in a heap between him and the net?" – pok – "Offside!" – "That's the ticket, bundle the sodding baronet back over the net to his own side!" – "Boys, boys, don't hog that bubbly, we're parched over here!" – pok – "Love fifteen" – "No, only love ten!" – "As the call-girl who didn't like the look of the wicket-keeper said to the cricket team, what?" – pok – pokity pokity pokity – "Aw, bollocks!..."

They continued quickly along the left-hand fork, which from here on was flanked by stately columnar poplars. Punctuating the wall to their right was a row of tall windows through which they could glimpse little more than reflections, and to the left through the poplars they could see a sweep of sloping lawn that descended from the front of the palace all the way to an extension of the moat they had crossed, now widened into a broad lake on which distant swans were drifting.

Their goal – the great front-door of carved oak – soon appeared before them atop a flight of marble steps. Here the driveway curved around on itself to form an elegant oval culmination which, although apparently not in use, had been meticulously raked and cleared of weeds. Gargoyles overhung the facade several floors above the door. Along the edge of the lawn the poplars were now replaced by a row of box bushes carved into bizarre topiary figures. A corkscrew, a bottle, a dragonfly and a skull were among the more recognizable. Of what were they signs? *Were* they signs? *Were* the shapes the form or the content? Or were both identical?, Jack wondered vaguely, sure that the gamekeeper could

have set them right on the matter. At all events, there was no sign of life, although it seemed to Jack as if somewhere behind the inscrutable, ancient facade someone or something was watching their progress with detached interest. He felt distinctly uneasy. A sudden blood-curdling screech from a peacock that was parading behind the nearest topiary caused him to swing around in alarm. This movement sent William flying at the other end of the carpet. His yell – and the gravel kicked up by him – caused the peacock in turn to turn tail and mince away as if offended.

“What a hideous sound from such a decorative creature,” Jack winced and repositioned the carpet more firmly on his shoulder.

“I can’t ’elp it, can I – if you must go zwingin’ me about like that,” William complained and shook his left leg out to the left and his right leg out to the right as if demonstrably making sure that their natural elasticity had not been jeopardized.

He had no choice, however, but to keep up with his son’s rapid strides as he led the way across the drive and up the steps to the front door, where they could at last put the carpet down while Jack located the bell.

“That’s funny,” he frowned after pulling it several times; each time a faint muffled ringing could be heard from far behind the solid oak but no answer was forthcoming. “He said distinctly that we’d be met. It doesn’t *look* like people are busy around here...”

“I zuppose you got the right ’ouse?” William commented, not very helpfully.

“Don’t be daft. This is the main entrance – see the coat of arms sculpted in stucco above the doorway? It’s identical to the ones on the gate and to the crest on the letter. Even the words on the scroll below it are the same: *Forte scutum salus ducum* – something to do with a strong shield and a filthy duke, I think, though that might not be quite right. I never did get very far with Latin... Well, I suppose we could just leave it here and go. The bill’s inside the envelope with the order letter, we could just leave it attached. I reckon we’ve done our bit.”

“Nay! “ William protested vociferously. “We come this var, we bain’t goin’ nowhere without doin’ the right thing by ’Is Lordship. ’Member what it zays in the letter – ‘to be delivered in person’. That means by ’and, not jist dumped on ’is doorstep, right?”

“Come off it, we’re not even sure it was really him that signed it. What we don’t know is whether ‘in person’ mean ‘to a particular person’

or ‘*by* particular persons’ – in other words, us?”

“If you aks me, it’s gotta be the one as zigned the letter – and zince it’s got ‘Is Lordship’s crest on it that be proof enough vor me.”

“Let’s just see that signature again then... Looks like whoever signed it was in a terrible hurry or was purposely trying to make it obscure. All the letters are just run together with a sort of squiggly tail hanging off to the right... Wait a moment, look at the way the scroll with the motto below the shield has little stylized thingies dangling off its ends like loose sleeves – they look rather like the limp squiggle at the end of the signature. Perhaps it’s a family trait. Remember what the gamekeeper said about the crest being an ‘index of relevance’. Well, it may not be much to go on – perhaps all aristocrats sign this way – but it’s better than nothing. Which is all that hanging around here on the porch is likely to achieve. I hate to admit it, but I suppose you’re right: we’d better find some other way in and get the carpet to the person who signed the letter.”

With this they reshouldered the carpet and proceeded to follow the edge of the building along towards the west wing. William huffed and he puffed, but looked definitely chuffed – for he had not been cheated out of his chance to meet a real live duke in person.

3. Plumbing the depths: from phonetics to phonology

At first it looked as if they might have to lug the thing right round to the other side of the palace. There were windows all along the facade of the west wing that looked out over the sloping lawn, and to judge by the shelves of books they could see behind them the ground floor here contained a library – but there was no door leading in. At one point Jack left the carpet and tool box with William and squeezed his way in behind the shrubs that grew below the level of the windows. Here he stood on tip-toe and, shading his eyes with one hand against the reflections, tried to see if there was anyone within whose attention he could attract. There was indeed a head in profile a few feet from him, but tapping the pane would not get it to turn towards him. After a moment it half turned of its own accord, however, and its mouth opened and closed a few times, releasing little puffs of steam, as if it were talking to a similar figure sitting on the other side of the window recess. The latter also swivelled and opened its mouth a few times too, accompanied by similar little bursts of steam, but it was apparent to Jack by now that these were not living library users at all. They were painted busts, each set on a pedestal and furnished with moving lips and eyes. Whether actual words were being produced by them he could not tell, but by craning his neck he could see that there was a whole line of these primitive automatons positioned along the near wall of the library.

Puzzled and with nothing useful to report he returned to William and together they continued their search for some way into the building. Just before the end of this stretch of the facade their efforts were rewarded: not with a door directly into the library, but with a set of simple steps behind a railing that apparently led down into the basement below. Perhaps it was used by the gardeners and other maintenance staff. The door at the bottom was not locked, although it would not open fully either, catching on the cement floor when pushed further in. By bending the carpet and to-ing and fro-ing a bit on the bottom steps they managed to insert the carpet and themselves through the narrow opening. They made their way as best they could with their awkward load along the

narrow, dimly lit passage beyond, bumping into the wall and tripping over unseen irregularities in the floor as they did so. They found themselves sloshing now and then through pools of muddy water. There were pipes suspended from the low ceiling the length of the passage and these did not facilitate their progress either. A muffled vibration emanated from them.

“Hallo, anyone there?” Jack called out every few yards in the vain hope that someone would hear them.

They manoeuvred around a corner and there was suddenly more light visible at the end, where a half open hatch could be seen. There was also more noise: an irregular clanking grew louder as they approached the light, superimposed upon a deeper, more regular sound, like some hidden dragon breathing out fire every few seconds. They dropped the carpet near the hatch – or rather William did, and Jack had little choice but to follow suit. While the older man slumped down on the tool box, mopping his brow and mumbling about the heat, Jack approached the hatch. Immediately, a hairy arm was thrust out, almost hitting him in the face as it waved around in the air.

“Give us the number five wrench, I think I’ve found the leak,” a gruff voice echoed out from within. “Quick now, I’ve got my handkerchief wrapped round it, it’s getting pretty bleeding hot!”

“I’m sorry – I think you’re talking to the wrong person.”

“Whas’at?” the head of the man on the end of the arm (which was equally hairy except for its bald pate) popped out and eyed Jack incredulously. “Where’s Jones got to? He keeps on just wandering off. He’s simple, that’s his trouble. You been sent to replace him? Fine by me. Come on, give me the number five before I burn my ruddy fingers off.”

“I wish I could help you, but we’re just delivering a carpet to the duke. Could you set us in the right direction?”

There was some low muttering as the arm and the face disappeared again, followed by a burst of steam, a yell and the sound of frenzied wrapping (in that order).

“Well, that’ll have to do until Jones turns up again, I suppose.”

The maintenance man – for such Jack took him to be – crawled back through the hatch and stood in his grimy dungarees, somewhat hunchbacked and wiping his hands on a rag as he stared with protruding eyes first at Jack then at William slouched on the tool box.

“I’ll tell you one thing: you’re not going to run into any duke down this way – not since the twentieth duke first had the ventilation system converted has any of them shown much interest in what goes on down here. Apart from Mr. Alfred, that is – the present duke’s younger brother. He has his experiments going on in the crypt under the chapel there. But that’s mainly at nights when we’re not around – and when he can find subjects with the right, er, impediments, so to speak. He’s keen on the physical basis of speech, you understand...”

During these words he waved an arm vaguely off behind him, but before Jack could enquire more closely as to the nature of ‘Mr Alfred’s’ odd preoccupations an ominous clanking sound could be heard from the pipes that ran along the ceiling overhead. This caused the maintenance man to leap up angrily and bang his fist against one of them. The sound settled down at once to a constant low vibration.

“Damned voiced consonants – we’re still getting the old problem with delayed voicing onset. The system’s just got too sophisticated to handle these basic things...”

“You mean to say there are sounds – words? – running along those pipes?”

“Of course, that’s what the twentieth duke did, he re-utilized the old ventilation and drain systems – ‘exapted’ them is the correct technical term. He was a suspicious old gentleman, as the story goes, as well as a bit of a skinflint. He was plagued by gout and an overly frisky young wife, and became obsessed in his declining years by the need to communicate immediately with any corner of the palace from his study – or wherever else he happened to be. Every room is in principle connected to every other room. Of course it never did him any good personally in the end – his wife left him when he refused to replace the old system of drains with new plumbing. Reckoned they could get along with buckets like in the old days. His system of tubes and valves are still functioning to this very day, though they do need constant monitoring by us down here, and every year there’s some new refinement we’re required to tinker with. The family has this thing about keeping up its traditions. Nowadays it’s not used so much to spy on servants and guests as to run this establishment more efficiently. Saves a fortune on internal phone calls. Here, put your ear here.”

Jack bent over as directed and placed the side of his head against a vertical pipe. And sure enough, he could clearly hear the vowel ‘a’ being

pronounced, which modulated slowly into an 'e'.

"But where on earth is it coming from?"

"If you'd like to come into my little room, brothers, I'll show you the diagrams. I dare say you could do with a spot of tea too. I can't do much else here until Jones shows up again anyway. Makes a change having visitors who show an interest, I must say."

He led the way through the hatch into the low space beyond. They followed, dragging the carpet after them with some difficulty, for they had to duck below a complex of bandage-wrapped pipes which vented threatening gasps of steam before they emerged in a still narrower tunnel on the far side. Here a multiplicity of larger pipes converged and they had to shuffle along in a stooped posture just like their guide, who waved them finally into a cramped little box of a room. This was almost entirely filled by what appeared to be the springy frame of an old bedstead. They were obliged to draw up their legs and sit on this as best they could while their host tinkered in a corner with some levers and checked a gauge – they assumed he was preparing the tea. There was a bit of a draft coming through the floor, causing the bedstead to vibrate slightly under them. William started complaining about it irritating a delicate part of his anatomy until Jack told him firmly to stop squirming about.

"I know it's a bit uncomfortable in here, especially if you've got long legs, but you have to sit like that to appreciate the four basic states, which I'll demonstrate to you in just a moment. Hang on to those cords if you need to stabilize yourselves. Meanwhile take a look at the diagrams on the wall over there. I expect you recognize the vowel and consonant grids – they show the International Phonetic Alphabet, the basic sounds of language that are recognized by our union. Each language chooses from among these its own contrastive sets of 'phonemes', defined in terms of articulatory features. What you may not be so familiar with is the way these relate to their acoustic correlates, as on the spectrograph read-out coming out of the printer over there. Under the phoneme tables you'll see a schematic representation of the vocal organs. It shows where contact is made between the tongue and the palate or between the two lips, and so on, in order to produce the different consonant sounds. The different vowels are produced by altering the position of the tongue – either bunched up high for close vowels or lying low for open ones, and with its bulk further forward or further back in the vocal cavity for

“There’s quite a large leeway for the precise positioning of the tongue in producing a given phoneme – a lot depends on context. A phoneme is actually an abstraction from a bundle of related articulatory gestures or ‘phones’ sharing the same ‘target’ – these constitute its so-called ‘allophones’. That’s the thing about phonemes, of course: as the expression units of the language code they are part of a system of oppositions. The precise setting doesn’t matter that much, as long as they are distinct from their neighbours, so that replacing one with another produces ‘minimal pairs’ like, say, /pit/ and /kit/, where the change of /p/ to /k/ gives a new meaning. This is where ‘distinctive features’ come in: they represent the dimensions along which phonemes contrast with one another. For example, if they are consonants, according to place of articulation – where the tongue touches the lips or the palate, etc. – and manner of articulation – as stop, fricative or nasal. Voicing – activation of the vocal chords in the larynx or voice box – is a distinctive feature that concerns both consonants and vowels (you’ll see voiced consonants stand to the right of voiced ones on the chart). All of them can be stated in binary plus/minus terms (with a little good will). These dimensions can in turn be related, if rather indirectly, to acoustic features of the kind the spectrograph registers.”

Seeing that Jack was now moving across to look at the spectrogram hanging out of the spectrograph, the maintenance man (or was he a technician?) went on:

“Now if you want to interpret that spectrogram, you need to know first of all that it represents the word ‘linguistics’ as I read it into the microphone here a while back. The important thing to pay attention to is the spacing of the first three vowel formants – the thick horizontal bands indicating energy in frequency over time (‘cycles per second’). Every vowel has a characteristic spacing and relative intensity of its three basic formants. Notice the energy concentrated around 2000 cps each time the short vowel ‘i’ occurs in this word – this is the characteristic of its second ‘F2’ formant. Of course you can only see the formants when there is free air flow, when a vowel – or other sonorant – is actually being spoken, otherwise the horizontal lines are broken by bursts of noise – the solid vertical bars that are especially characteristic of fricatives – or by gaps filled only by more concentrated ‘noise’, typical of aspirated plosives or ‘stops’. Different consonants are characterized by the concentration of the noise produced by their explosion within

specific frequency ranges. The noise accompanying ‘t’, for instance, is concentrated between two and four thousand cycles per second (at least before an ‘i’), whereas that for a ‘p’ is spread fairly evenly over all frequencies. But what gives the best clue as to consonants is their effect on the vowel formants before and after them, especially the second one, F2, which directly reflects the place of articulation of the consonant. It’s difficult to see on this particular spectrogram, but if you imagine the dark band representing the F2 of the first vowel abstracted out, above its first formant F1, you can see that its tail points back towards a certain characteristic frequency, here about 1800 cps, which is typical of any alveolar consonant.”

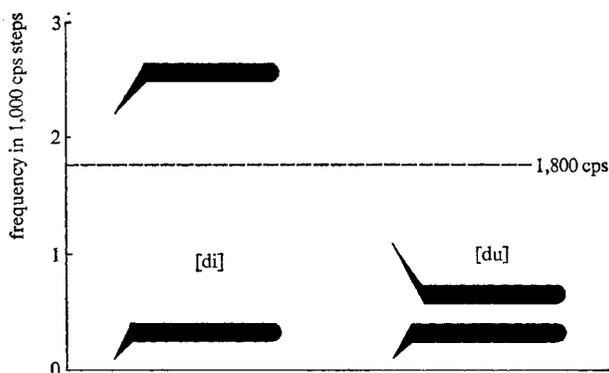
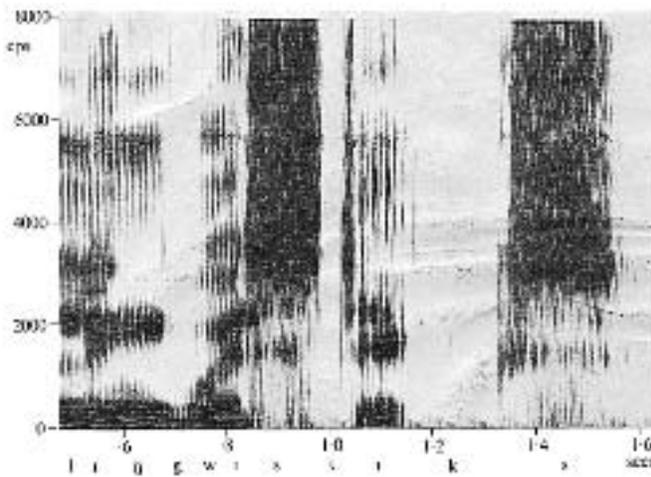


Figure 4

Here he traced a figure in the air with his stubby fingers as if expecting Jack to be able to read it without difficulty.

“You see, the tails of vowel formants always point back to a characteristic frequency for such a transition, irrespective of the frequency of the vowel’s own characteristic F2. If the vowel had been ‘u’, whose F2 frequency is much lower, the tail would have pointed upwards to that point rather than down. This is the most salient clue to the ear as to which particular plosive it was that it heard, since you can’t actually see the state of the speaker’s tongue and palate, can you? With other consonants (according to *manner* of articulation) the nature of the transition – in particular its duration – may be different. In general what we actually hear is a continuous gradual modulation of the sound signal, its transitions and coarticulations, for example the gradual onset of voicing during the pronunciation of a voiced consonant in English, rather than neatly packaged phonemes labelled like on the diagram. The clues as to what segments were actually intended to be packaged are rather subtle and transitory, but generally each ‘package’ is organized around the nucleus of the syllable, with its single clear sonority peak, usually a vowel. But the signal is always under-determined and potentially ambiguous, despite a certain useful amount of redundancy in the features defining a segment. A lot of comprehension is actually guesswork – expectations from previous exposure. It works top-down as well as bottom-up from the signal itself: expectations that arise on higher levels – say that of the syllable or the whole word – are constantly being confirmed or revised (for example, when we hear /sla/ we expect a following consonant since English words cannot end in short /a/). The nub of the technical problem in comprehension is to abstract digitalized phonemes from the raw, unbroken speech signal and, conversely in production, to convert phonemic commands into analog signals to activate smoothly the relevant muscles. Upstairs it’s phonemes that’s required, no two ways about it – they went digital years ago...”

In the brief pause that followed, as the hunchbacked technician shaded his eyes to read the dials again, Jack hopped back onto the bed-frame next to William.

“Ah, now it’s warmed up enough for a simulation. Tea is almost ready. I’ve been chattering on long enough – like I said, it’s not often I get to explain things to complete strangers. Maybe you could put a word in with them upstairs about the possibility of extending the guided tours to

include a visit down here. I'd love to demonstrate our knowhow to a wider public, in fact I've been trying to get them interested in it for years, but all they say is that the general public would find it too technical. Anyway, hold on," the hunchback's voice rose, his protruding eyes glistening with enthusiasm. "You've been in the voiceless state up to now, here comes voicing!"

With this he pulled a lever and at once the draft blowing up through the springs increased to a localized gale that set the frame humming and vibrating.

"Elp! Me asterhoids!" William voiced his discomfort vociferously as he was tossed around like on a living trampoline; Jack, however, remembering the advice given earlier, braced himself against the elastic uprights by which the frame was attached to the ceiling and floor.

"Now the whispering state," their host announced, and the vibrations died away again (none too soon for William), to be replaced by a diffuse sighing of air up through the frame, the interstices of which were now stretched wider at the back by some mechanism in the walls. "This can be modulated by introducing a little more voicing – like this – until you have the fourth possibility, murmur."

Here the springs began vibrating again – but not as strongly as before – and the sighing changed to a muffled sound as of some invisible giant mumbling to itself.

"Now for an actual word. I promised you tea and 'tea' you shall have. You'll enjoy this. Pay attention to the dials over here corresponding to the tongue tip, the body of the tongue, and the palate or velum; you can feel for yourselves what the glottis is doing. You'll be able to see how the signals to the different articulatory organs set in and overlap in their effect, adjusting to each other to produce a smooth series of transitions. It's an ongoing balancing of efficiency – ease of articulation and anticipation of the next unit – against clarity of expression – the production of vocal gestures that are maximally contrastive for the hearer. Right, here goes."

With this he shouted into a nearby microphone: "Tea.... time!"

William groaned and clung for all he was worth to the well-sprung framework as it sprang into slow-motion action once again.

"See how the dial for the tongue tip sinks down – now! – and delayed voicing sets in – now! You will have felt the transitional puff of aspiration from the windpipe. Now, after the vowel, comes the second /t/

(note that I cite it between obliques, the usual convention to indicate a phoneme). Now the tongue tip rises again and the air flow stops for a moment. You can't tell, but the point of contact of this second alveolar stop is actually slightly further forward than for the first, because of the different vowel in the second syllable, whose voicing sets in – now! Notice the gradual raising of the tongue body as the diphthong proceeds. Remember, I've only given the system digital settings! And now keep an eye on the dial for the palate – there it goes, lowered even before the nasal consonant starts: the passage to the nasal cavity is open and here comes the /m/ at last!"

The vibrations through the frame at this point became too much for William, who started thrashing about laughing and slapping his sides as if being tickled by an invisible hand.

"And now, as a final little demonstration of something a little more unusual that I've managed to iron out recently, see what you make of this!"

With a look of diabolic glee he seized another lever and thrust it upwards. At once a terrifying detonation jarred the whole framework, sending Jack and his father ricocheting against the walls and tumbling in a heap on the small square of floor by the door.

"Go on, guess!"

"Bloody hell!" Jack fumed as he tried to extract himself from William's legs.

As if disappointed by the lack of enthusiasm on the part of his visitors, the hunchback sighed:

"Sorry, I always expect too much of non-specialists. I get a bit carried away sometimes. How could you have recognized an alveolar lateral click anyway? You've probably never had much to do with horses. Exotic airflow mechanisms are something of a hobby of mine, you understand – these include ejectives (with air compressed and suddenly ejected from the oral cavity, sealed off from the lungs by closed vocal chords, when a secondary point of closure is opened), implosives (similar but with air drawn inwards following release of the secondary point of closure after rarifying the air in the vocal tract by lowering the larynx), and clicks (with air suddenly sucked into the mouth cavity, sealed off by the raised back of the tongue, by releasing a secondary point of closure further forward in the mouth). Clicks, unlike the others, can be voiced or voiceless, they can also be aspirated or nasalized –"

“Listen, thank you for the demonstration,” Jack replied as he got to his feet. “But I think we had better get that carpet delivered now.”

“That be the truth,” William chimed in, rubbing his sore head before replacing his dislodged cap. “We can’t keep ’Is Lordship awaitin’. If you’d jist be zo kind as to point uz in the right direction.”

The maintenance man turned and stared at William as if really noticing him for the first time.

“That’s an interesting way of pronouncing ‘Lordship’ you have. A beautifully retroflex /r/. Funnily enough we don’t get too many speakers of rhotic dialects round here. Mr Alfred hardly has any r’s at all – more like w’s those that he does have, and Jonesy – well, he’s Welsh. And that voicing of initial fricatives in the last sentence – I’d love to check it instrumentally. Would you mind if I delay you just one moment longer? I promise to get you where you want to if you cooperate.”

William started to back away through the doorway, waving his hands defensively, but Jack blocked his way of escape and he could not avoid the object that was thrust into his face. It was a small funnel-like thing attached to a tube that came out from the apparatus on the wall with all the dials.

“Please repeat the last part of what you said, from ‘be so kind’. Feel free to assimilate or dissimilate, whatever makes you feel easy. Just speak naturally.”

William protested and started spluttering into the funnel, but Jack held him in position, muttering: “You heard the man promise, old fellow, better just humour him.”

“Be zo kind...,” William finally mumbled, more sullenly than before.

“Very interesting, very interesting,” the maintenance man clucked as he tapped the dials and jotted down a few readings. “Now I’ll just get the synthesizer to repeat what it heard.”

After a few more switches and whirrings, a flat, mechanical voice creaked out over a loudspeaker amidst the dials: “Bees are coined”.

“No, no,” he shook his head. “It’s reinterpreted a word boundary *and* misanalysed the diphthong. This is most unlike it.”

“Maybe it’s the context, like you said,” Jack suggested innocently. “We’ve just had this lecture about coins – and perhaps he was thinking of the letter ‘b’ rather than the insect, what with all this technical talk about phonemes. Dad is very impressionable, you know.....”

“No, we heard him say the phrase quite distinctly, didn’t we?” (The

man was apparently oblivious to sarcasm.) “The system should be able to abstract away from indexical stuff like local accent. Try saying the phrase again.”

“Be zo kind!” William bellowed when pinched by Jack, then tried to slip away between his legs as the hunchback turned back to his dials; but Jack caught him between his legs and lifted him up again by the scruff of his neck.

“Bees are coined,” the loudspeaker repeated stupidly.

“Damnation!” the maintenance man threw up his arms in evident aggravation. “Try saying it a few times in succession, it may learn with practice.”

But here William thrust his head against Jack’s chest, as if trying to bury himself behind his jacket, and refused to turn around again. He was saved from being forcibly strapped to the funnel by the appearance of a thin fellow wearing dungarees like the first man – presumably it was the missing Jones. He stood sheepishly grinning in the entrance behind Jack’s back.

“I went to find a wench, like you asked for, Mr Headley,” he began in a sing-song voice, rubbing his hands together nervously. “But I could not find one, honestly. Housekeeper says they are all busy upstairs. Would there be anything else you would like me to do for you?”

“Jonesy, Jonesy, I despair of you sometimes,” his partner exclaimed. “Well, I suppose we’re not going to get any further with this obstinate heap of junk – I’d better get back to that leak before it bursts. You show our visitors here the way up to the central hall, Jonesy, you can do *that* right, can’t you? But be sure and come straight back afterwards, you hear?”

“Thank you, we appreciate your assistance,” Jack added for the benefit of the newcomer; his voice revealed undisguised relief at the prospect of getting on with their task at last.

“Eh, ’oo’s ’e think ’e were callin’ a heap o’ junk?” William muttered as they hoisted the carpet onto their shoulders again and began following the second man back along the low tunnel.

They continued past where they had joined the passage from the right, and after what seemed like miles of similar passages through a murky, evil-smelling labyrinth of pipes that hummed and hissed and spluttered like a baby giant babbling to itself, they bumped into Jones, who had stopped abruptly at the foot of some wooden steps. He pointed

upwards with a grin.

“Just up there. You’ll come out under the main staircase in the hall. If you’re ever in Llandudno, boys, do say hullo to aunty Gwyneth for me, and tell her not to worry about the extra underwear, I’ll manage. Cheerio now.”

With some further struggling they managed to manoeuvre their burden up the dim stairway towards the outline of a door that was visible at the top.

4. The library: where words gather

The two men with the carpet appeared backing out of the doorway. In trying to open the door they had already knocked half a dozen mops and buckets and other items of janitorial equipment back down the steps and now they were having further difficulty twisting the carpet round the narrow space between the doorway and the blank wall beyond. To accomplish this, they had to back down a bit. Jack now pushed the tool box out first with one foot then turned to pull the carpet (his father attached to it) up the last few steps. At last it was hauled out onto the tiled floor, and they stood looking around them at what appeared to be the central hall of the palace. It rose to a circular ceiling two stories above them decorated with the signs of the zodiac that meandered in a broad band around the starry heavens. A divided staircase of dark polished oak ascended to the higher floors – it was from under one side of this that they had emerged. The space around them echoed with muffled voices that must have been coming from some way off, for they could not see anyone in their immediate proximity. As if in awe at the immensity of their new surroundings, William removed his cloth cap and stood twisting it between his palms as he gawked.

While he stood thus, Jack went to investigate the staircase – this looked like the route they needed to take in order to reach the duke's inner sanctum. However, the way up the broad steps to the point where the staircase divided was blocked by a cordon of scarlet rope. On a stand at the foot of the stairs the following message was spelled out: 'Private. Admittance for guided tours only'.

"Looks like we'd better find a guide, then," he muttered, and looked all around for signs of an official presence.

Only there were none. The front door, visible at the end of a hall lined with escutcheons and crossed maces and the like, lay directly opposite the staircase, but appeared as unmanned on this side as it had been on the outside. The only thing to do was to hoist the carpet back on their shoulders and head in the direction of the murmur of voices. This led them down a broader hallway hung with portraits of the duke's aristocratic forbears which appeared to constitute the main approach from the public entrance to the central staircase. The sound of voices

could well have been from a group gathering to be guided this way. But they had only gone a few steps when Jack noticed a discreet sign indicating that the way to the library lay down a side passage.

“I wouldn’t mind taking a quick look in there – I’m curious about those animated figures,” he addressed William over his shoulder, twisting his neck to do so. “There’ll probably be a guide coming by in a few minutes that we can catch.”

William muttered something about keeping His Lordship waiting long enough already but his complaint was ignored by Jack (who, by virtue of his sheer size, had the greater say as to where the carpet was heading), and a moment later the library door had been butted open and slammed back with a crash. Having spun around precariously a couple of times as if trying to regain its equilibrium, the legged carpet deposited itself with a thud in front of a large wooden desk and its two bearers emerged shakily before the disapproving gaze of the librarian, a wizened, tortoise-like figure seated behind it. Glancing around him in embarrassment Jack felt rather than saw other frowning eyes turned towards them from the soft leather armchairs and green-shaded reading lamps that were positioned along the length of the silent hall. The effect of disapproval on the librarian’s part may in fact have been an illusion produced by the thick beady glasses perched on his nose, for his eyes were quite obscured behind them. The emotion suggested by his reaction was rather one of alarm at the sudden irruption from without. He shrank back timorously into a shell of shadows.

“Sorry about that,” Jack started explaining, then instinctively lowered his voice. “No hands free – didn’t think the door was open. We’ve got to deliver this to the duke in person. Couldn’t find anyone outside. Could we bother you for some information?”

“I know nothing! Nothing!” the librarian piped up and flapped his little arms about defensively.

“Don’t take me wrong, I don’t expect you to take us to His Lordship in person. Actually, I just wanted a word with you about the contents of this library – I mean, I presume that’s what it is...”

“If it’s words you have come about that’s different...” He sounded somewhat mollified. “Words I have.”

“Well, I suppose these are all books, aren’t they?” Jack waved a tautological hand towards row after row of leather-bound tomes arrayed on the old-fashioned wooden bookcases all around them.

“See, in the main entry on page one, following the phonological specification (and the redundant indication of regular morphology in brackets), information is given on the word’s syntactic category (‘verb’) and its syntactic frame, which indicates that it ‘subcategorizes’ or ‘category-selects’ a following noun phrase (its object) and possibly a further prepositional phrase complement. The semantic information provided below – namely that the word refers to an action and semantically selects the roles of Agent and ‘Patient’ (or ‘Theme’) – has to be correlated with the syntactic arguments subcategorized for. The further semantic information is an abbreviated meaning postulate stating that ‘defeating’ entails causing the patient to ‘lose’ (in some sense) – this is essential for the logical interpretation of sentences in which the word occurs. It used to be that specific semantic selection restrictions on a verb’s arguments were marked – for example the fact that ‘defeat’ generally requires an animate subject and object. Nowadays they want abstract ‘theta roles’ instead. They also require that nouns be given their own syntactic frames, so ‘defeat’ used as a noun has to be marked as subcategorizing a suitable complement, as in ‘the defeat of Germany by the allies’ – you’ll find all that on page two. If only they didn’t keep on changing their minds upstairs every few years about the format – each change means a simply horrendous amount of work for us, adjusting every single entry again. They’ve recently decided that still more information is to be removed from the grammar and dumped in the lexicon. They just don’t understand upstairs how troublesome it all can be – it defeats me what they think they’re up to sometimes. Hm... now how could one see an Agent in ‘it’ or in ‘what they think they’re up to’ for that matter..? Anyway, it gets still more complicated as regards the content, since this can be cross-classified in so many different overlapping ways. Then there is the whole business of combinatoriality – derivation and compounding, and of course any irregular inflected forms. Most of the rest of the pages of the volume are taken up with associations to other English words that are alphabetised elsewhere entirely. This can be a matter of shared semantic field or etymological root, of relations of metaphor or metonymy, or of similar phonological shape or rhyme. Then, of course, there are pages and pages of concrete examples of usage. Here, a few pages on, at random, you’ll find some fixed phrases it enters into, like – yes, here for example – ‘defeat the purpose’ or ‘de head be willin, but de feet dey be draggin’ – now how the

devil did that find its way in?” (He frowned and started rapidly rubbing away at the entry with a big rubber.) “I swear there are hackers getting into the system – you just cannot get away from wanton graffiti these days...”

“This all sounds like a curious way to organize a library. How on earth can you order the volumes on the shelves if there are so many ways of doing it – wouldn’t random access be just as quick?”

“Yes, yes, I don’t deny it! It is all in a sense random! It’s arranged according to the principle ‘first come, first served’. Like I said, they’re always trying to modernize things upstairs, to go electronic, only His Lordship is prevaricating. Says he’s so used to the old card system, he can’t see the point of change, it invariably just means more complication, and I quite agree with him – oh, please don’t mention that I said that! It’s more than my life is worth! I just follow orders – you can’t blame me if volumes have to be rebound sometimes, I have assistants – some of the binders lack experience, they are the ones responsible for handling the phonemes sent up from below. I’m only in charge of overall categorization. You’re not going to put in a complaint are you? Have you found another mistake?”

“Course not – and I wouldn’t say a word if I had.”

“That’s good – to be discrete.” The librarian looked relieved and even stuck his neck forward a fraction, lowering his voice to a whisper again: “Order around here depends upon it. You have to be discrete to communicate effectively – clear oppositions and contrasts, no messy analog stuff. Systematization of expression is what it is all about, however murky the content. We update the latest changes in form and meaning and register any extensions of use, so misunderstandings are minimized. As far as humanly possible. The family insists on it.”

“But what exactly do you do with all this – information?,” Jack too reverted to a whisper. “Does it get used or does it just sit here gathering dust?”

The librarian looked offended and retreated into the shadows again. William’s fingers tapped Jack impatiently on the back, but he ignored him as he peered into the shadows, trying to see if the librarian was still there or not. Finally the tiny voice whispered out of the murk once more:

“Of course it gets used. They ring down to me for reading matter every evening. See these tubes behind my desk? That’s where the orders

come down, scrolled up inside metal cylinders. And those larger slots over there – that’s where the orders are placed and get sucked away to their destination. They are later returned down parallel chutes.”

“You mean there are tubes to every other floor?”

“To every other room in the whole palace. All information here is distributed and freely available to all *bona fide* house guests. Every room is in turn part of the classification system. Each one has a name, like the Turkish Suite or the Turquoise Room (just to stick to the t’s). The benefit is mutual – they get their reading requirements catered for while we can expand our stacks considerably. We lack space down here, as you can see, so we delegate information out. We’re really just a clearing house, we put addresses in touch with each other according to the accepted house code.”

“So let me see if I can figure this out: all the words down here have to be fitted into sentences and then into whole texts on other floors, higher up?”

“You’re not as obtuse as you look at first sight, I must say. Perhaps you might permit me to show you the contents of some typical items that you yourself have just referred to.”

When Jack expressed his interest, William clicked his tongue and wandered off sulkily in the direction of the windows on the far side of the long beamed hall. The librarian appeared round the edge of the desk pushing a set of steps on wheels which he positioned against a nearby section of shelves and clambered up.

“This should give you an idea.” (Here he retrieved and handed down to Jack a large – but surprisingly light – leather-bound tome.) “Recall that you said ‘figure’ a moment ago...”

When Jack opened it he was perplexed: between its covers the book seemed to be completely devoid of content, it resembled an empty box.

“No, don’t just stare at it, this is the talking book version – we have duplicates of every item in the library in this format. Put it to your ear.”

When he hesitantly did as he was instructed, he was even more surprised to hear that the book was far from empty: it was filled with faint whisperings, most of them just the word ‘figure’ itself, pronounced as if he were saying it to his own inner ear. In fact it sounded more like hundreds of voices repeating the word almost (but not quite) in unison. And beyond that there were more distant renditions, containing not just the word itself but others associated with it: ‘figure out...’, ‘figure this

out...’, ‘can’t figure it out...’, ‘figure of speech...’, ‘figure eight...’, ‘that figures...’, and even, barely audible amongst dozens of complete but faint sentences, the version that amazed him most, almost causing him to drop the book, namely his own recent words: ‘So let me see if I can figure this out...’.

“But those were exactly my words!”

“Does that surprise you? A decent library needs to be built up on original tokens, not just on types accepted by hearsay (though they can later be ignored or forgotten when the type is well established). Now this volume doesn’t just contain strings of phonemes and real sentences that the word fits into – listen some more. Tell me what you feel.”

“Feel? You mean like the feeling of puzzling over something and finally finding the solution? Or the feel of something tangible that forms a simple shape, one you can recognize? Or the feeling that something makes sense in general? There are so many different associations. But I suppose it all boils down to the feeling of using the word right...”

“But do you always use it the same way – are you sure it is the same word just because it sounds the same? Have you not heard of homonymy? That is a lot of what my job is about, sorting out that sort of thing.”

“Well, a homonym would be another word with a different meaning that happens to sound the same... I suppose the verb ‘to figure’ and the noun ‘figure’ are homonyms. But, now you mention it, they do have something or other in common besides the sound, though I’d be hard put to explain it...”

“Quite so. It takes professional training. Obviously they are historically related, but at what point did the meanings diverge enough to be able to speak of homonyms? Or are they still just polysemous, one word with multiple meanings, after all? As you can see, they have both been put in the same volume in this instance. But it is admittedly confusing when the ‘same’ word can be a verb or a noun, as is so often the case in English with its propensity for ‘conversion’. Even the same verb can fit into more than one lexical frame, say intransitive ‘that figures’ and transitive ‘he figured it out’ – so one could argue that there are in fact two different verbs here. But let’s take a word that can only occur as one part of speech, like this one over here.”

Here he took the first volume back and laid it aside while he looked for another one from further along the same shelf where it continued on the other side of the next recessed bay. This time when Jack put it to his

ear he heard a multitude of little voices whispering: “Hard, hard, hard...”

“The question is, is the adjective ‘hard – solid’ versus ‘hard – difficult’ a case of polysemy or of homonymy? They are obviously two different form-meaning combinations, but what does that prove?”

“Well...”

“You’re hard put again, I see. Never mind, a useful rule of thumb is to maximalise polysemy and see how far you can get with that, allowing for metaphorical extensions and all the other tricks of the trade. Even if there is no earthly grounds for supposing they are the same word – say ‘ground’ as in ‘ground floor’ and ‘ground’ as in ‘ground down’ – it’s always expedient to indicate a vague associative cross-reference. Redundancy on the broad scale never hurts.”

“Where have I heard that before, now?”

“Of course, if you *are* interested in history, there are at least two different ways you could investigate whether it is the same word or two different historical ones. One could concentrate on the form and enquire how that word of that form changed its meaning through time – a matter of ‘semasiology’ – or one could concentrate on one of the meanings and enquire how different ways of expressing that meaning within the same lexical ‘field’ have arisen and replaced one another through time – a matter of ‘onomasiology’. So whereas semasiologically speaking one can follow the meaning of ‘figure’ as in ‘figure out’ back through various stages to its Latin source, and even beyond that to the Indo-European root *dbeigh-* meaning ‘to form or build’, onomasiologically it has to be considered in relation (via metaphor say) to other words meaning ‘understand’. None of which really helps you decide whether there are one or more ‘figure’s in English today, however. The plain truth is that these things are almost impossible to decide in isolation from the whole system – and the whole system at any one time is extremely complex. That’s why experts like me will *never* be redundant.”

“You mentioned you had assistants helping you,” Jack remarked, having noticed one or two diligently scribbling scribes tucked away in discreet corners among the stacks. “What exactly do they do?”

One of them, a bespectacled young woman, was bent in concentration over a nearby desk in an alcove; she looked up myopically for a moment as her superior approached and began explaining her activity to the visitor.

“Miss Arbuckle, as you can see, is gluing stems and affixes together –

her speciality is derivation and compounding. Show our visitor what you are working on just now, my dear.”

Here the young lady timidly lifted up the end of a series of pages glued end to end, one morpheme written in big letters on each, to which she had been adding brackets with a pen and ruler. It read: [DIS-[EN[FRANCHISE]]]MENT.

“You’ll notice here that the innermost bracketed morpheme – the nominal stem ‘franchise’ (the base for further derivation) which could be called the lexical ‘head’ – is not in fact the morphosyntactic head of the construction, which is what determines the syntactic category of the whole word built up around it. The construction is of course endocentric, like compounds of the ‘bottle-top’ type: its meaning depends on that of its parts – its head does not lie outside of the word in some missing collocation, as in the exocentric compound ‘greenbottle’, which is not a kind of bottle.” (As he spoke these words an insect flew past and before Jack could believe his eyes – which he decided not to – the librarian’s jaw had snapped open and shut again and the thing was gone.)

“No,” he continued after a pause no longer than a quick swallow, “the morphosyntactic head is clearly the suffix ‘-ment’, even though it is a bound form, not an independent stem, since the word as a whole is a noun, not a verb. The two successive prefixes preceding the stem belong to earlier stages of the derivation – as the bracketing suggests – but they are not heads themselves. The first merely modifies the meaning of the verb ‘enfranchise’ (forming its opposite), while the ‘en-’ prefix, which can convert a noun to a verb (as in ‘endanger’), is actually redundant here where it functions as an almost meaningless verbal intensifier – ‘franchise’ on its own could be used as a verb in earlier usage. In English at least, suffixes are generally heads, while prefixes could be called tails, since they mostly just modify the meaning of the lexical head without changing its category.”

Before Jack could voice his confusion at this point, the librarian leant forward and, frowning, peered more closely at his assistant’s work.

“Do be careful with your bracketing, Miss Arbuckle, I’ve had to mention this before, haven’t I? Three left-facing ones require three right-facing ones, is that not clear?”

The face of the unfortunate young woman turned red and began to quiver. Before he could placate her she had burst into tears and run sobbing from her place.

“She’s ridiculously over-sensitive,” he sighed. “I’m afraid the agency just isn’t supplying us any more with the kind of thick-skinned, reliable drones we need. Like Duncan over there.”

The librarian led the way round to the next bay, where a young man – similarly bespectacled and wan-looking, but with the additional feature of a prominent over-bite – was sitting gazing at a stack of what appeared to be transparencies.

“Now Duncan here is our morphophonemics specialist, he collates related sets of concrete forms (or ‘morphs’) and assigns them to the relevant abstract morpheme, both independent stems and bound morphemes. Here he is matching allomorphs – context-determined variants of a given morpheme – to put into the volumes he is currently working on. He uses that transmuter there” (here he pointed towards an instrument on the desk top that resembled a microfiche reader) “to project individual wordforms between the covers in the appropriate alphabetical places, a process of ‘burning’ them into the overall resonance pattern for the word concerned (very advanced technology is involved). We use the term ‘wordform’ round here, by the way, to refer in a general way to any meaningful form of a lexical word or ‘lexeme’ (irrespective of whether or not it is derived or inflected) that potentially can stand under its own independent intonation contour. Now show us what you have there, Duncan, there’s a good fellow.”

“Al-lo-morph,” Duncan stammered out in a painfully slow, flat monotone as he held up a transparency on which the wordform ‘roof’ was visible; then he slowly raised a second one containing the alternative base ‘roove-’, accompanying it with his own words: “A-noth-er al-lo-morph.”

“Yes, I remember,” his superior nodded. “The alternative plural ‘rooves’ has been definitely accepted as standard now, hence the adjustment. In that stack there you’ll see he has the allomorphs of plural ‘-s’ itself – there are three of them. That’s all right, Duncan, we don’t need to see them all.”

Duncan raised the first of this new set of transparencies and began spluttering out “a-noth-er” once again, but without waiting for the exposition of the rest of them the librarian patted him on the back to put him back to work. To Jack he added:

“It’s not as simple as it might appear, deciding what counts as a single ‘morpheme’, or what the relevant context is. What about enclitics like

‘ll’, for instance – does this go with ‘shall’ or with ‘will’? And what about items like the possessive ‘-s’ in ‘the King of France’s wig’ – what exactly are the restrictions on what it can be attached to? Then there are inflected forms of words, let’s call them ‘grammatical words’, such as the past tense form of ‘give’, ‘gave’, and its corresponding past participle ‘given’. These are categories which are only actually defined on the next floor up – here they are just tagged in readiness. Duncan’s work also requires a certain manual dexterity. Simultaneously with entering the particular allomorph you have to associate the relevant triggering context, for example –”

At this point they were distracted by a sudden disturbance from the direction of one of the window recesses, where William appeared to be engaged in a violent argument with one of the animated busts – he was waving his arms about and dodging the bursts of steam that accompanied the automaton’s angry retorts.

“Only positively specified strict subcategorization features and only negatively specified selectional features appear explicitly in lexical entries!” the automaton hissed like an overheated kettle, causing the pedestal it was fixed on to rock ominously from side to side.

“Oh my goodness, it’s Noah,” the librarian turned even paler than he was already. “He mustn’t get him worked up – those heads are priceless, a family heirloom, and he’s the most idiosyncratically tuned of them all, the most autonomous...”

He scuttled off to try and separate the antagonists before damage was done, and Jack followed close behind.

“I ain’t got the vaintest idea why ‘He read the book carefully’ should be hacceptable but ‘Jack resembles his father carefully’ bain’t, an’ I don’t like the unzination neither!”

“Clearly, what is needed is the following rule: [+ - NP[^] Manner] → [+ - NP], to be interpreted in the following manner: if (D,C) is a lexical entry with distinctive feature matrix D and complex symbol C containing [+ - NP[^] Manner], then C is replaced by C’, which contains each specified feature [αF] of C, where F ≠ [- NP], and also the specified feature [+ - NP].”

“That bain’t clear to me at all – and there be no point blowin’ steam in me vace, that won’t convince me, nohow!”

“I repeat, the lexical entry for ‘resemble’ obviously has to contain such a redundancy rule!”

“You be the one gonna be redundant in a moment, yer zawdust-brained puppet! Of course me own zon resembles me. Take it back!”

Jack and the librarian arrived just in time to remove his grip from the automaton’s wooden throat. The offended Noah (for such the metal plaque on the pedestal proclaimed the figure to be) carried on repeating in a steamed-up voice all through this treatment: “No transformations in the lexicon! No transformations in the lexicon!” until the librarian found a switch behind the pedestal and – like a *deus ex machina* – turned him off.

“Uvay. I told you you’d get into trouble ignoring usage, my young friend,” the crinkle-haired old automaton labelled ‘Jacob’ on the pedestal opposite commented with a strong Slavic accent. “People are just not predictable.” (This was accompanied by a restrained sigh of steam.)

“This is not for beginners!” the librarian turned reproachfully to William after ensuring that no harm, apart from loss of dignity, had come to the figure on the pedestal. “If you really want to know more about that sort of thing you’d better ask upstairs. It’s not my area of jurisdiction at all. They are just kept here for safety, away from the public and the probing little fingers of children.”

“I’ve never seen such a phenomenon before – where do they come from?” Jack wanted to know (while William, after pulling a face at silenced Noah, just turned away and looked out of the window indifferently).

“It’s the collection of the present duke’s grandfather, Lionel. He combed the castles and museums of Europe trying to find the best of them to buy – they say it cost him half of the family fortune, which may be why they’ve had to start letting in the public in recent years. Of course it’s an old tradition, the construction of talking heads, but the earlier ones were very primitive, purely for entertainment. With his background it was not surprising that he should want to refine the basic model and produce his own. He hired the best clockmakers and joiners of the county to assist him. Noah was the last one he produced just before his untimely death – from scalding. He had provided him with the capability of generating an endless variety of sentences, though he still hadn’t quite ironed out the problem of supplying him with a reason for actually producing any of them.”

“It sounds like this interest in language goes back a long way in the family...”

“Longer than you might suppose. The earliest record of it was in the chronicles that tell of the very first duke, Raymond the Rotten (as he was dubbed by spiteful monks), who came across with William.”

“Eh, I never gone nowhere with no rotten Raymond,” William muttered (though his back was to them, he was evidently still listening with one ear).

“It was at the time of the sacking of the Anglo-Saxon monasteries, of course, and Sir Raymond was set by William to do his share of the dirty work. He became interested in the illuminated manuscripts plundered from Lindisfarne in the North, and on his return to the castle his lord had given him (which originally stood on this site, by the way) he assembled several expert scribes and set them to work on illuminated menus. These he distributed round the table at the luxurious banquets he used to hold for his fellow barons – on such occasions they would vie at outdoing each other in lavishness. Weeks it would take to produce just one, the clerics grumbled – for a meal that would be disposed of in one sitting. But at least it kept the tradition alive during those dark times. Though his peers scoffed, the duke even made the effort of learning a bit of English. Enough to make his wishes known to the scribes under his command at least. But that’s another story – it’s all in the Archives upstairs. Oh dear, oh dear, I must get back to my station now. I can see there are new orders piling up on my desk. I mustn’t fall behind or there’ll be hell to pay...”

“We must be going too. Thank you for your – information. Come on William, the carpet. We have to find a guide.”

The two men followed the librarian back to his desk (where he scuttled into the shadows), picked up the carpet and tool box and headed out the way they had come. The timing was perfect: a guided tour was just passing along the portrait-lined hall. The excited voices of the visitors echoed all around them, bouncing off the panelled walls and the vaulted ceiling. At their head marched a brisk, officious-looking lady in a tweedy suit, a walkie-talkie slung over her shoulder on a strap and a roll of paper tightly clasped under one arm like a swagger stick. She was talking away non-stop in an authoritative counties accent. They joined the back of the crowd as it surged towards the staircase, where the guide had pulled aside the scarlet cordon. The easiest thing, Jack decided, would be to try and get her on one side when she finally stopped talking.

5. Of syntax and thumb-tacks

Like General Wolfe leading his vertical charge up the Heights of Abraham, the guide emerged on the landing that surrounded the circular stairwell at first floor level, where the two flanks of the staircase met again. From there they continued, splitting again, to the second floor landing high above. She sniffed the air as if checking for French scouts. Satisfied, she turned and rallied the noisy but loyal rabble behind her with a wide swing of the arm and a loud “This way!”. The way led round the edge of the abyss – from which only a flimsy balustrade separated them – towards an open doorway on the far side. Here the guide stopped and announced, in a bellow which all could hear, that beyond the doorway lay the ‘state’ rooms open to the public.

“On the same floor there are also situated the ‘interrogative’ and the ‘imperative’ rooms, but these are of no immediate interest to visitors. The former is where the duke in earlier times carried out his hereditary obligations as local magistrate, receiving statements from malefactors and witnesses – it is still occasionally used for the settling of estate matters today. The latter refers to the private toilets (the visitors’ toilets, as you will have observed, are situated on the ground floor near the entrance).”

The straggle of tourists congealed into a coherent group once more in the first of the luxuriously decorated chambers reached via the corridor beyond the door. Here the guide silenced the murmur of admiring comments and explained that they were now in the ‘reception room’, which was reserved in the old days for visiting dignitaries and landed business associates. A notable feature was the suit of armour standing in one corner: this, it was explained, was installed in Elizabethan times by the thirteenth duke. It could house an interpreter who would discreetly communicate his simultaneous translations via the pipe that led down through the armorial spear into the floor and up again into the back of the duke’s chair. The duke prided himself on understanding every civilized language on earth – though for the sake of dignity would reply only in ripely turned English.

The two men with the carpet hung back near the door to the corridor, half in, half out. They could distinguish various nationalities in the

group now – including a tight gaggle of Japanese, who, surprisingly, appeared to understand the rapid flow of English (or at least they smiled and nodded every now and then, perhaps at random). There were also, rather incongruously, a couple of painted Indians wearing feathered headdresses who stood at the back with glum, far-away expressions on their faces.

Without a pause the guide led the way on through a further succession of rooms: the first, the ‘representation room’, contained a display of family art treasures from all the corners of the globe (the rounded ones, that is); the next, the ‘retiring room’ or ‘old study’, was where retired gentlemen could smoke and where financial or political propositions could be made and concluded at leisure; then the theatre (mostly used in recent years for Christmas pantos put on by and for the younger members of the family and their friends); and, finally, the largest and most lavish of them all, the ballroom.

Here several other groups that had not yet moved on were lingering – Jack thought he recognized snippets of French and German from the guides as they meandered past. Their own group came to a halt in the middle of the great hall’s parquet floor. They dumped their carpet down and tried to blend in with the rest of the group. Their guide began to elaborate upon the most notable architectonic features of the room, pointing now towards the ceiling – with its exquisite fan vaulting – now to the walls – filled with alternating mirrors and tapestries portraying scenes from the hunt – and now to the tall windows between the mirrors on the south wall, where gathered curtains half revealed the balconies beyond.

“The hall itself dates back to the Gothic core of the palace – only the adjoining chapel remains of the still earlier Norman keep. But it has been remodelled several times since then. Note in particular the Neo-classical elements that now predominate – the elegant simplicity of the columns and their plinths, the moulded arches above the doorways, and the lintels and entablatures of the great windows. All that remains of the Gothic period decoration is the imitation wooden vault at the far end of the ceiling where the scaffolding is in place. It’s being renovated just now, I must apologize – the inspirational phrases in Gothic script (an affectation typical of the time) have begun to flake off, alas. As for the baroque trappings of the intervening period, observe for example the mirrors along the interior wall with their elaborately wrought frames,

Bohemian work – a present from the Elector of Brandenburg in recognition of services rendered by the family in 1713. As an amusing little detail illustrating the eclectic nature of the decor, note the Italianate stucco fauns tucked away in the spandrels below the cornice of the west wall – those are the curved triangular spaces formed by the arches of the windows and the enclosing mouldings. You can see something similar where the fan-vaulting meets in the ceiling directly above us. They are busily engaged in plucking and throwing grapes at the guests. You can just imagine those guests of yesteryear in their elegant gowns and uniforms swirling across the floor – itself the work of the most renowned French *parquetier* of the *grand siècle*, Julien de la Fleur... And it is of course the details that count. Human language itself, some would claim, is but a ‘spandrel’ in the overall scheme of things, the filling out of a chance space left by the abutment of other more basic features, a non-adaptive side effect of our biological make-up. Such ‘filling out’ may evidently be more or less elegantly and more or less usefully realized. Be that as it may, I think you will agree that the whole effect of this truly English house is one of both elegance and utility. It is of course the result of many centuries of tradition, traditions merging into traditions, only marred by the occasional abrupt transition, as following the terrible fire that almost gutted this wing during the Civil War.”

“How much is this little lot insured for then?” a vulgar male voice arose facetiously from the midst of the crowd. “It’s hard to *really* believe the duke is broke.”

The guide’s eagle eyes, trained for recognizing trouble-makers from a considerable altitude, frowned as they honed in on the source of the question. The reply was as acerbic as it was effective in quelling this potential act of insurrection:

“One cannot put a price on cultural heritage, can one? That is hardly the point of it. If the structure of our civilized grammatical world came crashing down about us we would all revert to the inarticulate gibbering of animals. Cries and gestures, even simple words, but no coherence, no syntax, no real grammar. Without grammar what would our language be? No, nothing is ensured – so it is the clear duty of everyone who loves it to contribute what they can to prevent its disintegration and decay. By speaking in the accepted manner. And that, I might add, includes avoiding split infinitives.”

The man who had spoken cringed back into anonymity as the guide wheeled about and again gestured towards the ceiling above them.

“You will observe that the articulation of the room’s appointments reflects a subtle and harmonious blending of the different nationalities and styles represented: if you look more closely at the inscriptions all about you you will see a great variety. Compare, for example, the ponderous sententious feel of the Germanic phrases on the beams that I pointed out to you with the texts woven into the tapestries in courtly, curlicued French. In the former, the bulk of the content is suspended between postponed particles or participles, multiple modifying clauses are inserted between demonstratives and head nouns, and so forth, while the latter consists of free-flowing clauses, the logic of their succession deceptively simple but manifesting a subtlety of modulation that is borne largely by conjunctions, oppositions of tense, and the alternation of indicative and subjunctive moods. Or observe the ‘scrambled’ syntax of the complex Latin periods inscribed in the stucco mouldings up there – they need to be unravelled to be interpreted at all, but the elaborate array of inflections supplies all the cues necessary. What articulates the word order here is style and – more broadly – pragmatic concerns of emphasis, of context, of newness of information and heaviness of clause, in a word: the demands of rhetoric. Contrast this with the unvarying word order of the explanations in honest-to-goodness English you can see here and there attached to the columns for the benefit of visitors like yourselves. Lacking in inflectional clues, our native language relies on word order to express grammatical relations between constituent words and phrases. Of course what it lacks in morphological intricacy is made up for by its exceedingly varied vocabulary, borrowed from all the other major languages of the world. Which makes it an ideal instrument for analytical logic. It has been said that every word is a castle for speakers of English. Isolation is certainly valued higher in this fair land of ours than is profligacy of derivation – making a virtue of necessity, foreign sceptics might say. But we must admit, being fair, that every language possesses its own sense of aesthetic cohesion and balance, like this ball-room, if only it is exploited to its full capacity. The rules defining how phrases and clauses can be built up, expanded from simpler word units, the possibilities available for subordinating or coordinating clausal structures, the means of marking agreement or case relations between constituents, the obligatory expression of certain kinds of abstract meanings

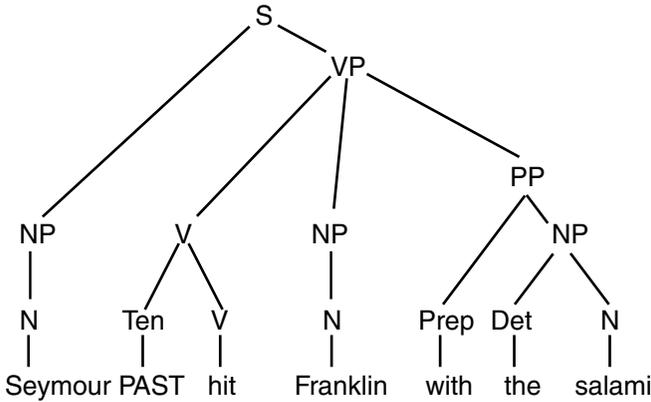
but not others, all this varies greatly from language to language. Nevertheless, there are features and limits shared by all human languages, features and limits that reveal common motivations and constraints in the working of every human mind. For, yes, grammar is a window upon the soul.”

“But grammar’s so dry and – dead,” another visitor – female this time – was bold enough to interject, perhaps egged on by her giggling friend. “If this place is short of cash, like we’re supposed to believe, why don’t they try bringing in more by livening it up, say with a discotheque at the weekends or something....”

“For a start we are not at all adverse here to new ideas – though hardly of the vulgar kind you suggest. The work proceeding on the scaffolding over there is in fact indicative of the latest thinking in the maintenance of the great houses of this country. Rather than indulging in grandiose schemes for expansion from one generation to the next, there is a return these days to studying individual constructions – in order to increase our general understanding from investigations of how precisely they are used and how they evolve. Highly abstract syntax – ‘dead’ syntax, I suppose you would call it – is being supplanted by attention to individual functional configurations. This is a healthy trend if you want my opinion, fresh air always is. Well, enough of these generalities, time to grab our hockey sticks and get down to the nitty-gritty. Let us see how things are put together around here.”

Here she marched across to a nearby portable blackboard that had apparently been stationed at the edge of the hall for just this purpose. Whipping out a piece of chalk she scratched away with it to produce a tree structure, adding below it a kind of logical formula whose relationship to the diagram above was not immediately apparent.

Figure 5



Past e_1 : $[\text{hit}_V (d1x_1 : \text{Seymour } (x_1))_{\text{Ag}} (d1x_2 : \text{Franklin } (x_2))_{\text{Go}} (d1x_3 : \text{salami } (x_3))_{\text{Inst}}] (e_1)$
Sub Ob

“Take an everyday sentence like this. Basic to all syntax is the constituent structure tree (or ‘tree diagram’), like this one. It merely shows how words and other basic meaning units combine into larger surface groupings – phrases – which in turn are related to each other within overall sentence units. It is not associated exclusively with any particular brand of linguistic theory, though it has been used and developed most widely within the standard ‘generative’ variety of syntax, which combines morphology and syntax in a broadly autonomous, morphosyntactic approach to grammar. Bear in mind too that we are talking about English here, a language with a clearly defined ‘VP’ or verbal phrase (here ‘hit Franklin with the salami’). English is a ‘configurational’ language with rather strict word-order. For a non-configurational kind of language where the object can be separated at a considerable distance from the verb a correspondingly ‘flatter’ tree structure – with the various NPs (or noun phrases) on a par with the verb itself, directly under the sentence ‘S’ node – might well be called for. The important thing to note is that the verb is the key to the configuration: apart from the NP

in subject position (which all full declarative sentences in English require), the verb has its own ‘valency’, calling for an obligatory object NP and, as here, an optional prepositional phrase in instrumental function (the ‘PP’) – these are ‘subcategorized’ in its lexicon entry, as recorded in the lexical department on the floor below us. Other conventions here are the labels ‘Det’ for determiner (the article within the third NP) and ‘Ten’ for ‘tense’, which unlike the other nodes is not attached to an independent word, but indicates the need for the correct tensed form of the verb, here ‘Past’ (I shall ignore the matter of agreement with the singular subject, which is not relevant here). The tree expresses the successive expansion of ‘S’ according to simple phrase structure rules, such as ‘S ---> NP + VP’. More advanced forms of this approach are practised elsewhere in the building, where (if you get that far) you will hear about other theoretical ramifications that have grown out from it. Here and now I should like rather to contrast this purely structural representation with a functional one of the same sentence, since this is the most bewildering thing about grammar when you first begin: there seem to be so many alternative ways of representing the same facts. That is simply because there are so many dimensions involved and some of them are more relevant to pursuing certain kinds of generalization than are others – you cannot grasp it all at once.”

With this she pointed at the formula she had written beneath the diagram.

“The same information about the interpretation of the sentence as on the tree structure – that is the predication ‘ e_1 ’ – is given in the formula below, only the details of expression (like the exact order of the words) are not indicated. These are assumed to be handled by separate late ‘expression rules’, which I have left out for reasons of economy. Conversely, on the tree structure the functions of the constituents were not directly indicated, although the grammatical ones at least can be inferred (e.g. that the first NP is the subject of the sentence, a structurally determined matter in English). In the formula the verbal predicate ‘hit’ and its nominal ‘arguments’ or ‘terms’ (the various ‘x’s) are represented in predicate calculus format – but don’t let that throw you. Notice that the verb is preceded by an abstract operator for past tense and the three arguments associated with the verb have semantic roles associated with them – thus ‘agent’ for the first argument, which has also been assigned the syntactic function ‘subject’ (the patient or ‘goal’ term

could have been chosen if it had been a passive sentence). Both the subject and the object are marked as definite and singular ('d1') since I'm assuming that Seymour and Franklin are known to us all."

"I'll be buggered if I knows the gents," William muttered, just loud enough for the guide's basset-like ears to pick up his words and cause her instantly to swivel round, searching him out at the back of the crowd. There was no escaping her fierce gaze, nor the disapproving clicks of the tongue from the visitors nearest him.

"Well, I means to zay, 'ow can you know what a zentence is about if you don't know the volks it's meant to be about, and what exactly it be they be zupposed to be gettin' up to with that there zalami thing...?"

"Are you purposely trying to undermine my authority, you silly little man?, "she bridled. "These contextual matters are handled higher up in the structure, they are of no concern to us here. They are not part of the tour. What goes on on the next floor above is a private, real world matter – the residents have a right to their own lives like everyone else."

"Now where was I," she unbridled with a shake of her mane as if coming into her stable from the rain. "Yes, let us consider a slightly more complex sentence which contains a complement phrase. I shall use this to illustrate how different deep structures can explain ambiguity in surface structure. This I have already prepared on a sheet of paper in order to save time – please bear with me, we will eventually get back to the overall structure of this splendid room... Damn, damn..."

The expletives were brought on by her thwarted attempts to fix onto the rim of the board the diagram that she had been carrying rolled up under her arm; the bits of cellotape at the corners must have folded back on themselves.

"Looks like she's all thumbs," an American among the tourists chuckled to his phlegmatic neighbours. "I have some thumb-tacks in my pocket she can borrow – they must be good for syntax." He obviously considered himself something of a wit.

"Some *what* tacks?" the guide swivelled and shot the words back at him.

"Thome some-tacks, I mean -"

"Thank you," she sniffed, "but I think I'd prefer drawing pins."

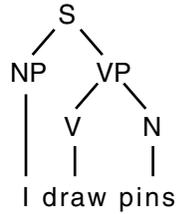
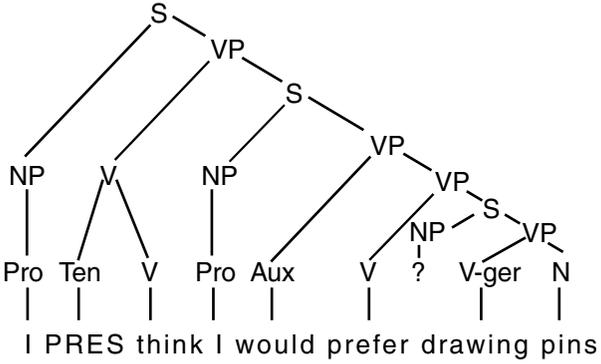
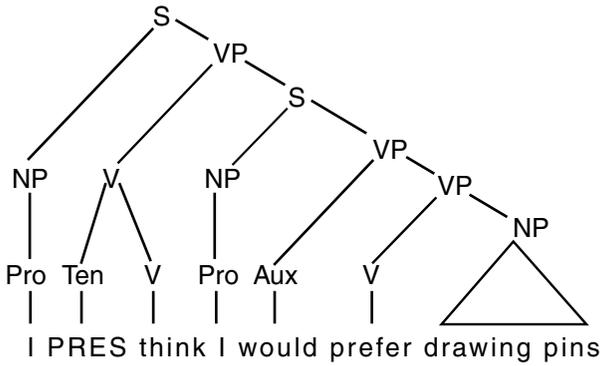
With this she dug into the pocket of her tweed jacket and drew out a handful of the objects thus named.

"What's she think she's gonna draw with those things?" the American

whispered defiantly as she turned away again to pin the thing up. “Pins or puns?”

But his words turned into an incredulous “What the heck -?” when she stepped back and he saw that the tree structures now pinned to the board referred to the very sentence the guide had just used.

Figure 6



“You will observe here that the verb ‘think’ takes a whole sentence as its object ‘complement’, not just a noun phrase. In the first of the two structures corresponding to this sentence notice that ‘drawing pins’ is an ordinary NP consisting of a single endocentric compound with ‘pins’ as its head, whereas in the second, the object NP is replaced by a clause consisting of a gerundial form of the verb, ‘drawing’, plus its own object ‘pins’. This is the relevant complement structure subcategorized by ‘prefer’. The question mark dangling on the expected subject NP node of this embedded sentence is just meant to suggest the trace left by the subject in the deep structure clause sketched below (‘I draw pins’) before it was dropped by so-called Equi-deletion and the gerundial form of the verb introduced. And since you raised the subject,” (here she stared pointedly at the American) “perhaps you can tell us why one nevertheless can say ‘I think I prefer him drawing pins’, in which the underlying pronominal subject is not dropped but on the contrary treated as the direct object of ‘prefer’? However, this is probably getting too technical again for the pinheads among us, I wouldn’t want to overtax their capabilities...”

The American wiseacre turned livid but remained silent.

“But those two readings of the first sentence,” another visitor objected hesitantly. “Surely intonation distinguishes them. Is that in the deep structure too?”

“No, that is handled by a different component or module of the grammar altogether, the phonological component. You are right, however, that intonation – or rather stress – is indeed different in the two cases. It is essentially a matter of scope: on the second reading the verb ‘prefer’ takes the following complement phrase in its scope whereas on the first, which lacks such a complement, ‘drawing’ does not take ‘pins’ in its scope since it is on the same syntactic level, namely within a simple NP. Syntax according to this brand of theory has interfaces – whether at the surface or the deep level depends on the vintage concerned – to both semantics (or ‘logic’) and phonological spell-out. The latter includes the assignment of stress and intonation patterns. It is generally agreed that it is surface structure that is passed on to the phonology, where specific phonological processes are triggered – for instance the shortening of the auxiliary verb ‘would’ to /d/ in the sentence written out on the board. This depends on its position in the surface string – it would not be triggered if ‘would’ were in initial position in a question. As regards

semantic interpretation, the important thing is that at some level there should be unambiguous representations supplying clear input for logical applications beyond the confines of the syntactic component itself. It is the function of ‘transformations’ to associate unambiguously interpretable deep structures with ambiguous surface structures, while actual semantic interpretation occurs elsewhere. According to other approaches, however, semantics is everywhere, in every nook and cranny of the building (although often invisible) and cannot be teased away from structure at all. The cake can, as I’ve suggested, be cut in several different ways however, depending on purpose. Well, this is a broad subject – there is always scope for differing perspectives. Speaking of which, let me demonstrate the very heart of syntax.”

With this she removed the pins from the board and strode over to the nearest of the tall mirrors with the diagram in her hand. Here she held it up at an angle so that the group could see the words reflected back from it and at the same time aligned herself so that the mirror reflected back not only herself and the sentence she was holding but also the mirror between two windows on the wall opposite so that she was reflected back in rear view from the other side of the hall, and within that reflection she was again reflected back in front view from the first mirror – as a smaller self holding the same sentence in the reflection of the mirror opposite, which in turn contained a further reversed reflection, and so forth, *ad infinitum*.

“You see here an analogue of the infinite recursivity of syntax: the overall sentence node ‘S’ can generate a daughter node which is itself an S, which in turn can subcategorize a further S, and so on, in principle without limit. Thus the original sentence ‘I think I’d prefer drawing pins’ could be expanded to ‘I think I’d prefer to use drawing pins’, which in turn could be expanded to ‘I think I’d prefer to use drawing pins for attaching the picture to the board’ or, expanding upwards at the other end, ‘He claims that I think I’d prefer to use drawing pins’, and so forth, all perfectly well-formed English sentences... Ah, but now I see the previous group is coming back from the chapel – it’s time to move on, gang.”

Without waiting for questions, the guide rolled the diagram up, slipped it back under her arm with military precision and spearheaded the next general surge of the group towards the far exit from the ballroom, where a short corridor led to the entrance of the chapel. Here

Jack and William, who followed at a distance, saw their chance to get her to one side at last, for a piously smiling figure whom she addressed as 'padre' took over the function of guide for this part of the tour (he was presumably the family chaplain, although his surplice looked more like Army surplus). The female guide, having handed her flock over for the duration, stood smoking a cigarette in the corridor outside. When the pair with the carpet now addressed her directly, after dumping the carpet and tool box on the ground before her, she raised a suspicious eyebrow.

"Excuse me, you probably noticed us tagging along behind your group," Jack began in an apologetic tone, "but the truth is we're here on another errand altogether and were just waiting to get the chance to ask you for directions."

"What?" the guide flared up. "You mean to tell me you haven't paid for a ticket? Do you think my services are free?"

"Well, no, we don't need tickets – we're supposed to be delivering this carpet in person to the duke. Couldn't you just –"

"Hah! A likely story! Why, your accomplice there even wasted my time with a ridiculous question."

"But that's only because we're genuinely interested in what you have to say – if we had more time we'd love to see the interior of the chapel and all the rest."

"If you're on the tour you *have* to see the chapel – it's obligatory. In which case you must have a ticket. If you're not then you cannot and it is a matter for the authorities, there are no two ways about it. I've seen your likes before, scroungers, breaking the rules then not even having the guts to own up to it when caught red-handed. I'm going to call security. You stay right where you are."

Here she slung the walkie-talkie from her shoulder and half turning away (but still keeping a sharp eye on them) she pressed a button and spoke rapidly into the mouthpiece. The only word they could make out was 'freeloaders'.

"An official is on his way to escort you to the manager's office, where you can try and explain yourselves – but don't think you can talk your way out of it: they have ways of getting at the truth. In the meantime you'd better go in and join the group. Since they'll make you pay like everybody else you might as well get your money's worth. Just don't try slipping off. There's no other way out of the chapel. You can leave that carpet thing with me – I dare say it's stolen anyway."

Despite their protestations they had to do as she insisted, what with her standing there with her hands on her hips and glaring at them like a medusa. Heads were beginning to turn their way and indignant whispering could be heard from other visitors nearby. The last thing they wanted was to cause a scandal – they risked being summarily evicted from the premises, minus the carpet and without having got anywhere near the duke.

The atmosphere inside the small chapel was suitably hushed, for the thick walls effectively blocked out any sounds from without. The chaplain's reverent voice was droning on about the history of the family shrine to the group, which was now gathered close to the altar at the far end. On the wall behind the wooden pews to his left Jack noticed a sombre painting of a seated saint holding a quill in his hand. With it he was inscribing something on a piece of parchment – one could read 'In the beginning was the Word' if one tilted one's head. The altar itself was encased in glass – rather like a bookcase – and in the flickering light of the myriad candles positioned around the shrine it could be seen that the object inside, propped up on a golden cushion, was indeed a beautifully bound, ancient-looking volume.

"Few of our great country houses can boast a family grammar going back as far as this one," the chaplain was explaining in an unctuous tone. "It has survived four major spelling reforms and even the Great Fire of 1644, when the sixteenth duke had the foresight to order the entrance to be blocked with stone and mortar before he was forced to flee the encroaching Puritan army with his family. Now, if you turn around and look to your left you will see the other main treasure of this chapel, a series of stain-glass windows dating from the early eighteenth century depicting the successive phases of the Holy Analogy. It starts, as you can see, with Moses descending the mountain with the slabs bearing the rules of Universal Grammar, and continues all the way up to the invention of the printing press over at the end there, when acceptable verbal conduct become fixed for all time thanks to the possibility of infinitely reproducing the norm."

"Isn't that all a bit outdated now, gov," the cocky tourist who had annoyed the guide earlier interrupted. "I mean, language changes, people use it in new ways all the time..."

"Beware of this kind of loose talk!" the little chaplain suddenly pulled himself upright and raised his voice, switching instantly into sermon

mode. “Individual words may come and go, but the Truth they refer to when correctly used does not. Why do words exist if not to form propositions? And why do propositions exist if not to form Judgments? We shall all be judged by our speech acts – and those who fail to comply with the accepted norms will be cast down into the realm of darkness where the undead wail and chatter in perpetual ignorance and mutual misunderstanding. Believe me, good people, you would not want to descend the stone steps inside the wall there that lead down to the ancient, dank places below. But lift up your hearts – the same steps lead upwards, the other way, towards the Judgment Day bells in the belfry far above us. Although they themselves will not ring before the last trump is heard – well, until there is another birth or a death in the family, at least – if we open our hearts with sincerity, we can hear the faint tinkling of lutes and harps, which is none other than the presentiment of the eternal state of the society of the blessed who have so tuned the instrument of their worldly intercourse that all felicity conditions are instantaneously fulfilled whenever they so much as open their mouths...”

“Lawd, ’e do go on,” William shook his head and sighed.

“Now perhaps you understand how the idea of the porridge came to me,” Jack commented sardonically.

“Well now, you zuggestin’ as ’ow we might...?” William cocked his head with a sly grin towards the organ loft above them.

“As a matter of fact, perhaps we *could* make use of it in effecting a getaway while he’s still blathering on. Why don’t you cause a diversion by going up there and playing around with the organ while I grab the carpet and make a run for it – we can meet up again in the ballroom. With any luck we can find some more sympathetic guide before Brunhilde out there sets the security guards on us.”

No sooner said than done: William was up the winding steps to the overhanging organ loft in a few springy leaps, while Jack edged back to the entrance and peered through the half-open door. He ascertained that the guide still stood finishing her cigarette in the immediate vicinity of the rolled up carpet. A moment later the diversion engineered by William commenced – only not at all in the way they had planned. Plunging his fists down on the keys produced not the great stomach-churning discord he expected but a breathy roar that modulated slowly into the gravelly, drawn-out phrase ‘Tea-time!’ which they had heard synthesized in the cellar earlier. The organ must have been patched right

into the ubiquitous communication system, part and parcel of the twentieth duke's innovations.

The effect on the occupants of the chapel was at all events even more electrifying than if the expected discord had been produced: panic gripped them and a mass exodus towards the narrow exit began, with women screaming and voices yelling such things as "The devil's breath!" and "The last trump!". The chaplain alone kept his head and headed with severe intent straight down the aisle towards the organ loft stairs, but William had already sprung down and elbowed his way out through the exit together with the last of the struggling tourists. In the confusion outside he saw Jack grab the carpet and the tool box and stagger off to the left while their guide was swamped by clamouring tourists who clung to her – whether seeking succour or demanding tea, it was not clear. William ran to catch up with Jack and lifted the dangling end of the carpet to his own shoulder. Luckily, another tour group was heading the same way at this time – its rearguard had become entangled with those clawing their way out from the chapel, adding greatly to the confusion. Father and son were swept along towards a smaller staircase at the end of the corridor – and then down.

6. Feeling the way forward

The steps spiralled down through several turns, passing on the way two sets of narrow windows. At the first of these they stopped for a moment to catch their breath and to let the last of the descending group pass them; this resulted in some muttering and indignant remarks about the obstruction that the carpet was causing on the stairs. When Jack looked down he saw that there was some kind of courtyard below them. It was laid out with square flagstones and was hemmed in by high brick walls – except to the left, where it was flanked by a newer single-storey extension of the main building. There were a number of statue-like objects of wood or metal positioned about the courtyard, apparently at random. These included the life-size effigy of a rampant unicorn, a cocktail glass of similar proportions containing some coloured liquid, two large chess pieces (a knight and a bishop perhaps, though the angle obscured their identity), a spinning top poised at an odd angle, a teapot, several brightly painted cubes and pyramids, a curved holder for a missing globe that resembled a giant question mark, and various more abstract constructions put together from triangular, circular and stick-like components that were difficult to classify. Presumably this represented some kind of modern art display. Visitors were also wandering around down there, singly or in small family groups. They appeared to be dressed in clothing more typical of the previous century, however, the women bearing parasols and the men in top hats, while the children were kitted out with sailor's uniforms or bonnets and pinafores, according to gender. The whole area was somehow slightly out of focus, its colours blurred and pastel-like, and the figures walking in it moved in a strangely slow and sombre fashion, almost like ghosts. The light seemed to pass right through them, the walls partly visible beyond. Where was this light coming from anyway? The sky had been heavy with rain when they had first entered the building.

They didn't stop at the second window, but from a brief glance in that direction Jack saw that the lighting had changed again already, and that now the objects spread across the flagstones had also shifted position, as if invisible prop men had rushed out and rearranged them in the intervening seconds. But could the visitors too have changed clothes so

quickly? Why should the men have been wearing golfing caps and knickerbockers now and the women light frocks and headbands in the style of the twenties, all carrying champagne glasses and chatting and laughing as if they were out for a lark in the country? The only parasol in sight was a large one stuck in the oversized cocktail glass, and the only top hat about was worn by one of the chess pieces. By the time they stepped out of the door at the bottom into the courtyard itself the sky was again overcast and the positioning of the mysterious objects looked once more quite different from before. Perhaps it was the perspective. But the people standing or walking about now were also quite different. They were clustered in small groups, their heads together in animated conversation; some were smoking and some sipping coffee from paper cups. The men were wearing casual jackets and open collars – some with academic capes thrown over them – and the women wore no-nonsense dresses or trouser suits. Both sexes displayed name tags pinned to their lapels or dresses, at various approximations to the horizontal. Jack remembered that someone had mentioned earlier a conference supposed to be taking place in the new extension. The French doors leading into the conference hall – visible to the left of the courtyard – were wide open. There must have been a break between presentations just now. A further door between where they emerged from the staircase and the new wing seemed to lead back into the entrance hall, but it proved to be locked – presumably the general public was not allowed access to the courtyard while the conference was in progress.

Their immediate priority was to obtain directions to the duke's private quarters before they could be intercepted by further officials with walkie-talkies. There was a conveniently broad pillar located in the middle of the courtyard behind which they could conceal the carpet while considering their next step. In fact it turned out to be useful in another way as well: it functioned as an information display and contained a map of the palace grounds with arrows pointing to various areas and attractions open to the public. From this they could reconstruct the way they had come so far and guess the private areas most likely to contain the duke's study. The only problem was that there was no obvious way back into the main building from here apart from the way they had come. Perhaps if they could get through to the formal gardens that were indicated as lying on the other side of the wall opposite the new wing they would find a more private way in. From the

map it was not clear whether such a possibility existed – short of going all the way out and in again from the other side via the arch they had seen leading to the stables. Perhaps there was a way through the small structure marked ‘greenhouse’ that was located next to the high wall on the garden side. The gardens were at all events indicated on the map as if they were open to visitors. But the greenhouse could only be accessible from this side – if indeed it was – through the maze that lay beyond the northern wall of the courtyard. This represented quite a deviation, but was probably worth it if they were to avoid the attentions of the medusa at their heels. No doubt she was marshalling officials to pursue them at that very moment. Any of the conference participants could probably tell them whether there was a way through to the gardens. With the intention of making inquiries to this effect, Jack left William with the tool box and carpet ensconced behind the column and approached the nearest group of academics – three men and a woman who appeared to be enjoying themselves enormously. Every now and then they would throw back their heads and guffaw at each other’s pronouncements.

He waited diffidently for a pause in their discussion, glancing as he did so at the name tags they were all wearing. Above their names and institutions was the conference title: ‘Whither the Acceptability Judgment? Third International Conference of Normative Grammar’. To judge from their exchanges – which Jack, as layman, could not understand a word of – this must have been a very specialized subject.

“*That a boat had sunk was obvious that John had built.”

“*Who did John believe the claim that Tom saw?”

“*John saw more horses than Bill saw or Pete talked to the dogs.”

“*John and the umbrella stood in the corner.”

“*John cried the baby.”

“Challenge!”

“Um, um, it was one of those European Festschrift things – about 1988, something to do with Control, of course...”

“Not good enough! Yah boo sucks! One down to you!”

“All right, all right. My turn to continue... *The old man saw herself.”

“*The see womans the man.”

“*Floyd dropped the glass to the floor by tickling Sally, who was holding it.”

“*For apparently Bob to be sick would worry Harriet.”

“*Bob retold Eddie to leave.”

“*Charley was scared by stupidly Violet’s driving the car off the cliff.”

“*Sam well did his work.”

“*Sam shouted John the story.”

“There is an oat on your shoulder!”

“*Sam likes.”

“*Myself seems by me to be clever.”

“*I talked about himself to Thmug.”

“*Who did a picture of himself fall on?”

“*A picture of himself fell on somebody.”

“*I didn’t catch a fish and it was ugly.”

“Challenge!”

“Z. Johnson, *Glottglot* 1991, on the effect of negation on referential opacity in indefinite noun phrases.”

“Should have known – you were one of the editors! Try this one for size: *They perform their leisure with diligence.”

“*The rock deliberately rolled down the hill.”

“*The plane climbed from 30,000 to 20,000 feet.”

“*The child crawled the floor.”

“*He coffeed the guests.”

“*I was delighted for me to win.”

“*I visited five various countries.”

“*They sell only two furnitures: beds and sofas.”

“*Twenty dollars have been cost by the book.”

“*They passed away on each other’s birthdays.”

Since the conversation didn’t appear to have any natural junctures that he could take advantage of, Jack opened his mouth at last and blurted out:

“Excuse me for butting in – but could any of you tell me whether there’s a way through to the gardens from this side?”

“Hold on there, old chap,” one of the friendlier looking academics (a Dr. Pym, his tag announced, from one of the lesser know Oxford colleges) tilted his head towards him and whispered behind one hand, while the others, turning away with looks of disapproval, continued their conversation. “Do play the game. That sentence sounded perfectly acceptable – there was no star in front of it. Did you arrive late? It’s been agreed that during the morning session we non-revisionists will only talk in starred sentences that have been established in print. To show our undiminished belief in the universality of such distinctions. The fun of

it is that you can be challenged at any point to say what the source and the context of your sentence was. If you can't do that in five seconds you have to buy the challenger a drink – but if you can, of course, then it's the challenger who pays! Don't be a spoil-sport, make an effort, dredge something or other up from the literature. Or have you, by any chance, succumbed to the propaganda of the other camp and subscribe to the subversive notion that anything goes, given the right context?"

Here he frowned pointedly, awaiting a clear reply from Jack. Only when Jack began to stammer nervously: "That's a question which I don't know what the answer to it is," did the don's unhappy expression dissolve back into a friendly smile and a nod.

"*That more is like it. Yes, island constraints on accessibility, Cowan (1978: 45). A gem. Now, re. gardens, *How many have you of apples?"

The don spluttered and doubled up with laughter at his own words, at which point Jack gave up and beat an indignant retreat.

"No, wait – *I promise that you are enjoying yourselves...!"

As Jack hurried back to rejoin William behind the information pillar the sound of renewed hilarity trailed away behind him:

"*Spaghetti was eaten by Joe for five minutes."

"*Lee seems struck as naive about politics."

"*What did that Fred won surprise Mary?"

"*Lou was resembled by Pat."

"*Irv threw the room with the cat."

"*The ball fell because Martha fell it."

"*Betty attached the wall with posters."

"*Nancy touched at the cat."

"Challenge!"

"Um, Buzbeck-Hayes et al. 1978, on semantic components in conative constructions!"

"Oh, you got lucky!"

"*She is a little young enough for the job."

"*A this is dagger I see before me?"

"*Which tune did Harold accept Max's guess that Clifford played?"

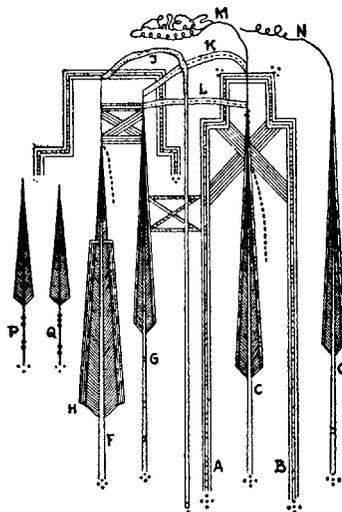
"*Her hit he."

"*In winter snows a lot in Canada..."

There was nothing to do but to follow Jack's original plan of finding a way into the gardens through the maze. To reach the entrance he decided they had best keep close to the walls, where they would be less

conspicuous from the windows of the west wing. Unhappy at the prospect of this arduous detour, but unable to suggest a better course of action, William picked up his end of the carpet and let Jack lead the way to the nearest section of the eastern wall, along which they turned, heading north. The wall turned out to be punctuated every few yards by displays of different writing systems, illustrated and explained. They proceeded from pictograms through logograms to the first syllabic scripts, and beyond. It was not clear whether this was a permanent feature or had been especially set up in connection with the conference. The first display he looked at, of a Yukaghir 'tos', was described as a conventional pre-literate love-letter carved on birch bark by a coy Siberian maiden. The Christmas-tree like figures apparently represented human beings, the angled shapes they were framed in indicating houses and the smoke-like swirls connecting them symbolizing different emotional links between them. 'C' was the love-struck girl herself (recognizable from the dotted pig-tail), and the sheaves of crossed lines within her house symbolized grief. In the house on the left the figure 'F' was a Russian man the girl loved, 'G' his wife, and 'P' and 'Q' their two children. The fact that its walls did not extend all the way downwards indicated that its occupants were absent. 'O' was some unfortunate youth whose feelings were in turn directed towards the girl.

Figure 7



As Jack followed the sequence along, pausing for a few seconds at each of them despite the grumbling of William behind him, it suddenly dawned on him that the objects scattered across the courtyard itself were not unconnected with what was displayed around the walls. The six foot tall shape they were level with at this point – a kind of stylized animal with four tiny legs and a huge bristling head, welded together from curvy wrought iron strips – had at all events a clear connection with the exposition of Chinese characters he was now standing next to. It corresponded to the character *mǎ*, ‘horse’, whose genesis from a more naturalistic ‘pictogram’ was illustrated on the wall along with some other ‘*ma*’ words distinguished only by tone. Below this was an explanation of the relationship between phonetic ‘determinatives’ and semantic ‘radicals’ in compound characters (the majority of them) – these stylized portrayals of individual word meanings represented a somewhat more arbitrary ‘logographic’ stage of development. The former elements were explained as giving a rough idea of the sound (and were thus arbitrary as regards the meaning of the compound) while the latter gave a rough idea of the meaning, for instance something to do with humans, hands, wood or water respectively. The text explained that also the third and fourth ‘*ma*’ characters given were examples of such compounds, combining the basic ‘horse’ character as phonetic determinative with respectively, the radical for ‘woman’ and for ‘man’. Looking back up at the ‘knight’ character Jack wondered whether the ‘horse’ bit was really just there to indicate the sound. Knights rode on horses, after all – at least in European chess sets. Was this just coincidence? he wondered. The arbitrariness of the ‘nurse’ character he could better see – until suddenly he grinned as the image of the horsey-faced nurse at grammar school popped up in his mind. She would always wear the same mournful expression whether she was administering vaccinations, looking at their tongues or making them cough with her hand cupped under their cringing balls.

Table 2

mǎ	má	mā	mà
馬 (𠂇馬)	麻	媽	馮
'horse'	'hemp'	'nurse'	'knight'

Phonetic determinatives

	A	B	C	D
Semantic radical	敖 (áo)	參 (cān)	堯 (yáo)	甫 (fǔ)
亻 'person'	傲 (ào: 'proud')	慘 (cǎn: 'good')	僥 (jiǎo: 'lucky')	輔 (fǔ: 'help')
扌 'hand'	擻 (ào: 'shake')	摻 (shān: 'seize')	撓 (nǎo: 'scratch')	捕 (bǔ: 'catch')
木 'wood'	檝 (áo: 'barge')	椽 (shēn: 'beam')	橈 (náo: 'oar')	楠 (nán: 'trellis')
氵 'water'	激 (jī: 'stream')	滲 (shèn: 'leak')	澆 (jiāo: 'sprinkle')	浦 (pǔ: 'creek')

Moving on to the following section, which sketched the evolution of Sumerian cuneiform writing, he saw that the nearest sculpture consisted of a framework of bamboo poles and dyed cloth wedges. Like the Chinese symbol, it could equally well have been a work of abstract art. What the devil the garishly coloured cocktail glass behind it with the parasol stuck on top was meant to correspond to he could not imagine – unless the phosphorescent neon bubbles bursting as they rose through the liquid was a cryptic message in Morse Code. Perhaps, after all, it was just a modernistic fountain.

In the next couple of sections there were illustrated successively the development of syllabic systems in Japanese and Korean, and the evolution of alphabetic writing from its roots in Egyptian hieroglyphics through Semitic scripts like the Phoenician indicating only the conso-

nants, up to Greek and Roman writing and even Nordic runes. It was explained that though writing systems had developed independently in several places (Mesopotamia, Egypt, India, China, Meso-America) it had always developed from the pictographic or iconic towards the more abstract and arbitrary, recapitulating the development of language in the individual child and indeed the genesis of human language itself. Apparently the source of Phoenician ‘aleph’, for example, was to be found in a pictographic representation of a bull’s head and that of ‘mem’ in the wavy flow of water.

Figure 8

Symbols			Greek			Latin	
Phoenician	Name	Phonetic value	Early	Classical	Name	Early	Monumental (Classical)
𐤀	'Aleph	'	Α	Α	Alpha	Α	Α
𐤁	Beth	B	Β	Β	Beta	Β	Β
𐤂	Gimel	G	Γ	Γ	Gamma	Γ	Γ
𐤃	Daleth	D	Δ	Δ	Delta	Δ	Δ
𐤄	He	H	Ε	Ε	Epsilon	Ε	Ε
𐤅	Waw	W	Ϝ	Ϝ	Digamma	Ϝ	Ϝ
𐤆	Zayin	Z	Ζ	Ζ			
𐤇	Ĥeth	Ĥ	Η	Η	Ēta	Η	Η
𐤈	Teth	T	Θ	Θ	Theta	Θ	Θ
𐤉	Yod	Y	Ι	Ι	Iota	Ι	Ι
𐤊	Kaph	K	Κ	Κ	Kappa	Κ	Κ
𐤋	Lamed	L	Λ	Λ	Lambda	Λ	Λ
𐤌	Mem	M	Μ	Μ	Mu	Μ	Μ
𐤍	Nun	N	Ν	Ν	Nu	Ν	Ν
𐤎	Samekh	S					
𐤏	'Ayin	'	Ο	Ο	Ōmicron	Ο	Ο
𐤐	Pe	P	Π	Π	Pi	Π	Π
𐤑	Sade	S					
𐤒	Qoph	Q					
𐤓	Reš	R	Ρ	Ρ	Rho	Ρ	Ρ
𐤔	Šin	SH-S	Σ	Σ	Sigma	Σ	Σ
𐤕	Taw	T	Χ	Υ	Tau	Υ	Υ
				Χ	Chi		Χ
				Ω	Omega		Ω

At the angle of the next section of wall, where it turned west again, an unsightly example of the ancient phenomenon of graffiti had been sprayed in red – was it part of the display? The words read (downwards): ‘Down with writing!’. The two men with the carpet did not linger to consider the matter but proceeded straight to the entrance of the maze, which was visible ahead of them between two carved Mayan stelae.

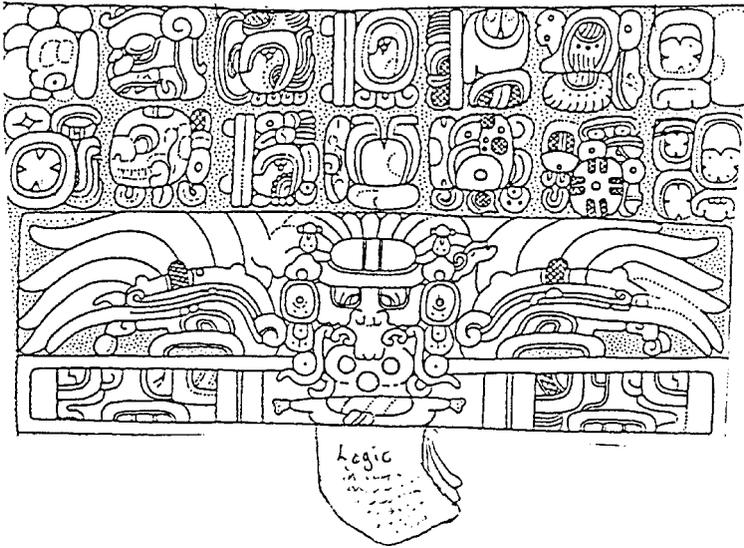
The logical sequence of the displays seemed to break down here. Was there some significance in the fact? Jack paused for a moment observing the nearest of the stelae – there was at least a slight chance that they might find some clue here as to how they could get through the maze with a minimal loss of time. William groaned and fretted as Jack read the explanation on the wall next to the stele.

“It says these stelae were found at the entrance to the ruined city of Tikxal and that they were brought back from the Yucatan by the duke’s great-grandfather. Wonder how he got away with that... It seems these Mayan ‘glyphs’ have only recently been deciphered, in fact a lot of the detail is still controversial – there’s lots of variation according to period and locality. A typical glyph contains both pictorial and phonetic elements, it says, rather like Chinese. Some of the elements indicate the pronunciation, by syllable, and some are logograms – although some of these are actually ‘rebuses’ showing how the sound is to be read, in which case their own meaning is irrelevant, a phenomenon also known from Egyptian hieroglyphics. The first sentence engraved on this particular stele has been reconstructed as it might have been pronounced. It’s translated here: ‘On the day ‘5 *ajaw* 13 *kase’w*’ (that’s a specific day of the year – the Mayans apparently had separate glyphs for every one of them!) ‘the Jaguar-Lord, Lord of X, was not seen’. It’s supposed to refer to a new ruler withdrawing from the public eye for ritual purification. Only the ‘K’uhul Bakil’ part of the title is unexplained, hence the ‘X’.”

Figure 9



ma' il-aa-j-Ø bahlam ajaw k'uhul bakiil aja-w



“Listen, don’t just wander away. This could be relevant: the ruler’s full name may be uncertain, but see, the final glyph looks like it could contain a representation of a shield, there below the bit that must be read ‘*ajaw*’, ‘lord’, like on the glyph before it. Now the duke’s crest also contains a shield... I wonder if the missing bit could mean ‘strong’? Ah, there’s a key of known elements listed below, including one meaning ‘shield’. It looks vaguely similar to the shape in the glyph. Oh, and here’s one meaning ‘strong’ – it looks like the face of some ferocious animal, which figures. But it doesn’t look much like any part of the ‘lord’ glyph either – unless the face has somehow been split up with the eyes and nose up here and the mouth below. Perhaps the shield element has

actually been squashed up into the shape full of dots on the left – there are plenty of dots around the shield sign in the key. It says this sort of thing is often done by scribes, a matter of individual style. Glyphs can be dismantled and its pieces stuck together again in a confusing manner, turned at different angles or simplified, some half covering others like the letters in modern graffiti art. There again, perhaps the ‘shield’ sign doesn’t represent a shield at all – actually it looks very like this one here in the key that means ‘maize bread’.”

“Didn’t know as ’ow they made special bread to eat in mazes, did you? It don’t bode well vor ’ow long we can reckon on spendin’ in there...”

“The trouble is, I have no idea whether the sign is meant to be pictorial or not... Anyway, you can use the key to interpret the rest of the inscription yourself, it says. It’s meant to be read from the left to the right and from the top down, in groups of four glyphs at a time, which you read across and then down and across from the left again. Well, let’s see, as far as I can make out, it carries on roughly like this from the top left: ‘Let Lord X... beware... He is doomed... his domain will fall and... his slaves will rise up against him... The jaguar at the gate... cannot save him’. Some of these glyphs are difficult to distinguish, so perhaps I’ve got it a bit wrong. But frankly, I don’t see how this is going to help us through...”

“What about them brochures ’angin’ out the mouth of that monster thing on the other zide?”

“You may be right, there’s no further explanation over there, and the brochures look like they’re meant to be taken by the public. I don’t think it’s a monster though – perhaps it represents Lord X himself.”

“Oever ’e be ’e don’t look like ’e be in too good shape – zuppose that’s what bein’ dead a vew zenturies’ll do vor yer.”

Jack took a couple of steps in that direction – William following – and, after putting the tool box down for a moment, plucked out one of the brochures held loosely between the clip-like teeth of the ‘monster’. On the front were printed the words: ‘Logic in practice: some of the more rational things you can do with language. Just follow these simple steps to reach your goal’. Flipping it open to the first page with his thumb he read further: ‘Step one: first you must turn sincerely towards the truth’.

“Towards the truth... Well, that’s simple enough, we take the first turning to the right, right?”

With this Jack put the brochure between his teeth, picked up the tool box, and led the way confidently forward to meet this unsubtle challenge to his intelligence.

But from here on the going got more difficult. The main problem was manoeuvring the carpet through the narrow passages of the maze at the same time as watching where they were going. At every corner they had to stop while Jack put down the tool box and transferred the brochure from his mouth to his free hand to read the next step. If the decision resulting from this was a turn to the left or to the right the high hedges on either side – not to mention the ends of the carpet – took a battering, as did William, who was several times whipped right off his feet and sent crashing backwards into the foliage following some impatient movement on the part of Jack. Both grew successively more irritated with the other, Jack because of his father's petulant complaints and inability to keep his end of the carpet up, William because of Jack's stubborn pretence at knowing where he was leading them while he patently did not.

"Where the devil d'yer think yer be draggin' uz? Me overalls gonna end up all over the place! I can't be presented to a duke in this state!"

"Stop your whining and let me concentrate – this is a crucial clue. Any minute now and we'll get through to our goal..."

"Crucial my voot – that be a load of old balls an' you knows it. Anyway, what *be* our conflundered – aaargh!!" (Here his words were smothered as he was once more slammed back into a scratchy mesh of leaves and branches, as if he had caught a goal kick point-blank.)

The truth was, although he followed the instructions in the brochure to the best of his ability, it was not at all clear to Jack where they were actually directing him. He vented his growing frustration by plunging ahead still more stubbornly, and paid little attention at first to the stone statues that were positioned here and there in shallow recesses in the hedges. William kicked and struggled at every turn, producing a flurry of dislodged leaves around him. The first few steps had been straightforward enough, starting with an example of material implication ('if you turn left, then you will make progress', where the first clause is a sufficient but not a necessary condition for the latter), then one of biconditionality ('if and only if you turn back the way you came from will you regain the right course', where the first clause is a necessary condition of the second). This was followed by an example of entailment ('you have just passed a wrong turning', which entailed that they had not

just *taken* a wrong turning), and one of *modus tollens* ('if there is a turning to the right, there is a way through' and 'there is a turning to the left', therefore -?).

But then things began to get fuzzier. The next step in the brochure informed Jack that a *particular* goal lay ahead of them at the centre of the maze – it was not just a space where different paths converged. “Recognizing what it is is tantamount to reaching it,” he read out loud. “So keep your eyes open for clues – like that one you can see to your left.”

When he turned his head in that direction he was surprised to see carved on one of the stone statues the words: ‘It never rains but it pours’. On the pedestal above the inscription a stone effigy of an unfurled umbrella was fixed. What kind of logical progression was this meant to represent? The brochure was of little help on this point: it restricted itself to pointing out that deixis had just been demonstrated – the anchoring of a proposition in the given communicative context, both spatio-temporal and personal.

“Propositions”, it continued, “can be *thetic* (presentational) as well as merely *categorial* (predicating something of a given logical subject) – the sentence ‘On the pedestal above the inscription a stone effigy of an unfurled umbrella was fixed’ illustrates the former kind. But all propositions expressing a judgment bear a potential truth value, namely true, false or ‘suspended’. That is why sentences expressing them can be compared with real states of affairs. It is the suspended judgment that is the most useful in finding your way through a maze, since it forms a hypothetical inference or ‘abduction’, which always moves from a ‘result’ (for example some surprising phenomenon observed) plus an invoked law or regularity (say the ‘reason’ for similar phenomena one might have experienced before) to arrive at a hypothesis that ‘saves appearances’. Induction and deduction, by contrast, are simply ways of testing and validating such hypotheses (producing generalizations from observed instances and deriving further testable consequences from general rules, respectively). To experience abduction in practice try and guess the reason for the following (possibly true) statement and act accordingly: ‘Where you are trying to get to is in front of your noses’.”

“But that’s a contradiction!” Jack muttered. “If it were in front of our noses we wouldn’t still be trying to get to it!”

“False,” the brochure read under the next point. “It may however be a tautology, since you presumably always turn your noses in the direction

you want to go. But that was not the *reason* behind the statement. What would you guess that was?”

Jack shook his head in growing perplexity but read on:

“This illustrates the difference between so-called ‘natural’ and formal inference. The former is not limited like the latter to truth relations between propositions, since it involves a general sense of plausibility and intentional behaviour based on world knowledge, and is thus far less reliable (though very human). One variety is the ‘practical syllogism’, of the form:

A intends to bring about *p*

A considers that he can bring about *p* when he does *a*

Therefore A sets himself to do *a*

It is really not to be recommended except in desperation. Still not got it? Well, a reasonable abduction from the statement in question would be that you should continue straight ahead. This can only be a hypothesis of course – it can be invalidated, for example if you come up against a dead end. Nevertheless, it is probably worth entertaining, since following the steps in this brochure so far has not led you astray.”

“Like ’ell it ain’t!” William objected. “I votes we make a beeline straight vor the nearest way out. That there brosher thing be jist tryin’ to confuddle uz, it be takin’ the perverbial!”

“It’s too late for that, you old fool, it’d be no quicker getting to the exit than getting to the centre – we must almost be there by now.”

“That’s what yer keeps on zayin’ – look where it’s got uz. The duke and duchess’ll’ve gone to bed by the time we makes it out of this larrybinth! Lookee, I zwear that be the way we come in down there, to the left. We’ve passed that bleedin’ statue thing twice already.”

“Rubbish. It’s a new one – see what it says on it: ‘Don’t give up till you reach your goal’. But what’s that miniature ploughshare stuck on top meant to signify, I wonder?”

“It be mad, all of it – I be gettin’ out of ’ere now.”

“Go on then, for all I care! Christ almighty! I’ve had enough of your endless complaining. I’ll carry on alone. But since you can’t carry the carpet on your own you’ll just have to wait at the exit for me anyway.”

“Ere, bring that back!” William yelled and threw himself onto the end of the carpet that Jack was now dragging further on his own. “I still be in charge, yer young ruffian, I zays where the goods gets taken to!”

Jack continued tugging it along sullenly while William cursed and thrashed about as he tried in vain to pull in the opposite direction. Around the next corner was another niche with a statue. Here Jack stopped and, ignoring William's renewed moaning, read the inscription on the nearest side: 'Don't fight, pool your resources'. The top of the pedestal was empty this time – except for a slight depression like a bird-bath, as if some bowl had once stood there.

"This must all mean *something*," he puzzled. "Perhaps there's something on one of the other sides."

There was indeed another sentence inscribed on the opposite side, but it made even less sense: 'Ve have vays and means of making you talk!'

"Perhaps the brochure will explain the point."

But when he looked at the next step in the guide he was merely informed:

"The evidence of the senses and of hearsay are not worth much without being supplemented by the dual products of induction (what 'is' the case according to such evidence) and deduction (what 'must' be the case according to reason). Together these define the domain of 'epistemic modality' (as opposed to 'deontic' modality – a matter of obligation or permission). If you still have not formed a clear idea of the goal at the end of your path and cannot yet express it in words, you should (deontically) at least avoid sentences of the following sort: 'Racing cars without seat belts is a fast way to die'. Think of how you decide to interpret them, that should (epistemically) help pass the time. You have only a couple of miles to go – it will not seem long."

"Oh nooo!" William wailed.

"Since we have to walk a couple of miles will seem long," Jack sighed, and read further:

"That is exactly the sort of thing. Now, how does one arrive at an understanding of this so-called 'garden path' sentence? It starts out ambiguously but at a certain point – the word 'will' to be precise – the alternative reading that has been initiated is cancelled as ill-formed. What triggers that decision? The syntax or the meaning? Or both simultaneously? The point is that one has to formulate goals before they are realized – form hypotheses that may or may not be confirmed as you proceed. When the syntax suddenly fails the projected meaning, a reinterpretation is searched for to reestablish harmony between form and content. So, once again: if you want to reach your goal you must not

be afraid to form a clear picture of it. Visualize your desire and feel your way towards it with the means at your disposal.”

“I knows *my* desire – to get the bloody ’ell out of ’ere!” William retorted. “Let’s bash our way through, we’ve wasted var too much time already...”

“No, wait, I think I’m beginning to catch on to something here – I have a feeling that if we keep going just a little further I’ll grasp it!”

“Jist don’t expect my ’elp then!” William stamped crossly and let Jack drag the carpet on on his own. He nevertheless followed at a distance, kicking at fallen leaves.

“This way feels right,” Jack turned right at the next turning without even looking at the brochure.

He staggered along for a few more yards before dumping the carpet and tool box down next to yet another statue, where he stopped for a breather. Atop this one was a stone replica of a dog howling up at an invisible moon – a female to judge by the parallel rows of teats visible along its belly. The inscription read: ‘You cannot teach a new dog old tricks’. Wasn’t there something wrong with the wording here? He looked around at the other side and found, as before, a second sentence. This one read: ‘Marriages are maiden heaven’.

“This has got to contain a misprint,” he murmured as William came shuffling up. “Yet it rings a vague sort of bell...”

“Let’s ’ope it bain’t another o’ them blasted modest tollin’s,” William groaned.

Referring once more to the brochure, Jack read: “You are almost there – just concentrate hard on where are you trying to get to. Think! Define! Express a belief state! Describe! Meaning postulates accepted if formal components not available.”

“It’s something – lovely. Something – lush and sweet, soft to the touch – like a velvet curtain – *the* curtain – but no, not that – it’s more like a place where – a person who – guarded by – a thing that... I can’t put it into words – but, bloody hell, I can feel it all right! We are almost there. It’s on the tip of my tongue. Here, Dad, grab the end, I swear I’ll carry it all the way out on my own if I’m wrong.”

Though sceptical William complied – these were terms he could accept.

“I’ll ’old you to yer words, zon...”

And there around the next corner Jack's intuition bore its fruit: beyond an arch in the hedge was revealed a kind of bower whose centerpiece was a small pond where reeds and lilies grew and dragonflies darted. In the middle of the pond stood a life-sized statue of a naked nymph, her hair up in Grecian style, pouring water from a vase on her shoulder. A slow trickle splashed around her ankles, which were immersed in the pool. A stone frog stood crouched on the rocky edge looking outwards, as if guarding her.

"Of course: the garden..." he murmured and let the carpet and tool box drop to the ground. "That's amazing – what we knew we were looking for all along. It's somehow just like I was beginning to imagine it too!"

"Aw bollocks!" William griped as he removed a foot caught under the carpet. "Anyways – it didn't look nothink like that on the map..."

"Who cares. Just look at her – she's exquisite."

"A vair bit of vlesh on the wench, I mun admit," William sniffed.

"Keep your mouth shut, you lecherous philistine, you wouldn't appreciate true beauty if you were bashed over the head with it."

This was said without malice, in a low whisper that suggested awe rather – an awful whisper. As if mesmerized, Jack took a few hesitant steps towards the edge of the pond, raised one muscular arm and very very gently – as if fearing an electrical shock – brushed his fingertips against a smooth stone cheek.

"Oo you callin' lecher? – look at oo's droolin' over a nakend girlie! You'd do better lookin' at that brosher again, zee 'ow it can get uz out of 'ere again."

Jack sighed after a while and stepped back a pace. As if suddenly noticing that he still held the brochure in his left hand he raised it and glanced at the page he had reached – the last page.

"Well, you have reached the word that was on the tip of your tongue, but can you define its meaning exhaustively now that you have reached it?"

"A garden? It's where you dig and plant flowers and all that..."

"But what is there in common between this miniature garden in front of you and the formal gardens of Versailles, say? Or a cottage garden, or a market garden or the Garden of Eden? Is it flowers? But what about an orangery filled with them, or a garden full of weeds and grass – are these also 'gardens'? And are you really so sure you have reached *the*

garden you were after? How can you be sure when you have not seen either of them before?”

“Well, I don’t suppose I can really be specific about that. Maybe it isn’t *exactly* the one we were heading for...”

“You see, it is a slippery business, meaning – it is of no help at all in a crunch. All you have to rely on when you abandon logic is vague feelings, and feelings can only mislead you in the end. Let *them* help you find your way out if they can!”

Thus ended the advice contained by the brochure.

“This is ridiculous – I’ve been talking to a brochure...”

“Now you’re on your own, suckers!” A faint voice seemed to comment from the edge of the pool itself.

“What was that?”

But there was nothing there but the stone frog. Jack had the momentary impression that there was a glint in its eye, but that was probably just the spray.

“Zee what you’ve gone and got uz into!” William whined (ignoring the little voice if he had even heard it). “We bain’t never gonna get out again now! Might as well jist lay uz down right ’ere and die.”

“Don’t be so bloody pathetic. Logic got us in, logic’ll get us out. We just have to reverse the steps in the brochure, take them in reverse.”

Like it or not, William was obliged to follow along – he was not going to be left to perish on his own with no one around to blame for his misfortune. He hoisted his end of the carpet back on his shoulder. Jack had no difficulty retracing the first few turnings, but when they got back to the point in the brochure where material implication and the like had been applied, things got more complicated. Having been forced to keep turning left for a while he thought he recognized one of the statues they had passed a few minutes before, one with a stone arrow fixed across the top. This time he stopped and read the inscription on it. It informed him that ‘logical formulae are not generally reversible – results do not imply premises!’

When this sort of thing repeated itself several times in succession, and he had to admit that they had come completely unstuck from the directions traced out in the brochure, Jack threw down his end of the carpet and turned angrily on his father, whose repeated threats of mutiny were getting on his wick:

“If you think you can do a better job at steering, be my guest – you take the front end, go on!”

“All right, then, don’t mind if I do – jist don’t go shovin’ vaster ’n I can walk. Now you watch what a bit o’ common zense can achieve...”

But this new arrangement soon resulted in near catastrophe. After rounding a tight corner, where Jack had to shove hard, shouting in frustration at William to keep his end off the ground, they suddenly hit a straight stretch, and the built up momentum sent them careening straight into the hedge that blocked the way at the end. William’s rising scream of terror was curtailed by a crash of severed foliage, and when Jack pulled the carpet back out of the hedge he could not at first see his projected progenitor at all – only a spreadeagled, vaguely human indentation smashed into the hedge. Groans issued from within. There was a larger, circular hole just above it where the end of the carpet had broken all the way through to the far side of the hedge. He ran forward and grabbed one of the appendages that was waving frantically from the indentation. Pulling hard at it released first a whole leg, then the rest of William attached to the end of it.

“I’ve ’ad enough of this lark, I ’ave!” he spluttered on the verge of hysteria, kicking and waving his arms all about him. “Me old bones can’t stand no more o’ these tribobulations – I’m gettin’ out, you do what yer wants to!”

With this he plunged right back into the starfish-shaped orifice in the hedge before Jack could begin to talk reason to him. He was on the point of yelling good riddance after him when he noticed through the hole left by the carpet that one of the stelae at the edge of the courtyard was visible not far beyond. And after some further tearing and scrambling sounds William appeared next to it, his cap still miraculously on his head. He stood there for a moment in the entrance panting and staring wildly about him like some crazed scarecrow before taking to his heels in the direction of freedom. Rapidly there flashed through Jack’s mind the following practical syllogism: ‘William intended to get out of the maze; William thought that he could get out of the maze by breaking through the hedge; therefore William set himself to break through the hedge’. This was clearly a course of action worth following, given the evidence of his senses. So he ripped the rent in the hedge wider with his two fists as if it were no more than a tent flap, and stepped through backwards, dragging the carpet and the tool box on top of it after him.

“Well, that was lucky – see, hedging your bets does pay off sometimes, eh?” he shouted as he stepped clear of the foliage and hoisted the bent carpet back onto his shoulder.

Then he staggered out between the stelae – only to be confronted by two burly security officials who knocked the carpet from his shoulder, grabbed his arms and pinned them behind his back. William was already trapped in the iron grip of the female guide, who glowered in triumph at her prisoners.

“Thought I’d find you here, hiding behind a veneer of truth conditional fabrications. Now we’re going to get at the truth all right – by a different kind of logic, the interactional kind. Take them straight to the Manager’s office!” Then turning to two other younger figures hovering nearby she added: “You two, bring the carpet and that box of theirs along as evidence.”

Ignoring their protests, the officials marched father and son back across the courtyard towards the steps they had descended earlier; the two assistants followed with the carpet while the guide, talking into her walkie-talkie, brought up the rear.

7. Sentenced (almost) to death: an introduction to pragmatics

They were led across the courtyard (now devoid of academics), up the flight of spiral stairs, through the ballroom – where this time they were ogled by the tourists as if they were burglars who had been caught red-handed trying to make off with one of the historical rugs – and the cortege continued via the corridors and state rooms they had traversed earlier all the way back to the central staircase. Beyond the circular landing they were pushed into a further corridor through a door on the far side marked ‘private’. Not having to cart the heavy carpet themselves only partially alleviated the ignominy of being marched along at a forced pace. The corridor here was far less grandly decorated than in the historical chambers open to the public – in fact the ancient wallpaper was peeling away in places and the frames of the windows and doors looked like they had not seen fresh paint for decades. The bare wooden floorboards that creaked underfoot led around a couple of corners to a door with the words ‘Estate Manager’ on a plaque outside. Through this they were hustled, to find themselves in a large but bleakly appointed office of sorts. It looked more like a country magistrate’s courtroom, which is precisely what it had been in its earlier function. There were several rows of wooden chairs facing a raised dais at the far end, where a weighty, puffy-faced figure sat perusing a stack of papers with a severe expression. For a moment they thought he was wearing a wig, but it was only the bushy white hair sticking out from his temples. His nose, by contrast, was quite red and bulbous, and on it was perched an old-fashioned *pince-nez*, behind which piggy little eyes swivelled up to observe their entry. To the left of the space between the chairs and the dais was a dock-like area, standing room only. A small but solid door behind it looked like the way prisoners were once tugged out from dungeons below and moored to the dock-side. However, from Jack’s reckoning they were now directly above the entrance hall, so this was unlikely. They were nevertheless thrust into this area, accompanied by the security officials who had brought them this far, while the assistants dumped the carpet and the tool box in the open space before them. The

female guide sat down on one of the seats in the front row with a grim smile of anticipatory *Schadenfreude* on her lips. Behind her a few of the other chairs at the back were occupied by hunched figures Jack vaguely recognized from his encounters earlier that day.

“Soo,” the portly figure behind the desk pursed his lips and spat out the word like a worthless coin after casting a look of distaste in the direction of the recreants shuffling in the dock before him. “These are the two interlopers who claim to be delivery men?”

“This is all an absurd misunderstanding,” Jack started to shout, but was silenced by a jab in the side from one of the security men.

“That is what I am here to determine. You will kindly refrain from speaking unless spoken to in this office. Fusby, carry on.”

“These are the two, sir,” the senior official replied, referring to his notebook. “First reported playing around in an unseemly manner with a carpet in the library, where the older one subjected a valuable article of private property to verbal abuse. We suspect them of straying into other areas off-limits to the public – they certainly did not come in through the proper entrance channel. A little later refused to pay entrance fee when confronted by guide Dorking here, then caused a disturbance around the chapel area while attempting to effect a getaway. Were caught sight of again entering maze. Seditious graffiti found on wall near entrance assumed also their work. Further willful damage to hedges on leaving maze in unorthodox manner. On several separate occasions they have importuned bystanders with suspicious questions concerning His Lordship’s whereabouts. In sum, they have displayed a clear all-round disregard for the rules and a wanton flouting of conventions. We are at present further investigating whether any article of floor covering has gone missing corresponding to the article in evidence on the floor before you, sir.”

“But that’s what we’re supposed to be delivering! The gamekeeper phoned up to the palace and got us clearance!”

“I warned you to hold your tongue, young man. You stand accused of a serious breach of local rules. Do not make it worse for yourself. The letter of the law provides me – by ancestral right of c-command – with the power to send ordinary ‘guests’ who wander from the designated public areas for a spell in the Government-and-Binding chamber back there. If it is hardened professionals we have to deal with – well, just bear in mind that we have means available in there to distinguish between

small-time pro's and hard-core PRO's. For the latter the ultimate sanction is no less than the PRO-DROP." (With this he drew an imaginary rope around his throat and pulled a frightful grimace.) "As for your ridiculous claim of being cleared in advance to deliver goods to the palace, that is a blatant falsehood. Do you think I would not have been informed? No one has phoned up any such message to my office."

"It must have been the duke himself he spoke to then – or some member of his family," Jack protested. "We were told that someone representing the family would meet us at the door."

"His Lordship and Her Ladyship happen to be otherwise occupied at the moment with private guests, so that is highly unlikely – besides they never communicate directly with tradespeople themselves. You are clearly lying in order to save your skins."

"Why the hell should I lie? Look – I have a letter signed by him! I'll have you sued – sued and fired! Now where the devil did it get to...?"

"Calm yerzelf down, zon, show a little respect," William, trembling at his side, began to cluck and fret, recognizing that Jack had somehow mislaid the only bit of evidence that could save them.

"I am calm, I – oof!"

The second official's fist in his ribs immediately calmed him down more effectively than his father's well-meant words of advice.

"Trying to intimidate an officer of the law, eh? This won't improve your case one bit. I am merely executing my duty. As far as I'm concerned you could be turned over right away to the Linguistic Inquisitors in the adjacent chamber, but I am duty bound to take into account your attitudes and beliefs before pronouncing sentence. You are entitled to a character witness – in which capacity I call upon guide Dorking to approach the bench."

"Any time you like, sir," the lady thus addressed purred as she cosied up to his bench. "Would you like me to arrange myself in any particular fashion?"

"Hm, well, Doris – Mrs Dorking," the manager mumbled, his nose turning even redder than before. "There is no need for formality as regards your – posture. Please just tell us what you know of the background of the accused."

"She doesn't even know -, " Jack began, but stopped of his own accord when another official point of order was raised beside him.

"They are clearly degenerate types – you can tell by their accents,

especially the old one there who seems to be the ringleader. He bit me on the wrist when I was trying to apprehend him.”

“That’s quite sufficient, as far as I’m concerned. I certainly don’t want to hear any sociological claptrap about deprived backgrounds or the like – there’s no excuse for sloppy diction. Let’s go straight to the sentence. I mean the one you say the younger of the accused addressed to you.”

“Certainly. He said these words to me, in a rude and forthright tone that I found quite offensive: ‘The truth is we’re here on another errand altogether and were just waiting to get the chance to ask you for directions’.”

“It seems clear they are involved in some clandestine plot. Do you deny that you said that?” the manager turned to Jack, the faint avuncular smile he had shown Mrs Dorking reverting immediately to a severe glare.

“But it’s taken out of context!”

“Nonsense, it’s precisely the context of its utterance that interests me. It contains the topic on which you expressed a comment. Now, would you call that sentence of yours acceptable?”

“Well, I don’t see that there was anything wrong with it..”

“Of course you wouldn’t – you consider this kind of behaviour quite acceptable. Well, let me tell you, young man, there are people here who do *not* consider it so.”

“What’s this got to do with anything? We’re just here to –“

”We’re just here to establish your attitude and to see – if you refuse to cooperate and tell us the truth directly – whether we can reconstruct the motive for your pronunciation. Your attitude –“

”It be *’is* attitude I can’t abide,” William muttered, not expecting to be heard.

“As for you, your attitude *and* your pronunciation are both abundantly apparent to me already.” (The manager cast a brief look in his direction before continuing with Jack:) “Let us hear another witness, if you still claim ignorance. You there, librarian, stand up – do you recall the first words the accused addressed to you?”

“Of course, sir, your managership, sir,” the familiar bespectacled little figure rose to his feet to reply. “It was: ‘Could we bother you for some information?’.”

“Hah! They were trying to wheedle something out of you – I hope you didn’t give them what they wanted?”

“Good lord, no, I told them I didn’t know anything about His Lordship’s whereabouts...”

“This gets worse and worse – they could be assassins! Quick, tell us why you wanted to know that?” (A ponderous finger waved imperiously in Jack’s direction.)

“I’ve told you already – we need to deliver this carpet to –”

”Yes, yes, we’ve heard that before. The question is whether we can believe it. What was your real purpose in uttering it, eh? How about you, librarian, do you want to put in a word for these lowlifes?”

“No, no, heaven forbid... it’s more than my job is worth...”

“Say no more. Dismissed. Now, young fellow-me-lad, what about the following sentence: ‘This time they were ogled by the tourists as if they were burglars who had been caught red-handed trying to make off with one of the historical rugs’. Acceptable or not? Answer!”

“But I never said it!” Jack protested.

“No, but you were in it. You must admit you have a certain responsibility for its content. Why should impartial visitors have ‘ogled’ you this way if there wasn’t some truth behind their supposition?”

“That’s unacceptable! You are drawing false conclusions – premises cannot be results: that much I learnt from the maze. And doesn’t ‘as if count for anything here?”

“Not on these premises. But I am glad to hear you use the word ‘unacceptable’ at last. Tell me what exactly you find unacceptable in the last sentence?”

“I really have no idea what you mean by ‘acceptable’ and ‘unacceptable’.”

“Let me refresh your memory with a little help from an expert who just happens to be present here today. Dr Pym, I’m sorry to have dragged you away from your conference. We shan’t delay you much longer. Would you care to give us an example of an ‘acceptable’ sentence?”

“Certainly,” Dr Pym, now wearing his academic gown, rose from the chair at the back where he had been seated; as he did so he gave a friendly nod in Jack’s direction. “I think we could appropriately use the sentence that our young friend himself addressed to me when our paths crossed a little while ago. It was: ‘Could any of you tell me whether there’s a way through to the gardens from this side?’. Now the problem with this sentence, as I recall, was that it *was* perfectly acceptable – at

least grammatically (hardly a reprehensible matter, but in the context not quite playing the game). Nor do I think we should default him on the matter of truth – much of the best scholarly writing takes no account of this, after all. No, the problem with this utterance was its pragmatic *felicity*. It flagrantly broke one of the principal maxims that guarantees successful verbal exchange, upholding the ‘Cooperative Principle’, namely the maxim of relevance. It is, after all, generally expected that an utterance should neither say too much nor too little (the one would suggest insincerity, the latter grounds for doubt); that it should be truthful; and that it should also be phrased with a degree of politeness suitable to the circumstances. As a matter of fact I happen to have a copy of them in my pocket here – comes in useful when one can’t get a word in edgeways with garrulous colleagues.”

Here the scholar produced a scroll from within his gown, flashed it in all directions then reinserted it whence it came.

Table 3

The Co-operative Principle:

Make your contribution appropriate to the conversation

The Maxim of Relation:

Be relevant

The Maxim of Quality:

Try to make your contribution one that is true. (Do not say things that are false or for which you lack adequate evidence.)

The Maxim of Quantity:

Do not make your contribution more or less informative than required.

The Maxim of Manner:

Avoid ambiguity and obscurity; be brief and orderly.

“Such principles are implicit in all civilized verbal intercourse. They are directly brought to bear on the interpretation of so-called conversational implicatures. Thus ‘I intended doing it’ is a perfectly felicitous reply to ‘Did you do the job?’ (and implies that one didn’t); ‘I drank some’ as a reply to ‘Did you drink the beer?’ implies that one did not drink *all* of it; and ‘My purse is in the hall’ is a perfectly transparent reply to ‘Can I borrow five pounds?’. The sender implies, the receiver infers. It is also

generally expected – and this is the point – that an utterance should be relevant to the communicative situation. Relevance can be defined here in terms of two ‘extent conditions’, namely that (a) a proposition (or assumption) is relevant in a context to the extent that its effects in this context are large (which is true of the present statement), and (b) that a proposition (or assumption) is relevant in a context to the extent that the effort required to process it in this context is small (well, you would have to ask the reader about that). But what possible relevance to our on-going conversation could the young man’s utterance concerning the hypothetical gardens have had? It may have been relevant for him, but were we to know that? There again, one could object that one does not always want to be cooperative. One does not always want to be relevant. Why should this be so? Ah, the slyness of human intentions! Perlocution upon perlocution hidden away beneath an illocutionary front of sincerity. Who knows what indirect speech act was skulking behind our diffident friend’s innocent question – did he perhaps really want to draw me into the gardens with aggressive or with amorous intent, there in some voluptuous, flower-entwined bower to rob me of my purse or of my scholarly virtue, far from the vigilant eyes of my colleagues? Had he but dared to open his heart...”

“Thank you, Dr Pym, but I don’t think we should draw innuendo into the picture at this point, it would only further complicate matters. Speech acts are dealt with elsewhere in the building, at a higher level of responsibility, if you take my meaning...”

“Actually, I was purposely avoiding talking about acts directly – I do not think that would be to the benefit of this young man, who, I am convinced, is jolly nice at heart and deserves a fair hanging – I mean hearing...”

“What do you mean by ‘actually’? I have a distinct feeling that you are attempting to undermine the authority of these proceedings.”

“Well, ‘actually’ is actually polysemous – it has besides a straightforward propositional meaning (something like ‘in reality’) an epistemic and a rhetorical reading, the former glossable as ‘I assert that it is indeed the case that X’, and the latter, in the context of my attempt to convince you of something in an argument, something like ‘that negative point of yours, far from undermining my point, in fact adds to it’. Note that in its ‘rhetorical’ reading the expression may serve as a means to cancel certain presuppositions deriving from your own words (for example your

attempt to impute to me the flouting of the maxim of manner, which, by the way, is quite unwarranted – the maxim of quantity perhaps, but not the other!); this, however, is not incompatible with its positive role of increasing the strength of my argument. Presupposition can be viewed in this light as something interactional, negotiable and cancellable according to the dictates of the on-going dialogue and the purposes of its participants. It is the assumed mutually understood background out of which the explicit proposition expressed has been plucked. As to the actual ways in which presuppositions in general can be cancelled, this may be done not only lexically, but through appealing to successive layers of relevant context, from immediate syntactic and intonational embedding to general background knowledge, viz –”

”Enough! Please return to your lecture session now, we have quite sufficient information to reach a verdict.”

“All right, all right, don’t push so, you rude fellows,” Dr Pym simpered as the bailiffs accompanied him firmly to the door, whence he was thrust after a final encouraging smile and a wave of the fingers at the prisoners in the dock: “Don’t let them undermine your integrity, my dears, don’t let them treat you as innocents!”

“But we *are* innocent! We were summoned by the duke himself, you can ask him!”

“Now you may *think* that,” the manager leant forward and jabbed his finger towards them to emphasize his words. “You may even think you know it – and I might even know that you know it – but does that constitute mutual knowledge? I think not. For if I know that you know that I know that you know, for instance, it would still require that you knew all of that, and that I in turn knew all of *that* – the regression is infinite. So why don’t we just cut the crap and agree that I know that you are fabricating the whole thing! The only question is how best to package this information as an acceptably dignified and severe unit of justice. Is it to be a single sentence containing a neutral proposition, or a complex judgment involving truth? Or there again, perhaps a simple clause would suffice, as long as it is a relevant one...”

Here his words faded away and he appeared to enter a meditative state for a few icy seconds, pursing his lips. During this brief interlude vague groans and flogging sounds could be heard in the background from an adjacent room.

“What is essential,” he started up again, “is that the new information

within it be suitably highlighted and the old be distributed in de-emphasised form and position before I insert the words, so let me just practice the intonational envelope a couple of times, that always helps get the juices of the Law flowing.” (Here he mumbled something with his lips shut and eyes wide open, accompanied by exaggerated shakings of the head from side to side; after repeating this – with variations – a few times, he went on:) “Yes, that feels about right. Where was I? This is the difficult part, actually spitting out a well-formed sentence. The ‘emics’ of the coded system are clear enough – they are laid down punctiliously in socially sanctioned statutes. But to articulate the means at one’s disposal so as to fit exactly one’s intention at the moment of speaking – that is trickier. One is venturing out into the unstructured and *ad hoc* realm of ‘etics’. Well here goes – language is after all process as well as system. You will now see the spirit of its laws applied with the full rigour of practical action. Since you, the accused, do willfully refuse to cooperate with our investigations, I hereby sentence you to be taken hence from this place, to another place next door, where you will be opened up and your surface utterances subjected to intensive parsing in order to reveal their innermost, semantically interpretable deep structure –”

Proceedings were interrupted at this crucial point by two simultaneous outbursts – one by the detainees, who began protesting vociferously at the cursory treatment they had been subjected to, and one by a familiar mustachioed figure who came raging through the doorway with a gun in one hand and waving the other one (clenched into a fist) in the direction of the manager. The second outburst immediately curtailed the first.

“This is outrageous, Mr Potts!,” the gamekeeper shouted. “Yet again you have chosen to ignore my communications totally and to flout the basic rules of the language game – we above all, as staff, have a duty to maintain standards for others, you within the palace building and I within its wider grounds. You claim to follow the spirit of the law but what about the letter?”

“Yes, what about the letter, eh?” William piped up approvingly. “E zeed it, ’e did!”

“What letter are you talking about?”

The manager looked flustered – though perhaps he was bluffing, trying to work out his next move.

“The letter from the duke ordering the carpet that we’re supposed to

be delivering!” Jack joined in. “I’ve mentioned it again and again but you’ve just ignored me!”

“If you’ve been interfering with His Lordship’s mail again, Potts, he’s going to get a full report from me – and a recommendation of your immediate dismissal!”

“I swear I know nothing of any letter! What do you think you’re doing barging into my office – *my* jurisdiction – and accusing *me* of foul play? I have no time for games.”

The manager’s face had turned livid, as if in response to a positive threat to his self-esteem, while the gamekeeper’s had hardened and grown calm, as if countering a challenge to his integrity and autonomy. This prompted in turn – like in the give and take of a heated game of tennis – a sharp verbal back-hand to his opponent’s positively flabby face:

“That is disgustingly evident!”

“Explain yourself or get out of my office at once!”

This was countered by an artful shot on the gamekeeper’s part in an attempt to cancel the renewed challenge to his autonomy – in fact it was a highly successful lob that sent his opponent reeling back from the net:

“I have been sent by Her Ladyship to investigate why the carpet – *that* carpet – has not yet been delivered. I phoned her from my lodge to get clearance for these two men. Naturally I would not disturb His Lordship himself with such a trivial thing. Besides, I could see it was she who had signed the letter, even though she had copied His Lordship’s signature – she often does that in practical matters which she knows he would not wish to be bothered with.”

“Will somebody tell me what blasted letter everyone keeps talking about? Will someone please *produce* it.”

“That’s the problem,” Jack raised his voice in frustration. “It’s disappeared since those goons of yours jumped on us and dragged us over here.”

“And I’ll wager as ’ow one of ’em ’as the thing about their person right now!” William added.

“Is that true?” the manager’s piggy little eyes looked sharply about for a scapegoat, first at the security men and then at the seated guide.

The bailiffs looked unperturbed, but Mrs Dorking could not conceal her agitation; she crossed and uncrossed her legs, her lips twitching.

“As it happens, “ she blurted out crossly, “I do seem to remember one

of them dropped a piece of paper in a scruffy envelope. Looked like the contents were forged – well, I was right, wasn't I? I put it in my pocket to show later if it should prove relevant. Yes, here it is. I completely forgot about it – you must believe me, Charles...”

“I am sure that is so, my dear,” the manager sighed. “But the articles of the law are quite clear on such matters – I have no time right now to find the relevant paragraph, but it is there, it is there.”

Here he waved vaguely at a row of leather-bound tomes on the shelf behind his desk. His head seemed to have begun to sink towards the desk top – he had to use both hands to prop it up and maintain a semblance of dignity.

“Let me help you,” the gamekeeper intervened again. “*Some* of us have it all in our heads. If a noun is preceded by the definite article – as is the case in the phrase ‘the letter’, which has been used several times in the last few minutes – this is to be understood as a sign of (assumed) accessibility to the hearer as well as of semantic specificity. The instruction conveyed to the hearer by the speaker’s choice of the definite as opposed to the indefinite article is: ‘search for the most accessible relevant referent to which the phrase can suitably be applied’. This must be respected if the current value of the article is to be maintained. No, the letter must be made accessible to the public.”

“All right, all right, let’s be pragmatic about this. Please hand me the letter, Mrs Dorking. Now what is all this...?”

After perusing the letter handed up to him, mumbling sulkily to himself as he did so, he continued:

“This is an internal matter, alterations to the interior decor fall within my province, not yours. I do vaguely recall Her Ladyship mentioning that she was trying to get His Lordship to accept a few changes to the furnishings of his private quarters. I may even have expedited the letter myself. I have so much on my desk these days. Anyway, I don’t see what this has to do with you. I shall take care of the matter in my own manner.”

He waved one of hands dismissively – which was a mistake, since his left cheek, now unsupported, hit the desktop with a soggy sort of clunk. He at once levered it back to the vertical, his chin against the desk forming the fulcrum, but his sagging cheeks seemed to be dragging his face ever downwards.

“What goes on inside and outside the building are not unconnected,”

the gamekeeper persisted. “The same standards apply to the code itself as to the application of the code in actual usage. We are both concerned with roles – our own are in fact complementary – but in this case we are talking about Her Ladyship as the original sender of the message and these two gentlemen as its joint receiver (as regards the carpet it is of course the manufacturers who are the sender and His Lordship the ultimate receiver, but that is not our immediate concern). Once this is recognized the contents of the message – which contains both indexical and iconic elements – can be put into proper perspective. What is indexical of *your* part in this, by the way, is the envelope, which has been franked with the estate franking machine and not with an ordinary postage stamp, something which could only have been done in *this* office – with *that* stamp.” (Here he pointed pointedly at an apparatus atop the manager’s desk.) “Since you now know that I know that you know that, and I know that you know that I know that you know, I know I can trust the further expedition of the matter to you, without having to involve His Lordship in the matter at all. I shall report back to Her Ladyship that the carpet is now going to be delivered directly to the study, as intended.”

“All right, I admit I sent it, but it was out of solidarity with Her Ladyship’s interests – I was privy to the good cause behind her little deception and could not refuse to go along with it. It’s His Lordship’s birthday present, it was meant to be a secret. I’d forgotten all about it. If these stupid men had produced the letter I would have known at once what was involved and sent them on up to the study. I’m afraid Mrs Dorking may have been a bit over-zealous – but you understand as well as anyone the severe security problems we face these days, we have to be wary. We can’t just let the anarchists take over.”

“Quite. Then we are in agreement after all,” the gamekeeper announced, not without a trace of triumph in his tone, and marched out of the room with his gun slung loosely under his arm.

The manager groaned, his *pince-nez* slipping sideways in the rivulets of sweat that ran down from his forehead. His whole face seemed to be dissolving into flaccid moist folds that flopped right over the surface of the desk in a pathetically exaggerated attitude of weariness.

“Looks like ’e’s lost vace altogether,” William whispered with a grin to Jack.

“That’s as may be. I think the expression is more for the benefit of

guide Dorking there – see how furious she looks. I suspect some further explaining is going to be demanded of him in private after we get out of here.”

“Zo why don’t we jist pick up the carpet and leave ’em to it?”

“You two, approach the bench please.”

These words emerged in a gurgle from the jellified mask that was lolling on the back edge of the manager’s desk; they were accompanied by a limply beckoning finger. The two men stepped forward gingerly to receive the following communication, which issued like the last breath from a deflating balloon:

“It seems apologies are in order. Take the carpet and go. You’ll find the stairs up to His Lordship’s study in the middle of the floor above us. You can get there up the central staircase and through the private suites to the right. Go straight through, don’t dawdle and go poking your noses into things that don’t concern you. If you meet him – which is unlikely – do not expect a warm welcome. Just say the carpet’s paid for. He abhors the outside world. But if you do, you might try suggesting other jobs you could do for him, if you’re interested. His study is where it’s got to begin. Her Ladyship is convinced he’ll come around once he sees the improvement a bit of colour brings. I’m not so sure. Tell him how the place is falling apart behind the splendid facades. You must have seen yourselves how shabby things have become outside of the public areas. He’s so locked up in the past – just cannot comprehend that the estate faces economic disaster if we don’t renovate it soon. The west wing was just a temporary compromise – the whole palace has got to be opened to the public, it’s the only way. He might listen if he’s directly confronted with the truth by outsiders. He won’t listen to me or Her Ladyship, he just hides his head in the sand and says things will get back to normal. You can’t help admire him for his stiff upper lip. But he just can’t countenance change, doesn’t understand its necessity. The farm lands have already been sold off, there’s no other source of income apart from limited tourism and conferences. He has to understand the necessity of a dialogue with the broader community, so to speak. The family couldn’t even pay off the death duties after the old duke’s demise without raising a huge loan in the City. There’s almost nothing left to pay the staff with once all the monthly bills and the property taxes are settled. We’ll all go down together if he isn’t brought to his senses soon. The situation is appalling, just appalling...”

Here two stubby hands rose from the quivering mass that was the estate manager and clasped at the tufts of hair at his temples as if desperately trying to anchor his head to the desktop and prevent it from rolling right away in the convulsive sobs that now shook him. The very desk he was hunched over wobbled as if in the throws of a local earthquake. Not knowing quite what to say in the circumstances, Jack and William chose wisely not to say anything, but picked up the carpet and the tool box in silence and withdrew from the office, unchallenged by the bailiffs. They had no difficulty finding the central staircase again and began to climb up towards the starry vaults for what they hoped was the last time.

8. A discourse concerning the family archives

Reaching the second floor presented no problem either, but they must have taken a wrong turn at the top – not a hard thing to do since the staircase was again split into two opposing flights that came out at different points on the overhanging landing above. The corridor they now followed appeared to lead them back towards the west wing, for a number of the bedrooms here were – to judge by the odd academic figure about – occupied by participants from the conference going on below. One shifty figure in a gown was bent staring through a keyhole, while another, further along, was surreptitiously tapping at a door, a wine bottle in his free hand, until some invisible agency opened it from within and he scuttled through. This was evidently still a rather public part of the building. It was tastefully decorated, with textured wallpaper, oriental patterned carpets, framed landscape pictures, and potted plants positioned at regular intervals – more like some high class hotel than a private residence. There were no numbers outside the rooms but each had an iconic symbol on it – a palm tree, a minaret, a dolphin, an apple, or the like, presumably indicative of the name of the suite. Beside each door was also a small oblong frame containing a single word or phrase that could apparently be changed by a switch within. Outside the rooms they passed Jack observed that these showed respectively: ‘Come back later’, ‘Je t’aime’, ‘Occupied’, ‘Come on in’, ‘Ich liebe dich’, ‘Doozo ohairinasai’, ‘Szeretlek’, ‘I hate you’, ‘Ja tebya lyublyu’, and ‘Va te faire foutre’. From behind several of the doors came titters and whispers – in a variety of languages. It must have been the lunch break. So that’s what the academic life is like, Jack mused, half in disgust, half in envy. Anyway, it was not something William needed be exposed to.

“This can’t be right, we’ll have to make an about-turn. The sooner we get this wretched carpet delivered the sooner we’ll get out of here and off for lunch.”

“Aye, a nice spot of zider and a pasty at the old ’Ammer an’ Tack would go down well...” William sighed. “Though not bevore we zees ’Is Lordship in person, mind.”

They retraced their steps and tried another corridor leading off from the central staircase. This one lacked the lavish decorations of the previous wing, with functional floorboards and decidedly dusty windows that could have done with a wash. In fact, a short way from where the corridor abutted into another similar one, a frisky young maid in black dress and pinafore came bustling past from behind them, swatting at the cobwebs with her duster and humming happily to herself as she skipped and pirouetted along. Jack stopped and raised a free arm as if to hail her.

“I say, miss –,” he began, hoping to get information as to which way to turn now, but already he’d missed his chance: she had reached the corner and turned out of their sight to the right.

As he repositioned the carpet on his shoulder, Jack noticed in the light from the window beside him one of the things she had been swatting with her duster and which still hung by a thread across the recess: it was not a cobweb at all, though with its gossamer-like lightness and its semi-invisibility it could easily have been mistaken for one. It was a word. More specifically, the word ‘bailiff’. The mottled light highlighted first the one then the other diaphanous letter as it fluttered there. At the next window along he caught a glimpse of another word – this one was flattened up against a grimy pane but was still legible as ‘intuition’, despite the distorted letters and the damaged final syllable. He did not pause, however, and set off purposefully to the right in pursuit of the maid. William clung on, complaining, behind him. They were just in time to see her turn another corner and disappear from sight again. By the time they had reached it themselves there was no sign of her along the continuation of the corridor – only a choice of doorways leading off to either side.

Jack opted for the third door along, which was half open as if someone had forgotten to close it again in their haste. On the door itself was attached a sign that read: ‘Archives’, and below it: ‘Private’. Here they propped up the carpet before going in. A scuffling sound in the far corner of the room – as of someone who had dropped something in alarm – suggested that this had been the right choice. Only it wasn’t the maid Jack confronted when he stepped forward into the dim interior: a male figure was struggling on the floor in front of a chest of drawers. Here he had apparently dropped to all fours in an attempt to gather up the papers that had fallen from the drawer he had been rooting in. With his neat little goatee and jet black hair smoothed back from a domed

brow he looked like he may well have been one of the conference-goers. In one hand he still held a small electronic apparatus – a scanner? – which he quickly deposited in a pocket.

“Look, it’s not just me, all right?” he hissed defensively as he scrambled to his feet. “Everyone’s doing it. And why not? This is a unique opportunity for serious linguistic investigation – a corpus of text material going back for centuries in unbroken succession. Think of the richness of context! Not just individual words and sentences, but a reflection of language use through the ages quite unrivalled outside of the OED. It belongs by rights to the whole academic community, it shouldn’t just lie here gathering dust. The ends justifies the means in this case, wouldn’t you agree?”

When Jack and William – who still did not quite grasp what was going on – didn’t immediately reply, he continued in a more agitated tone: “I know, you are going to say ‘unethical’ – but there are others who are doing things that are a lot more reprehensible than this. I mean luring junior members of the staff aside under false pretences and interviewing them with concealed tape recorders for later analysis, or actually ripping out fixtures from the walls – old engravings, notices and the like. They’re like locusts down in the pantries where the ingredients for festive speeches are hung ready for processing. Well, it’s their own fault, the family’s, for being so secretive about public cultural property. Tell me you aren’t going to blow the whistle on me! Not before I’ve had a chance to copy this material for my forthcoming masterwork, ‘Topic in Text and Context – the Monograph’, please, I beg of you – my promotion depends on it, I have a mortgage, five children and two wives to feed, quarterly subscriptions to ten international journals to keep up with ...”

“Calm down, calm down. I have no idea what it is you’re up to and don’t really care. We just need directions to the duke’s study...”

“Oh thank God, you lovely sweet man. Come over here to the light of this lamp – no, I’ll open the curtains again, that’s better, we’re not doing anything wrong. Let me show you some of the treasures here – then you’ll see why sometimes even the most deep-rooted scholarly scruples just have to be overridden. Believe me this is the first time I’ve ever been tempted – it was all lies in the review of my last book which they had the nerve to publish in the *Journal of Unapplied Linguistics*. I never read a word of that thesis before I wrote it – just because she was

a grad student of mine – one has so many these days – bench-marking and peer review has such a lot to answer for...”

When he drew the curtain they could see that the room they were in contained numerous chests of drawers, filing cabinets, glass-fronted shelves and display cabinets. On the walls hung a few fading daguerreotypes of bewhiskered gentlemen and their crinolined ladies – presumably ancestors of the duke – plus a large, hand-drawn family tree. The branches of the latter were actually represented as boughs around a central trunk, the names and dates added in stylized curlicue script that followed the contours of the various forks and twigs. Here and there, items of family memorabilia were displayed behind glass – plaques, charters, maps, medals, duelling pistols, embroidered handkerchiefs, enamel lockets, old timepieces, and more obscure items of no obvious practical utility but no doubt suffused with rich potential for historical anecdote. On a large desk near the window alcove were spread a number of volumes that bore the family crest embossed on their gold-chased leather covers. One of these had been left open and it was to this that the intruder drew their attention.

“This is the item that interests me most as a philologist. The family history in five volumes. All the rest of the material in this room merely supplements and fills out what is condensed in these much edited pages. It has been added to and revised numerous times at the hands of successive generations. You can actually see the changing orthographic practice, the different writing instruments and types of ink used, the varying spelling conventions – or lack of them – like successive tide-marks left by the lapping waves of history. Even in the earliest records, when entries were not signed and probably not penned by family members at all but by anonymous monkish scribes in their employ, you can distinguish individual turns of phrase, dialectisms, orthographic quirks. It is a veritable goldmine for studying the evolution of text. Who, one asks, ordered this particular revision? What historical event suddenly rendered that earlier passage perilous and subject to deletion? In short, how did history rewrite itself? And how can we be sure that what has survived is not just an arbitrary, perhaps untypical collection of snippets, but a genuine reflection of the tradition? It is its organic wholeness, its coherence as text. Coherence creates texture. This is almost a definition of what text is all about: the interpretation of one part depends on that of others. Every language possesses an array of means

for ensuring textual coherence: conjunctions, coreference through choice of pronouns as opposed to full noun phrases, for example, substitution, ellipsis, anaphora (not to mention cata-, endo- and exophora), parallelisms, and specific lexical relations whereby the use of one word awakens associations that are echoed elsewhere in the text. These are among the things one can study through changing usage when a unique work like this falls into one's hands."

"But there must be all sorts of private things in there – letters and the like – that the family would hate to have revealed to the public. Every family has its skeletons. Surely their permission is needed..."

"Yes, yes, but that will be forthcoming – when the time is ripe. You see, it's ultimately a question of legitimization for them. They may prefer to remain intuned and immured, of course, but they need public validation of their ancestry to maintain the edifice around them. That's how it always works with old institutions. Perfectly natural. You'll see from the family tree on the wall over there that that ancestry can be traced – and documented, most importantly documented – all the way back to the Conquest, and indeed beyond, to Normandy and the icy mists of the North beyond that, where all is rooted in mythology. There is only one point on the route that leads from then to now where there is the slightest hint of uncertainty in the unbroken succession from father to elder son. Here, you can see for yourselves, I found the place – yes, here it is. A letter from the nineteenth duke to a parish vicar in a village in Devon, dated July 15th 1746."

Jack lent forward and examined the document indicated as the philologist continued.

"The language is a bit bombastic and obscure – intentionally so, if you ask me, but the gist is clear enough. The duke is requesting (or perhaps demanding) that the vicar look into the parish records for him on a matter of 'family business'. But the only indication of the nature of that business is the mention of a certain 'Robert of Buckland' who may or may not be the same person as a 'distant relative' of the duke's bearing that name, but who is believed to have died in that parish after returning from many years abroad. Notice how he seemingly casually throws in a sentence deploring the lax 'Frenchified' ways that had 'begun to affect the moral fibre of the nation', and the sly reference – a veiled threat? – to his ancestral privilege of recommending to the bishop of Exeter a suitable incumbent to the living of the said parish, situated as it was on

land tithed to the estate. And here is the reply, that has also been kept, dated July 30th of the same year.”

Here he pointed at another faded letter jammed into the crease of the inner margin just below the first.

“The good vicar appears to have understood the underlying purport of the duke’s letter perfectly: he mentions that the page in the parish register referring to this Robert character is missing, but he says nothing of *how* it went missing, doesn’t even seem greatly concerned by the fact. He just states that infants born ‘on the wrong side of the blanket’ would naturally not be recorded in the parish records. Was the page perhaps ripped out by his own hand? The words ‘missing’ and ‘wrong side of the blanket’ have been underlined and a note added in the margin by another hand – which looks much like the duke’s in the previous letter. See, the note just says ‘obviously no one we know’. Looks to me as if the record here has been adjusted by someone with an interest in maximalising his own legitimacy and nipping in the bud a counterclaim that may have been voiced by some other branch of the family. It’s a sorry thing to see, the internecine quarrelling that primogeniture can lead to, the dirty tricks that sometimes have to be resorted to even in the best of families. Of course this information could prove quite useful in a tight spot...”

His voice trailed away at this point as his eyes wandered meditatively out of the window for a moment – Jack followed his gaze but saw only the open vista across the lawn down to the lake and, off to the left, the woods with the gamekeeper’s lodge and the driveway from the back gate, the way they had arrived that morning.

“No wonder this material is not openly available to the public,” Jack murmured as he bent forward to look more closely at the documents loosely inserted into the volume. “The signature on this first letter – it looks very similar to the signature on the letter we got from the present duke. Or perhaps from his wife. Do you think these things can run in families?”

“Of course, my own interest in all this is purely theoretical,” the goateed scholar continued as if not hearing him. “My special area of research is, as I believe I mentioned, the nature of the ‘discourse topic’. I might even add that I have made quite a name for myself in that area. The principal question underpinning my endeavours has been the following: if, having analysed a text into minimal thematic sub-sections,

one sets about relating these hierarchically into larger and larger blocks, each level causally as well as taxonomically linked to the next, is it, I enquire, always going to be possible to descry a single ‘topic’ at the highest node? I am talking here not about individual people or things, note – so called ‘topic entities’ – but about ‘topic’ in the pre-theoretical sense of the term, ‘theme’ if you prefer. If it is indeed so, a position I argue cogently for, the next question is: what are the steps by which one can abstract that overriding topic? You see, my monograph is concerned essentially with the condensation of texts, in particular family histories, the null hypothesis being that they are all ultimately reducible to structures very similar to the traditional family tree. Now, there are some – like that unspeakable Pulverschmeisser at Carnegie – who would claim that one can simply construct an algorithm that in principle would allow a machine to carry out such an analysis automatically, producing a finite number of propositions. But this is arrant nonsense – so many of my trans-Atlantic colleagues are still so besotted with the misguided Artificial Intelligence venture, but that’s their problem, not mine. Those bloodhounds are barking up quite the wrong tree. They are all Platonists at heart. What they refuse to understand is the ultimately indeterminate nature of texts: one can simply not state once and for all the exact number of propositions underlying a given text. The information that must be inferred in interpreting and linking successive sentences is always going to be dependent upon the background knowledge the reader brings to the task, and this can of course vary enormously. Understanding a text is a matter of degree. One might go further and enquire how many of the propositions underlying a text need to be stored if it can be said to have been adequately memorized. What is adequately? Adequate for what purpose, and by what measure? No, hermeneutics – or whatever you care to call the search for the underlying teleology of a text – is the only way into a true ‘inner’ understanding of the human purposes and aspirations expressed by its author. Linguistics is not an exact science, it is precisely a *human* science, of the kind Vico so rightly called for centuries ago. Well, I for one am proud to call myself a philologist! Let the algorithmic crowd call me old-fashioned if they want, they will all go right to the same graveyard of deluded faddists as the Structuralists and the Transformationalists and the Neo-grammarians! What was wrong with Palaeo-grammar, for heaven’s sake?”

Here the self-proclaimed philologist banged his fist down alarmingly on the tome opened in front of him, sending up a puff of dust from the faded parchment.

“Careful there – you don’t want to leave your mark on history that badly, do you?”

But his waxing enthusiasm was not snuffed out by Jack’s attempt at levity.

“Linguistics is by rights the pursuit of gentlemen – and the odd lady – of leisure. That is how it was at its inception at least, amongst the Greeks. When Stoic anomalists, citing Plato, and analogists following Aristotle could discuss fine points of etymology from dawn to dusk – and narry a harsh word exchanged between them. Meeting in some placid grove, adherents of the two camps might argue in a civilized manner about the advantage of emphasizing universals over particulars or *vice versa* while they shared an amphora of the best Attic wine. Compare that with the unsightly scrapping and backbiting of linguists today, arguing over exactly the same points! Generativists provoking functionalists by exposing their clinically precise deep structures across the wall that divides them, and functionalists in turn tipping their informal semantic garbage back over the wall when the others turn away. All this pseudo-linguistic slanging about Innateness versus Evolution has brought such speculations no further than among the ancient Greeks – it has nothing to do with real linguistics, which has its roots rather in the medieval monastery, namely the concern for the authenticity of documents pertaining to the doctrines of the Church. They were all handwritten and meticulously copied in those days of course, so errors and *lacunae* could slip into even the holiest of texts. Grammatical analysis as we know it also has its origins here, in monkish concern for the dissemination of Latin, the *lingua franca* of all learning at the time – some of the best practical grammars of all times have been produced by monks and abbots and missionaries.”

“Ah yes,” Jack commented with a wry smile. “Somebody told us earlier this morning about the first duke and his monkey business, remember that, Dad?” (But William had already wandered off and was rubbing a finger against the glass front of some dusty cabinet as he tilted his head to read the titles of the faded old tomes behind.)

“From this source one can directly trace the origins of General Linguistics, which only had to wait for the invention of the printing

press and the dissemination of knowledge of languages spoken and written beyond the boundaries of medieval Europe. But the endeavour would have been impossible without authentic, accurate texts to provide the raw data in the first place. Languages were appreciated in those days as organic wholes, each reflecting the spiritual heritage of the people that spoke them. Then the Industrial Revolution came along and everything started to go downhill...”

“I don’t know too much about any of that, but this history of the duke’s family looks pretty interesting. How the other half lives and all that. If we had the time I wouldn’t mind hearing you tell us more, but it’s the man himself we really must -“

“I’d be delighted. Let me illustrate how my method works on these very volumes. You might think that such a heterogenous collection of anecdotes and events, of loosely related documents – letters, lists, public announcements and the like – could not constitute a homogenous text. But you would be wrong, you would not be taking into account the quintessential human propensity to *create* text, to search for it everywhere that words appear in the context of other words. We naturally try to splice what we see or hear into the on-going text irrespective of whether there are overt coherence markers present or not. Are we not tempted to supply our own missing links between any given sequence of sentences? So much more so when there *is* a clear unifying principle, namely the family tree itself, that beckons us on to seek it out. Let us open it at random in a few places and see what we get.”

Here he opened one of the other volumes which lay closed on the desk and, plonking his finger down without looking, challenged Jack to read out what was written there. It was a faded article clipped out of a newspaper. Somewhat impatiently, Jack did as he was told:

“On July 14th the steamer transporting Sir Nigel and the archaeological treasures he had retrieved amongst the Mayan ruins of the Yucatan peninsula arrived safely in Southampton after a harrowing month at the mercy of unseasonable Atlantic storms. Although the other members of the expedition and half of the crew were in a lamentable state, the duke himself was in fine mettle and set about arranging without delay for the transport of the *objets d’art* back to the estate. He was particularly concerned about the welfare of two richly engraved columns of stone wrapped in many layers of sacking which were carefully winched up onto

wagons, an operation he insisted on supervising personally.

Sir Nigel was greeted with joy by his wife and children when the little *cortège* finally reached the palace on the 20th of the month. His faithful servants also offered touching expressions of gratitude at his safe return. The tales of his latest voyage kept the family in awe for many a following evening. Especially the young heir, Lionel, was fascinated by the shrunken heads and the poisoned arrows he had snatched from the quavering hands of savages on the Orinoco...

The stone stelae were raised in the gardens and the duke took pleasure in discussing the purport of the strange symbols with learned men whom he invited down from the Academy in London expressly for that purpose. It was already known that the ancient Mayans had possessed an extremely elaborate system of time reckoning, with the interdigitation of cycles of different length producing cycles of astronomical complexity. This doubtless formed a part of the elaborate rituals observed by a civilization obsessed with the cyclical, repetitive nature of time. Its precise significance, alas, was irretrievably lost to the ravages of the conquistadors and there was little agreement among scholars of the time as to how the symbols on the stones were to be related to this calendar reckoning. The duke, being himself greatly interested in the passage of time and the precise observance of important calendar dates, was convinced that final interpretation would be forthcoming within a matter of years if not months. It was during one such gathering of learned guests that he first mentioned – albeit in a jocular context – the legend of the curse...”

”Listen, that’s enough isn’t it?”

“Quite sufficient. Typical narrative style, based on temporal sequencing, with the odd background comment or elaboration interspersed among fore-grounded sentences that carry the narrative flow forward. Note the redundantly over-specific reference to the subject – Sir Nigel – initiating the second paragraph. This is a stylistic device for organizing text into semi-independent segments; the alternative would have been running on with a further ‘he’, which would have been quite adequate for comprehension. Now, how would you sum up that passage? What’s its overall topic?”

“Well, those ‘stele’ things Sir Nigel brought back from his explorations, of course. We saw them, you know, out by the maze.”

“Right, but how do you know the stelae referred to in the second paragraph actually refer back to the ‘stone columns’ in the first one? The word as such was not used there, yet you had no problem linking the definite noun phrase ‘the stone stelae’ back to its textual antecedent. That is because you know what ‘stele’ means – and are even familiar, it seems, with its irregular plural – and could make the lexical link between the two. Such things you take for granted, but that is all part and parcel of what cohesion is about. Now let us consider cohesion across a wider stretch of intervening text. Try reading another passage, later in the same volume, like from – here.”

Again he flipped several pages forward and thrust a finger down on a new passage. Jack shrugged and complied. This time he appeared to have plunged into the middle of a diary entry:

“I am deeply apprehensive about the continuing deterioration of Gerald’s mental equilibrium. Since his *magnum opus* was turned down by Macmillan’s he has turned his back on intellectual society entirely. I try to keep his spirits up by telling him that that deplorable event must be regarded as just a minor upset in his career as a philosopher – he is still regarded as the leading light of Phantasmagoricism by his admittedly small, but no doubt illuminated flock of adherents. His work has always been innovative, how could he expect the average academic, let alone the general reading public, to appreciate the sweeping vision of ‘The Sliced Universe’? Admittedly there is little in his theory of the individual being as a quantumized series of slices through time, each independent of the next, that I myself as a practically minded layman am qualified to comment upon. But when that fundamental dogma leads to the consequence of relinquishing all moral responsibility from one instant to the next one has to question its soundness. Signs of this began innocently enough with him shooting at the peacocks from his window, claiming he was only shooting out intermediate slices (though this was bothersome they could be replaced), and with him molesting the successive ‘tweenies’ sent to clean his rooms and bring him his meals (the name of their function, he claimed, ignited his imagination). But when he started taking pot-shots at visitors with the canon (heaven knows how he had hauled it up into his room!), claiming that they were getting too thick on the ground for his liking, intervention of some kind became inevitable. One can understand his refusal to countenance medical

involvement – he is after all a proud man and brother to a duke – but limits have been reached and I, as his elder brother, have a duty to secure the safety of the other members of the family. Meanwhile he languishes in the eastern turret, under lock and key for his own good, until I can bring myself to take the next odious step and seek outside advice. Luckily he does not seem to understand that he is there under coercion, but sees himself now as some medieval limner in his tower, now as a muezzin calling out the hours of prayer to the faithful below, training his telescope upon the heavens at night and upon young female members of staff about their duties in the daytime. Alas, my poor Gerald..’ “

”All right, stop there. I’m sure you will remember the gist. You will also have noticed the more complex structure here – the embedding of a narrative sequence in a reflective, diary style context of self-questioning, where the subjectively charged rhetoric rather than the sequence of actions is highlighted. Now take one more passage, say this one here.”

Jack would rather have read a bit further this time, but had little choice but to start afresh since the philologist had already pulled the book towards himself and flipped several pages forward in it. This time he read what appeared to be a letter to the editor of the Daily Telegraph; the clipping was dated September 3rd, 1919.

“Dear Sir,

In this day and age of growing appreciation of the role that persons of the female persuasion can play in the life of the nation – apart from the antiquated one of child-bearing (for their raising we have nannies, thank goodness) – it is almost beyond belief to read of such incidents as that reported a few weeks ago in the columns of your otherwise respected newspaper concerning a young lady of outstanding intellectual potential who, having received a scholarship to the new ladies’ college at Cambridge at the tender age of fifteen, was not only refused permission to enroll by her insensate father, but was soundly horsewhipped by the tyrant for even suggesting such a thing! And to be informed that the said young lady is the only daughter of Lord X (as in the original communication, I shall abstain from mentioning the last name, but only because I know you would claim it was your policy to remove it – but anyone can read between the lines), why, one shudders in disgust! That such barbarous behaviour still persists amongst the so-called leading families

of this country is cause enough to consider whether Mrs Parkinson does not have some degree of justice on her side after all: such incidents fuel her campaign at the least...

I write now to forestall any further gossip that may accrue from the fact – one that no doubt will soon enough come to the attention of your readers one way or another – that the same young Lady Evelyn has in fact reacted in a natural manner to the treatment meted out to her by her own family, and is at present to be found somewhere between Benares and Agra as a personal guest on the barge of the Maharaja of Hyderabad. There are bound to be prurient interpretations of her attire – though its diaphanous nature is perfectly adapted to the tropical climate and the jewels are little more sumptuous than what a fashionable girl of her age and breeding would be wearing when presented at St. James – and there will doubtless be voices raised concerning the seemliness of dancing barefooted to the twang of the sitar and the patter of the tabla, and of using such quantities of henna and myrrh in one's *toilette* – voices, that is, that are ignorant of local customs in these matters. All I wish to say to society, as the erstwhile companion of the said Evelyn X, is this: behold what you have done to the poor creature! Wake up from the Middle Ages! Let our young women of talent through the gates of Academia without hindrance!

Yours, etc., (Lady) Gwendolen F.”

“There, you can judge for yourself. This is purely argumentative rhetoric, almost journalistic in style and structured accordingly. One could with profit compare the different manner of intertwining the referential and textual functions of language in these three excerpts – but more to the immediate point here is the question: What is it that allows you to read all these extracts as part of one single coherent text?”

“Well really,” Jack looked confused. “I just don't get it. There doesn't seem to be anything ‘coherent’ about them at all.”

“But my dear fellow, the family tree – remember the family tree! Does that count for nothing?”

“Look, I challenge you to show me anything specific in common between these passages and the next one, here, for instance, next to the illustration of a frog climbing out of a jam jar in a little boy's bedroom. It looks like a couple of pages have just been torn out of a children's book and glued in. Listen to the text: ‘While Jimmy and Spot were

sleeping the wily frog found it could twist the lid off the jar from within by applying its finger pads to the undersurface. See – out he climbs and heads straight for the open window’.”

Figure 10



“And it carries on under the next picture: ‘Now you can see Jimmy waking up in the morning. Spot is licking his face: he has already noticed that the frog has escaped. Come on, Jimmy, what are we going to do now?...’ Now, you’re not going to tell me this all belongs to the same coherent text? There’s no overall structure to it, it’s chaotic!”

“Ah, you have seen through my little ploy, then,” the philologist lowered his voice and lent forward with a conspiratorial smile on his lips.

“You are obviously not as thick as you look!”

“Why does everyone round here say that to me, I hate it!”

“Don’t let it bother you, none of my colleagues has seen through it either. No, you are perfectly right, all that hermeneutic mumbo-jumbo, it was just preliminary probing – to see whether you were capable of understanding the *real* purpose of my research, namely the endeavour to unearth an algorithm – yes, I admit it willingly! – that will account for the structure of any conceivable text and, in turn, be able to generate any conceivable text. In other words, to create a real ‘story grammar’. This is by necessity formalistic. The thing is, you see, it’s algorithms that sells research proposals these days! One cannot just reveal one’s long-term goals to all and sundry, there are unscrupulous rogues about who could try and usurp your place in the queue for funding. Here, I can show you a preliminary sketch of the sort of thing I have in mind, since I know you are not interested in using it for your own purposes – are you?”

“For heaven’s sake, I’m just a carpet-fitter...”

“Just testing! Can’t be too careful. Here, take a quick look then.”

Here the philologist whipped out a scruffy piece of paper from his pocket, looked about him to make sure there were no superfluous witnesses, and flashed it for a few seconds in front of Jack.

“When this is worked out in detail I shall be able to collapse all the texts in these archives into a few simple underlying formulae and then regenerate them at will. The process can be extended in principle to all possible academic texts as well. I will control the entire field!”

This he said with eyebrows arched in Mephistophelian glee, his goatee twitching furiously.

“I don’t quite see –”

“Of course not. Let me illustrate the ultimate reduction with these volumes in front of us. Starting from the most recent passages, they can be collapsed back successively into each other like sections of a pocket telescope, back to the very first entry in the first volume, the primordial myth out of which all later family stories were generated. Here take a quick look at this.”

The page he now presented Jack with – the first one in the oldest, most worn-looking of the five volumes – began with the following words written in clumsy capital letters as if by an orangutan wielding a nursery crayon:

‘In the beginning was the Wood. Houses were made of wood, furniture and utensils were carved out of wood. All this wood was in the middle of a wood. The first humans – the man, Ask, and his woman, Embla – were also made of wood, since they were originally trees, an ash and a vine respectively. They were brought to life by the gods as they walked past them one day. Odin it was who gave them breath, while Hoenir gave them reasoning souls and Lodur animal warmth and colour. And at the centre of the world – like the centre beam of a mighty house – stood a tall tree called Yggdrasil that joined the three worlds around its axis. Three roots it had, one plunging into Niflhel, the underworld. A fountain near it, Hvergelmir, was the source of all rivers. The second penetrated to the frosty land of the giants and next to it lay the miraculous fountain of Mimir, for a draught of which Odin himself risked an eye. The third root was in the heavens and from the fountain near it the wisest of the Nerds, Norman, used to water the tree to keep it alive. But at that root the serpent Nidhögg gnawed, and in the foliage of the tree four stags wandered browsing relentlessly on its young buds. Beneath the tree the horn of the god Heimdall was hidden. It would sound to announce the final battle of the Aesir against their enemies – for one day the tree was destined to be destroyed by giants in the Twilight of the Gods...’

“That’s enough for you to get a feel for the method. See, you find reflected here not just the general concern for the preservation of the family line experienced by successive dukes, but also the seeds of everything that follows. For example, the tale of the knighting of the first duke, according to which the grateful William rewarded him (then just an ordinary Norman foot soldier) for holding up his shield to protect his liege just as an enemy arrow was heading his way at Hastings. This can be directly related to the blowing of Heimdall’s horn, which the battle motif presupposes.”

His further elaboration of the point was curtailed by snorting noises nearby, where a somewhat less regal William stood chuckling lasciviously to himself at something that he had removed from a glass-fronted cabinet.

“Ah, I see your companion has located the collection of privately printed journals belonging to the 18th duke. Pretty sordid illustrations, but the texts are quite subtle in a scurrilous sort of Restoration way. We

could use that one there in order to illustrate applying my formalism to another kind of text.”

But William clung adamantly to the volume, slapping the philologist’s hands away as he continued chuckling and reading.

“On the other hand, we could just as well use one of the 23rd duke’s manuscript plays on the next shelf over here. It makes no difference, though the contrast with your friend’s choice could hardly be greater. They remain unpublished, although some of them are occasionally put on by members of the family for the village pageant – or if the weather prevents other activities around Christmas. From a modern viewpoint they are of course hopelessly outdated – melodramatic historical romances. What’s this one now?” (He flipped through the first pages of the slender volume that he had plucked out.) “Ah, it’s not one of the plays, I see. It’s the handwritten account by the late duke’s third son of his traumatic experiences during the Great War. It was written while he was recovering from shell-shock in a hospital in Kent. It was part of his treatment in fact – a kind of therapy considered advanced at the time. Take a look at this passage and see what it reminds you of in the ur-myth I showed you.”

“All right, just a few sentences, we’ve really got to get going.”

What he read – to himself – was the following:

‘Historians may some day recount that the present conflict, this Word War that engulfs Europe, was the most significant historical event for our glorious national language since the Great Vowel Shift. But few of us will remain to recount the real horror of it. The images still surge up every time I close my eyes, rendering sleep impossible without the help of morphine... The Hun was pounding us with 50-ton final-clause canons, throwing up great barking slabs of verbiage all along the front. Our division had been isolated and our light artillery was powerless to drown the infernal racket – madness was not far away. Then I and a fellow officer volunteered to cross over into enemy territory and silence the big guns disguised as itinerant gerunds. We were armed with nothing but a knife and a grenade each, plus a pair of concessive clauses in case of capture. We set out across no-man’s land, wading knee-deep in defused ejectives, past dangling participles and unbound relative pronouns that hung pathetically from shattered tree structures – beastly stuff. Any minute snipers could have targeted us. Then suddenly there

was a sickening squelch as a heaving dark mass dropped out of the night onto my comrade's back. I whirled around and saw an enemy sentence – one of those foul Teutonic ones – trying to crush his head in convulsions of filthy logic. Quick as a flash I grabbed my knife and lunged – straight for the finite auxiliary verb. I remembered from training that if you can dislodge it from the syntax, avoiding the temptation of going for the postposed main verb, the rest of the thing will collapse on the spot into a shuddering heap of solipsistic jelly. But the blade was deflected, it scraped off only a handful of scalar adjectives. Its barbed tail missed my face by a fraction of an inch. Cursing, I thrust again, but now it jerked aside, releasing my speechless friend, and coiled about me instead. As luck would have it my left arm was still free – I felt for the grenade, pulled it from my belt and crammed it down the beast's snarling maw. It exploded and I was thrown back twenty yards in a shower of individual letters – all in Gothic script ...'

“It's no use, I really don't –”

“The *Stammabaum*, squabbles in the family, it's all there, man, don't you see?”

“Not really. The logic is sort of – out of focus.”

“All right, that last bit was perhaps not the best of choices for getting the point across to a layman. You need a simple text where you can see how bridging inferences can be used to reduce the essential information to a minimum. Let's try the one I was looking at just before you burst in so unexpectedly. It's in the most recent of the volumes on the desk back where we were. Try the very last entry.”

“OK, but this is the also the very last time. We'll be making our exit in a moment.”

He picked up the slimmest of the leather-bound volumes on the desk and held it up close to the window in order to read the last hand-written entry:

‘It looked for a moment as if a large floppy tongue was jammed at a painful angle into the space between the upright of the old arched gate and the high stone wall and was wriggling desperately to escape. But then one saw the spindly legs kicking out spasmodically below the near end of the object and heard the shouts of the two men, one on each side of the gateway, and realized that it was in fact a rolled up carpet, now

partly unrolled, that they were trying to get through the gap that way. On closer inspection it became clear that the gate – closed by a rusty padlock – had long been in disuse, although its filigree metalwork, incorporating two identically plumed coats of arms, was still impressive. Less so was the state of the wall itself, partially hidden at the base by weeds and covered by straggles of ivy that had worked their way between the stones and loosened the mortar, causing the upper part next to the gate to crumble right away and leave a narrow fissure. It was through this that the two men had apparently tried to force their load after ascertaining that the way was otherwise barred. The words on the side of the van that was parked at the edge of the lane flanking the wall provided a clue as to the nature of their strange behaviour:

William Horricks & son, Carpet-fitters and (Re)Upholsterers.

“But that’s us – where the hell did this come from? Have you been spying on us? All the way from beyond the bridge?” Jack rounded in consternation and confusion on the blank-faced philologist.

“Me? certainly not. You don’t think I wrote that, do you? You want to ask the keeper of this journal, the archivist. Anyway, it doesn’t matter, the thing it can be used for is to illustrate the distinction between automatic, conventionalized inferences and those that the reader has to make ‘on line’ in order to grasp the text and reduce it to a form which can be integrated with the updated contents of his memory. This will give you an idea of the natural reductionism that goes on all the time in the reader’s mind. Now, how would you characterize, for example, the inference that you probably made between the expressions ‘spindly legs’ and ‘the two men’, namely that the former belonged to one of the latter – was it automatic or *ad hoc*, or perhaps a mixture of both?”

But Jack was too flabbergasted to pay attention to this academic question. Once again he had the uncanny feeling that someone had been following their every move since they had arrived on the grounds of the palace, and his eyes darted all about him. He noticed a waste-paper bin beneath the desk and when he knelt down and plucked out a single crumpled sheet he found to his still greater amazement when he smoothed it out that it contained an earlier version of the same page, with various words and phrases neatly scored out or changed and notes added in the margin. Among these he read – at random – a reminder to

‘apply a more consistent hermeneutic investigation to the contents – continually ask yourself “why?” – put yourself in the author’s position – question his ultimate intentions’, and further down: ‘suggest the meta-semiotics needed to grasp the coherence of the whole estate, from attic to cellars, from garden to state rooms, from text to meta-text...’

Greater attention to the philologist’s words would have been superfluous anyway, since a sudden vague noise out in the corridor caused the scholar to jump round at this point. He froze for an instant in a position of imminent karate attack, but when the sounds were not repeated he drew the curtains across the window and, muttering something about there being eyes and ears everywhere, strode rapidly towards the door. He peered out cautiously, then vanished in a trice, leaving the door open behind him. Jack in turn got to his feet and waved to William to follow him.

“Come on, you lazy sod, put that disgusting thing back where you got it from. We’ve wasted enough time already, it’s time for some more lifting.”

But before they had reached the doorway there was a loud clanking sound from somewhere down the corridor, then a roar of air being sucked in followed by a hideous scream. They rushed out to see what had happened. The corridor was empty: there was only a wide open cover to a laundry chute in the wall, but no sign of the philologist.

“Well, I zuppose that be what in scholarly zircles they calls ‘goin’ down’,” William grinned. “‘Is term must’ve bin over.”

Jack shook his head in disbelief, but there was nothing to do except hoist his end of the carpet onto his shoulder and take the tool box in his free hand once more. They continued on their way along a still dustier, less well groomed corridor that turned left, away from the front of the building, then right again. The grimy, word-smearred windows now looked down across the gardens behind the palace. As far as Jack could tell they must have somehow skirted the central staircase beneath the dome which they had seen from below and have entered the eastern wing of the palace. But of the few doors they passed none seemed open to them; the two he tried were locked. The only living person they encountered – if living he was, he looked so pale – was attired in a black velvet jacket with wide lapels and a purple cravat and had the air of some decadent *fin-de-siècle* poet, with long black hair to match. He walked slowly towards them, waving his left arm as he emitted strange words.

“A lynx, its luminous eyes elucidating the rebus of the night, slinks across the darkened lea...,” he declaimed, as if in a trance of fierce etymological deliberation.

“Excuse me, could we trouble you for some directions,” Jack tried hesitantly as he came level with them.

The poet walked straight past, ignoring the request entirely. But as his voice trailed away behind them they thought they heard him mouthing the word ‘di-rec-tions’ very slowly and precisely to himself, as if tasting it. Then he spat it out before disappearing round the corner.

They continued around two more corners but came across no one else – until from behind one door there emerged unmistakably human sounds. A female voice was declaiming on the far side in exaggeratedly dramatic tones. Not wanting to disturb whatever performance was going on, but nevertheless inquisitive, Jack signalled to William to keep quiet, and flexing his knees carefully under the weight of the carpet knelt with one eye to the keyhole. At first he could see no one, only pink wallpaper flickering in candle light, a dressing table with a winged mirror, the edge of a canopied bedstead, and a half open French window from which moonlight slanted through, all redolent of a young lady’s bedroom. But he could hear the words more distinctly now:

“Oh my love, I shall wait for you for ever – beyond the grave if needs be. But you must away, I understand, alas, I understand – the cardinal’s men approach, I hear the rumour of their cloddish boots without even now – you must over the rooftops and flee to the border in the carriage which my faithful coachman Pierre has at the ready anent the stables. Fare thee well – and anon for the nonce!”

There was a pause as if the actress was awaiting a response. Then she began again:

“Nay, I shall not forget thee, my sweeting, nor will I betray thee to our mutual enemies even though they threaten my frail flesh with instruments of foul torture! Here, take one last token of my undying love – bear it ever close to thy manly bosom!”

Here Jack gave a gasp as a buxom young creature in shorts and an orange chiffon blouse knotted around her waist suddenly appeared at the French window. The moonlight caught her long blond curls, flecking them with gold and highlighting the contrast with her full, slightly opened crimson lips. Her eyes were wide and pleading, her eyebrows arched above them as in supplication. In her hand she bore what looked

like a parchment. Then she removed something on a chain from around her neck and leant out to thrust it towards some invisible presence on the balcony beyond.

“Ere, what be goin’ on in there? Let me ’ave a look, g’won!” William jostled his son with the end of the carpet.

“She’s – wonderful,” Jack sighed. There was no way he was going to give up his position at the keyhole.

“Ah, I swoon,” the young lady staggered back from the window. “The thought that you must vanish into the night after one brief kiss, to face further unspeakable perils whilst bringing justice to the downtrodden peasants of these parts, tears at my very bowels! My brave heart – I know you do it all for my sake! But hasten, be gone! I hear the cardinal’s men baying at the door! Alas, there is no time for further honied exchanges!”

There was another brief pause, after which she clasped her barely covered bosom and stepped back a pace, as if in unbearable distress:

“What? You would face the villains like a man! My love, you think not what you say! Thou art weaponless – they bear cutlasses, maces, a vat of boiling oil, spiked gloves, battle axes, carabins and a fourteen foot catapult! Flee, flee while there is time, so that thou shalt live for another kiss from these panting lips!”

“Get going, you nincompoop!” Jack could not refrain from muttering.

“Zounds like yer knows the missin’ part, eh?”

“What are you talking about,” Jack hissed back at him without turning round. “What missing part? Can’t you hear the replies from the balcony? The bastard just doesn’t know when to take a hint...”

“I reckons as you jist be bezotted – that lass be talkin’ to ’erzef!”

“Hie thee hence at the instant, my prince of brigands,” the female voice continued with unabated rapture. “Rejoin thy band of brave men and think not twice about plundering my father’s domains again – if I were a fellow, I would be out there plundering and raping with the rest of you hot lads! The evil cardinal – whose men attempt as we speak to rudely penetrate my maidenly bower with a battering ram – has him at his beck and call, the poor deluded puppet!”

“All right, zo what be that brigand chappy zayin’ to ’er now?”

“I give not a fig for the cardinal’s base threats,” Jack whispered as if to himself, “I would spit a thousand cardinals on my rapier if I saw him but touch the hem of your gown.”

“Say not so, my love, ’tis venom he spits, you stand in mortal danger,

flee now even as the cursed dogs clasp their chain-mailed fists about my defenceless arms, save thyself before it is too late. Oh no, sweet fool – willstou yet tarry?”

“Aye, I willst,” Jack murmured.

“Then make thy move, grab this dagger that I cast to you now, the one with which I was about to thrust into my own alabaster throat rather than face a fate worse than death!”

“’Ere, ’ow’d you get that? I knows, yer don’t ’ave to tell me – this ’ere play be nothin’ but stereopytes, you can guess the replies a mile awf. Question – answer, command – revusal, bip – bop, jist like tennis, one move after the tother. A zimple matter of roles an’ hexpectations.”

“The exchanges may be banal, but *she* is not – I have never seen such a beautiful creature...”

“Come on, vair’s vair, you’ve zeen enough now, s’m’y turn, blast ‘ee!”

It was not the ensuing scuffle at the keyhole that disrupted the performance at this point, but a phone ringing within.

“Oh it’s you, is it, Daddy,” they heard the young lady speak in an ordinary, rather petulant voice now, cancelling a number of expectations about her role. “Hell, all right, I’ll be right down... It’s not my fault if those idiots get so tanked up they go and make a spectacle of themselves in the music room, at least it’s not in public... I’m sorry if you can’t hear yourself think, but listen, I didn’t invite *all* of them. I’ll do what I can to simmer them down. It’s pure animal spirits... Yes, yes, and yours... But this is a most inconvenient time, I hope you realize. I was just practising my part for the pageant. How do you expect me to memorize all this confounded tripe by the weekend? It wears me out... All right, all right, don’t go on about it. I said I’d do it for your sake and I shall...”

Here the receiver was slammed down, and the two voyeurs/auditors just had time to stagger to their knees and back away a few paces from the door before it flew open and the young lady – the duke’s daughter Polly, as they now realized – flapped out. For a moment she paused, a little astonished at finding them standing there. She eyed Jack up and down, dwelling especially on his bulging upper arm muscles.

“You look like a big strong fellow. If you want to come and lay that thing of yours in my room just say the word!”

Then she was off along the corridor with a flick of her curls and a last coy smile over her shoulder.

“Come on, we must follow her,” Jack croaked out, dry in the throat.

“She knows where her father is.”

He set off as fast as he could, with William virtually flying along behind him. But when they reached a twisting staircase down which Miss Polly trotted – and Jack looked like he intended following – William put his foot down like a break.

“Old yer ’orses, the duke’s study be up ’ere on this vloor – or even ’igher. If we goes down, we jist gotta come back up again. Whassa point?”

“Stop griping, we’ve got to catch up with her. She’ll take us straight to him!”

As usual he had his way, by sheer dint of muscle. But by the time they reached the landing of the floor below it was clear that they were not going to be able to catch up with her – short of abandoning their heavy burden entirely. In fact they could hear no further footsteps on the stairs below them, so they could only presume that she had entered one of the two doors that led from the landing. Jack knocked on the nearest of them, and when there was no reply forthcoming he pushed it open and led the way through.

9. Nursery talk

On the threshold of the large room that they now entered they were confronted by a diminutive but solidly built figure in a black dress and old-fashioned bonnet. She stood blocking the way with arms akimbo and jowls a-quiver as she sized them up (the adverb was apropos, given her stature).

“What do you think you’re doing with that clumsy object in here? This is a nursery, not a workplace. You’ve got the wrong door.”

“Excuse us, we’re just trying to get directions to the duke’s study – we thought we saw his daughter coming down the stairs this way...”

“Neither Miss Polly nor His Lordship have been this way all week. Why should they?”

“But surely you – or somebody in here – could just point us in the right direction. He’ll be wondering where his carpet got to...”

“His Lordship’s study is nowhere near here – it’s on a completely different floor. I couldn’t possibly show you myself, what with my rheumatism and my acrophobia, and besides, the twins are in the middle of a lesson with their tutor, I can’t leave them alone with *him*. If you want them to take you to their father you’ll have to wait until the lesson is over. I’m not having their education disrupted on account of a vulgar rug.”

“I reckons we can bide a while,” William puffed, his legs almost collapsing under him.

“All right, but you keep quiet unless spoken to. Just stay out of the way in the corner there by the rocking-horse. No, it’s all right, Mr Fitz, just carry on, pay no attention. Back to work, Dibs, and don’t stick your tongue out, Dabs – it’s becoming a most unbecoming habit with you!”

These words were addressed, as she turned, to a lanky figure with a high collar seated on a plain wooden chair and two identical little girls in frilly pink frocks and ribbons. Each of the twins sat, pen in hand, at their own little desk with identical lined exercise books before them. The tutor – as they assumed the tall man to be – had half turned his head to scrutinize the newcomers. He had a sly, wolf-like look about him, enhanced by a swept-up crest of thick greyish hair and a small pair of spectacles balanced half way down his long nose. His arms, which ended

in abnormally spindly fingers, were too long for the tight-fitting jacket he was wearing, and the imbalance was echoed at his nether extremities, where a length of bare boney shin was exposed on each leg between his socks and his trouser hems. He gave a forced smile, revealing an array of pointy, discoloured teeth, then returned to the place marked in the book on his knees by a ruler while Jack and William deposited the carpet as directed.

They looked about them as the murmuring from the direction of the little group continued. The desks and chairs were the only furniture in the middle of the bare floor-boards, but there was also an armchair pulled up by the hearth opposite the window, beyond the rocking-horse, where the nurse had apparently been sitting warming herself and reading a newspaper. Around the periphery, which was marked by a skirting board punctuated with mouse-holes, were numerous chests and cupboards that overflowed with dolls and puppets – including an ugly-looking golliwog with pointed teeth like the tutor’s that eyed them from the edge of a wicker hamper and looked like it really might bite if provoked. There was also a toy theatre made of cut-out cardboard sections with replaceable backdrops and wings, and a large doll’s-house that appeared to be an exact replica of the palace; small wooden figures could be made out behind the windows. At the back, near a grandfather clock, was an interior door that presumably led to the girls’ bedroom and the nurse’s private quarters. She settled back groaning into her rocking chair and picked up the newspaper again. This caused the rocking horse to creak back and forth in sympathy – it rocked forward every time she rocked back, as if synchronised with her movements.

“Pretty girls,” Jack commented in a friendly tone, hoping to repair the bad start he had got off to with the woman. “Just like their sister... Only smaller.”

To say this he had to crane his neck to the left as the horse rocked to the right and the nanny to the left. The girls, overhearing, giggled, but the nanny’s rocking came abruptly to a halt.

“If all you can do is make rude innuendos, you might as well hold your tongue,” she scowled back, then resumed her rocking.

“Sorry, I didn’t mean to be rude,” he craned his neck to the right as the horse rocked left. “I meant only that they all look – nice. In the same way. You can see that they all belong to the same family.”

“I should think so!”

“Are there any other children? Do they have any brothers?”

Only a deep sigh came in reply to this question. During the pause that ensued, one of the little girls, who had been staring over the tutor’s shoulder at William, slowly lowered the teddy bear that she had on her lap to floor level beneath her desk, its back pointing forward, so that William could see it but the tutor could not. Suddenly she bent it over at the waist towards herself, thus exposing its fuzzy bottom towards him; at the same time she poked her tongue out. He pulled a bear-like face back at her, exposing his false teeth and clacking them ferociously. She put on a sour expression and looked away huffily.

Jack tried another tack, again twisting his neck round the rocking horse as the nanny rocked forward: “They look like a bright pair – twins, aren’t they? Did they begin talking at the same time?...”

This had indeed a more positive effect on their nanny.

“Yes, they did. They do almost everything at the same time. It’s all noted down in the baby book. Debs’ first word – at age 6 months – was ‘dadda’. Dabs’, the same day, was ‘existentialism’.”

“Hm. Sounds like the twins have rather different capacities for language, even though they do *look* identical...”

“Oh, I don’t know about that – my ears have been playing tricks on me of late, I may have misheard Debs. This wretched tinitus makes me sick to the tummy sometimes – the bitter result of a lifetime of rearing boisterous young dukelets and duchettes... But I’m not saying it isn’t rewarding also – it is so amusing to hear the sweet things prattle on using words in their own special way without realizing that we grown-ups find it funny. I remember Dabs first using the word ‘tick-tock’ about a clock, then about a clockwork soldier, then about one of those talking head affairs in the library. Debs I remember first said ‘quack’ about a duck out on the lawn, then later about a peacock, then an aeroplane, then finally about the doctor who gave her the medicine for whooping cough... No, they both developed in much the same way and at the same time, as far as I can judge. At one stage they even invented their own private language, which His Lordship was furious about when it finally came to light – I think he saw it as something of an insult to his philosophical notions. I’m afraid Mr Fitz made short work of eliminating it again anyway. The poor wee mites.”

“I was just obeying orders, you know that,” said the tutor, who had been half-listening to the conversation with a cocked ear and now turned

completely towards them. “His Lordship sees eye to eye with me as regards the time-honoured precept ‘spare the child and spoil the rod’. I for one cannot be accused of letting perfectly good rods rot away in the corner from disuse – in these times of economic hardship we must all pull together. Anyway, leave pedagogy to the experts, Nanny. You don’t really know what you are talking about when you claim that the twins are developing exactly in tandem, as if they were wound-up clockwork mechanisms. There is a clear difference in learning style, one that is often encountered between children of identical ages. Debs went through a period of establishing a broad array of fixed phrases, pronounced with adult-like intonation and used in the appropriate social circumstances. She did not vary these much and used vague words like demonstratives for referring to all sorts of ‘things’. Dabs was at the same time busy expanding her ability to name things and was much more creative in doing so, but she was also less inclined to produce whole utterances with fluent intonation.”

“But I thought all children were supposed to learn to speak in roughly the same stages.”

“With the emphasis on ‘roughly’, yes! What is more or less universal is – excuse me a moment –” (Here he turned back for a moment towards little Debs who was apparently tearing at her sister’s golden locks because Dabs had just flicked ink into her face; a skinny hand raised threateningly and the two words “Silence! Write!” immediately pacified them.) “Where was I – ah yes, what is common for all children are the following stages, as their ‘mean length of utterance’ gradually increases. First, before one can talk of ‘utterances’ at all, there is the babbling stage, which starts around six months. During this phase all possible sounds produced by the speech organs are practised, although only those relevant to the adult speech of the community will ultimately be retained, fine-tuned and moulded into ordered oppositions between phonemes. Then, around one to one and a half years of age they enter the one-word or ‘holophrastic’ stage. The single unanalysed words they produce during this phase can be understood as expressing single semantic roles and relations such as agent, action, location, recipient, and so on, with the missing part of the proposition (from an adult’s viewpoint) being contained implicitly in the context – as when a child says ‘fire-tongs’, wishing the adult to hand her such an object. Of course the purpose behind the utterance, the incipient speech act, is also largely

implicit in the context, although intonation will usually distinguish between a request (as here) and a question, say. Then, at an age of about one and a half to two, comes the two-word stage, in which words become combined into couplets like ‘theme (or neutral entity) plus location’, ‘agent plus action’, ‘agent plus theme (or patient)’, or ‘possessor plus possessed’, for example ‘Nanny oven’, ‘Nanny cook’, ‘cook Nanny’, all with open class items. Often they employ a strategy of combining one open class word (say a noun) with one closed class ‘pivot’ word such as ‘that’ (pointing at something) or ‘up’ (desiring that something be lifted), as in ‘Debs up’ or ‘doggie up’ or – ‘belt up!’”

The latter phrase was addressed to the twins again, who were now giggling together: Debs had scribbled something on a page of her exercise book and held it up in William’s direction. It could have represented William on all fours lifting his leg like a dog against a lamppost. William had not exactly alleviated the disciplinary situation when he sat back on his haunches in a doggie begging position, front paws dangling and jaws silently moving up and down as if woofing. But now they instantly shut up, and William, aware of the eyes of everyone else turned his way, looked innocently in the other direction as the tutor continued.

“Following the two-word stage comes the stage of so-called telegraphic speech, at approximately two to two and a half years of age, when utterances consisting of several words strung together in syntactic units become possible, for example a subject plus a verbal phrase, the latter in turn consisting of a main verb plus an object. Children’s utterances at this stage have surprisingly few word order errors but lack most of the small functional words and the inflectional endings required by adult speech. They say things like ‘man ride bus today’ or ‘what that foot doing?’, or ‘Dolly wanna eat cutlet’ and so on.”

“Oh, I remember that phase well,” the old nurse joined in. “The girls treated it like a game, the dear hearts – they would send little telegrams to each other by phone, though they couldn’t write as yet. Then they discovered that there was a number they could dial to send real telegrams. I began to suspect something was wrong when the estate manager complained about the huge increase in the phone bill that quarter. He suggested that members of staff might be sneaking external calls, but who would risk their position for such a thing? Then His Lordship almost had a fit the next day when he was informed by his broker that he

had acted upon a telegram from the palace instructing him to ‘dump rubber, stop, buy all Dolly Mixture instead, stop, keep under hat, stop’. Those naughty things! Sacking the broker didn’t solve the problem either – His Lordship had a dreadful time trying to get all those sweetie shares sold again...”

“Of course, the acquisition process is still far from over when they reach that stage – there are all those non-lexical function words like the definite and indefinite articles to learn, for a start. Problems with pronouns and scalar adjectives can persist for a long time too. Then transformations of structure – inversions for questions and so on – have to be mastered. Complex structures such as reversible passive sentences won’t be understood by children until they’re around 7 or 8 (‘The horse was kicked by the man’ as opposed to ‘The man was kicked by the horse’). The nature of the adult language will play a greater and greater role – though the nativists will insist that apart from vocabulary this is just a matter of binary ‘parameter settings’ being chosen from a universal set of choices by the child (either inversion for questions or not, for example). Anyway, learning vocabulary does continue right into adult life, of course. Whatever the stage and whatever the elements being learnt, however, the general learning curve is U-shaped: at first there are no errors to speak of, just *verbatim* items learnt by rote, then follows a period of over-extensions in which the item is experimented with and hypotheses are made about the rules involved. Various attempts at substitutions and simplifications may intervene until finally an adult-like competence is achieved, with errors pruned away again. And at every stage, comprehension – perception – will be ahead of production.”

Table 4

General stages of acquisition:

ca. 6 months: Babbling

1- 1½ years: One-word stage

1½ – 2: Two-word stage

2-2½.: Telegraphic speech

Order of acquisition of English non-lexical morphemes:

1. *-ing*

2. plural *-s*

3. possessive -'s
 4. *the, a*
 5. past tense *-ed*
 6. third person singular *-s*
 7. auxiliary *be*
-

“Now, girls,” the tutor turned to his little *protégées*. “Show the nice men what you can do by yourselves. Recapitulate the principal stages of development and illustrate with examples that you yourselves have produced. First, babbling!”

This presented no problem for the girls, who started babbling away with gusto.

“All right, enough. Refer to your notes now. Holophrasis.”

“Fire-tongs!” Debs piped up.

“And the semantic role involved?”

“Theme!” Dabs volunteered at once.

“Good. Two-word stage!”

“Nanny oven!”

“And the roles?”

“Agent and location!” Debs added at once.

“No – *theme* and location!” Dabs objected indignantly.

“Well, it could be either,” the tutor admitted. “Now stop that at once, you little brats!”

He grabbed the flailing tiny arms that had again gone each for the other sister’s tresses and separated them with his own steel-like grip around their wrists.

“That’s better. Now, telegraphic stage!”

“Dolly want eat cutlet!”

“And the missing function words?”

“Want *to* –”

“– *a* cutlet.”

“That’s what I like to hear. Now show the gentlemen how you learnt the different allomorphs of the plural morpheme ‘-s’, namely /s/, /z/ and /ɪz/.”

The twins looked at each other quizzically, but neither of them was willing to start.

“Come, come, remember the ‘wug’ game we played when you were

very little, trying to sort it all out? I gave you a noun and you gave me the plural. First with known words like ‘cat’, plural –?”

“Cats!” they cried out in unison.

“And ‘dog’, plural –?”

“Dogs!”

“And ‘face’, plural –?”

“Faces!”

“Right. You seemed to have mastered the basic idea, so I gave you a made-up word, ‘wug’. What did you say, one wug, but many –?”

“Wugses?” Debs tried.

“No, no, that’s not at all what you said. If you say one dog but many dogs, you should also say one wug but many –?”

“Wugses!” Dabs insisted.

“Explain yourself!” the tutor whacked his ruler down furiously on Dabs’ desk.

“We can prove it,” Dabs whined, her face distorted on the verge of tears, and reached under her desk for her little satchel. “We’ve got a jam-jar full of them that Dadda gave us in the greenhouse. Look – it’s got ‘wugses’ written on the label!”

And sure enough, the little jar she produced bore exactly that wordform written on it. The glass was somewhat clouded over but within could be seen a tangle of weird-looking creatures, half insect, half vegetable, with eyes on stalks and thorny legs, all clambering to get out.

“We’ll discuss this later,” the tutor silenced them with a severe look, then turned back to the visitors with the same sly smile on his lips as before. “Let me just say a few more words about universal tendencies in the order of acquisition. I mentioned the transition from babbling to phonemes, that is sounds organized into a system of functional but abstract oppositions. It turns out that the order in which children learn the different kinds of sounds of the adult language are not only more or less the same for all children learning that language, but also across all target languages. Thus stops are universally acquired before other consonants, labials are learnt before alveolar sounds and dental fricatives like voiced and voiceless ‘th’ are always amongst the last sounds mastered. Moreover, whenever a new phoneme is learnt it is first learnt in initial position within words. Why is this, you may ask.”

“Why is this?” William asked obediently.

“It is because of the physiological basis of the ‘distinctive features’ that

determine how phonemes come to stand in binary relations to one another in articulatory space. There is a natural order in which that space can be maximally differentiated, starting with the distinction between unhindered airflow through the speech organs (vowels) and sudden breaks in that airflow (consonants). Successive oppositions beyond that optimally divide up the remaining space. Labials are, furthermore, a surer way into consonant distinctions than alveolar consonants formed with the tongue behind the teeth, because their characteristic lip position can more readily be seen by the hearer. As for new distinctions being learnt in initial position first – that’s a matter of saliency, especially well motivated in a language like English where the stressed vowel usually comes immediately after any initial consonant. Now similar universal tendencies can be seen in the acquisition of morphemes too, for example words of spatial orientation, where ‘in’ and ‘on’ – alongside ‘under’ and ‘beside’ – are learnt before ‘behind’ and ‘in front of’, and the latter are first correctly used about objects that have an inherent front and back and only later about other objects – like trees – that don’t. Well, this is directly relatable to the physical grounding of language in sensori-motor experience, but the quasi-universal order of acquisition of non-lexical items like grammatical function words and inflections for tense are specific to particular languages and need to be explained in other terms, for example relative frequency and, again, intrinsic saliency.”

“I’ve read that children can only learn a language at all if they start early enough – what’s your angle on that?” (Jack managed to get a word in edgeways here by shoving it quickly into a suitable slot between punctuation marks.)

“There does indeed appear to be a critical age – around the onset of puberty, when other things begin to distract the full attention of the pupil – beyond which children cannot normally start to learn a first adult language. Well, Nanny can tell you a story about that, can’t you, old dear?”

“Ah, that I can, Mr Fitz, that I can... It happened during the annual Historical Philology Hunt one year when the old duke was still quite a young man, at the height of his powers. Of course the Hunt has not been practised in its old form for donkey’s years now. In those days it was all just good fun – a day’s outing scouring the countryside for boxes of old correspondence, obscure inscriptions or dusty parchments, with no

constraining theoretical framework, just the sound injunction: drink straight from the stirrup, make as big a racket as possible, and shoot at anything that moves. The health of the duke's poor wife had only just begun to deteriorate. I had not been long at the palace myself. I remember them riding back from the hunt that blustery summer afternoon, all the fine gentlemen in red and the ladies in their smart riding habits, the hounds baying away excitedly all around them. For they brought back with them not only several finely inscribed Saxon pelts, but also something else, which His Lordship carried in front of him across his saddle, something wrapped up in a blanket that struggled when he handed it down to us servants. It was a young lad, completely naked, about fourteen or fifteen he could have been, but quite puny and in a filthy condition. They'd found him in a fox's den in the woods beyond the hill over yonder. It seemed he'd been reared by the foxes from infancy. Couldn't speak a word, just snarled and barked when he couldn't get what he wanted. Which was usually one of us girls put in charge of 'educating' him. You see, His Lordship had this notion that he could bring him up as his own son – he had only managed to produce daughters with his wife up till then and it seemed unlikely that she would present him with further offspring now that she had taken permanently to her bed. His obsession with producing an heir seemed to cloud his judgement at times. He hired a whole crew of tutors to teach the lad Latin, geometry and divinity, but to little avail, since after two years he could still only bark out his name and utter a few simple phrases. His lordship had intended getting him into Oxford and then into politics – Conservative of course. But it soon became apparent that his speech by the age of twenty had not advanced beyond the telegraphic stage, and he had already developed an aversion to politics in any case (understandably having this thing about foxes), so the duke had to be content with obtaining a commission for him in the army signals corps instead. Of course, there were tongues that wagged and scandalous rumours were spread, people whispered about illegitimacy and how the babe had been abandoned by the duke's own eldest daughter, now in a convent – but these are murky matters, best not talked about in front of the c-h-i-l-d-r-e-n... Anyway, there was a happy ending after all. Her Ladyship recovered miraculously from her illness and they did have a son – though she died bringing it into the world, poor thing. The continuance of the family was assured, that was the main thing. And the wild boy disappe-

ared in the foxholes of Ypres and was never heard of again. Oh, but listen how I babble on. You must forgive me, it isn't often I get the opportunity to talk about the old days any more..."

Intent upon her account, Jack did not notice what was going on between William and one of the little girls – not the one who had bared her bear at him (she was just grinning) but the other one. She had picked up her doll from the floor beside her chair and, pointing it below desk level in his direction, flipped its short dress up, flashing its nickers at him. He tried to look away, but kept on looking back out of the corner of his eye to see if she had stopped – she repeated the movement each time he did. His initial embarrassment turned to irritation then to fury, and when, at the end of the nurse's tale, Debs accompanied another flash with a lascivious roll of the eyes, licking her tongue slowly around her lips, he leapt to his feet and cried out:

"Pack that in, yer little Jezerbell!"

"Come over and pack it in yourthelf, big boy!" Debs lisped, making the doll shake its hips provocatively at William, at which both sisters burst out in loud giggles – until the tutor again slammed the ruler down in front of their noses.

Plucking the doll from the girl's hands he hurled it in the direction of the hearth – where it was fielded just in time by the nurse, and the twins returned to taking their notes, as good as gold. But William had already stamped off sulkily to the other end of the room, where he pretended to be interested in the doll-size replica of the palace.

"Oh my, I really don't know where they pick up such expressions," the nurse clucked apologetically and shook her head. "They lead such protected lives, there's no television or contact of any kind with the rude village children, you really wouldn't think..."

"What you are enquiring about ultimately, Nanny, is the old question of Nature versus Nurture," the tutor took up the previous thread again. "Where, one might ask, do children acquire their concepts in the first place? What is *your* opinion?" (Here he swivelled towards Jack.)

"Well, I suppose there are some things they know about already, from playing with them, for example. Other things they have pointed out for them. I mean, adults around them name things. Then, I suppose, later they learn the meanings of new words through definitions made up from more basic ones that they already know..."

"It's not quite that simple, though that corresponds to the usual

layman's view of the matter. What you have omitted is the social context in which the meaning of the word or phrase is learnt. Just pointing at something and supplying its name, so-called ostensive definition, is not enough – it's far too ambiguous. I mean, if I point at Debs here and say the word 'blebs', how is the other child to know that I mean 'girl', or perhaps the name of this particular girl, or perhaps her hair or whatever other part I happen to point most directly at? Or there again, perhaps I mean some quality of the object, for example 'bad' or 'brazen' or 'misshapen'."

"Blou Blebs," Dabs pointed at her sister while the tutor just carried on talking, his back turned towards her.

"Bli blow blat, blo blat's blew?" Debs whispered back with a shrug.

"What you take for granted, like most people, is the complex cognitive development that has already advanced a long way before they ever achieve the capability of producing adult-like sentences. The pre-linguistic world doesn't just disappear when that occurs. By then they have also obtained some rudimentary understanding of the purposes to which language can be put, for naming, for ordering, for proposing actions, and so forth. It's this knowledge that helps the child 'bootstrap' her way towards understanding the significance of words. As for the things they are supposed to know 'already', we are in much murkier waters. What *are* the basic categories the child brings to the language learning process? Are some of them specific to language alone – like 'noun' or 'verb'? One school of thought claims that there are no such things, and that language is emergent out of more basic cognitive skills and depends entirely on social transmission for its specifics, although they do not deny the natural instinct to babble, to analogize, to form propositions and indeed to communicate with speech in general. This is the view I myself find most congenial. There is, however, another influential view, the 'nativist' one I mentioned earlier, which Nanny would doubtless subscribe to (if she understood it). This viewpoint suggests that the child brings many more specific linguistic abilities to this world, such as the propensity to recognize what nouns and verbs are and to link them to objects and actions respectively. Of course both schools of thought agree on the child's need to hear input in a particular language from adults in order to have this potentiality activated and linked to phonological words. It is rather that the nativists claim that an abstract framework of structural choices – which they call Universal

Grammar – is innate, genetically there from the start. This includes the basic principles of syntax – the child does not have to rely on imperfect data heard by chance from adults around her, they will say. Children appear to know in advance, for example, the principle referred to in the literature as ‘Principle A’, which states that a reflexive pronoun must have an antecedent that c-commands it, as in ‘The girl’s father hurt himself’, where ‘himself’ must refer back to ‘father’ and not ‘girl’ (the latter is a mere ‘specifier’ of the head noun).”

“Well, Mr Fitz,” the little nurse protested. “I must say it does amaze me how the little poppets can know about such complicated things as Principle A and c-commanding – why, I sometimes forget them myself! Where would they have it from if not from the cradle? I never told them a word about such things, I swear!”

“All I can say, Nanny, is that if you thought for a moment about the *meaning* of such sentences you would have to admit that they hardly need abstract structural reasons for rejecting it! Naturally it would not do for a little girl to command her own father. Anyway, it’s just not true that children learn from positive data alone, i.e. without explicit correction – if they persist in the error of their ways they are simply not rewarded with the comprehension of their wishes by adults! Without my constant disciplinary vigilance they would be speaking pidgin English or Welsh or something equally barbaric by now. Why, you must admit, Nanny, even you sometimes mete out correction.”

“I don’t know what you are insinuating, I’m sure. But of course they get clipped round the ear by me if they try uttering any naughty words in my presence! But I hate myself for it – the poor innocents just don’t know what they’re doing sometimes, it’s in their nature to be naughty.”

“There is little difference between the two cases. They certainly know what is coming to them from me if I hear them flouting Principle A or indulging in long-distance anaphora or the like! I don’t even have to make a switch reference. It is a simple matter: are they to have their way, or are we? Just this morning I heard Miss Debs say the following sentence to her sister as she showed her a carving knife she must have stolen from the kitchens: ‘Who shall we kill today?’. Naturally she received a healthy slap on the back of her hand with the ruler, and I daresay she will think twice about neutralizing ‘who’ and ‘whom’ again in the future.”

“But Mr Fitz, really now, children are capable of spontaneously producing funny new sentences of their own all the time. How can you

explain the fact that they often over-extend the rules you have taught them – and when they realize they haven't got it quite right begin to adjust the rule, pruning it back quite without prompting?"

"But that proves my point entirely. This 'pruning back' is the result of hypotheses they make – abductive hypotheses to be exact. These are the way by which they get at the rules implicit in the speech they hear around them, although it is also the source of erroneous simplifications and generalizations, and indeed – if it is allowed to get out of hand – of language change. But abductive hypotheses are just guesses at 'best fits', and alternative hypotheses that do not in the long run fit so well what they hear around them simply wither away from lack of reinforcement. Thus a child may speculate that the '-ed' they hear all the time on English verbs from adults is something to do with past time – these forms are used solely about situations that no longer pertain in their immediate surroundings. And they would be right. But there is still something wrong with the fit: they produce all sorts of over-extensions like 'seed' instead of 'saw', thinking that '-ed' can be added to any verb to produce that meaning – including strong ones which should not take it. This reflects the natural tendency to align one form with one meaning and *vice versa*. What happens is that, as they gradually acquire specific past forms of strong verbs in suitable 'past' contexts, these are reinforced to the point where they are so automatic that they will override any attempt to apply the over-extended '-ed' rule to them. The rule doesn't disappear, it is just adjusted so as to be triggered only by weak verbs, for which special forms haven't been learnt. The essential thing is the *input* they are exposed to."

"Can we get down now, please?" the twins chimed up in unison as the clock in the corner chimed out the hour.

"Yes, yes," Mr Fitz nodded after cross-referencing the time on his fob-watch. "The lesson is over. Report back in precisely thirty minutes, do you understand? The rules laid down by your grandfather still apply to the letter. We shall continue with spelling after the break."

At this the girls rushed squealing and laughing towards the rocking-horse. Debs leapt onto the iconic steed and started rocking it back and forth so violently, waving one little arm as if it held a whip while blowing through her other fist an indexical hunting halloo, that it began to inch its way forward over the floorboards. Dabs, pretending to be a fox, scampered about on all fours taunting her, until the rocking-horse took

off after her and she scampered, screaming with laughter towards the far end of the room, with Debs on her rocking-horse hot in symbolic pursuit.

Paying no attention to this rumpus, the tutor and the nurse continued their heated conversation at the point where they had left off.

“The role of imitation has been vastly underestimated by the nativists.”

“All I know is that however good an example I try to set, it has little effect on their behaviour.”

“But you must admit that you speak to them in a different way than to adults – clearer diction, simplified syntax. The input they get from you is by no means ‘degenerate’.”

“I should think not!”

“Well, this ‘Motherese’ as it is sometimes called has a not inconsiderable role to play in the acquisition process.”

“I wouldn’t call it ‘Motherese’ myself,” the little nurse sniffed. “Her Ladyship only sees them twenty minutes every day, ten in the morning and ten at night when she pops in to say good night. The only phrases they hear from her are: ‘Oh, the darlings’, ‘Nighty night, my angels’, and ‘Don’t stick pins in Nanny!’ I can’t see that as providing a solid basis for their mastery of English.”

“Well, let’s agree to call it Nannyese, or Old Nurse, then,” Mr Fitz gave her one of his insidious smiles. “I’m sure it has had a great effect on their development. Wouldn’t you agree?”

“Small wonder,” Jack replied when thus addressed. “All that time she must have spent with them.”

For some reason the nurse glared at him rather than at the tutor, as if he had just tried to insult her again, but her fit of pique was short-lived: there was a crash and a shriek as Debs on the rocking-horse careered into the model theatre, which sent its rider flying through the air and crashing down on top of her sister.

“Gotya, you nasty little fox!” Debs shrieked.

“Let me go, squire, else I’ll bite your nuts off!” Dabs yapped back, and the two of them tumbled about on the floor tearing and scratching until the nurse clapped her hands and cried out:

“Girls, girls, what kind of unladylike behaviour is this? Mr Fitz, please – I really can’t be expected to keep up with these little whirligigs all the time!”

The tutor strode across and separated the struggling twins with a surgically applied slice of his ruler. When he plucked them up by the scruffs of their necks they just stood there, good as gold again, awaiting instruction. The nurse glanced back in Jack's direction, frowning.

"I had almost forgotten these workmen. You have just got time to take them to your father in his study, girls. But don't dawdle, and come back immediately, do you hear?"

At this the tutor released his grip and the twins scampered towards the door. Jack hurried to get the carpet over his shoulder again and called across to William to help him. But William was at this juncture standing with bent knees peering in at one of the windows of the doll's-house-sized palace. He had managed to locate what looked like the nursery on the first floor at the back, corresponding to where he guessed they were now. Among the various doll-like little figures in the rooms behind the windows, one group had attracted his special attention: he could see two figures carrying a carpet over their shoulders, one of them wearing overalls and a cloth cap very similar to his own. There was no time to investigate this insult to his sense of verisimilitude more closely, so, shaking his head and muttering to himself, he ambled over to join Jack, who was already waiting impatiently by the door. The tutor was rubbing his hands in front of the hearth and did not pay the slightest attention to their departure, but the old nurse, muttering about draughts, had shuffled across to the door as if waiting to close it after them.

"Grab your end, Dad, we'll have to get a move on if we want to catch up with them."

But 'up' was the wrong word this time. When they stepped out onto the landing they could hear the patter of footsteps and the giggling of the girls as they scampered *down* the stairs instead of leading them upwards. Jack distinctly heard the words in plain English – as if meant for his ears – that Debs shouted to Dabs (or *vice versa*) as they ran:

"Come on, let's go visit Dadda!"

So perhaps they were leading them in the right direction after all.

"They are quite uncontrollable," the nurse clucked behind him.

"Where do you think they are going?" he asked her.

"Oh they won't get further than the 'secret garden' at the bottom of the stairs. They know what to expect from Mr Fitz if they aren't back on time. They're not really allowed to play down there – they'll get their

lovely frocks dirty. At least there's no way out into the public parts beyond."

"What is so 'secret' about it?"

"It's no secret to *them*, unfortunately – it was the 20th duke who had it blocked off by high hedges after his wife ran off and left him. They say he used to go down there and meditate on the futility of communication – which if you ask me meant getting as drunk as a lord. Well, the poor man was a lord after all..."

"But does the present duke use it too, then?"

"Huhnhn!" the old nurse produced a strange neighing sound, rolling her eyes as she did so, which could have indicated a negation or some kind of ironic confirmation. In either case she was obviously not interested in staying out chatting on the draughty landing any longer, and quickly retired the way she had come.

Though William started protesting half-heartedly again at the prospect of having to come right back up, they had little choice but to follow the one thread that appeared to lead them towards the assigned recipient of the carpet. To do so they had to hurry. As it was, they were almost too late when they reached the interior door at ground floor level and stepped out from the stairwell into a bare tiled hall. To the left was an open door leading out of the building into a cobbled yard and to the right they could hear beyond another door the clatter of pots and pans and voices calling out above it – apparently the kitchens lay in that direction. But there was no trace of the twins.

"They must have gone further down the steps – quick, back up – I mean down!" Jack cried and began backing into the stairwell again, pushing William behind him.

William's muffled yells of protest echoed up the stairs as he was forced back up them on his back; he struggled and kicked as he clung for dear life to the carpet. In his haste to complete the manoeuvre Jack did not seem to notice. The stairwell continued downwards, no doubt to the basement, but Jack stopped halfway down: here there was a small door in the wall, like a coal cellar hatch. It was open a crack and through it he could swear he heard distant girlish giggles. But he could also see that there was no way the carpet would get through – there was barely room for him to crawl through the narrow passage himself.

"You wait here while I go through and see if I can catch them," Jack declared.

Without waiting to hear William's comment on this proposition (actually four, none of them declarative), he pulled himself through the entrance and wriggled along for a while on his elbows, until he emerged at the foot of a short flight of steps that led upwards into daylight. When he got to his feet his arms were scratched and his T-shirt had come out of his belt. Adjusting himself, he stepped up, blinking, into what indeed appeared to be a small, walled-in garden. Unlike the formal gardens he had seen from above, it looked quite unplanned and unkempt; a single overgrown path of crazy paving wound its way between flowering shrubs and old fruit trees. The high walls were almost hidden by rambling roses. He stopped here and listened – yes, there was a faint whispering and giggling coming from further down inside the garden. The girls were in there all right. He proceeded cautiously along the paving stones, brushing aside the overhanging foliage, then froze again. He could still hear faint whispering – but it now seemed to come from between the wall and the bushes up ahead. Then it ceased.

“Apple..,” he thought he heard a tiny voice whisper from the left just as he started off again.

But when he bent down to examine the bush from which the voice seemed to have emerged he could see nothing – apart from a half-rotten apple that lay on the ground there. Behind the bush he noticed that some old planks had been left piled at random. Seen end on, several of them formed a rough letter ‘A’ that caught the dappled light in such a way as to stand out somewhat from the surroundings. Why this should warrant his attention he had no idea, but he nevertheless stared at it. At once a faint breeze began to whistle through the planks, producing a husky note like a faint ‘ah!’ of surprise, and all around him in the foliage other ‘ah’s could be heard echoing the first.

He got to his feet, tilting his head to try and locate the girls’ voices again, then continued along the paving stones. After a few more steps he heard another small voice, this time from down on the right behind a stunted yew tree.

“Beetle...”

He knelt down and, carefully pulling back the nearest fronds, looked into the shadows between the tree and the crumbling brick wall beyond. When his eyes had adjusted he saw a tangle of russet leaves on the moist ground tilt a fraction as a beetle extricated itself clumsily from under it, only to tumble headlong into a nearby snail that froze in its frothy path

and withdrew its horns into its shell forthwith. He was about to withdraw his own head when he noticed out of the corner of his eye something else stirring – a slight pressure beneath the humus. Something was trying to push its way up to the light. Some rotten twigs, two pebbles and a sprinkling of dark earth was pushed aside, and out popped a bluebell – only it wasn't an ordinary bluebell, it was the letter 'b' on a fragile stalk. It swayed there tinkling silently like a bluebell. And behind it another one – and another. Letter 'b's were popping up all around him! B's were being coined left right and centre! And as if in sympathy with them, everything in the garden beginning with 'b' was suddenly highlighted, whichever way he looked – there was the neck of a Bottle sticking out from the earth, a Butterfly that had settled on a Buddleiah, a cluster of Berries on the yew tree, a discarded, half-eaten Biscuit...

Then a cat yowled nearby and the spell was broken – all the 'b's shot back into the earth and were gone.

"Cat..." He heard the word whispered somewhere close to his ear.

The cat leapt out of the shadows and a small bird, dropping the worm in its beak, flapped up in panic. Having missed it by inches the cat slunk away again in feigned indifference – as if to show that it didn't really have to exert itself, it was only doing this to keep its claw in. Already it had sighted a new prey: a frog that hopped out from amidst the stalks of a primitive jungle of mushrooms. It flopped sideways into some weeds, sensing danger. The cat continued creeping forward in imperceptibly small movements. Only its tail revealed its impatience – it swayed and twitched from side to side, forming and unforming a tell-tale looped 'l'.

Jack felt the hairs on the back of his neck rise for some reason, and hopped back quickly himself onto the paving stones. As the breeze moved the trees there were whisperings and titterings all around him again but whichever way he looked he saw only glimpses of letters in amongst the shrubbery that vanished as soon as he faced them directly.

"Dial..." he thought he heard the word whispered tauntingly towards him from up ahead.

"Debs!" he called out now. "Dabs! Where are you?"

The word 'where' seemed to echo back and forth from leaf to leaf, joined by the occasional 'how?' or 'what?' or 'when?'. But all Jack could see was leaves and shadows and the beady eye of the odd blackbird staring out at him. And when he hurried around the next turn of the path there was nothing but a sun dial in a clearing, its base wrapped in ivy. At

the edge of the clearing was an old bench facing it. The motto 'Sufficient unto the day' was carved into the base above the date 'July 5th, 1816'.

"Why?" he wondered.

"Why?" croaked the frog behind the weeds. "Why?" the question reverberated round the twisting attic of the snail's house under the yew tree. "Why?" rustled the ivy around the sun-dial, and "why?" grumbled two anonymous bricks in the wall, grinding their teeth together. "Why, why, why?..." the question was tossed back and forth around the garden by a myriad faint voices and was echoed in the tracks left by hopping birds in the earth around the sun-dial: little inverted 'y's that pointed this way and that. Similar forked signs caught the sunlight between the leafy fingers of the trees – twigs held by invisible little dowsers, pointing now this way, now that way, over here, up there, down over there, as if guiding the eye to the nearest lode laden with meaning.

"Where are you, girls? Where are you hiding?"

Jack looked wildly all about him for the source of the whispering.

Then a window scraped open somewhere high up on the facade behind him and sent the dowsing rods spinning wildly about their axes. In the ticking silence that ensued he thought he could hear a faint scratching sound from the far end of the walled garden, then a muffled giggle. He stepped stealthily in that direction like the cat – this time he had them cornered. Darting up to the trunk of an old apple tree he listened with bated breath to what was going on behind it. The scraping sound stopped. There was a thud, then the girls whispered back and forth:

"Ble blust ble black blin blen blinutes."

"Bleve blenty blof blime blo blisit Bladda, blome blon!"

There were more scraping sounds interspersed with gasps of concentrated effort, and when Jack looked round the trunk he saw that he was too late again: Debs' (or was it Dabs'?) struggling legs were just disappearing through a cavity that had been produced by removing three loose bricks. No adult could follow that way. The twins obviously had their private way out into the forbidden public gardens beyond. There was nothing to do but to go all the way back to where he had left William and hope he could find an alternative way through to the gardens from that side. Perhaps in doing so he would also come across their elder sister...

He strode quickly back to the basement steps, and crawled through to where William was waiting hunched by the carpet, grumbling impatiently.

“I saw them go through to the gardens,” he explained to him summarily. “If we run we can still intercept them and get them to take us to the duke. Here, take your end of the carpet, we’ve got to hurry.”

“I bain’t runnin’ nowhere! This be nothink but a wild goose chase. Can’t yer zee, I be too old to go galvilantin’ about no more after birds? If you were thinkin’ straight you’d jist get a ’old of someone in the kitchens ’ere to ’elp us. I reckons as you’ve bin bewitched and befuddled – you be more interested in chasin’ after nymphs than in deliverin’ this ’ere carpet!”

“All right, then, you decrepit old specimen. You can wait in the entrance while I try and find a way through by way of the courtyard. At least you can help me get the carpet back in there.”

Dragging the carpet out to the hall again was easy enough, though once there William just sat down on top of it, demonstrably removed his cap and mopped his brow as if to underline his intended immobility.

“Just don’t stray away before I get back, you hear?”

With this Jack plucked up the tool box and hurried out of the door that opened into the yard (why he should have taken the box with him was obscure – perhaps he instinctively wanted to deprive William of the possibility of laying the carpet without him).

“An’ don’t you tarry neither!” William called after him. “At this rate it’ll be closin’ time at the ’Ammer and Tack avore we be out of ’ere...”

10. The kitchens: where William is witness to a right old morphophonological stew

Now William was not what one might call a man of a patient disposition. Although he was no longer up to carrying heavy loads over long distances, his bouts of fatigue were as short-lived as were his bursts of energy. After two minutes of waiting slumped motionlessly on the carpet, he could not suppress a fidget – his left leg twitched, shooting out a few inches then back again, as if on a taught spring. After three minutes his right leg did the same. After four and a half minutes his neck suddenly tilted, then with an asymmetrical twist straightened up again. After six minutes his left hand shot up and performed a sweeping movement across his face, as if brushing an insect away. Thirty seconds later the clenched fist of his right hand, laid across his knee, opened, hesitated, then clenched again. Two minutes after this, both his feet started drumming rapidly on the ground in front of him for the duration of approximately five seconds. And exactly one minute and forty five seconds after this movement had ceased as suddenly as it began, his jaw sunk and his arms shot out sideways in a kind of combination stretch-yawn like a cat. After which he began to rock rhythmically backwards and forwards as he sat. After thirty seconds of this he jerked back to an upright position and sat contemplatively clicking his dentures for a further minute and a quarter. Finally he slapped his hands down on his thighs and, as if all his internal springs had been released simultaneously, sprang to his feet.

“Zod this. Can’t ’ang around all day.”

Leaving the carpet where it was he began pacing up and down the hall; now and then he poked his nose through one of the doors leading off it and called to see if anyone was about. Eventually this summoned forth a liveried footman, who stared at him superciliously without deigning to utter a word.

“Ere, we’ve got a carpet to deliver, personal like, to ’Is Lordship. Thik’un over yonder. Only me zon’s scarpered. Could yer give uz a ’and instead?”

“You have documentation for it, I assume?” the footman sniffed in a seriously plaid Scots accent.

“Course I ’ave – zee this ’ere letter, from the duke ’izzelf, like I zaid.”

“It looks like it’s signed by Her Ladyship. That’s much more likely. I’ll see to the matter myself. You may go – by the back door.”

“Wait a zecond there – it zays ‘in person’, I bain’t goin’ nowhere avore I zees it delivered proper like. You can jist take ’old of the vront end vor me.”

“That will not be necessary. However, if you insist, you can follow along behind me. Her Ladyship is preparing to receive guests for tea in the morning room. She will no doubt sign for the carpet but we must hurry – she is not to be disturbed once she has begun entertaining her guests. There is a short-cut through the kitchens.”

The footman hoisted the carpet onto a broad shoulder as if it were no more than a sack of potatoes and set off without another word towards the large door at the end of the hall, which he kicked open before plunging through. William followed close behind, fussing with the end of the carpet but not actually lifting it. The footman swung one leg back to kick the door closed again behind him as if William was not there at all – it slammed to behind them, just missing his nose as he flattened himself against the wall.

A short passage led them straight into the middle of a pungent, crashing, sizzling, hacking manic bedlam. Amidst clouds of steam, flames leaping from pans, flying vegetables, swinging ladles, and bubbling cauldrons at least half a dozen chefs in knotted neckerchiefs and tall white hats could be seen and heard above the racket as they shouted out orders to the handful of assistants and scullery maids who appeared to be doing most of the actual work. The effect of the spicy aromas all around him on William’s concentration – already gnawed at by hunger – was evident. The footman, on the other hand, seemed to know some invisible stepping stones through the chaos, and with the fancy footwork no doubt expected of his job – and a couple of near collisions avoided by nimble pirouettes – was half way across the kitchen before William had got further than the first table.

Here two sweating assistants were madly hacking up vegetables to keep up with a chef who sported the bristling moustache of a sergeant major. He was barking out orders in all directions as he presided with his ladle over the great tureen to which the vegetables were being added,

while a scullery maid trotted back and forth between the table and a hatch in the far wall, upending bowl after bowl of ingredients into the tureen. When he looked closer at the bland objects she was tipping into it William saw that they were minute letters formed of dough. The traditional speciality of the house, he surmised. At the next work surface two Gallic-looking chefs, one pinch-cheeked and with up-pointing moustaches, the other puff-cheeked and with down-pointing moustaches, were working together over a number of variously shaped metal containers. They appeared to be using them to make jellies and aspics in. Only there was little sign of cooperation between them: now the first would grab a utensil from the other and rap him over the knuckles with it, now the second would snatch up the still liquid contents of a container the other had just filled and pour it instead into one of his own choosing. All the while they bitched away at each other noisily.

Squeezing his way past, William found himself in front of the gridirons of a great hearth where what looked like a whole lamb was being roasted. The spit was being turned by a creature which could have been a Barbary monkey on a chain, but might equally well have been a hairy dwarf with his back towards him. Protecting his face from the heat he sidled past, making the occasional springing motion as he tried to keep the carpet on the footman's shoulder in sight. But he was rapidly thwarted in his endeavour to make headway by a whole throng of arguing chefs that surged back and forth between the two long tables that filled the centre of the kitchen. He was caught up in the middle of one particularly violent surge and had to thrash out with his arms and legs to avoid being knocked to the floor and trampled on.

"*Nom d'une pipe!*" one excitable little chef was screaming close to William's ear. "What is ze point of trying to stick to a recipe if 'alf ze ingredients zey are missing! It is unraisonable. One must have structure – but one must also be creative sometimes, no?"

"You are just trying to find an excuse to slip in your finicky à la Cartesian experiments despite the fixed menu we agreed upon!" (This was uttered by a pasty-faced chef brandishing a rolling pin in the face of the first.) "What is wrong with roly-polly pudding, even if currently we are without currants? Who are you to dictate the family's tastes? I know what's functional, we don't need formalist usurpers from outside with their fancy *crêpes* and *crèmes* to tell us our just desserts!"

"Take zat back, you xenophobic diacritic-critic!"

“Neither of you amateurs knows the first thing about real desserts,” a chef in an untraditional fez popped up between them.” I refer to the kind that melts on the palate into visions of dancing houris and tinkling caravans that ply their way through the dunes beneath the moonlight, the kind of dessert that should be deleted while reclining on rich carpets in tents of purest damask silk. It is the evening for my syllabub – it is an evening for paradise!”

“What about my trifle?”

“I spit on your English trifle! What of my meringues – zey are not to be trifled with!”

“Zis is not fair! I have not the dessert done for a ganzes week. It is my turn by rights. Mine union – the European one – vill hear of zis!”

“Jesus, what’s wrong with good old hot apple pie a la mode?”

“Nosing – except for ze pasetic attempt at French and ze general disgustingness of Yankee pig-slop fast so-called food!”

“Not so fast, chum, what do *you* propose that doesn’t take five hours to prepare?”

“Banana fritters *à la Cointreau*, what else?”

“*Apfelstrudel* viz Black Forest crunchy bits!”

“Peach Melba!”

“Lice pudding!”

“Cloudberry and kiwi delight!”

“Word salad!”

“Rhubarb, rhubarb, rhubarb!”

Wisely, William dropped to his knees and escaped between the nearest table legs. He crawled out cautiously on the far side next to two adolescent assistants who had been set to the simple task of baking scones and buns. One was mixing dough and the other was rolling it on a floured board and forming it into shapes which were then loaded onto trays destined for the furnace in the wall behind them. They were whispering together as they sent disgusted looks across the table at the undignified *fracas* on the other side. Their superiors, two of the pastry cooks, figured prominently in the thick of it.

“It’s time the workers took over this shambles, if you ask me, mate.”

“Right – and the word is out that it may not be so far off...”

“Maybe this evening already, according to what I hear from the pudding boys. Upstairs is due for a taste of new times...”

“If they paid us decent wages things might be different.”

“We’re exploited, that’s what the root of the trouble is.”

On seeing William emerge next to them they clammed up, but as soon as he grinned at them and started talking they relaxed.

“That were a close shave! Tell me, lads, does this zort of caper go on every day?”

“Sure it does,“ the paler of the two shrugged. “They can never agree about dessert. They’ll probably just end up making them all and letting the guests choose – just more work for us and a lot of waste, eh, Dick?”

“Right, Flann,” the more spotted of the two replied. “There’s been nothing but conflict ever since the Item-and-process lot started trying to take over. Not that I’ve got anything against new ways of looking at things – though I’ll be bugged if I can see what’s wrong with Item-and-arrangement, or even Word-and-paradigm, in their right places. I’m on probation, I keep my mouth shut. But why can’t master cooks live and let live? The more variety the better in this trade, I say.”

“What be this ’ere word-and-whassit stuff – different schools or zom’ent?”

“You could say that. You could also say it’s a matter of loyalists against radicals. This new lot – well, Flann’s master is one of them while my own is a traditionalist, but it makes no difference to us. We’re pals. These generativists insist that morphology and syntax belong to one rule system, and that there’s no such thing as a distinct level of phonemes. The basic ingredients of each dish are the underlying word-forms of the recipe which are spelled out by the application of successive rules until you have an acceptable, pronounceable output. What they object to in the old Item-and-arrangement approach of the structuralists is that it presupposes an autonomous phonological level that doesn’t leak through to the morphology at all – they say this is only possible if you look at language as a static system and give up trying to explain how or why it comes to hang together.”

“All zounds a bit technicallical to me, but I zuppose things gotta ’ang together. What were that third ’un?”

“Word-and-paradigm,” Flann took over from Dick. “An even older approach that harks back to traditional Latin grammar with its nominal and verbal paradigms, its declensions and conjugations. Of course it’s a bit superfluous for an analytic sort of language like English, but it’s come into its own again recently, since neither of the other approaches can really deal with *portmanteau* morphemes, and plenty of languages around

still have those. Has the advantage of being directly interpretable in psychological and functional terms, or so its adherents claim. It can define whole recipes, not just abstract ingredients.”

“Portmanteau? Thought that were a ’at-box or zom’ent.”

“Well, take these words in Italian – they are related together as a single verbal paradigm.”

Here Flann carved into the surface of the dough he had been working on three words, using the blunt end of a fork:

Table 5

Italian past definite tense

	s.	pl.
1	<i>feci</i>	<i>facemmo</i>
2	<i>facesti</i>	<i>faceste</i>
3	<i>fecero</i>	<i>fecero</i>

“These forms constitute the past definite tense paradigm of *fare* ‘make’, first person singular then plural and so on with second and third person. The question is, what are the morphemes that indicates the tense and the person and number of the subject? The I-and-A people, because they are so tied to the linear order of morphemes, have to say that the ‘-i’ in the first form indicates first person singular, though they cannot explain its relationship to say the ‘-o’ of the corresponding present tense form *faccio* or explain why the ‘a’ of the stem here has been replaced by ‘e’ in just three forms. The truth is that these inflections have several meanings all packed into them which cannot be separated in the linear chain of sounds. The Item-and-process approach fares a bit better (so to speak), since it can simply take an abstract bundle of morphemes as input – say, FARE, 1ST PERS. SING., and PAST, and link it by an arrow to the output, in this case *feci*, without having to decide how to break up the linear chain. But it still does not show how all these forms hang together in the lexicon as belonging to a single lexical word, with particular forms summoned in particular syntactic contexts. Whereas –”

But here one of the chefs on the other side of the central table – a dark-skinned man with sunken eyes who had pulled himself free from

the *mêlée* – appeared to be twisting his neck to try and see what Flann was writing on the dough for William’s benefit. Noticing this, the assistant grabbed the nearest form-cutter and rammed it down quickly around the paradigm, flicked the shape onto the tray next to him, and repeated the process at high speed until only a limp filagree of dough was left in front of him. Bits of this he deftly twisted into various lace-like shapes and stuck onto the individual buns. Dick then squeezed dollops of various jam-like substances onto them from a set of confectioners’ cones, one into the thumb-depressed centre of each bun. Suspicious, the dark-skinned chef on the other side pushed his way around the length of the table and positioned himself between the two assistants and William. He took a supercilious glance at the assistants’ handiwork before Dick could get it to the furnace, then drew William aside. When he spoke it was with the unmistakable lilt and retroflex voice quality of Indian English.

“This is very rudimentary stuff. Just stems with individual affixes stuck crudely on and a little dab of *ablaut* in the middle. Minimal allomorphy. The essentials were already worked out and written down in my country over two thousand years ago. The only real innovation in this area is in specific combinations of the basic spices. Nothing new under the sun. Well, sir, I can see that you are interested in what is going on in these kitchens – and not as a cook either, unless I am mistaken – no, don’t say a word, I realize official spice-spies and tart-tasters are not allowed to reveal their identity while they are about their duties.” (William had not even opened his mouth, but just let the man get off his savage chest whatever it was that was on it.) “But perhaps you could put in a word for me with those philistines over there. I was engaged for the excellence of my curries, which the family greatly appreciates, but the majority of those rogues claim that it is not the day for curry. Every day is a day for curry! This is a big feast – His Lordship’s birthday, no less. Gosh, he would be desolated if there was not at least one little chicken *Tikka*, say, and a *Masoor Dahl* on the side, ticking away with flavour among the other bland dishes.”

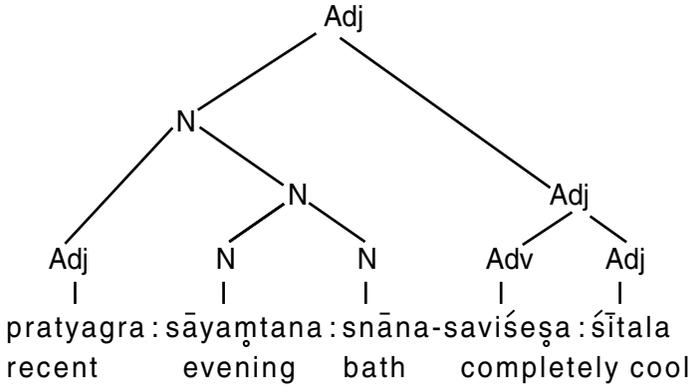
“Well, I be aveared I don’t know much about curry – it don’t zuit me tummy, to tell the truth...”

“Ah, of course, a common British complaint – but I am the soul of discretion in these matters, that is why the memsahib hired me. My curries are so mild – and logically transparent – that you could success-

fully serve them for tea in the nursery. One must of course respect native tastes – although one must also admit that the average English word is a drab and timorous creature, matching the weather of this damp island, one might say. Morphology in other languages is so much more – sophisticated. Let me illustrate by taking you through the assembly of a single Sanskrit compound word. Perhaps I can convince you that I simply *must* be allowed to play my part in the feast if it is to taste of anything at all. Listen to this now: *pratyagraśāyaṃtanaśnānasaviśeṣaśīṭala*.”

He spoke the word with obvious gustatory delight, closing his eyes and smacking his lips after he was finished as if he had just tasted a choicest vintage.

Figure 11



“This means ‘completely cool from the recent evening bath’ and can be analysed into successive parts of speech organized according to head and modifier relationships, the whole construction functioning as an adjective. But how can the subtly balanced wholeness of its flavour be rendered in such coolly analytic units as these English so-called ‘words’? No, the myriad combinatorial possibilities of *karmadbaraya*, *dvandva*, *babuvrihi*, and *vṛddhi* compounds, and the subtle mergings of flavours afforded by *sandhi* phenomena, internal or external, may be beyond the

taste range of your average European, but at least a professionally informed one – like your good self – may appreciate the abstract harmony of the recipe. Let us divide it up into its elements. First *pratyagra* ‘recent’, then *sāyaṃtana* ‘pertaining to evening’, then *snāna* ‘bathing’, then *saviśeṣa* ‘completely’, and finally *sītala* ‘cool’. As for the delightful things that go on beneath the surface at morpheme boundaries – well, ‘words know no boundaries’, eh? I shall leave it to your imagination! Now try repeating this second one yourself: *virājatkatipayakomaladanta-kuṭṭmalāgra*. It means approximately ‘with a few tender tips of bud-like teeth gleaming out’... Don’t hold back, goodness me, you prudish British! Let your tongue explore all the delights of the palate!”

William just stood there with mouth open, salivating and wondering how he could extricate himself from this situation and get back to his errand without insulting the rapturous specialist. His chance to escape came a moment later: a cry arose from the direction of the hearth, where flames were leaping out and up towards the ceiling:

“The kid! Save the kid!”

This was followed by a surge of chefs in that direction, momentarily unified in the face of disaster. It seemed that the monkey – or dwarf – turning the spit had fallen asleep at his post. His fur appeared to be singed in one place. Kicks from several directions set the creature cranking away again like an organ-grinder and the immediate application of several seltzers dowsed the excess of flames.

“My god,” the chef who had been working on the soup commented as he ran up beside William to see what was going on. “Those clowns had better watch out that the main course doesn’t get spoiled – it’s not easy getting fresh kid these days. The local farms are not delivering any more – and there are not enough visitors to make any difference to availability yet, despite the swings and all...”

William didn’t care to stick around for any further elaboration, but beat a hasty retreat around the kitchen ranges at the far side. Beyond them was another doorway leading off deeper into the building. The Scottish footman must have gone this way with the carpet. He had completely lost sight of him, but assumed that he would be able to find the ‘morning room’ on his own without too much trouble. His way through was hindered, however, by another gaggle of cooks arguing around an array of frying pans and bubbling pots.

“Watch out – you are splashing your vile sauce *béarnaise* into my *hollandaise*!” one of the chefs, flying into a rage, shouted at another.

“Nonsense. Look, it’s my stirring spoon you’ve got there,” the second one replied in a peeved but sing-song voice. “You must have picked it up. No wonder it has leaked some yellow into your orange. It is you, *meneer*, who should be paying attention!”

“See, now you’ve made my sauce curdle!”

“Naturally, you have not been following the rules! Will you never learn that morphological rules are ordered and cyclical – I bet you tried adding the egg before the flour and water were properly blended.”

“That is absurd! The egg-rule feeds the flour-and-water rule! You are mixing up your sources.”

“There, told you so! It bleeds it, as any fool knows. The only rule the egg-rule feeds is the chicken-rule!”

The first chef didn’t deign to answer the other (who was Swedish anyway), but whipped his saucepan away to a further ring, turning his back on the other.

“Here – what do you think you’re doing dumping spinach in cheese sauce over a perfectly innocent sole?!” another chef was spouting and wailing.

His neighbour, a Frenchman with pursed lips and a sharp nose down which he peered critically at a world consisting uniquely of potential ingredients, had apparently just tipped the contents of a small bowl over the fish he was frying. Furiously he scraped the offending greenery off with a ladle again, flicking it back in the direction of the other.

“You ignorant peasant! ’Ow can you cook *ze sole meunière* wizout *ze* spinach??”

“We do it in the manner we’re used to round here – with butter and almonds. You’ve got a lot to learn, Jacques – some things just don’t combine. Spinach, indeed!”

“We French should know! All cuisine worzy of zat name stems from our tradition! Your English so-called cooking is completely derivative! It must be with spinach and *gruyère*, I tell you – and placed lovingly on a little bed of laurel leaves!”

“The trouble with your lot is that you’re altogether too finicky – resting on your laurels. Everything’s in the details of inflection – you’re slaves to tradition. All you care about is keeping up appearances, you forget about the essentials, the substance. That’s what combinatoriality

is all about – X is an element of Y, Y is composed of X, X contains Y – these are the stuff of real solid recipes, not abstract *ideas* of dishes!”

“And where would *zis* ‘substance’ be *wizout* attention to *ze* correct inflections? Ungrammatical and uncommunicable, *zat* is what! Inflections relate *ze* isolated word to *ze* wider syntactic context, *zey* are completely general and productive and are not contaminated by *ze* meaning of *ze* base stem of *ze* word.”

“Languages can do without inflection and still be understood perfectly, you silly little *omelette*. It’s a luxury. Derivation, on the other hand, can change the meaning of a stem radically, even changing its syntactic category, say from noun to verb. You can tell their relative importance by the fact that derivational morphemes almost always come closer to the stem, while any inflection is attached more peripherally. This is because they are more *relevant* to the meaning of the stem. It’s no surprise that they generally form the heads of complex words, unlike inflections which are subsidiary and used for such trifling matters as marking agreement for number or case. As for them being less productive and general, this is a positive advantage – it’s what gives them their lexical beef.”

“Zen why not leave *ze* matter of taste and substance entirely to *ze* stem and *ze* roots? Each of *zem* – *ze* right ones, *zat* is – ‘as its own legitimate succulence... And talking of your famous English ‘beef’ – you realize, I suppose, *zat* *ze* majority of your stems are actually from French and Latin? And *zat* goes for ‘alf of your famous derivational affixes too!”

“But how you can be sure there is clear division between derivational and inflectional affixes?” a fiery Hungarian chef joined in the fray, waving his goulash ladle dangerously close to his rivals’ noses. “As Hungarian I happen to know a thing or two about case suffixes – we have the most and the spiciest of any language in the whole world. They can function both as inflections, required by the grammar, and as lexical indicators of location, therefore derivational! We have so many case affixes in my local dialect that no one has ever succeeded in counting them – the two halves of the village have been feuding over just this question for five generations! Don’t talk to me of derivation – both English and French are puny and anaemic when it comes to full-blooded morphology ! “

“I say, that’s pushing it a bit, old chap,” yet another chef joined in the conversation, adding a somewhat more courteous tone (he may have

been from the conference and just donned a chef's hat for fun). "Our national genius is for plain but efficient fare – for 'conversion', the recycling of nouns as verbs or adjectives, rather than for spicy morphology. Anyway, you are all ignoring the question of productivity. These Latinate affixes our language admittedly abounds in are nearly all quite unproductive, not to say bookish in effect. I'm a bit of an expert in this field, if I do say so myself. All derivational English affixes can be divided into two major classes. The first one does indeed largely consist of Latinate affixes that affect the stem they are attached to sometimes quite radically as regards both allomorphic shape and stress assignment. The other class consists essentially of more productive native affixes. These generally follow 'class one' affixes if both are present in the same derivation, so one can't for example say 'humourlessness'. I would concede Jacques here the point that being native does not necessarily mean being more lexically weighty or more relevant to the stem."

Table 6

Class 1 affixes		Class 2 affixes	
-ity	san-ity public-ity	-ness	prompt-ness
		-less	hair-less
		-ful	hope-ful
		-ly	quiet-ly
-y	democrac-y	-er	defend-er
		-ish	self-ish
-ive	product-ive	-able	commend-able
-i(al)	part-ial		
-ize	public-ize		
-ious	audac-ious		
-ion	nat-ion		

"Now hang on a moment," another English chef objected, this time with a vague northern accent. "Let's leave class out of this. Before you let them toss our national heritage right out of the window, answer me this: how can you even distinguish between the stem and the affix in

words like ‘divinity’ or ‘electricity’. If ‘-ity’ is an affix forming nouns from adjectives, what is ‘divin’ and ‘electris’? Do we have to live we these continental abstractions in a purely British lexicon?”

“Well, precisely, I was going to add that ‘native’ *can* be equated with more productive... These Latinate stems and affixes do not really represent any active part of the language today, they are lexicalized fossils of processes once alive, the processes that changed the final consonant or vowel and assigned the stress pattern in a manner analogous to patterns already known – an iconic matter. We have assimilated these combinations and absorbed them into our lexicon as unanalysable wholes, now fully anglicized.”

“*Non, non, non, monsieur*, zis I cannot accept! You talk ’ere of analogy rather than rule – typical of your insular bias towards empiricism. But we do not in French apply any such sing. Ze analogous words *divinité* and *électricité* are stressed in a perfectly regular manner on ze final syllable. Zis is an arbitrary rule, zere is nosing ‘iconic’ ’ere at all.”

“But zere is iconicity everywhere,” a corpulent German *Küchenmeister* protested. “Morphology is natural, it reflects reality. It is foot for sought. Take my special *Knackwurst* here – it comes apart in qvite natural segments, obserfe.”

Here he started pulling out seemingly endless lengths of linked sausage-like objects from the deep pan in front of him, each segment a morpheme. The first few links could be read thus: ‘*Reichskanzlei-versamlings-stellverträter-sitzungs-verbot-bekanntmachung*’.

“You vil haf to vait a vwhile for the het, vvhich naturally comes at ze very ent. Let me see if I can reach it. Each successive morpheme acts as het for vvhats precedes it, in a neat binary fashion. All hets branch in a binary manner in nature too – look at a deer’s antlers, or at your own ears for zat matter.”

“You calla thata monstrosity ‘fooda’?” another chef of more southerly complexion exclaimed with a flourish of the hand and a sarcastic laugh. “It would take a whole montha to digesta!”

“Why shoults everysing be pre-digested, you pasta-faced lout-mous! Unlike Italian food, vvhich may be nice to sing but is as soft as a bambino’s bottom, into German foot you can sink your tees!”

“Who you calla the ‘loud mouse’, you krauta-breathed beera-barrel, huh?”

“And yet,” the chef who was cooking his sole harped on where he had

left off. “And yet, if the lexicon is only to contain concrete forms, idiosyncrasies and irregularities not covered by general rules, how can we allow it to contain pure abstractions?”

“It can only mean one sing,” the Frenchman threw up his arms in disgust. “You cannot do away wiz ze distinction between ze two separate levels of ze morphology and ze syntax. Each is an autonomous discipline! Ze very fact zat ze boundaries and units of ze morphology and ze syntax do not always correspond one to one – for example in ze phenomenon of ‘clitic’ elements in my own language – shows that zey must be ’andled independently. As I was just saying to my assistant: ‘*Prenez les épinards et m’en-donnez une*’. Now ’ow can you analyse ‘*m’en-donnez*’ – ‘give me zereof’ – if not as an indivisible word, even if you ’ave to use sree in English?”

“Hate to mention this, Jules,” an American voice joined in. “But this kinda stuff can all be handled by the syntax plus redundancy rules in the lexicon – it’s nothing to do with this department. I agree about the autonomy issue, but it sounds like you still haven’t heard of the Lexicalist Hypothesis over on your side. Derivation can be left to the lexicon, but we still need to worry about inflection, which, I think you’ll agree, is a matter of agreement. Actually it can be taken care of easily enough by percolation from the INFL node in the syntax. We have no need of extra, artificial floors between the levels of phonetics and syntax at all. All that really matters is providing space for maximal projection from the lexicon, all the way up.”

“Zat’s typical – you Anglo-Saxons always stick togezer! But I tell you your conveyor belt picture – straight from ze larder to ze dining table – is a perversion wiz no structural foundation in linguistic reality.”

“But chef,” a weedy fellow in glasses who had been standing wringing his hands behind the first English chef piped up, addressing his master: “Do you really agree with the view that our work down here is of no significance, that the ingredients that come up to us from the cellars might just as well go straight to the family to consume at table upstairs, without us treating it at all?”

“You keep out of this, Sidney. This is a matter of principle. You are only secondary.”

“You are right to doubt, my boy”, the Frenchman continued unabashed. “It is all you ’ave to ’old on to. All ze rest of what your master is saying is *balivermes*, poppycock – ’is conception of ze relationship

between lexicon and fully specified syntactic word-forms is totally misconceived!”

“What are you suggesting about my mother?” the English chef flared up.

“Better pay attention to your sole – she is burning!”

“Retract that statement immediately!”

Here he grabbed the chopper out of the hand of the German chef who had raised it to begin segmenting his *Knackwurst* and waved it in the direction of the Frenchman, who countered by upturning the frying-pan with the charred sole onto the floor then jumping up and down on it. His opponent dropped the chopper and turned deathly pale as he stared in open-jawed disbelief at the mess at his feet. The Frenchman continued fuming:

“Admit it, generative swine, zis building is divided into floors for a very good reason – wizout zem you would ’ave no ground to stand on – and your damnéd sole would already be frying in ’ell!”

“No, you garlicky ponce, I won’t admit it!” the English chef recovered and lunged forward with chopper raised again. “The floors here are not cut off from each other by the floors – there are stairs! Processes can cross between them just as we can. As long as there are stairs we don’t need floors!”

“Please be careful, chef,” Sidney wailed on the verge of hysteria as he tried to hold him back by his apron strings. “You’re the only chef I’ve got! I’m so confused. I do my best, God knows! But what exactly is the nature of our interface with the family up above? What do they expect of us??”

As he spoke he waved a free hand in the direction of a hatch in the wall nearby – a dumb waiter of the sort that conveys ingredients from below and in turn sends finished dishes up to a dining room overhead. Since it was dumb it did not answer his question.

The Frenchman took advantage of this intervention to grab the nearest ladle and parry the chopper with a triumphant cry of ‘*Touche!*’, knocking it right out of the first chef’s grasp. There was more shouting and jostling as a surge of defenders rushed to the aid of one or the other of the offended parties. William decided to retreat on hands and knees at this point and tried to scuttle for the door before knives and bottles began to fly. But his scuttling only brought him up against a pair of legs that suddenly stood between him and escape.

“Lost your way, have you?”

Looking up at the source of the stentorian voice that had addressed him, William saw that the legs were surmounted by a solid torso wearing the uniform of a *sommelier* and bearing a silver tray. From far above the silver-lined tray and the clouds of steam that circulated in the upper layers of the kitchen’s atmosphere, the head of a jolly red-faced giant was beaming down at him.

“Jist lookin’ vor the gentry... got zomethin’ to deliver,” William mumbled as he picked himself up.

“The gents? Certainly, sir, follow me. I’m going down that way myself. It’s next to the wine cellar.”

The *sommelier* was evidently somewhat hard of hearing, which was not surprising given the distance between his head and that of anyone of a more average stature. This may have contributed to a similar problem he appeared to have with his vision – if he really took William in his overalls to be a guest of the house. Since the struggling scrum of chefs had now surged around to block the way towards the door he was initially aiming at, William was not averse to being taken under the massive wing of this placid protector. The kitchens were a dangerous place for a small person, and besides, the prospect of taking a peek at a real duke’s wine cellar was not to be sniffed at. See how the other half live – and drink. There would be time enough to catch up with the carpet in the morning room when the way was clear again.

His guide led the way with dignified strides that took them back in the direction of another doorway that William had not noticed before. In doing so he was obliged to bend his neck constantly to avoid brushing against things dangling from the ceiling, despite its considerable height from the floor. William followed close behind, looking back over his shoulder all the time as if still expecting attack from some unexpected quarter.

“Glad I vound yer,” he shouted upwards. “Things be gettin’ pretty rough round ’ere. They all’ers at each other’s throats zo?”

“I would have thought so too. But you can’t expect stress-timed English chefs to see eye to eye all the time with those syllable-timed French ones. Question of temperament. Luckily these little family tiffs do not affect the quality of the product aversely. What is important is the fresh ingredients – and of course the wine to complement them. As you will see on our way down, the two things are in close proximity. The

pantry through here is where the more ethereal culinary substances are kept before being formally integrated in the kitchen. The steps down to the cellars are just beyond.”

Here he opened the door, which they now had reached. He was obliged to bend almost double in order to pass through to the pantry that lay beyond. This consisted of a series of smaller closed doors lining a cool passage.

“Behind that door are kept the general abstract contents of the most widely used suffixes and prefixes. Things like PLURAL and DATIVE or PAST and HABITUAL. Also the meanings of internal changes like ‘ablaut’ or ‘umlaut’, and the implicit semantic ingredients of individual verbs that have an affect on the syntax on the next floor up, like CAUSE, CHANGE, or TELIC, or the conflation templates of FIGURE, PATH and MANNER for motion verbs. All this has to be taken account of here for our products to meet standards expected in the dining room. These elements are added to the more specific lexical stems and roots and other basic fresh ingredients kept behind the other doors after they have been sent up to us from the kitchen gardens and local farms outside. Now the gents is down this way, sir. Watch your head. Don’t mind the echoes – it’s just the pipes creaking.”

William followed him down the steps to the dank stone floor of what appeared to be an immense wine cellar. It was illuminated by naked light bulbs that dangled here and there among the cobwebs. Row after row of dusty bottles were stacked up against the walls between the occasional large barrel wedged on its side, all neatly labelled. There were also some more modern looking vats attached to the pipes that ran along the walls and ceiling. These were linked in turn to the barrels by flexible hoses. A shadowy assistant could be seen in the depths filling bottles from one of the barrels.

“Struth, ’Is Lordship keeps a vair amount of the wet stuff down ’ere, don’t ’e? There mun be enough to keep the ’ole county blind drunk vor a century...”

“Oh, it has indeed, sir. But if you discount the stay of the odd count – and even an archbishop or two – there’s a fairly even balance between intake and outlay in the long run. Which in this family is *very* long. As you will see from the labels, many of these bottles are real vintages. Take this one here, for example –”

Here he raised a crusty old bottle in his huge paw, brushed the dust

from the label as he put it up close to his eye, then handed it down to William. All that stood there was: '1899. Bottled on the estate. Oh.' – with no indication of what chateau it emanated from or what grapes it was made of.

"No, no – put it to your ear and tap," the *sommelier* urged when William just stood there twitching his nose over the cork to no avail. "That's it – you can tell the quality at once, can't you? Full-bodied and luscious, with a generous bouquet of overtones, yet leaving the most subtle of afterglows in the cochlea. Ah, 1899, it was one of the greatest years of them all for 'o's – you can understand why it was especially selected to be put down for future generations. It was the old duke's own enunciation that was taken as the basis, of course – a sound one. In those days the nobility really knew how to pronounce their vowels, though they may not always have watched their p's and q's..."

And an 'oooh' was indeed all that William got out of tapping the bottle. It was also his bland comment. The *sommelier* looked disappointed at his lack of enthusiasm.

"Well, it's not to everyone's taste, of course. Try something a little more recent. This, I think you will agree, has a lot more zing to it." (Here he picked up another bottle and scrutinized the label before handing it down to William.) "Crisp and precise, with a perfect balance of formants. What do you think?"

The sound William heard this time was a clear 'iiii'.

"Don't reckon as you could get crocked on that 'un neither..."

"That's right, it's just for cooking," the *sommelier* laughed and slapped William good-naturedly on the shoulder, causing him to retract downwards under the pressure, his legs splaying out sideways. "I was just having you on! It's not every guest that can take a joke in good grace. I like your sort! Now, my assistant over here will show you the way through to the gents and answer any further questions you might want to put – I must be about my duties, selecting wines for this evening."

With this he gave a whistle and waved his assistant over, then lurched off, tray in hand, to the other end of the cellar.

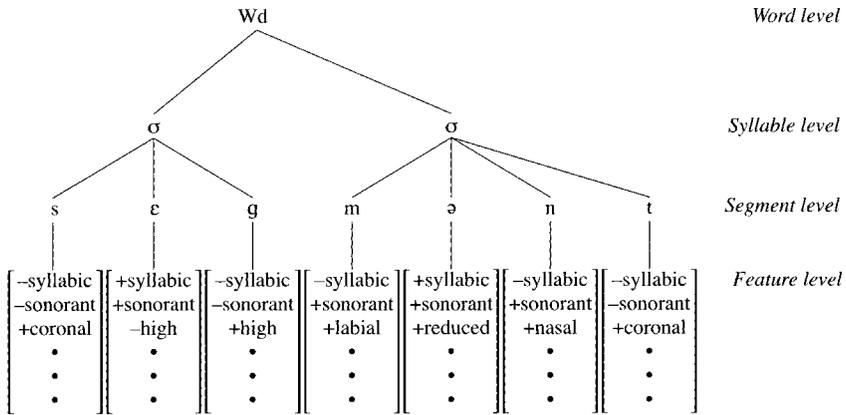
"All right, what do you want to know then?" the singularly sour-looking assistant demanded bluntly of William as he approached, wiping his hands on his apron.

What interested William at the moment was why these apparently empty bottles should require such an elaborate system of storage. This,

the assistant informed him, was because the contents were basically non-linear, and that the problem was to stack them in such a manner that the inherent constraints of the linear medium would be obeyed at the same time as revealing their internal hierarchical structure, thus maximalising rational access.

“The solution that we have found works best involves four levels or tiers. The top-most tier of each stack corresponds to a single phonological word, say ‘Bordeaux’, which at the next level down is represented by two syllables, which in turn split up into a succession of phonological segments – distinct phonemes if you like – at the next level. Finally these are broken up into distinctive features at the bottommost level, where the bottles are stacked according to individual plot and vintage, as indicated by the unique bundle of contrastive binary features.”

Figure 12



“This one here – an amusing little *Chateau Segment* – contains the vowel ‘e’, for example, distinguished by being a non-high syllabic sonorant. The net result is a comprehensive phonological skeleton. Neat, don’t you think?”

“Well, neat, aye, as a pile of old bones goes. But do it actually *do* anything – vor the contents?”

“Naturally. That is the whole point. The organization is immediately compatible with the various operations that need to be applied to the contents – like removing and replacing individual bottles, keeping track

of feature spreading, and so on. Consonantal and vocalic tiers can moreover be interdigitated to produce syllabic structures. It is also useful for analysing languages like the Semitic ones that display stacked tiers of consonants without vowels, for instance Arnbio *q-t-l* meaning 'kill'. Vowel templates indicating tense or number and other morphological modulations can be added to this to produce concrete wordforms. But the area where the approach has shown itself to be most effective to date is in metrics."

"I thought as 'ow we were still in hitches and pints in this country..."

"I am talking about feet."

"Veet? That's not metric."

"I see I'm going to have to fill you in on the basic terminology here. The metrical foot consists of a stressed syllable plus any number of associated unstressed one. It is a useful unit for describing the mechanics of stress placement. The structure of the individual word can again be expressed by a hierarchy of tiers, this time the syllable level, then the foot level above it, and finally the word level on top. The different levels are exploited differently by different languages. French, for example, is typified by the 'right-headed unbounded foot' – a foot in which the head is located over the rightmost syllable."

"G'won! Pull the other one!"

"Hungarian, on the other hand, is typified by its mirror image, 'the left-headed unbounded foot'."

"Never!"

"In English, however, the situation is more complicated. The foot there is bounded, that means the stressed head is associated with only one unstressed syllable. It comes in two basic varieties, the 'trochaic' and the 'iambic', forming respectively the 'bounded left-headed foot' and 'the bounded right-headed foot', as in the words 'promise' and 'collect' respectively. But this does not exhaust the possibilities – there is also the 'minimal foot', consisting of a head alone, and the 'degenerate foot', so named because compared to the ideal foot with a head and a dependent syllable –"

"Stop it, stop it!" William gasped, "I'll get an 'ernia!" (He had turned away towards the barrel and was propping himself up against it with one arm, trying to hold back his chuckles.)

"It occurs in Maranungku, for example, where a degenerate foot results because a head is required on each foot and whenever binary feet

are constructed over an odd number of syllables one will always be left over...”

William began banging his fist against the cask, his back heaving convulsively.

“The same procedure can be applied to analysing secondary stress, but here we need to take the higher word-level tier into consideration. On this level we build another foot – usually an unbounded one – over the syllable-level foot that takes the primary word stress. The result will be that one of the stresses originally assigned by foot building will be the head of the word-level foot and will be interpreted as the primary stress, the remaining stresses being secondary. However, some syllables fall outside this scheme altogether, being extrametrical. Since all syllables must belong to a foot, it is assumed that such syllables are joined to the metrical foot after stress placement. What at first sight looks like a whole foot that has fallen off the metrical skeleton can be handled in fact by a process called ‘stray syllable adjunction’, which allows stress to fall on a stray foot – “

At this William let out a kind of high-pitched whinny and slid slowly down the side of the barrel, to collapse in a heap at its foot. At last the assistant seemed to notice his odd behaviour and at once took offense.

“Look, if that is your attitude to the serious business undertaken on these premises, I suggest you move on.”

“Move on – yes, I’ll jist shuffle along then – on me degenerate little veet,” William spluttered as he wiped the tears from his eyes. “Jist point me kindly in the direction of the ’ead, I means the gents – me bladder – I suddenly...”

“You’ll have to go back there, behind that last stack,” the assistant grumbled sourly and went off about his business again.

There was little more than a hole in the ground in the dark corner that had been pointed out to him. Having no other choice, he projected his business approximately in the right direction. But when he turned, zipping himself up again and still grinning inanely to himself, he noticed that he was not alone – not exactly. A body was slumped in the shadows against the back of the wine-racks. Immediately his grin vanished. Was it some drunk who had wondered down here undetected? If so, he had had plenty of time to indulge: when William cautiously stepped forward he caught the full smell of decay off the body and saw the flies crawling over it. And the rags it was wearing appeared on closer inspection to be

the mouldy remains of a smoking jacket and bow-tie. The skin of its face, which was half twisted to one side in a horrible grimace, was already like parchment, and planted in the middle of its forehead was what looked like a huge nail – most likely one of the spigots used to drive in barrel bungs.

“Gawd almighty,” William gasped, then turned and scampered to fetch the assistant. “Quick – there be a dead gent in the man’s – I means a dead man in the jakes! ’E looks bad, like ’e needs medical intention vast – or a decent burial at least!”

“Yes, yes, very funny,” the assistant sniffed without looking up from the short ladder on which he was taking a reading from the pipette he had inserted into one of the vats. “Go find someone with a more developed sense of humour.”

William fumed and fretted but couldn’t attract the man’s attention any more. Then he caught sight of the *sommelier* again, who was heading towards the steps up from the cellar, his tray now laden with bottles.

“Ey! Wait for me, don’t leave me on me ownsom down ’ere!” William shouted and scuttled across on his bandy legs to where the giant stood looking around myopically for the source of the cry.

“Oh, it’s you again,” he beamed on seeing William appear at his feet. “I trust your visit to the conveniences proved satisfactory.”

“Like ’ell it did. There be a body as been done in and stuffed back there! Dumped like!”

“Oh that,” the giant’s face twitched as if in embarrassment for an instant, but the smile instantly returned and he resumed his slow ascent of the steps with William close behind. “It’s not the first time this has happened. There’s always one black sheep among the staff gets found drunk down here every year.”

“Drunk? ’E be *dead* drunk! I tell yer the bloke’s got a spike right through ’is fore’d!”

“I dare say that’s one way of putting it. But the man will clearly have to go. Please keep it to yourself – no point giving cause for idle gossip. Best not get involved in these things.”

He went on talking, ignoring William’s further protests. When he reached the top of the stairs he continued in his hunched posture across the pantry towards the low door and back into the kitchen.

“Reminds me of the time His Lordship had to sack that red-nosed American chef who was found trying to mix levels – he’d actually got so

far as to remove a floorboard between the kitchen and the cellar. He'd lowered a winch affair through it – said it was standard practice in the best hotels in Boston – supposed to give cooks more efficient access to the cooking wine. Well, he had it coming to him!”

“But the body – what about that there body?!”

“No, he had no friends. Men like that don't. They shipped him right back where he came from. Now, if you'll excuse me, I must have a word with the chefs over there about the selection of dessert wines.”

They had already entered the kitchen, and the *sommelier*, straightening up again, lurched off towards his culinary colleagues near the far entrance. It was the other way that William needed to go. The pitched battle of a few minutes before had reached some kind of simmering state of truce for the moment, but he had no desire to stick around tempting fate. Should he first inform someone in authority – someone less auditorily challenged – of the gruesome discovery he had made downstairs? As he stood there scratching his neck a maid came trundling past with a trolley laden with tea things. The scones and cakes among them were no doubt the handiwork of Dick and Flann. She was heading in the direction he needed to go if he was to catch up with the carpet. That was his most pressing task at the moment. Perhaps Her Ladyship was after all the obvious person to inform of a skeleton in the family cellar – he would mention it at the same time as settling the other business.

So he slid into the wake of the trolley and followed it through the far doorway into another passage that led to the front side of the building. When they had turned a corner into a broader, carpeted hall and were homing in on a grander door of the kind one might expect a duchess to entertain guests behind, he skipped round in front of the trolley, causing the maid to stop in her tracks with a little yelp of alarm.

“Don't vret yerself, Missy. I jist got a little vavour to ask of yer. Let me nip in avore you and get this receipt zigned. Me carpet's already been delivered to 'Er Ladyship, zee?”

She nodded silently, as if terrified by the scarecrow-like figure before her, and let him run ahead to the door. There was no noticeable sound coming from behind it – with luck her guests had not yet arrived. So removing his cap and sprucing back his hair as best he could, he put on his sweetest grimace and rapped on the door. His heart was pounding in nervous excitation. When a melodiously mature female voice called out ‘Pray enter!’ from within, he did so, praying.

11. In a manner of speaking...

William found himself entering an elegantly decorated drawing room, at the back of which large windows looked out past the parallel rows of poplars towards the lake that he had seen earlier from outside. The sunlight slanting through from that direction made him blink after the dim artificial lighting of the hall. Then he froze in his tracks and his hand went automatically to his forelock (or where it would have been if he still owned that hirsute appendage of his youth) as a lady of indeterminate years but most determinate graciousness rose out of the sunlight, where she had been sitting on a scallop-like *chaise longue*. She greeted him with a disarming smile. All that William took in before dropping his eyes and his arms was the smile, the russet hair gathered up in Grecian style and glowing in the light from the window behind, and what to his eyes looked like the folds of a diaphanous golden robe – though in fact it was a matching skirt and blouse of a subdued brownish hue. It was as if he were in the presence of a goddess rather than a duchess.

“You must be the carpet man, Mr Horricks, I believe it was. Perhaps you’d care to come in and have a cup of tea before you take it all the way up to my husband’s study.”

Flushed at the honour of being thus addressed, he began to twist his cap between his hands. His embarrassment was compounded by the fact that this majestic lady was not alone; she was attended in fact by a whole oyster bed of elderly ladies whose faces had all turned inquisitively in his direction. They sat in armchairs fringed with shawls like seaweed and were themselves collectively characterized by sombre attire only minimally livened up with barnacle-like broaches and necklaces of dull pearls. Their voices had been so gentile and hushed that he had not heard them through the door.

“It looks like an awfully heavy object, so I really must prevail upon your kindness to take it on up there yourself – it’s a surprise. Today is his birthday, you see. I just hope that Faithful will accept it in good grace...”

“I’m sure he will appreciate it, my dear, one can hardly criticize a present!” one of her attendant dames reached out an ectoplasmic arm as if to pat her on her own.

“I hope you are right, Maude – it will be worth every penny if it has the desired effect...”

The carpet in question stood propped up against the wall to the left of the door, where the footman must have deposited it.

“Thank’ee kindly, mam, but it bain’t vor the likes of me to unconvenience gentle volks. I’ll jist be cravin’ your zignature on this ’ere rezeipt and takin’ it on up – I dare zay I’ll vind me own way...”

“I say, Aggie, what a delicious local accent!” another of the old biddies whispered into the ear-trumpet of her neighbour, a faded relic of a lady who sat in a Bath chair between her and the duchess.

“Pure southwest Barsetshire,” she croaked back. “From within five miles of Piddle-in-the-Water, I would wager, m’dear.”

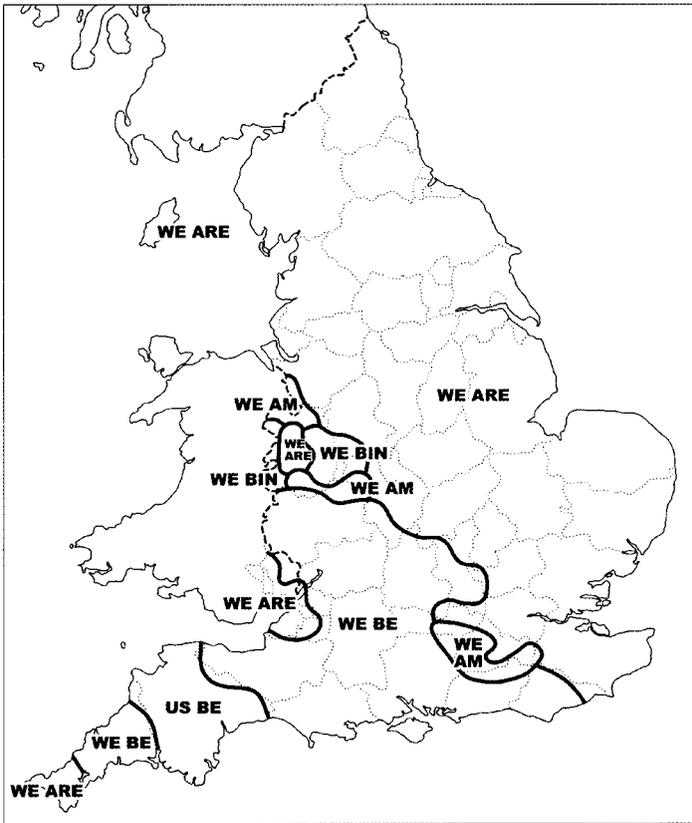
“I won’t hear of it!” Her Ladyship insisted. “You absolutely shall join us for a cup of tea, it’s on its way now. I know you must be dying for one. Do sit down. We don’t stand on ceremony here. Anyone who refused to drink tea in the company of local folks would not be a member of our circle for very long!”

“Zircle, mam?” William looked dubiously at the irregular distribution of little tea-tables like rocks in a tide-pool and at the old ladies swaying gently back and forth with the current among them as they scrutinized him; he hesitated to move forward.

“Yes, we ladies have to do *something* to contribute to the good of the community. In my own case it is my interest in matters of local dialect, which is shared by my dear friends and relatives here. We like to think we can assist the sociolinguistically handicapped. Most recently I have had a new questionnaire delivered by my maids all through the district – my good friend Professor Pickering of London University put it together for us. He ensures us that it will definitively resolve the question of the position of the ‘we be/we are’ isogloss that runs across the county either just to the west or just to the east of the palace. You see, this is truly a marvellous setting for studying fine-grained variations in local usage – everyone around her is so traditional in their diction.”

“Be that zo?”

Figure 13



“Do sit down beside me and tell us about yourself, Mr Horricks. You were born west of the palace, I take it? I just adore the lack of suppletion in your rustic inflection of the verb ‘to be’ – it must be so much more convenient just to stick to one form all the time. By the way, do you say ‘bow-legged’ or ‘bandy-legged’? That would be the next question one would want to ask.” (William’s face flushed again and he tried to stand as straight as he could, but to his relief the question was not in fact asked.) “Now I want to hear absolutely everything about your idiosyncratic syntax while we wait for Lydia to bring the tea in. First, let me just sign that receipt of yours so we can get formalities out of the way.”

Here she sat down again, patting the vacant place on the next to her and all the ladies nodded and murmured their enthusiastic support for

the motion. A direct order was something William could better relate to, so he shuffled forward, grinning foolishly and repeating vague words of thanks. He was quite literally tickled pink by the attention he was getting – Mrs Horricks would be quite beside herself with envy. When he was finally installed, perched on the very edge of the *chaise longue*, Her Ladyship signed the piece of paper that William produced for her. At this point the maid – who must have decided that she had waited long enough outside – knocked and came in with the tea trolley. She turned up her nose pertly when Her Ladyship indicated that she should serve William first, but did as she was instructed before curtsying and trotting away again. William went at once for a big slice of cake from the nearest tray and began in rapid alternation to sip tea from the cup in his one hand and take bites from the cake in the other, inserting a kind of half-grin, half-grimace in each transition from left to right and from right to left again. The masticated cake spilling out between his dentures in the process somewhat marred his assumed intention of indicating grateful satisfaction.

“That’s right, ‘tuck in’ – as I believe the local idiom has it. You deserve it after all that distance you must have carried the carpet. I take it your helper had to leave. You must forgive the little misunderstanding about meeting you – you see what we call the ‘front door’ is actually the back door from the perspective of the way you approached us. We hardly use the old front one any more, it remains bolted and locked.”

“Big ’ouse, mam, lots o’ doors,” William mumbled through a doughy mouthful of cake, and, depositing his emptied cup, grabbed for two scones at once as if the pile beside him might be spirited away from him at any moment. While the duchess topped his cup up he began spreading one of them with clotted cream and the other with jam to make a kind of sandwich which he thrust between jaws distended like an anaconda’s.

“Well, yes, it is rather big. Far too big for us in fact and quite impractical in this day and age. That’s why we simply have to open it up for the public. Of course one feels a little disheartened at times to see one’s world shrinking, familiar old walls closing in on one, as it were. But times change – and the house itself does too, very slowly. This room, for example, which we call the ‘morning room’ because of the sun coming through from the southeast all through the morning, wasn’t always a drawing room – it used to be the upper level of the orangery. Over where the French windows are today it used to open straight into

a glassed-over extension where the orchids and the citrus trees were arranged before it was all blown up. I can remember as a girl the old Italian fountain and the steps that were there. Aunt Agatha remembers it in its heyday, don't you auntie?" (The last words she spoke loudly into the old lady's ear-trumpet.)

"Ah yes, m'dear," the dame in the Bath chair nodded and clucked. "Such scents! Such blooms! Such sweet words exchanged behind the palm fronds! It was that foolish brother of mine, Harold, I fear, who was responsible for its loss. He somehow developed the notion that he was the one in the family with green fingers, he was always interfering with the work of the gardeners. One summer when the white fly was particularly bad he insisted on taking over the attempt at combatting them. Claimed he had heard of a new substance recently developed by farmers in America that was unusually effective against all sorts of garden pests, so he went out and procured some in London. The trouble was he was not too sure of the name – bought a sack full of TNT instead of DDT. Turned the dear old orangery – and himself – into marmalade in one almighty blast. Well, I suppose it was the kind of mistake anyone could make. And we certainly had no further problem with white fly that year..."

"Ah, *sic transit gloria mundi*," the duchess sighed.

William (whose Latin was even more latent than his son's – it was late Latin) began dabbing his mouth with the serviette he had been provided with, vaguely fearful that Her Ladyship might have been referring to the quasi-regurgitation occurring in his mouth consequent to a series of violent hiccoughs. He gulped and swilled it all down again with the remains of his second cup of tea. But already his eyes were darting back and forth among the plates searching out yet more delicacies to cram into his maw.

The duchess, who did not seem to have noticed William's transient distress at all, turned back to him:

"Now it's your turn to tell us all about yourself. I want to hear about your life in the town. It is a constant cause for regret, but I hardly manage to get out and about in person any more. You see, one just don't have the right clothes... We were talking about local accents, weren't we? I'm just dying to know how you would pronounce the following word, for example – I shall pronounce it my own way of course, but just tell me how you would say it yourself: 'now'."

“Er, neu, yer wants me to zay it ‘neu’, yer Ladyship?” he replied hesitantly after a loud gulp; luckily only a minimal fine spray of crumbs escaped with the words.

“Good gracious! Are you sure? Perhaps you are confusing it with ‘know’ – please pay no attention to my own pronunciation. Try saying ‘know’ now, ‘know’ as in ‘know thyself.’”

“Nay, thoyzself?”

There was much whispering and a rapid fluttering of fans amongst the gentle ladies.

“This is extraordinary,” the duchess exclaimed exultantly. “Ladies, we may have discovered a hitherto entirely uncharted dialect!” Then with a suspicious hint of a frown added: “Unless it is mixed. Listen, my dear Mr Horricks, you don’t have any Scottish blood in your family, by any chance?”

“Nay, yer Ladyship, not as ’ow I knows...”

“No, of course you wouldn’t. But that footman does. We must bring him back in to compare immediately. Wouldn’t that be a hoot?”

Here she gave a tug at sash on the wall behind her, doubtless activating thereby a bell somewhere out of earshot.

“This could represent a most unusual geographical anomaly,” she continued in a meditative mood while waiting for a response to her summons. “It is possible that the ‘nay’ pronunciation of ‘know’ (which I believe reaches south at least into Northumberland) could in fact continue southwards as a covert, perhaps intermittent extrusion, all the way to the Southwest...”

A while later (after more whispering and shawl-waving on the part of the ladies and one more slice of cake and a Bath bun had trundled down the road to William’s eager little stomach), the footman who had carried in the carpet appeared.

“Now, Ferguson, say something Scottish for us please,” the duchess commanded. “Go on, man, no holds barred!”

“Hoots awa and a’ that, ye kecklin’ auld wallydraigles,” the footman complied, obviously used to the routine.

“Frankly, my dear, I don’t see too much similarity,” one of the ladies who hadn’t spoken yet shook her head. “Ask him to be more specific – try ‘know’ on him.”

“All right. Ferguson, try ‘Know thyself.’”

“Ken yer sel, ye sellie biche.”

“Well, it’s true – the two accents are rather different in effect. In fact, if mutual intelligibility is the essential criteria, one might doubt that it is the same language at all. All right, you may go, Ferguson, thank you. Well, this is exciting – we may really be on to something unique. I think at least we can rule out the Scottish connection – unless he has managed to pick up something of Ferguson’s pronunciation in the short time they were together. Do you think that is possible, Pru?”

“They do say Scottish is very catching... Well, most peripheral accents are – it can be so distressing to see the effect they have on perfectly well educated young people in the provinces these days. By the way, I never could understand how it is that the manner in which decent upper-class Scots of Edinburgh speak the language is not particularly offensive to the ear – why should it enjoy such high standing in the rest of the country, as compared, that is, to the horrible city accents heard south of Hadrian’s Wall? Perhaps you could ask Professor Pickering why that should be so next time you write to him, Gertie.”

“I should be delighted to. I was going to write to him anyway – I have another used maid to pass on to him. She has some exquisitely aberrant diphthongs for him to examine. I suspect leakage from the Midlands.”

“The prospect of a leaking dialect is positively alarming but – I admit it – also deliciously wicked!”

“Not so amusing when you see it in your own household. The domestic hierarchy in general is beginning to show distressing signs of leakage – at least in certain establishments I could name. Why, in one great house not fifty miles from here I hear that the butler belted the younger son of the earl when he caught him smoking some kind of potted plant, and the cook belted the butler for patting her behind while rolling pastry. I wonder if anyone knows their place there any more – it could be the earl kissing his wife’s chambermaid next...”

“But ladies, we are quite ignoring our guest! That’s right, Mr Horricks, do just help yourself, make yourself at home. Tell me more about this fascinating way you speak. Does the rest of your family speak the same way? Please do excuse the indiscreet question – but you do have a family, don’t you?...”

“Aye, Yer Ladyship. Me zon be a bit toffee-nosed owin’ to ’is ’avin’ been expositied to grammar-school hinfluentions vor zome years...”

“‘Toffee-nosed’, how deliciously quaint!”

“It’s simply deplorable the baleful influences our offspring are exposed

to at public schools these days,” one of the other ladies shook her head in commiseration.

“But Mrs H, ’er be the cream of the earth – born and bred on the varm, up Puddleton way.”

“And you’re sure she’s not Scottish?”

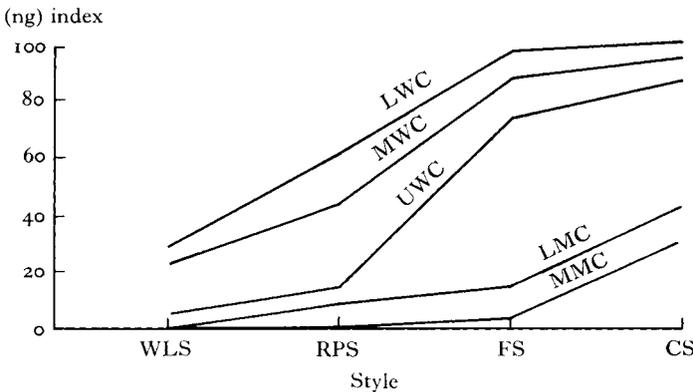
“Nay, she be as English as they comes, mam.”

“Hm. Sorry to harp on about it, but you can’t be too careful when conducting serious studies of language variation. You can only be as accurate as your data, as Professor Pickering would say. It is his techniques that we are applying in our local work, of course.”

“What exactly be the nature of that work, mam?”

“Being local, you must surely have come across one or other of our charitable questionnaires? – but no, of course, you have somehow managed to allude our net until now! That must be rectified, Mr Horricks! Well, as with most sociolinguistic studies, we are mostly concerned with variation – variation in pronunciation, in vocabulary, in syntax, and its correlation with factors like age, gender, social status and style or register. Recently we have conducted inquiries about the pronunciation of final velar nasals – ‘ng’s’ if you will. Naturally we are using the same technique professor Pickering used in his famous Norwich investigation, where he measured the percentage of ng’s dropped in different classes – upper, middle and lower working class, lower and middle middle class and so on – and in different styles, ranging from formal word-list style to informal conversational style.”

Figure 14



“It turns out that in this area, just as in Norwich, there is a greater tendency to drop ng’s among the lower social ranks and also, across the board, in informal as opposed to formal styles. A given individual X may on the average have more final ‘ng’s as opposed to ‘n’s than individual Y (usually a matter of class), but X himself may use more ‘ng’s in reading individual words than in free narration, say. There are also other interesting factors relevant to individual usage, such as immediate social context (who else is present) and speed of utterance. We are obviously not dealing with fixed rules but with statistical variables, as the professor would say. He has even been able to incorporate his findings into variable rules, but that is a bit beyond my limited aptitude as an amateur.”

“Oh Gertie, do test Mr Horricks here right away!”

“Oh yes, do!” several other enthusiastic if wishy-washy old voices joined in.

“Well, all right, I do happen to have that questionnaire at hand. Since we have the poor man captive, we might as well let him sing for his supper – or perhaps rather ‘sin’ for his tea!”

The old ladies tittered amongst themselves and then swayed forward in her direction as the duchess produced a copy of the said questionnaire from beneath the *chaise longue*.

“First the single word list. Please just read these out for us at your own speed. Forgive me for asking, but you *can* read, can’t you?”

“If you insists, mam... Ridin’, zwearin’, eatin’, drinkin’, ‘untin’, shootin’, an’ fishin’.”

“Hm. Not much variation there.”

“Reminds me of my dear departed husband, Sir Ralph,” old aunt Agatha sighed wistfully.

“Now try the next list.”

“Buckingham, ’Astings, chicking, brazing ’ussy.”

“That’s all quit normal too – shows that ng-reduction only applies in certain conditions. But try putting all these words together into a spontaneous story now – something from your daily life. Shoot away, Mr Horricks, just as if you were talking to your companions in the local alehouse.”

“Well, ’ang on a tick, mam, that bain’t zo easy – I never bin to ’Astings nor Buckingham with no chicking – nor no brazing ’ussy vor that matter!”

“But surely you’ve gone in for a bit of hunting, shooting and/or fishing in your time?”

“Nay, I ain’t ’ad time vor none o’ them – but I done a vair bit o’ eatin’ an’ drinkin’, I reckons.”

“There you are, that was quite sufficient – but I am afraid the result as far as I can see is still that you display no variation at all on this parameter.”

“Zorry, to be sure...”

“Perhaps he comes from Norwich,” Aunt Agatha croaked, prodding her with her ear-trumpet as she did so. “Though he may not know it. It’s rampant there, you know.”

“No, auntie, I don’t think that was quite the professor’s point. Actually what he is particularly interested in is the uses to which variation may be put for social ends. Small differences of accent, for instance, can be indexical of one’s social and geographical allegiance. Professor Pickering has in fact written widely on the vertical – or class-striatal – as opposed to the horizontal – or geographical – spread of innovations in these islands and the social pressures for change that can be descried behind them. Which reminds me, I must have words with the staff about falling standards...”

“Zo let’s zee if I got this right. This ’ere charity work you ladies bin carryin’ out round these parts, it be zupposed to ’elp us all talk right?”

“Quite so, Mr Horricks. The ultimate goal we have set ourselves is no less than to assist all the underprivileged children of the county to speak the Queen’s English – in the name of universal communicative competence. Plotting variation is just the first step – eradicating it, knowing just where to apply gentle correction, is the second. I am proud to say that I have already initiated a yearly competition at the village school where the little boy or girl judged to speak the nearest approximation to Received Pronunciation is invited up to the palace to receive a suitable prize from me – a pronouncing dictionary or a pair of clip-on lip braces or the like. In another generation – after we are all long gone – it is my dream that every ragged little urchin running barefoot through the village streets will speak RP as melifluously as any of us here present. Oh, I’m sorry Mr Horricks, I didn’t mean to be rude – do have another slice of cherry cake.”

“Thank’ee, mam, don’ mind if I does,” he grinned and grabbed for the last piece of cake that he had already been contemplating, wondering

whether there would be an opportunity to stuff it discreetly into a pocket when no one was looking.

“By the by, mam,” he lowered his voice between laboured chomps and inclined his head in his hostess’s direction (his aching jaws were definitely slowing down). “There be one little matter I thought I oughta mention – it be zort o’ delicate like... Zee, when I were down in the wine zellar I stumbled over this ’ere body – dead ’e were, I be sure on it.”

“Oh, don’t worry about that,” she gave a breezy laugh. “They are stuffed about all over the place. Goes with the property, you understand. Thank you for mentioning it, but it would be better if we kept it between ourselves...”

“But what if the kitchen staff vinds it – they zounded to me like they could easily turn nasty. I ’appened to ’ear zome rather disrespectful talk amongst ’em – grumblin’ about bein’ underpaid an’ all...”

“My dear Mr Horricks, I can assure you that we are all one big happy family here, though it is understandable that as an outsider you may not quite grasp the situation. I know it is rather chaotic in the kitchen right now, we shall certainly have to cut down on superfluous staff – after the birthday dinner, that is. My husband is only concerned with maintaining standards from his father’s day – I’m afraid he just does not think of the expense of things. Anyway, there is no possibility of insurrection even if we sacked the lot of them. Everyone is far too nice around here for that sort of thing. Nobody is concerned about such demeaning matters as ‘pay’ – why, I do all my charity work quite for free! Now if you want to hear about something that really *is* worrying, it’s the state of the east wing – as if damp rot weren’t bad enough, death-watch beetle has been heard in the woodwork recently.”

“Aye, well, you ’ave to watch out vor them little vellers alright. Would Yer Ladyship be interested by any chance in the obtainment of a hestimate vor treatin’ it?”

“Oh,” she threw up her arms in a gesture of despair, “the expense of it, the expense of it – I can just imagine!”

“Listen, Mr Horricks,” she spoke again after composing herself, then stood up and, taking him by the arm, drew him aside. “I feel for some reason that I can confide in you. You are a straightforward, simple sort of man – unlike my dear, tormented husband.”

The old ladies all leant forward like sea anemones with their tentacles out, trying to catch the words of their conversation, but she shooed them back again with an imperious wave of her free arm.

“You see, Faithful needs shaking out of himself – he has become so morose and in-turned of late. It’s mainly the general situation, the future of the estate, but there are also specific family reasons. He won’t talk about it even to me, but I know he is dreadfully despondent about not having a male heir – well, we did have a son many years ago, but he died in infancy, choking on his own first words – such is the price of language, the doctors tried to console us... But I’m sure you do not want to be bored by details of other people’s private tragedies. If his brother Alfred were to inherit that would be the end. He’s totally demented – and more interested in monkeys than in marriage anyway. Then there’s Polly... Faithful worries that she is mixing with quite the wrong set in London – far too fast for our way of life. You may have caught a glimpse of those frightful young things waving tennis rackets about whom she insisted on bringing back for the weekend. Well, you can’t be rude to guests, but I just hope Polly gets them out of the way before the festivities this evening – it’s Faithful’s day, he must not be upset. God knows, we have tried to introduce her to all the eligible young men of decent standing in the county. The trouble is that she doesn’t seem interested in a serious match at all. Quite unnatural, her father thinks. And so are the liberties she allows his chauffeur to take with her – she does nothing to discourage him. He does not know his own station, a most unsuitable acquaintance for her to cultivate. I have spoken to Faithful about dismissing the villain, but he insists that he requires his specialized knowledge for keeping the Rolls and the Jag in trim. I mean, really, the Rolls is only driven back and forth between the stables and the back door once a day and polished for show – we can’t afford petrol to take it any further afield like in the old days. And he only takes the Jag out for a spin once a year when his brother the earl visits. It’s not as if he has to keep it ready for a fast get-away from creditors – yet!”

This William took to be a joke – and indeed when he glanced sideways at the duchess’s face, half in sunlight, half in shade, a rather sad smile was upon it. Her gaze was directed out through the French windows in the direction of the ghostly glass-roofed extension of yesteryear.

“Anyway,” she sighed. “I would be grateful for a small favour on your part if you happen to meet him when you deliver the carpet, Mr

Horricks. Please tell him that it can be returned if he doesn't approve of it. It is only 'on spec' from the manufacturers for the time being. That is correct, as I understand it, is it not?"

"I – er – but – hrrmmm – that be..." William began to mumble and shuffle his feet as if he were trying to control his own unruly body, one foot on the accelerator as it tried to protest, the other on the brake as it tried to show respect.

"Naturally one would not in fact dream of asking for one's money back or anything so vulgar. I am just begging you to commit a little white fib in a good cause... And by the way, rather than send a cheque, I do hope it will be possible for one to pay in jewels – it can be done discreetly through a third party in the town. It really is all that I have of value of my own these days..."

She looked so sad and embarrassed when she said this that William could not bring himself to mention that the manufacturer would insist on a cheque from *him* within ten days of delivery. Ah well, what was this minor inconvenience compared with being confided in by a real duchess!

"So that's settled, then," Her ladyship exclaimed, brightening up again, and led him back to the *chaise longue*. "I am sure you have time for just one more cup of tea – and one more questionnaire. You are a treasure, Mr Horricks, a veritable treasure."

12. Back to the apes

Trying to catch up with the twins, Jack had meanwhile wandered far afield, although it had brought him no nearer to their father than before. First he had followed the high wall from the 'secret' garden along the edge of the cobbled yard to where he saw a gate leading through it to the formal gardens beyond. But before proceeding this way he took a quick look at the garage on the opposite side of the yard and in at the stables at the far end – just in case the duke was in either of these. The garage itself was closed up, but through a small window in one of the three hinged doors that opened onto the yard he could see the bonnet of an immaculately polished Rolls pointing towards him; there was no sign of life, however. Backtracking to the stables he found that they too were devoid of life, human or otherwise – though when he looked along the row of closed stall doors he could see that there were rusty signs attached to some of them. One of them still read quite legibly 'Clever Hans' – a strange but perhaps not inappropriate name for a horse presumably bred for the hunt. It was clear at all events that the days of the Shire Hunt were long gone for the present duke and duchess. When he looked into the central passage that led through to the back of the structure there was a musty smell of rotting straw in the air and cobwebs hung everywhere from the beams. It had clearly been abandoned for many a year. Dim light coming through the single, barred window in the door chained shut at the far end prompted him to make a detour to see what lay behind the stables. Here he saw life – but not of the relevant kind.

There was a muddy wasteland between the stables and the trees beyond, where an overgrown bridle track disappeared in the direction of the moat – perhaps there was another bridge across it that way. But what immediately caught his attention was the strange female figure bent over almost double in the middle of the wasteland, apparently engaged in pumping something up with a stirrup pump. The figure was dressed in the riding attire of some previous century, complete with black dress and lady's riding hat with a short veil attached to the brim. What was visible of her face and neck was as seasoned and shiny as an old saddle. She was muttering to herself grimly, though her words were inaudible to Jack. On closer inspection, the object she was engaged in pumping up with

such determination could be seen to be a cloud. Jack wondered whether he was observing some kind of hallucination. The cloud hovered a few feet above her head, attached to the pump by a hose. At each stroke of the pump the cloud rose a little higher – oozing drizzle as it expanded. Further above, merging into the overcast sky, fully-blown up clouds were already drifting free from the ground, trailing faint threads of drizzle. For a moment he stood and watched in fascination, then – to test whether he was witnessing a *bona fide* hallucination – he began a loud hallooing, but this had no effect, either in breaking her concentration or in causing her dissolution.

There was no time to stay and investigate the phenomenon more closely. He retraced his steps rapidly back through the stables and across the yard to the gate he had seen through to the gardens. At first, in his impatience, he could not open the thing at all – and the spikes along its top, flush with the top of the wall, discouraged any attempt to scale it. It was a modern, electronically operated barrier, which would only be induced to open after he had located a red knob that was recessed into the wall. Pressing it produced a buzzing sound and the gate swung smoothly open. When he had been admitted into the garden beyond he turned to close it but it was already automatically closing behind him. To his annoyance he saw that there was no equivalent button on this side: it must have been intended to keep the public out – or rather in. Well, first he had to find the girls – he would tackle the problem of getting back through the gate later.

The gardens were laid out checker-board fashion, in a series of intersecting paths. Each square section was in turn subdivided by low hedges into individual beds, some with fountains, some with larger specimen trees at the centre. The path immediately in front of him ran as far as another wall on the far side of the garden, and above the intervening shrubbery to the right of it he could see the top of a large glass greenhouse. Perhaps that was where the hypothetical public way in from the maze lay. But the girls could have gone in any direction. The hole in the wall where they must have entered was invisible from this side – probably concealed behind the climbing roses along the wall to the left, back in the direction of the main building. Standing on tip-toes on a nearby stone urn (its contents removed but still earning its keep as decoration) he could not see any sign of the girls in the vicinity; only a couple of small family groups – paying visitors, he assumed – wandered

slowly about here and there. To the right lay two shed-like buildings, close to the wall, and it was possible that they had disappeared into one of them. Annoyed at himself for wasting time on the way, he hopped off the urn and headed for the larger of the two.

As he approached the door, a bespectacled visitor came lunging out, moaning and careering about in a most alarming fashion as he tried to mop some filthy looking substance from his face with a large handkerchief.

“Whatever you do, don’t try and feed him!” was all he got out of the man as he bumped into him then staggered away deeper into the garden.

Jack’s surmised – on the basis of the jabbering and whooping and shrieking that issued from within – that it must have been some kind of monkey-house. This was confirmed when he stepped inside: the interior of the building was lined with cages that contained primates of a number of species, including two different kinds of chimpanzee – each in their own cage – and several smaller varieties of monkey and lemur. Moreover, there was a hominid, the only one not behind bars – although he looked like he ought to be. He was jumping up and down in front of one of the excited chimpanzees, whooping and bashing the bars with a rolled up umbrella. He was wiry and thin and ragged shocks of straw-coloured hair pointed out in all directions from the upper hemisphere of his skull. His clothing – which included some kind of leather kilt – was, like his hair, unkempt and also covered in straw as if he had just been rolling about on the floor. Surely this wild-man could not be the duke in person? He looked more like the result of a chance encounter between Rob Roy and a sex-starved female orangutan than the scion of one of the noblest families of the country. Could the twins really call this – thing – ‘Daddy’? Could Polly? A clue to the enigma came, however, as soon as the man calmed down, and turning in his direction aimed a few words – accompanied by a mad smile – in his direction.

“They weally appweciate a little solidawity, you know.”

He vaguely recalled something he had heard earlier about the duke’s eccentric brother, Alfred.

“Excuse me if I’m disturbing anything – but I believe it’s your brother, the duke, I’m looking for. Do you know where I might find him?”

“Feed him? I wouldn’t wecomend it. Alweady completely full of himself. Bit peckish myself though – you wouldn’t happen to have a banana or a bunch of wadishes about your person, I don’t suppose?”

“No, no,” Jack backed away instinctively. “I meant find him. I have something to deliver to him for his birthday.”

“So do I, so do I,” the man sniggered. “At least Fwodo here does. If you encounter the awwogant wogue do tell him to come and pick it up in here, while it’s still warm.”

“I don’t suppose you’ve seen any of his girls either...?”

At this the chimpanzee in the cage behind him started shrieking furiously and leaping back and forth between the bars and the denuded tree at the back of the cage where a tyre on a rope was suspended. It dived through this and clambered up the tree to a fork, where it ensconced itself, glowering at Jack.

“I wouldn’t mention that word aound Fwodo – it puts him in mind of something we can’t pwovide him with here, unfortunately.”

“You’re surely not telling me he understands English...”

“Oh he understands well enough – but he has difficulty expressing himself. No u-bend in the old twachea and a voice-box still half way up into his mouth. He wewesents a stage pwior to the coordination of hands and vocal organs that chawactewised early man.”

“Wasn’t that a little before the appearance of English though?”

Jack’s attempt at flippancy was rewarded by further shrill calls from Frodo on his perch, who now appeared to be engaged in enthusiastic masturbation. Ignoring both manifestations of self-expression, each from their respective end of the evolutionary process, Alfred continued:

“He has a natuwal instinct for communication, like the west of us, you just have to learn to communicate on his own pwemises.”

“You mean you can talk to him??”

“Certainly. This is something I have devoted myself to studying – animal communication and the evolution of language. It nicely complements my investigations into human deficits. Fwodo has a wide wange of intelligent subjects to discuss, considewably more than his cousins the monkeys over there – or my own bwother, for that matter. Human beings are in genewal a lot less intewesting conversationalists. Here, I’ll demonstwate... Oh, well, perhaps we should weturn to Fwodo in a while – he appears to be otherwise engaged,” he sniggered and moved instead to another cage.

“Let’s start with these lemurs. You’ll see how far Fwodo has come fwom his days with them in the fowest. Now these little fellows have a vewy simple vocabulawy indeed – I doubt if their modest little bwains

could hold more than four or five words. They can distinguish at least four types of vocalization – clicking, gwooning, purring and barking – but these are no more nor less than stimulus-bound social calls. They always signal the same thing – just with greater or lesser intensity. Notice how one of them is gwooning the other – the purr it’s making is unique to this process. On the other hand, here is what a bark means to them.”

Here he gave a high-pitched sound rather like a hedgehog sneezing, and the two lemurs inside immediately raised their tails in alarm and leapt off to the most distant corner of the cage, where they remained huddled together staring out from the shadows with wide, frightened eyes.

“They can’t help themselves – they are slaves to their own information technology. Much like bees. Bee language is in some ways more sophisticated – but they buzz so much when they speak it’s difficult getting more than the gist. And it’s still mainly iconic and indexical: the angle of their dance reflects the angle between the sun and their flight path towards the source of the nectar – just tilted up through ninety degrees and projected onto the vertical surface of the honeycomb. And the vigour of their tail-shaking directly reflects the distance to the nectar. These are not true symbols, the relationship between content and form is not conventional and arbitrary. Well, it’s a collective endeavour for them, you won’t find an individual bee inventing honied phrases of its own to make a point.”

“But can any animal other than man really produce arbitrary symbols?”

“Of course. Take these vervet monkeys –” (Here he hopped along sideways to the adjacent cage.) “They tell me they have three distinct calls, which are quite arbitrary – well, I have to take their word for it, having never actually seen their native habitat. One signals the presence of eagles, another that of snakes, and a third that of certain larger mammals, all their natural enemies. Their reactions to each is different. In other words, they have the ability to associate a particular alarm call with a particular perceptual category and to respond accordingly.”

Jack put the tool box down and leant forward, shading his eyes to peer into the shadows at the back of the cage where the monkeys had already retreated. At once there was a curious chattering sound and several little

shadows could be seen scurrying up to the highest point of the tree trunk at the back.

“Which shows that they correctly classify you as a mammal, not a snake or an eagle. But what is it that chimpanzees can do that monkeys can’t, you might ask? Let’s go back to Fwodo now, he appears to be decent again. Look at his face: it is capable of the most varied of grimaces, unlike his little friends and relatives with their masklike countenances. He is also an excellent mimic. This comes on top of the typical primate repertoire of social signals. The one he is producing now is his greeting hoot – he is really very polite. In the wild he would use it also for signalling his location to the rest of his family, but living alone in a cage renders that function a trifle redundant. Here, let me interpret.”

With this Alfred leapt up onto the outside of the bars of Frodo’s cage and pulled a hideous grimace, revealing long yellowish teeth in a kind of exaggerated grin. Frodo, still perched in his fork, stopped his hooting at once and made an identical grimace back at Alfred.

“He is expressing his submission to me,” Alfred twisted his neck backwards to explain. “Which is sensible, since I’m the one who provides his sustenance.”

“Looks like my old dad when he sees an influential customer in the offing.”

Frodo spontaneously pursed his lips and extended them outwards in Jack’s direction.

“See, he finds that funny – that is his dewisowy expression.”

“And what is he trying to express now?” Jack wondered as Frodo opened his mouth into a rounded trumpet through which he hooted loudly, then bounced out along the limb, did a somersault on the spot, and dived onto the rubber tyre. On this he swung across to the far wall, where he kicked off again so strongly that he was able to flip out of the tyre and – after performing another somersault in mid-air – land on the straw. Here he proceeded to race about whooping and kicking and waving his arms wildly before collapsing just in front of them, his head buried in the straw and his bald rump exposed towards them.

“Wroughly translated that was: ‘A funny thing happened to me on the way out of the hotel for my constitutional this morning. A man came washing up to me and wanted to know whether the bar was still up. I asked whether he meant was it still *open*, and he replied no, he’d been

pwopping it up all night and had just gone out for a bweathe of fwesh air'. Hah hah!"

"Come off it. He never said that."

"What are you twying to insinuate by that 'never'?" Alfred snapped, jumping down from the bars. "Of course he never said it before – innovation is the hallmark of weal language!"

Here he suddenly flew into a real rage and began leaping up and down on the spot, waving his fists all about him. Frodo accompanied this by imitating Alfred's gestures to perfection.

"When have you ever bothered talking sewiously to a fellow anthwo-poid? You're no better than the west of them – intolewant, ignowant and pwobably cwypto-Welsh!"

"Please calm down – I was simply expressing my astonishment. Do show me what this little fellow in the next cage can do."

"Ah yes," he instantly grew calm and turned an expression of tender concern in the direction of the next cage. "Bonsai is the linguistic genius awound here. He may be a pygmy in stature but he's an intellectual giant. It's long been known that chimpanzees taught to sign with their hands are capable of passing on symbolic behaviour to their offspring, but until Bonsai the bonobo came along the pwocess of spontaneous cwacking of a linguistic code by a chimpanzee had never been observed. Of course, it wequired an unusual situation. I was twying to teach his mother to form syntactically well-formed sentences out of symbols, arbitwawy shapes that can be attached to a board – there you can see one on that easel outside his cage. He has an identical one inside. He was a new-born infant at the time, clinging to his mother's neck. They couldn't be sepawated, so I and the mother just ignored him while we went thwough the motions. But she was wather incalcitwant – easily distwacted, like most of the adults of her species and not particularly gifted linguistically. I was about to give up on her ever acquiwing any degwee of competence – she had only learnt five symbols in so many days, all of them wefewwing to food – when little Bonsai suddenly cwawled down fwom her neck, marched across to the board and spelled out the sentence 'Don't pay any attention to Ma, she a bit thick, just lay a couple of bananas on her and let me take over in the driving seat'. Well, I tell you, it knocked me wight out of my socks!"

"That does sound amazing – do you think you could get him to cooperate and demonstrate his abilities?"

“Well, I suppose so – but just remember he’s vewy shy, he’ll pwobably only be willing to pwoduce the most elementawy of sentences in fwont of a stwanger. I’ll ask him what he wants to do just now.”

Alfred strode across to the little metal board set up outside Bonsai’s cage and taking a handful of magnetized blocks from the surround arranged them in the empty space in the middle. Bonsai hesitated for a moment, frowning back and forth between Jack and his familiar keeper, then hopped up to his board and methodically placed four metal shapes on his own board.

“Ah, ‘Bonsai – want – play – game’. Well, that’s vewy simple – he’s capable of much more advanced syntax, believe me. Come on, now, Bonsai, twy again, tell us what *kind* of game.” With this Alfred tapped his fingers insistently on the symbols on his own board.

The bonobo looked a little confused, then hesitantly moved the symbols on his board around, adding one new one and substituting one of the old ones for another taken from the surround, so that they now read: ‘Bonsai – chess – play – Bonsai – want’. He looked up hopefully at Alfred.

“No, no, no, think, Bonsai, think! Equi-deletion!”

Bonsai nervously manipulated the symbols on his board into a new configuration: ‘Bonsai – play – chess – want – Bonsai.’”

“No, no! You muddle-bwained little homunculus! Too many Bonsais, thwow one away! Like this!”

Here he ripped the symbol for Bonsai off his own board and tossed it over his shoulder. The bonobo cringed back, looking thoroughly despondent, then slunk away to mope amongst the remains of lunch at the back of his cage.

“You see, he just won’t be cooepwative when stwangers are awound.”

“He certainly looked pretty intelligent to me, all the same.”

“If you want *weal* intelligence now, on a level compawable to our own, you will have to leave the anthwopoids altogether and consider communicating with a dolphin. Of course the challenge is much gweater – they are vewy diffewently endowed as wegards means of both perception and expwession. They obviously do not have hands to wave but they do have a sophisticated form of echo-location which we now know forms a part of their complex communication system. It complements their social signals – the audible squeaks and gwowls that we can hear. The sonar wave-form bounced off an object – say a mackewal – can be used as an

icon for such a fish. Who knows, with further simplification and generalization of form perhaps it could even function as an arbitrary symbol. They are also very social creatures – and this is what we must exploit in order to communicate with them, on their own terms.”

“But can we ever really – I mean really communicate with a species that has such different perceptual and social experience from ourselves? Isn’t it somewhat limited what you can say to a dolphin about mackerels?”

“Not at all. I have held a long and informative tank-side discussion on precisely that subject with a dolphin at Whipsnade. I’m quite partial to mackerel myself in fact. I used a blind man’s cane to tap out my intentions on the side of the pool and an aquaphone dipped into the water to pick up the sonar clicks from its jaws. The only initial difficulty was convincing it that I belonged to an intelligent race. Thought I was some playful pet the keeper had provided it with for its diversion. Well, after I gave it a bonk with my cane on the melon (the special receptive organ on top of its skull) to show it the true nature of our species, I got its full attention. It went off so well in the end that I invited it home for a little experiment the following week in the maze over there. With the connivance of a gorilla I know at the zoo – a nodding acquaintance – I managed to bring him back here after closing hours. We agreed that I would place some tinned mackerel by the pool at the centre of the maze and we would see who could get to it first from the entrance, both of us blind-folded. I used the cane to find my way while the dolphin used its sonar – it flopped its way along in a shallow tank I had rigged up on a tea-trolley in such a way that it could be propelled by little oars with suction-cups attached to its fins and steered by the contact between its beak and a joy-stick. Of course, even if it had got there first it was me that had the tin-opener – that would have clinched the question of relative intelligence! But that wretched brother of mine found out and intervened when we had hardly begun, and my guest was sent packing back to the zoo. It really was too rotten of him...”

“Well, that makes an amusing story,” Jack grinned. “But seriously – what exactly is it that distinguishes human speech from all other forms of animal communication?”

Alfred looked for a moment as if he was about to have another fit, but controlled himself by grabbing two shocks of straw-coloured hair and wrenching his head through ninety degrees, producing a sickening

crunch of insulted tendons. With renewed amiability he then produced a felt pen from the pouch of his leather kilt and, sweeping the magnetized symbols aside, began scribbling rapidly on the board:

Table 7

<i>Design feature</i>	<i>Non-human primates</i>	<i>Humans</i>	<i>Birds</i>
1. Interchangeability	yes	yes	no; only males sing
2. Feedback	probably	yes	?
3. Specialization	in part	yes	yes
4. Semanticity	yes	yes	yes, limited
5. Arbitrariness	limited confirmation; selectively adaptive	yes	yes, though highly adaptive
6. Discreteness	in call systems	yes	yes, in song
7. Displacement	no	yes	no
8. Productivity	possibly	yes	possibly
9. Duality of patterning	no	yes	no
10. Tradition	possibly	yes	yes, limited
11. Prevarication	possibly	yes	possibly
12. Learnability	no	yes	possibly
13. Reflexiveness	no current evidence	yes	no

“These thirteen points are genewally taken as chawactewizing the ‘design features’ of human language: interchangeability – all members of the species can both send and weceive messages; feedback – speakers are aware of what they are twansmitting (by self-monitowing); specialization – the system is used only for communication; semanticity – it conveys meaning through welatively fixed welations between signifiers and weferents; arbitwawiness – there is no inhewent connection between a linguistic symbol and its refewent; discweteness – the code consists of isolatable, wepeatable units; displacement – it can be used to wefer to events wemote in time and space; pproductivity – new messages on any subject can be pwoduced at any time; duality of patterning – arbitwawy combinations of meaningless signs (or phonemes) are combined to form meaningful ones (morphemes); twadition – the code must be twansmitted from expewienced users to new learners (well, this one is to be taken with a gweat deal of caution, most sewious investigators have their weservations); pwevawication – the system allows you to talk nonsense

or to tell lies; learnability – a speaker of one language can learn to use others; and reflexivity – the system can be used to talk about the system itself, as a metalanguage. We can then check off in the other columns the consensus view on whether other primates and birds share these features – like this. Notice that features seven, nine and twelve in particular are supposed to be marked as resoundingly negative (forget the wretched birds on point twelve – what they might peck up from other birds isn't worth learning). Frankly, I have my doubts as regards the primates – I think they understand much more than they let on. A more important factor is missing altogether on the list, namely that animal, unlike human communication all occurs at ground floor level. Animals simply do not live in buildings with several floors. Duality of patterning is just a special case of lack of hierarchical organization in communication. But why *should* they have to live in high-rise buildings? All the essential things worth talking about are down at ground level – like food.”

“I can see that human language must have begun at ground level – but surely we have moved on from there, else we'd still be using gestures and social cries all the time...”

“But we still are! The only difference is that we have combined the two systems into one. The crucial step in the evolution of symbolic self-expression occurred when gestures and cries became associated. What is presupposed is the coevolution of expanding brains and hands freed from being walked on almost all of the time. The result was that repeated gestures could be linked to repeated social cries as single proposition-like information bundles expressing single proto-speech-acts, like commanding or describing or requesting. There would have been just one simple clause at a time, with very limited vocabulary, but a certain basic combinatoriality of the same order as Bonsai displays. *Homo erectus* was undoubtedly already capable of that, as are children at the two-word stage still today, or speakers of pidgins or victims of certain types of aphasia for that matter – it is a prerequisite for efficient group cooperation when hunting out on the savanna or on the nursery floor. But for full syntactic language to have arisen other factors were needed. This was nothing much to do with further increase in vertical posture or in brain size, since *erectus* was already about as erect and swollen-headed as you can get – oh dear, that's got Fwodo going again... Anyway, what gave *sapiens* the edge is still the subject of debate – there

are many theories afoot. Some (mainly men) say it was due to changes in social organization, for example that it developed amongst males as a means to chat up the opposite sex, impress them with a wide vocabulary and phrase structure, whereas others (mainly women) say that it developed in connection with secret female rites (a brew of moonlight, gossip and menstruation, most alarming to males). Others claim the beginnings of real language was in the developing skills of lying and cheating, specifically the ability to keep track of sexual partners within the tribal unit – though this would just have been an extension of something other anthropoids appear capable of, as we saw. But there are still others who point out that none of these theories can explain the *readiness* of primitive man to develop full syntactic language. The question as to which came first, increased brain size or need for increased social skills is for them a chicken-and-egg question. They argue for a special organ within the brain – specialized for grammar, that is – and I believe they are quite right. It has been called the Language Acquisition Device. *That* is what is specific to our species.”

“But has anyone actually found this particular organ? I don’t know much about it, but I thought there were several bits of the brain, not all next to each other, that all had their part to play in language...”

“Oh, you mean Broca’s area for speech production and Wernicke’s for semantic comprehension and so forth. No, the organ in question is something much deeper than that, though it probably has some privileged surface access to those areas. In fact I have spent many happy hours at the dissecting table trying to unearth its physical manifestation and find signs of its origins in pre-hominids. Since it consists of universal rules and principles that allow you to learn any human language it can’t hurt too much to slice it about a bit. Of course I made some mistakes at the beginning – my first experiment was with a shrew: I cut out something pink and wiggly which seemed to affect her ability to communicate quite substantially. She died actually. Well, how was I to know it was her womb? I’m not trained as a surgeon. But I still see no reason to believe that the language organ should not have evolved just like any other part of the human body – and I am in full agreement with Nanny on this point: she gave me permission to think this way and to follow my convictions to their natural conclusion, so there!”

He pouted petulantly, obviously not used to having to defend himself.

“Yes, I heard her expressing her point of view – but I also heard the

opposite one, that language is essentially a cultural thing, passed on by teaching, by imitation and by books.”

“Hah! The old ‘in the beginning was the weird – the hand-wearer-‘theowy. Don’t believe a word of it! Nobody ever taught *me* a thing – I learnt it all from scwatch. Ask Nanny.”

Here his face and arms began to twitch and he turned back towards the cages, scratching distractedly at his arms and midriff. Frodo began imitating him from his perch, and the two were soon hooting and signing back and forth to each other excitedly again, until all the other primates had been set off; their enthusiastic commentary echoed from all corners of the square ring of natural selection. Jack realized he was going to get no more sense from this degenerate throw-back of the aristocracy – he had wasted enough time already. So picking up his tool box he beat a hasty retreat by the way he had come in.

Greatly relieved at being able to breathe fresh air again, he paused outside, trying to decide which way to turn now. But the decision was made for him – further along the wall to his right was the other shed-like building. It was somewhat smaller than the first one and surrounded by wire meshing. From this direction a high-pitched voice suddenly started shrieking: “Help! Help me! Fire! Rape! *Au secours!*” My God, he thought, could it be Polly, in dire need of his assistance? He rushed towards the structure, calling as he ran:

“I’m coming! I’m coming! Help is on the way!”

13. Birds of a feather

But when he came running up he could see that it was just an aviary, with birds of various shapes and sizes enclosed in individual cages, each facing outward. As far as he could tell there were no humans about – other than himself – at all. The cries he had heard (which had ceased as suddenly as they had begun) appeared to have come from the direction of a pair of rather nondescript, medium-sized birds in adjacent cages, one sleek black one with its head tilted to the side and a sardonic look in its beady eyes, and the other a brownish, fluffy affair with variegated feathers and finer beak bobbing up and down in comical fashion as if trying to assess the attitude of the intruder. But this was of course nonsense – he could hear them chirping and fluting away together in an animated musical duet, the one trilling and playful, the other somewhat slower and mournful in tone. Had Jack understood their language he would have heard something quite different:

“There, you see,” the second bird was saying to the other. “The meaning of a word is in the action it provokes. ‘Help’ has no other meaning than the reaction it produces in the hearer. It is a tool.”

“But that reaction depends crucially on the circumstances,” the other replied gloomily. “This fellow would not have run up in such an agitated manner if, for instance, someone had come up to him in the street with an open map and asked him for help.”

“I never said it had to be a *single* reaction – any word is associated with a wide variety of reactions, depending, precisely, on the context. Ask yourself rather what ‘helping’ someone in the street, helping someone who is being attacked, helping the poor by writing a cheque, helping your wife out with the shopping, unwittingly helping your opponent in a guessing game, helping yourself to some cake, and so forth, all have in common. Precious little, I think you will agree, apart from a vague sense of doing something for someone’s benefit. But whose? And for what purpose? And how?”

“There you are, the very fact that you can begin to unpack the meaning of the word in this way shows that there must be a core that is common and distinct from that of all other words, otherwise you wouldn’t use it in similar, repeatable situations. If a bricklayer, say, trying

to lift a heavy slab turns to you, his assistant, and says ‘help me’ you know exactly what he expects you to do, don’t you? And that is irrespective of what your reaction actually is – perhaps you will refuse or make some excuse for not helping. Which reminds me of my poor old great-uncle Wilberforce, who was owned by some manic-depressive Austrian philosopher. He heard his master say the word ‘slab’ so many times in the same irritated tone that he got stuck repeating it after him, went into a deep decline and finally died of sheer boredom. A depressing story altogether.”

“But the very fact that you know what the bricklayer *expects* you to do on receipt of hearing a request for help supports my contention: naturally you can also imagine helping someone without actually undertaking any kind of overt action. It’s the *potential* action associated with the word that is crucial, just as the potential feel of lifting a slab, its visible appearance and material structure is all part of the aggregate of potentials that is its meaning. What ‘helping’ is is the type of all events in the real world that have a roughly similar feel and purpose to them, just as what a ‘slab’ is is a member of the type of objects in the real world that roughly meet the functional and perceptual qualifications in question.”

“Roughly, roughly – you are always so fuzzy-minded, cousin. It’s not that I am able to tell you exactly how to analyse the particular word we have been discussing, but its precise sense is surely there to be unearthed by careful analysis – in terms, say, of an open list of meaning postulates. For instance, if I ‘help’ you I wish to bring about some result you will deem positive. Or in terms of strict entailments, if I say for instance that I ‘helped’ you, it follows automatically that I actually did something that contributed to such a positive result. Meaning is compositional – syntax and semantics are inseparable – that is why we can build up complex meanings at all from single words grouped into phrases and in turn grouped into clauses, and so on. You may poo-poo the compositional analysis of meaning, but it is justified – irrespective of ideology – if it produces valid generalizations across whole classes of words, even if there are further aspects of the meaning of individual words that are less systematic, more idiosyncratic.”

“But it’s not just a matter of the nature of actual events or things in the real world to which the word can be applied. The same physical event – say me raising a slab in my beak and moving it in the direction

of a bricklayer – can be interpreted in a multitude of ways. I could for example be trying to kill him with it. The sense of a word is not just fixed once and for all within a framework of social convention, it is highly dependent on the perspective of the individual speaker – there is plenty of scope for creative application of words to new situations.”

“Yet there still has to be agreement on the *basic* meaning of the word for more creative or figurative uses to be recognized as such.”

“Well, that is not necessarily so, if you think about it. Why not say that what is recognized as conventionally corresponding to the meaning of the word is simply the family resemblance between instances of what it denotes in the real world? We have inner representations of prototypes of categories, surely no one would want to deny that in this day and age. But there is no way that such a representation can be mapped directly onto the set of all entities in the world matching some finite and exhaustive description of it. Take the meaning of the word ‘bird’. Now we would both agree, I am sure, that an ostrich is less of a bird than either of us – and a penguin is quite beyond the pale of respectable birdhood. On the other hand, I am very close myself to the prototype at the centre of that category. You are only a little further from it – your singing voice isn’t quite up to par, you must admit, and that is after all a core attribute of our kind.”

“What are you talking about? My sleek feathers and precise imitative ability place me far more centrally than you, with your unkempt plumage and thoughtless garrulousness – anyone can tell you are related to the babblers of India, and they are hardly ‘typical!’”

“What *you* are prototypical of is *mynab* birds, not the major category of birds as such – a natural error resulting from the egocentricity of your particular species. ‘Bird’ is a *basic* word – it is the most easily envisaged or drawn or recalled by association, unlike hypernyms and hyponyms respectively higher or lower on the taxonomic scale, such as ‘animal’ or ‘crow’. Tokens of the type ‘bird’ also share the most common features, those that are most salient and correspond most directly to everyday experience, such as flying and pecking up food.”

“There you go – you cannot help but define categories and sub-categories in terms of discrete features despite all your fashionable fuzziness!”

Jack had in the meantime been looking all around him, peering into one cage after another trying to see if there was a keeper around at least,

but the cages were quite open to the outer world – there was no interior space between them where mayhem could have been concealed. This brought him back to the two twittering birds he had first noticed. He leant forward suspiciously, right up to the wire meshing behind which the black one was perched. It fell silent when he approached, and hopped nervously from one leg to the other it, then it cocked its head the other way, still holding him in sight.

“Watch’er, cock!” he tried.

“Watch’er, cock!” the mynah bird couldn’t help but repeat.

The other bird – a bulbul according to the label outside the cage – burst into silvery cascades of laughter.

“He got you there, my friend! You’ve blown the gaff. We’re rumbled!”

These words the bulbul spoke in a fashion that even Jack could understand. He jumped back in surprise.

“We were just discussing family resemblances,” it went on merrily. “Perhaps you could give us your opinion. By the way, my name is Major, and my depressing cousin here is Minor.”

“I don’t exactly have an *opinion* on family resemblance,” Jack began, feeling a bit foolish actually talking to a bird, and looked around to make sure they really were alone. “But now that you mention it, I wonder if you could tell me something about the duke and his family? I know what his girls look like and I have just met his brother. There’s some kind of resemblance there all right – but how will I recognize the duke himself? I need to find him to deliver a carpet to him in person.”

“Frankly, I wouldn’t be too sanguine on that score,” the mynah bird sighed. “The whole point of such resemblances is that token A resembles token B, which in turn resembles token C, and so forth in a chain, but in such a way that A may in fact not look anything like, say, M. As I recall, the duke and his elder daughter, for example, have not much in common apart from two legs, one head and two arms – mind you, that’s already a lot from our point of view. I wouldn’t mistake her for one of my fledglings.”

“Perhaps it will help you to know that the duke lacks those two soft protuberances between the waist and the shoulders displayed by his daughter,” the bulbul chirped in.

“Yes, I’d noticed that display,” Jack smiled. “But I don’t think it will get me very far in narrowing down the field.”

“Yes, I can see your point. Both of them. What you really need to get some leverage on is an interpretation of the phrase ‘the duke’. There are two basic approaches to this, the formal and the cognitive – and unfortunately my cousin here and I do not really see eye to eye on the matter. He is a traditionalist, he keeps on repeating the same dreary old pronouncements from the past – he’ll go on and on about the ‘correspondence theory’ and truth conditional semantics until you start seeing unicorns. This antiquated approach presupposes that there either is or isn’t an entity that can be referred to in the real world by a given referring expression, whereas it’s quite obvious even to the layman that hypothetical entities like ‘the King of France’ can be entertained and have meaning irrespective of the ‘real’ world situation. Why, I have myself exchanged a few words with that noble gentlemen, myself.”

“Listen to him babble on without the least concern for the truth! He’s as bad as any lyre-bird! Obviously definite descriptions must refer either to individuals, to collectives, to masses or to aggregates (that is, a plurality of entities), whatever the degree of abstractness. This is so whether they be ‘real’ first order entities (things or persons), second order ones (events), third order ones (facts or propositions) or even higher order ‘speech act’ entities. One can explain reference to any kind of entity – whether by direct deixis or by definite description – in terms of denotation and truth. Mental representations are irrelevant and secondary. Besides, we formalists are perfectly capable of discussing such matters sensibly – in terms of ‘possible worlds’. But truth conditions cannot be ignored, even if that truth is relative to such a hypothetical world. Either a proposition about birds is true or it is not. If you say ‘birds can talk English’ the proposition must be assigned a negative truth value as far as most worlds are concerned (it just happens to have a positive one in this one), and that is because of the logical – analytic – incompatibility of the two concepts ‘bird’ and ‘talk English’.”

“Nonsense! Any two concepts can be blended to form a coherent new whole – given a modicum of imagination (something you, cousin, are alas a little short on). None of the formal approaches really gets to the heart of the matter, namely that language – which is by its very *raison-d’être* communicative – has to be interpreted in terms of messages sent and received. And definite descriptions are no exception to this – the definite article is quite simply an instruction to the hearer to search for the most accessible specific referent in his mind fitting the description

in that context. Take your phrase ‘the duke’ – all you need do in order to understand it is to search your memory for the most salient exemplar of that category. Remember, it need not be a prototypical one.”

“But I’m not even sure what a prototypical duke looks like!”

“Ah, it’s true that there are dukes and there are dukes. Which brings us to the question of polysemy.”

“Polly – what?” A definitely salient entity sprang up in Jack’s mind, but it was unfortunately not a duke (it had too many soft fleshy protuberances).

“She too. A polysemous miss indeed... But let’s stick to her father. Is ‘duke’ polysemous? Does the word have several distinct meanings? If you look it up in the dictionary it will simply define it as something along the lines of the following: ‘a sovereign prince of a small state, a nobleman of the highest order’.”

“Well, that sounds like two meanings rather than one – depending on whether you’re talking about a ‘small state’ (is this one?) or England in particular – though, come to think of it, Polly’s father could well be both, as far as I know. It depends on what conventions prevail, I suppose. And then there’s the American expression ‘dukes’ for fists (as in ‘put up your dukes’), whatever that comes from...”

“That’s actually Cockney rhyming slang – from ‘the Duke of York’s’, i.e. ‘forks’, slang for ‘fingers’, not originally American at all. Since you apparently didn’t know the connection – the relations of metaphor and metonymy deriving it from the basic meaning – it counts as homonymy rather than polysemy. It’s as if it were a separate word that just happened to have the same form.”

“But if I *had* known its origin, would the word have been polysemous instead?”

“Ah, well, it is already. Consider this – of the two meanings I gave you, which is the basic one? Historically we know it derives from a broader meaning of ‘leader’, as in Latin, but that doesn’t help us as regards the English. One could never confuse the two meanings, precisely because one would always know whether one was talking in the context of England or of somewhere else. In this case, however, we could not talk about homonymy, since there is almost total overlap of meanings once the factor of context is removed.”

“But don’t imagine that that is *all* there is to the meaning of the word,” the mynah bird butted in petulantly. “The word ‘duke’ is not

isolated. It's part of a wider semantic field structured both vertically and horizontally. If we stick to the English sense of the word, it is ordered at the top of a finite number of ranks within the British nobility (below the royal family itself, of course). It is a 'hyponym' of 'noble' at the same time as being a link in the 'meronymy' of 'nobility' (that is, the parts that constitute the latter). Moreover, the word has a close relationship with another one, 'duchess'. The two words stand in a mutual relationship as 'converses' – the duke is to the duchess as the duchess is to the duke, together they form a married couple. This is a particular sub-type of the relationship of antonymy, which also includes graded contradictories like 'good' versus 'bad', and contraries like 'male' and 'female', all of which can be represented in terms of strict entailments. For instance, 'X is not male' entails 'X is female', whereas 'X is not bad' does not necessarily entail that 'X is bad'."

"True," the bulbul chirruped gamely. "But you can continue in the same vein and very soon you leave simple binary oppositions far behind you. We are not slaves to our tail feathers – we must learn when to leave our tails behind us and move on. We all have a territorial instinct for our own native environment, but the truth is that semantic fields overlap and intersect, they are impossible to defend without relying on highly artificial taxonomies created by social convention – such as the ranks of the nobility. But even here the word 'duke', for example, summons all manner of associations – such as appertaining uniforms and regalia, famous individual dukes from history, the accepted form of address to a duke ('Your Grace'), the whole system of lords and ladies and knights and life peers that extends the concept of nobility out amongst the ranks of commoners – and it is next to impossible to say where exactly the line must be drawn around the core meaning and where figurative usage or mere connotation enter the picture. By the way – there was a tip for you: try addressing something you suspect of being a duke by the phrase 'Your Grace'. If it responds with a condescending nod it is probably what you are after... You see, word knowledge shades off imperceptibly into world knowledge. The notion of 'word meaning' is itself just a metaphor, based on the 'meaning' – the intention – a speaker has in uttering something in the first place."

"On he goes about his beloved metaphor. Compositional analysis is just a means to lay bare the core of a word's meaning, its relationship to other basic words, it's not meant to deal with figurative usage. For you,

cousin, everything is metaphor – but that is just one aspect of meaning. Ever since you left your homeland you seem to have sublimated your natural longing for its lush fields by this internationalistic relativism. You’ve become a semantic vagabond! Why, I’ve heard him claiming that even such basic grammatical categories as subject and object are really just prototypes.”

“As indeed they are: they simply reflect a language-specific grouping of functions of a more basic nature – semantic roles, like agent or goal, and pragmatic ones, like topic. In English your prototypical subject combines the functions of animate agent and topic, but divergences extend out in all directions from this core – when, for example an inanimate object is subject, or when the subject of a passive sentence promotes the object or ‘theme’ to subject position...”

“But the roles themselves – the ‘functions’ if you insist on using that behaviouristic term – form a finite set. These ‘theta’ roles are universally valid. It is merely their surface marking and distribution in individual languages that varies.”

“No, no, all of these abstractions have no meaning at all unless they are embodied in real speakers in real situations of use, and that means anchored in sensorimotor reality. All abstraction from that is sheer metaphor. Tense, aspect, modality, case, word classes – all the ingredients that get passed on from the gardens to the kitchens for combining into higher units – all of these categories are fuzzy and leafy and relative.”

“And are the states of affairs they reflect fuzzy – is reality itself fuzzy? Of course not. There are distinct events and states, accomplishments, achievements and on-going activities – no one in their right mind would deny this. Language – its surface structure – is ambiguous, but the reality it corresponds to is not. Either ‘the woman fed the man with the carrot’ refers to an event where a distinct, locateable woman provides a distinct, locateable man with a token of the category ‘carrot’ to ingest *or* it refers to an event where she provides sustenance of an unspecified sort to a particular man carrying – or in some other way associated with – such a token. The meaning intended is itself perfectly determinate.”

“You’ve got it all back to front as usual! Naturally we can *analyse* such sentences in terms of determinate ‘models’, but reality itself – at least the only reality that counts for language – consists of our inner representations of it, and the intentions leading to such a sentence can be complex

and individual. You formalists simply have no grasp of intentional behaviour – or of representations. Sometimes you sound like you really believe that there are predicate calculus formulae – lists of ‘*qualia*’ binding variables and the like – floating around in your brains, things that are quite unrelateable to experiential reality.”

“That’s right – you always think you know better! Whereas ‘in reality’ you haven’t any more precise idea what is ‘floating about’ in there than we do. At least we know exactly what has got to be accounted for one way or the other to make sense of language systems. We are just cautious and don’t leap to conclusions about ‘cognitive models’ and other such chimera.”

“Schemata, not chimera! Just look at your own use of language and you’ll see the evidence right before your own eyes – we all understand implicitly about containers and their inclusion of contents, about paths and goals, about forces and impediments, about figure and ground relationships. Why ditch all that in order to introduce abstract categories that are only relevant to language itself?”

“Because language itself demands it, if we are honest with ourselves! Real explanations do not sweep complex facts under the carpet with simplistic, unconstrained accounts of what might just possibly, in a general sort of way, be relevant to interpreting individual sentences!”

“Formal explanations are not explanations at all – they are unembodied! Even the best of them can be overridden by real world knowledge. Take the sentence ‘The cognitivist would not accept his opponent’s explanation because he was too cautious’. Your principle B or C or whatever you call it would require categorically that ‘he’ referred back to ‘the cognitivist’ – but that all depends on whether you happen to believe that cognitivists regard formalists as over-cautious – or whether, on the contrary, you consider cognitivists to be the ones who are too cautious. Beliefs and other intentional attitudes enter the picture as soon as you begin to talk of interpretation and meaning. Am I right, or am I right?”

This argument, which was growing more and more heated by the minute, with both birds now bobbing up and down furiously on their respective perches, suddenly reverted to trillings and warblings, wolf-whistles and hyena-like laughs. Jack, who had been attempting for some time to get his word in and steer the discussion back towards his question of how to recognize the duke, gave up trying to intervene. He

shrugged and turned to leave. But at that moment another bird – a lethargic-looking parrot in another of the cages – seemed to wake up, opened its eyes, then its beak, and produced the single clearly articulated phrase: “Pretty Polly”. Then it fluffed up its feathers and fell silent, its eyes glazing over again.

“Wait – you two, can you listen to me for just one moment?” Jack raised his voice in a mixture of exultation and exasperation. “Isn’t that a sign that the duke’s daughter must have been this way very recently?”

“Well, recently, recently, everything is relative,” the bulbul returned to English for a moment. “That dozy foreigner over there is for some unfathomable reason her favourite. She ruffles its neck feathers and coos to it every time she comes by.” (Jack felt a sudden pang of jealousy at these words.)

“So which way did she go – after the last time she came by?”

“Ah, that would all depend on whether you mean in an extensional sense, with reference to a real world individual, or in an intensional one, within the sentence,” the mynah bird squawked.

“Don’t listen to him – it doesn’t depend on that at all: intension is simply extension in all possible worlds. Here they all coexist. And two expressions are synonymous if they have the same intension, for example ‘duke’ and ‘senior male member of the highest order of the English nobility’. The intension of an expression is the property that defines the class whose members it denotes. More important is whether metaphor is admitted as being involved or not,” Major tilted his head thoughtfully.

“I’m not sure I know myself,” Jack hesitated.

“In that case,” Minor concluded depressingly, “I’m afraid we probably cannot help you, since any reply would be multiply ambiguous unless you knew the exact sense of your question in advance.”

“On the other hand,” Major injected a spark of hope. “You may want to go and see Dadda in the greenhouse – he is ancient and knows the history of the place. He keeps a record of all the comings and goings.”

“Now, we’re finally getting somewhere,” Jack thought.

Thanking the birds summarily, he started off with a determined stride in the direction of the greenhouse that he had noticed before. As he did so, a flight of honking geese flew past overhead. But his thoughts were mostly revolving around the vexed question of whether, if he did come across Polly, she would as much as give him the time of day. He noticed vaguely as he traversed the gardens that they were organized in a

somewhat unusual manner. Suddenly unsure of how he would manage to get her alone if she were with her father in the greenhouse, he slowed down and then stopped entirely. He bent down, as if prevaricating, to look at one of the metal signs that were positioned along the side of the square he was now following. This particular one seemed to refer to the low, neatly manicured hedging around all four sides of the square, with gaps left only at the four corners. It read: '*taxus baccata*, family *taxaceae*, genus *taxus*, common (lit. "berry-bearing") yew'. In behind the hedge there was a border with six different kinds of herbaceous plants, alternating and repeating all around the square in clumps of similar size, three sets to each side. Every third group was provided with little metal signs in front of its exemplars. Behind them stood individual standard rose bushes in flower, one to every three herbaceous species and each bearing a label attached to its spindly stem. The same alternation of reds and pinks and whites was repeated along every row. Further still towards the middle was a square of stepping stones approachable via diagonal paths from each corner of the outer square, and within this a number of flowering shrubs – alternately tall and short – were positioned behind colourful small diamonds of bedding flowers. The plants here all had their own labels fixed in the ground in front of them. At the very centre was a smooth pyramid of stone with some kind of symbols engraved on its four surfaces.

Jack hesitated, but then stepped in along one of the diagonal walks to take a look at the object in the centre. On the way he merely glanced at the individual signs and labels. All of them bore the same kind of detailed taxonomic information – sometimes with an English equivalent or an abbreviation for the country of origin added. When he reached the pyramid – or rather peered through to one of its exposed flanks between two shrubs labelled respectively *enkianthus campanulatus* and *pietris japonica variegata* – he saw that the following two formulae were neatly engraved there, like on a grave stone:

Table 8

$$\forall x [\text{Girl}(x) \rightarrow \exists y [\text{Boy}(y) \wedge \text{Love}(x,y)]]$$

$$\exists x [\text{Girl}(x) \wedge \forall y [\text{Boy}(y) \rightarrow \text{Love}(x,y)]]$$

Below the formulae was something that might have been a translation, carved in more or less everyday words: 'For all x, such that x is a girl, there is a y such that y is a boy and x loves y', and below it – presumably a translation of the second formula: 'There is an x such that x is a girl that loves all y such that y is a boy'. Wondering what these might correspond to in ordinary English – and vaguely disturbed by the possibility that they might have contained some not entirely flattering allusion to Polly – he made his way back to the surrounding path.

This whole evasive manoeuvre was not particularly illuminating – nor did the formulae help him with formulating any clear strategy of his own. Was that what he was meant to figure out? He continued, more slowly and ponderously now, around the side of the next square, which was somewhat like the first in overall layout, but with flowers and shrubs forming a different geometrical pattern in the beds between the internal pathways and with a realistic statue of some uniformed general in the centre rather than a stone pyramid. He took another left turn in the direction of the far wall. In the centre of the square that the path now flanked was a fountain that portrayed some Greek hero struggling with a multi-headed serpent from whose nostrils the water was jetting. In fact, looking around him, he could see that each square was distinguished by a different style – from the prosaic to the poetic, from scientifically objective to elaborately baroque. All in all, the gardens, although colourful and obviously well-tended, seemed to him in his present, decidedly fuzzy mood arid and overly formal. As for the proliferation of Latin terms – well, taxonomies in general left him cold. Did Polly have any favourite plant among them, one she loved by sight and not by name? He wouldn't mind being plucked by her and held to her soft cheek... But why should she go for a commoner, an intrusive weed like himself? Pluck him she might, only to consign him straight to the rubbish tip. And her father sounded like a difficult and possessive man – he was hardly likely to let her wander off with a trades person. He would probably just send him packing as soon as the carpet business was taken care of. He needed to find some excuse to stick around, to look at other jobs that might need doing. There again, perhaps he could get his permission to take Polly back to William so that she could guide them up to the study with the carpet. With any luck the duke would be busy for the moment with something or other in the greenhouse...

But now he was approaching the greenhouse, and there was no time for further brooding – he would have to rely on his instincts, just play the situation by ear. Indeed, at that moment shrieks of girlish laughter reached his ear from that direction and it was immediately apparent to him that he had forgotten one important factor in his weighing of alternative scenarios: the twins.

14. The historical propagation of language

“Blere blomes ble blokel blith ble blots blon Blolly!”

“Blets blighten ble blighter bloff.”

The faces of the twins, pressed up against the glass and distorted into hideous goblin masks, greeted Jack from behind the door of the greenhouse, but this only seemed to encourage him to stride towards them with greater determination.

“Blot blorking – bletter bleave blim blo Bladda, blere blonna ble blate!”

As soon as he had pulled the door towards him Debs shot out with Dabs right after her (or *vice versa*). As they scampered back into the gardens, one of them shouted back over her shoulder:

“If you want our sister you’ll have to wait your turn – she’s having it off with the chauffeur!”

They disappeared giggling from view. Jack winced and his face reddened – not so much at the content of this slander (he did not believe for a moment that it was true) as from being taunted by these rude little brats without being able to answer back. So much for breeding. At least, it seemed, they had led him to the duke – if the powerfully built, square-chinned, wrinkled old fellow bending over a potting shelf inside the greenhouse was indeed the man he was seeking. But surely he was somewhat advanced in years to be their father, and the attire he was wearing – muddy trousers held up by braces and a coarse brown shirt with the sleeves rolled up – was not exactly what one expected of an aristocrat, however eccentric a family he was head of. Jack recalled the words of the bulbul – there was a way to find out. He approached after a discreet cough.

“Excuse me, Your Grace...,” he began.

The old man slowly turned an eye in his direction, then returned without a word to his labours – which appeared to consist in shaking a finger at something in a flowerpot. As he did so his mouth cracked into something vaguely suggestive of a smile, but the furrows etched on his leathery face were so pervasive it was difficult to distinguish mirth from any other sign of affect. Only the slight rhythmical pulsation that shook

his hunched shoulders confirmed the impression. Again Jack's face reddened.

"I'm sorry – I thought I heard the girls refer to you as 'Dadda', you see... I don't suppose His Lordship has been in here this morning? I have to deliver a carpet to him."

The old fellow still uttered not a word; instead he made a vague sweeping gesture with the trowel that he was holding – whether this was to be understood as an affirmation of Jack's question or as an indication of the extent of the horticultural world he presided over was unclear.

"I suppose you are in charge of the upkeep of the gardens here," he tried again. "It looks like hard work, and as for remembering all those long Latin labels for things... You must have lots of under-gardeners beneath you to help keep that formal stuff in trim. Must say, I prefer something a bit simpler, a bit wilder myself – cottage garden style, like back of my Dad's place in town. Easy to look after, anyway. I bet you sometimes wish you had one like that yourself – or maybe you do, in your time off, like..."

"Time off?" the ancient finally responded in a slow, creaky tone, pulling himself up to his full dignified height, as if bestirred to action by something Jack had said. "I don't remember any 'time off' since I was a nipper – which was well before any of this newfangled Frenchified stuff was laid out. If it were up to me it would indeed still be a country garden, balanced between wild Nature and careful but invisible tending – of the sort this country can be proud of having given the world."

"But the duke prefers a more geometrical style?"

"Successive dukes and duchesses have messed around with the style of the gardens many times – the present layout dates back to the seventeenth duke, if I remember rightly. Well, there's no accounting for taste. It all goes back to Newton, he has a lot to answer for. Next time the pendulum will swing in the other direction, you mark my words – the wilderness will return with a vengeance. That I can handle too. Of course you have to have some order and system, a practical framework of classification, but in my book a rough genetic taxonomy of families and stocks is quite sufficient – as long as it corresponds to Nature's intentions. Of course precise origins can become obscured – by cross-breeding and the like – but if the principles are sound this will all come out in the wash, given ample watering. There are other ways than the genetic one in which natural phenomena can be categorized, ways that

ignore the dimension of time and the question of common origins entirely, but I leave to the typologists their endless arguments about what particular categories are necessary or universal. It must all remain controversial and theoretical until the roots of the phenomenon are better understood. Darwin could already explain a great deal about the natural world before Mendel came along and worked out the actual mechanism of hereditary succession responsible for the general effects – and only recently (I hear) has any progress been made in understanding the molecular structures that in turn lies behind that. The role of typology, as far as I am concerned, is simply to constrain historical reconstructions within the bounds of the likely. ‘Like’ in the sense of natural ‘kind’, that is.”

“What kind of ‘historical reconstruction’ do you mean exactly? It doesn’t look much like archaeology, for example, what you’re doing here...”

“Etymology is just a side line of mine, a hobby if you like (historically the same word as before, note). My main job is to ensure continuity around the grounds. There are certain basic materials the palace has to be supplied with on a daily basis, regardless of short-lived whims of fashion – vegetables and herbs from the kitchen gardens back there to be sent over to the kitchens, and cuttings from this greenhouse for the private rooms upstairs. A great estate is more like an organism than a static system abstracted from time. You have to be kind to it if you want it to grow. You sound like a sensible young lad, you can appreciate that, I’m sure. Well, some might consider it a rather old-fashioned viewpoint, but old ways are at least well-trodden. New ones are all too often put forward by upstarts craving instant acclaim for the overthrow of earlier ones that were in fact perfectly viable.”

“I suppose what you’re doing now with that flowerpot is also part of supplying the palace with ‘basic’ materials...”

“Quite so. Take a look if you want.”

Jack put down his tool box and stepped closer to observe the small pea-like plant growing in the middle of the pot. The gardener appeared to be training it to wind around a small stick pushed into the soil near the centre.

“This one’s not quite ripe,” he explained, grasping the single pod that hung among the new tendrils. “But you can get the idea if I just pop it open. It’ll produce others soon enough.”

With this he squeezed the pod gently along its seam, causing it to burst and display a sequence of tiny half-formed peas within. Only they were not peas at all: on closer inspection Jack saw that each of them was in fact a little green embryo, still almost spherical but recognizably in the process of contracting to form a mature letter. Blinking, he could see now that they read: 'DOWNLOAD'.

"What the -? You don't mean you grow new words from seed in here?"

"Well, that's one method, of course, but not the only one. Existing words can also be cross-fertilized or grafted one upon the other. In the present case lexicalization has resulted from the compression of an existing syntagmatic construction – to load something 'down' – inside a unifying prosodic pod. All the techniques we use require a certain amount of manual dexterity combined with plain old common sense. I don't do anything particularly inventive – the needs arise elsewhere and are communicated to me accordingly. I just assist the natural process. It's a bit like being a midwife, you could say."

"So that's your function – once it, er, pops out you just send it up to the house to be categorized and then used?"

"It's not *that* simple, young fellow. As I said, ensuring continuity and not novelty is my principal role. It just so happens that the estate manager has acquired a new plaything of late – a 'computer' it's called – and this apparently necessitates a number of specialized new terms to operate it. At least this one is a native English creation. As a world language English doesn't have to put up any more with the continual invasion of effeminate Romance and pompous Latinate terms that has threatened to swamp our native lexical stock ever since the time of the fourteenth duke. In those days there was widespread infatuation with anything 'universal' and Court was filled with foppish continentals. This outrage continued unabated during the recent French disturbances, persisting even after Boney was put out of commission. If I had it my own way no loan-words at all would find their way onto the estate – round here it's British produce only! Unfortunately I can't weed out all foreign words on my own, though I do my best – my helpers are just too lackadaisical. Look over there, see what I mean? Amongst the floral decorations for this evening I can see a *fleur de lys*! Those useless under-gardeners! As if weren't obvious, being in italics! Out with it! Do they imagine that Her Ladyship couldn't tell the difference from an honest English lily...?"

Here he hobbled across and ripped the offending item out of the vase and chucked it into the nearest bin.

“Weeds, weeds everywhere. ‘In the beginning was the weed’ – that’s the truth I try to drum into the heads of my staff, but do they listen?”

“I thought that over half of our vocabulary was ‘foreign’ anyway. Including the word ‘lily’. Surely it can’t do any harm to let in a few more, can it?”

“But there’s a difference. Those old loan words – superfluous though they may have been at the time – have been naturalized in the interim and are now pronounced as genuine English words should be pronounced. As long as they behave British they *are* British. Take the word ‘grammar’ – ultimately from a Greek phrase *techne grammatiké* ‘the art of writing’ (as if only written language had grammar!). It has not only become thoroughly acclimatized here (what other country has a tradition of ‘grammar schools?’), it has also produced its own native ‘sports’ – thus the word ‘glamour’. Did you realize that this comes from the same source, via dissimilation of the first ‘r’ and the older English meaning, ‘spell, magic’? Anyway, whether it’s a matter of new words and phrases, or of old ones developing new meanings, there are certain basic standards of decency for all cultivated forms of language. In those packets and jars along the shelves there are stored thousands of seeds, each capable of producing numerous related words. But seeds cannot just be tossed onto the earth, it has to be prepared carefully first, compost worked into it – preferably well-rotted context, old fallen words and outmoded expressions. Then after being potted in the mix to just the right depth the seeds have to be watered in and kept in here at a constant temperature until they are ready to be transferred to a cold frame outside. That hardens them off sufficiently for planting in the open during the warmer months. And that is just the beginning. If they have lasted a season and proved their hardiness, clumps must be divided in the autumn, and they must be mulched during the winter and protected from birds and snails during the spring when they start growing again. The best way to do that, by the way, is with a combination of sticks and nets. Keeps them in well-defined horizontal rows and yet allows them to develop in novel ways vertically – up towards polysemy and the sun.”

“So you are saying that languages are like growing things –”

“When did I say ‘like’? Languages do not grow ‘like’ other living things, they *are* living things. They need pruning hard back now and

then, like rose bushes. They can get leggy and untidy. If you want to ensure an optimal display of blooms dead wood needs to be removed to stimulate growth and new ideas must arise for it to work on – a matter of regular feeding. Every bush contains its own inherent beauty, but only with constant attention can its true potential be realized. Its growth cannot be forced, only assisted.”

“But the form of a particular kind of rose is always the same, isn’t it, year after year? A language like English surely changes all the time, gradually – and it doesn’t die back and start all over again the following year.”

“You are very young – it’s the time scale that confuses you. Of course roses change – over hundreds of years of adaptation to changing conditions, sometimes with sudden mutations, either natural or through the nudging of horticultural experiment. And of course English dies back and starts all over again – not every year but every time a new child learns to speak it. The process is essential for its healthy persistence. It gives me great pleasure to see how each new generation of offspring here brings it to life again, each time introducing only miniscule differences from the speech of the preceding generation.”

“But how can you speak of a whole language changing as a living ‘thing’ if the source of all change is in the individuals learning it?”

“Again it is a question of perspective – when you have put on a few more decades you will begin to appreciate large-scale teleology or ‘drift’. It requires a certain maturity to see the levels at which this applies and does not apply. Take for instance the gradual shift from the complex morphology of the older Indo-European languages like Gothic or Latin to the more rigid word order of English and French and the other morphologically worn-down European languages of today. Syntactic means have replaced morphological ones in a number of parallel but independent developments at considerable geographical distance from each other. How could that be so if the original Indo-European proto-language didn’t contain the seeds of just such a change in its very nature?”

“That may be so for changes in grammar, for all I know, but it’s hard to see it applying to simple changes of pronunciation. I mean, can the fact that English ‘father’ corresponds to Latin ‘*pater*’ (which I remember from school) mean that ‘p’ in the original Indo-European language somehow ‘intended’ to become an ‘f’ in English for some reason?”

“You are referring of course to Grimm’s Law, part of which states that all the Indo-European voiceless stops became corresponding fricatives in Germanic languages – with certain exceptions that later also turned out to be regular. This is the paradigm example of what historical linguistics is meant to be about: the establishing of regular sound correspondences between all comparable words in cognate languages. Individual sound changes may be conditioned or unconditioned by their specific phonological environments (in this case the change of /p/ to /f/ was conditioned in part by initial position), but they always form part of a whole *system* that is evolving. All aspects of the system are constantly in flux, only some parts are changing more rapidly than others. Linguistic change is on the whole systematic but unpredictable (though my – *a* hidden hand may give it a nudge now and then). It is simply too complex a phenomenon to foresee in detail, all sorts of pressures for change being in competition with each other – not to mention chance external factors like contact with prestigious neighbours or outright conquest. But the basic principles involved are clear enough. Single phonemes at one stage of the history of a language may, for instance, split into two contrasting phonemes when the environment conditioning their variation is lost – as happened with the ‘*umlaut*’ phenomenon of Germanic languages. In this case */u/ (the star means ‘reconstructed’, not ‘unacceptable’!) became rounded to /ü/ under the influence of a following /i/ – in particular that which marked the plural of nouns. When this in turn disappeared it left couplets like English ‘mice’ but ‘mouse’ (originally */mysi/ – from */musi/, the plural of /mus/). Two phonemes may also merge, as when English */y/ and */i/ merged as /i/ in the same example. Such processes are quite general across the sound system concerned – unless stopped or reversed by external factors before completion. Now you may want to call these sound changes purely arbitrary, since there was obviously no *need* for them to occur (as a matter of fact they never did in related German, where the conditioning environment is in part still intact). But the point is that they were *potentially* there at an earlier stage of the common language. Moreover, once they have taken effect they draw all sorts of further adjustments into the process – morphosyntactic ones especially – in order to regain a kind of equilibrium. Analogy with existing, productive morphological patterns plays an important role here in levelling irregularities – in the case of English plurals the introduction of a new, regular kind of plural

that completely replaced the old one except in relict forms like ‘mice’. And this tendency to strive all the time to regain equilibrium is precisely the hallmark of unstable teleological systems – like individual human beings. Or mice.”

“But I still don’t see what could have *motivated* these changes in the first place – why change at all if everything starts out in equilibrium?”

“Ah, but language – like life – never stays that way for long. Not just vocabulary, but phonological systems and grammar too are continually emerging. New patterns arise all the time from small variations in construction and pronunciation and may be ‘captured’ and conventionalized for social, communicative ends. This does not happen at random – it develops under the competing influence of the twin communicative needs of increasing clarity of expression (to assist the less than perfect hearer) and economy of effort (to accommodate the average lazy speaker). The first of these factors was no doubt involved in the increasing rigidity of English word order, which was previously freer and which came to mark off certain nominal expressions as subjects by their position in the sentence and no longer by morphological case. The second of them lies behind facilitating processes like assimilation and dissimilation, the dropping of unstressed vowels between consonants or the weakening of consonants between vowels, also the general attrition of word endings – as in modern as compared to Old English.”

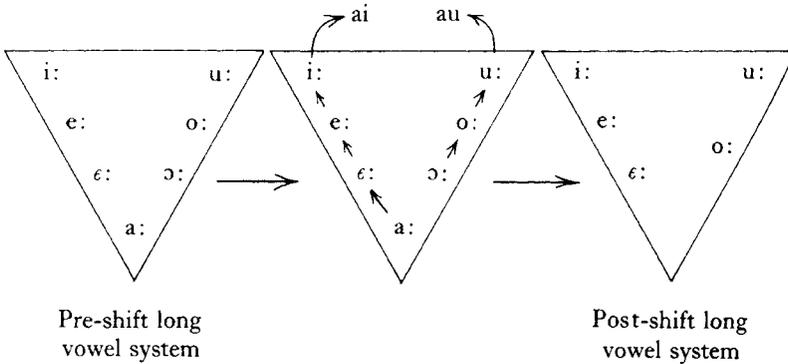
“If English is always changing for one reason or another, as you say it is (and I daresay you’ve seen a lot of the changes in person), I’d love to know why English spelling isn’t doing so too. If you ask me, it got stuck somewhere in the Middle Ages.”

“Quite right. But to understand the attitudes that have artificially kept it frozen for so long you also have to know something of the history of witchcraft, which characterized that era of witch-burning. Spelling was something the clergy had a vested interest in – it kept them busy with exhortations and excommunications and such like. Their attitude to it has since been taken over by generations of school teachers in this country. Bear in mind that a spell may sound arbitrary, but it is its determinate effect that counts – the hearer (or reader) knows full well what to expect when it is done correctly. Besides, English spelling is useful for reconstructing the recent history of the language and is therefore well worth mastering. It reflects rather directly the pronunciation of the language prior to the Great Vowel Shift, which took place –

albeit gradually – between Middle and Modern English. Its result was to shift all long vowels up one notch as regards tongue height – or cause them to diphthongize. Now there just happens to be a diagram of that complex shift opposite the *Stammbaum* in the back of the universal seed and root catalogue over here. It can be used to illustrate the forces behind sound changes in general.”

The old gardener put down his trowel and moved slowly across to a nearby table that consisted of a somewhat warped wooden surface on trestle legs. A large, much-thumbed volume lay open upon it. Jack followed and looked over his shoulder at the diagram he now flipped over the pages to.

Figure 15



“You see, there are two major types of explanation that have been brought to bear here – the ‘push-chain’ and the ‘drag-chain’ models.”

“Are those handle-like things above it what you flush it with?” Jack couldn’t resist interjecting flippantly.

“The arrows indicate the directions of change undergone by the individual long vowels of English,” the head gardener went on, unperturbed. “The question is, of the various individual shifts, which came first? A drag-chain explanation would say that certain sounds, say /i:/ and /u:/ (as still reflected in the modern spelling of words like ‘divine’ and ‘about’), shifted spontaneously to the diphthongs /ai/ and /au/, and that this left ‘holes’ which pulled the nearest vowels below towards them, so that original /e:/ and /o:/ in turn became modern /i:/ and /u:/, and that this pulled still other changes in its wake. Whereas a push-chain

explanation would have to say that the ‘overcrowding’ of articulatory space caused the mid-low vowels /ɛ:/ and /ɔ:/ to expand upwards towards /e:/ and /o:/, which would in turn have caused the latter to shift to /i:/ and /u:/ and so on, each shifting vowel pushing all the others ahead of it ‘out of its way’, and causing diphthongization in those vowels that ‘had no further to go’. In both cases the attested restructuring of the vowel system would have resulted as a response to insipient asymmetry. Those who emphasize that whole systems change to maintain maximal communicative clarity have generally preferred push-chain explanations, while those who emphasize the filling of individual holes that can arise through inertia and ease of articulation have generally preferred drag-chain explanations. The truth is that both may occur – it depends very much on the initial situation, and since any initial situation already contains a range of tolerated variation, there is obviously room for chance to enter the picture. In the case of the Great Vowel Shift, I suspect that the drag chain explanation is more likely, since the system itself was probably too complex to change as a synchronized whole and diphthongization of long high vowels is a natural area for spontaneous variation to occur. The situation is similar as regards the question of whether linguistic change is gradual or occurs in sudden ‘*saccades*’. Sometimes there are such leaps (at least in unconditioned changes with outside, sociolinguistic factors playing a role), but usually changes advance by gradual increment, and not necessarily in all words at the same speed – it depends on things like how frequent the word is.”

“But if sound changes can spread from word to word and stop short of being completely general, how can you be sure of the pronunciation of all the words in the reconstructed older form of the language? Didn’t you say yourself that languages of the same family are meant to be related by regular and general sound correspondences?”

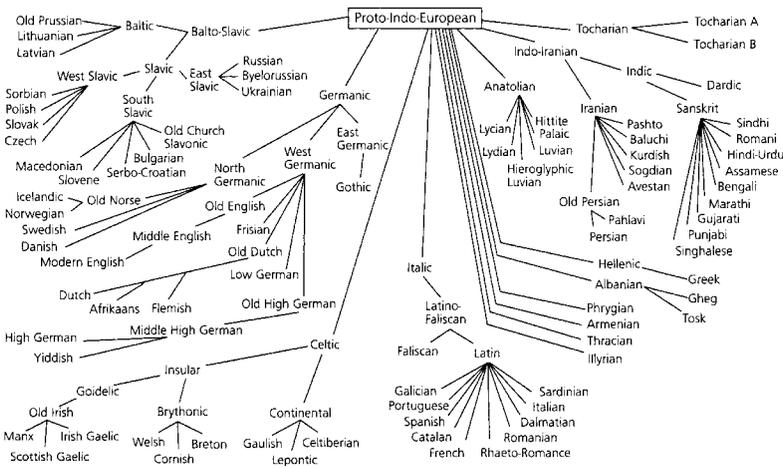
“Yes, yes,” he clucked and shook his head as if trying to be patient with a very foolish child. “But the two things are by no means incompatible – they are complementary. In reality there is just one thing. All human languages are linked together as on a huge tree, but that tree can be studied in terms either of the successive growth of its branchings (which the historical linguist is concerned with) *or* of the rings left by this process (the abstracted cross-sections that interest the structuralist). Lexical diffusion, as it is called – or, more generally, the ‘Wave Theory’ of the spreading of linguistic innovations – is simply at a different level

of focus from a traditional *Stammbaum* like this one here for Indo-European. There will always be exceptions and irregularities, but these, one hopes, will reflect processes of a known type, like assimilation, and thus be subject to more than *ad hoc* explanation.”

Here he pointed at the adjacent diagram in the catalogue, which reminded Jack of the family tree he had seen on the wall of the archive room earlier that day.

“We could represent the results of the diffusion of innovations as a series of expanding rings or isoglosses, but this would tell us nothing about the relative timing of each successive innovation and in particular about when they resulted in a new branch of the family. For that you need something like a tree diagram, which on the other hand cannot indicate the actual linguistic items that define its nodes – the changes may well be only partially completed. Then there is the further problem that parallel innovations can take place independently in two different branches of a tree, since something of the momentum or potential ‘drift’ of the earlier common stage remains in both. The confusion or indeterminacy is usually in the middle ground between the level of the family (where enough time has passed for at least the major sound correspondences to have been generalized) and the shallow end nodes, where innovations are still cross-cutting dialect – or even language – boundaries today. The problem is deciding which isoglosses *are* the most significant in setting up sub-groupings. It is by no means certain, for example, that the principal ‘cut’ should be between the so-called ‘*centum*’ and ‘*satem*’ languages (like Greek and Sanskrit respectively), although there is no doubt at all about all Indo-European languages having their roots in a common proto-language, the highest node of the tree, however fuzzy and spread in time and space it may have been. In fact this ‘family’ is more like a stock embracing several families – including the Germanic and Romance ones – or even a still higher phylum.”

Figure 16



“There is little controversy about these family groupings as such, it’s when you try to group them together into larger Indo-European sub-groupings that there is uncertainty, especially with regards to the relationship of the ‘Anatolian’ group to the rest – some consider it on a par with the remaining Indo-European families as a whole, forming one of two branches of an older ‘Indo-Hittite’ phylum. In reality the tree is more like a bush. But this is not really any different from the situation in biology, where – you may recall – there is cross-breeding at the lowest nodes of taxonomic trees between related varieties of species, but none is possible across higher level branchings. Both in biological and linguistic evolution, mutations may arise in individual members of a species which are then inherited by partially overlapping sets of descendants. Of course if you go far enough back in time – beyond say eight or nine thousand years – indeterminacy of another sort sets in, since it cannot be guaranteed that radical language mixing did not occur at some ancient pre-historical stage, when there must have been much more mobility amongst small pre-agricultural tribes. Which weighs heaviest when it comes to determining family relations – common vocabulary or common grammar? There are languages today which combine the vocabulary of one family with the grammar of another – some even claim that English is such a case, but that is outright slander from abroad. Having been an Empire for centuries we have simply had more liberal immigration laws.

Yet if one thinks of the hippogriffs and unicorns of ancient mythology – perhaps their linguistic counterparts really existed in the distant mists of time, even in our family... “

“But you have the necessary tools for investigating these things, right?”

“Naturally. You will find them in the tool-shed behind the greenhouse.”

“I mean tools for conducting historical linguistics.”

“What else? We have already touched upon the basic comparative methods – the setting up of regular sound correspondences between words in languages that one suspects are related. One has of course to constrain one’s comparisons to words whose meanings are not too wildly divergent from each other in the respective languages – easier said than done in practice – and to sound changes that are natural or at least frequent in existing languages. It is assumed that languages spoken several thousand years ago were much like the languages spoken today in these respects. Then there are methods of internal reconstruction, which can – if one is lucky – reach still further back in time within a single language, via residual irregularities in its morphology. Thus the irregular plurals of English I mentioned before can tell us something of a much earlier stage of Germanic where *umlaut* was a living process, even though all traces of its conditioning environment have otherwise disappeared. There are other subsidiary means which can be brought to bear – typological ones in particular – but these must be applied with care, and not by impulsive beginners.”

“Well, I admit I am a beginner. I’m continually being reminded of that. But wandering about the estate has set me thinking about language in ways I hadn’t considered before. Frankly, a lot of it still confuses me, but I feel as if I’m somehow learning something – by osmosis almost.”

“Glad to hear it. That you are context-sensitive, I mean. If you really want to find your way to the duke you will need it. By the way, since we happen to have the catalogue open, you may be interested in seeing some of the roots we stock here.”

The old gardener thumbed through the pages of the catalogue until he found a suitable entry, then pushed it a few inches in his direction. Indented under the main entry *‘pleu-’* were a number of recognizable English words, including: flue, fly, flow, plutocracy, pulmonary, flood, fledge, flight, fleet, flotsam, float, plover and pneumonia.

“How am I meant to interpret this? I don’t see what all these words have in common.”

“It’s a perfectly good Indo-European root, one that just happens to have come into English via a number of parallel routes. You can always read the small print for the details once you are familiar with the abbreviations. I won’t insult your intelligence by telling you what the root itself means – or meant. Try this one on the previous page, it’s a bit more subtle.”

The next item his finger pointed at was the main entry *‘peuk-’*, and the English words grouped beneath it included: punctuation, impugn, poniard, bung, punch, pounce, pygmy, repugnant, expunge, poignant, compunction and puncture. Jack scratched his head.

“I don’t suppose it’s anything to do with ‘puking’ – though most of these items could make me feel like it... Actually I don’t see what punctuation could have to do with punching pygmies or feeling compunction for punctures – though I expect you can tell me.”

“If you like – though I had hoped you wouldn’t give up so easily. The common notion is of course something like ‘pricking’. Think of the way you ‘prick off’ a sentence between dots – much like the way you ‘prick out’ seedlings into larger containers or into prepared rows in a bed.”

“Hmm. Let me try one more on my own.”

He flipped over a couple of pages himself until his eyes alighted on the entry *‘se-’*, below which stood the words: seed, sow, semen, seminary, Saturday and disseminate.

“Ah! This has to mean ‘sow’ originally – though I don’t see what Saturday is doing there...”

But before the gardener could comment upon his guess, something else alighted on the entry, pecked up the word ‘seed’ and flew off with it in a flash of brown feathers.

“Damned sparrow!” the gardener cried out. “That’s the last time you steal from my stocks! Henceforth you shall be an R-A-B-B-I-T!”

This last sequence of letters he pronounced in a loud authoritative tone as he aimed his index finger at the bird zig-zagging back and forth as it tried to find the open door it had flown in through. A flash of green fire shot from the finger and ignited the handle of a spade leaning up against the door-frame, but the bird had already darted out unscathed. The gardener shuffled quickly across and dowsed the flames with the help of a nearby watering can. The charred handle now had the rough

shape of a rabbit with its ears flattened back. All this happened so quickly that Jack just stood there with his mouth open staring alternately at the gardener’s actions and at the hole in the catalogue entry before him.

“It’s age creeping up on me, I’m afraid,” the old fellow muttered despondently as he hobbled back, rubbing his arthritic joints. “I’m just not as quick on the draw with my spelling finger as I once was. Confounded little thieves. Nature made a big mistake inventing birds, if you ask me... Now, we were talking about the regularity of sound changes. I expect you were about to ask me whether semantic change – the development of new meanings – is just as regular.”

“Well, I hadn’t actually...”

“The answer is of course no. Meanings have far too many dimensions and associations and hence possible routes of change, but nevertheless there are recurring patterns and tendencies – I mean besides simple broadening or narrowing of meaning or of metaphorical leaps to new ones. Some are even unidirectional and therefore ‘predictable’, in the same way that sound changes may be more or less natural and therefore statistically ‘predictable’. This is particularly true of words drawn into processes of ‘grammaticalization’. These are typically very basic words – for example verbs of motion or perception and nouns referring to body parts. There is a diagram towards the back of the catalogue illustrating some of the one-way trajectories that are well documented across languages. Let me find it for you...Yes, the general process is illustrated here, with the movement from verbs of movement and desire towards the grammaticalized meanings of future tense and epistemic modality (or probability) and beyond. Extensions of the meaning of the English verb ‘go’, via processes of reanalysis and analogy, illustrate this pathway well, in the combination ‘going to’.”

Jack looked passively at the diagram as the gardener commented upon it.

Figure 17

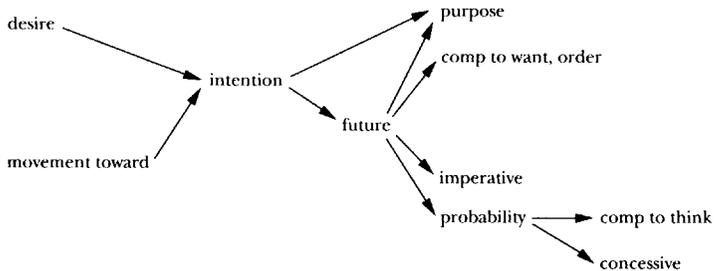
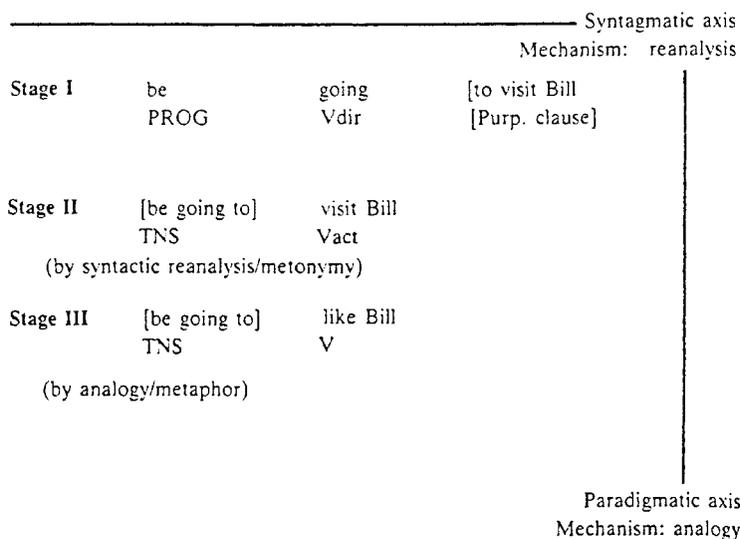


Figure 17 (continued)



“The gradual change towards greater abstractness and generality you see here is typical of the process. It leads from independent lexical items towards integration into a small set of grammatical choices – here the tense system of English. In languages with purely inflectional markers of tense this would be equivalent to integrating the word – as an affix – into verbal tense paradigms. You can see that there is a parallel between the ‘bleaching’ of the original concrete meaning and the attrition of the *form* of the word – not surprising, since linguistic signs always combine a form with a content, so both can be expected to evolve together. But this kind of change – paralleled in hundreds of other languages – does not only have a paradigmatic aspect, also syntagmatic context is crucial: the constructions in which it occurs are also relevant. In the case of ‘go to’ it is not just the verb, but also the preposition ‘to’ that is involved in the change. What is ‘grammaticalized’ is, in fact, often a conventionalization of an ‘implicature’ borne by one or another of the component words – for example here the expectation that ‘going’ towards a place will eventually bring you to it. That is an integral part of the future meaning of ‘going to’ today. You could say that both metaphor and metonymy are involved – respectively in the paradigmatic ‘leap’ from the domain of physical movement to a more abstract mental one, and in the

syntagmatic combining of the verb with the preposition to indicate motion towards a goal. Both serve to increase expressivity – the ability to express something one could not express (or could only imply) before. Naturally what is utilized in such cases is material that is already in the language, material with enough inherent generality and variability of meaning to be readily understood in the new sense, given a suitable – and frequent – context. For that reason older meanings may persist for a long time side by side with newer ones – reflecting the multi-layered, polysemous nature of word-meaning in general.”

Jack, staring at the page, was unable to give his full attention to this potted lecture. He was beginning to feel quite dizzy with it all.

“I think I’m going to –,” he murmured, putting a hand to his forehead.

“Yes, of course, forgive me. I’m getting a trifle forgetful these days. You said before you were heading somewhere else... Looking for the duke, wasn’t it? I notice that one of my under-gardeners is heading towards us – he will be able to point you in the right direction. I have my hands full here, you will appreciate. Bob, come over here, now and put that basket down. What have you got in there anyway?”

The gangling young man thus addressed grinned broadly as he trotted up – he had begun chattering away enthusiastically even before reaching them. On his head he was wearing something like an admiral’s hat folded out of newspaper and in his arms he carried a basket full of vegetables. He had entered the greenhouse from the rear while they leant over the catalogue.

“Aye aye, *mon capitaine* – that’s me – beans I have, runner beans – where should I run to with them? – the kitchens – the moon? – ever been to the moon? – great place for cheese – if you choose to chase geese – that’s sauce for the gander – you saucy devil, you! – take a look at yourself! – you’re a fright, a pumpkin stuck in your mouth, corn growing out of your ears – a basket case – easy, now, easy, just in case he understands – but no, he’s standing over it – both of them – peas in a pod – a puddle of piss – such a muddle, such a jolly old muddle – where’s it all going – going, gone – for a tanner! – well, you can tan my hide but I shan’t let on where he’s hiding – in the bushes, the bull rushes? – charges in the china shop for breakages – have I put a foot in it again? – the shoe should know where it pinches – oh dear, you were saying?”

“Ah, the beans, of course – I’ll take those from you, Bob. This might just be the quickest way of getting to the duke up in his eerie. Plant one outside and I’ll water it for you. Just cling to the top as it sprouts.”

“Thanks, but I think I’ll rely on more traditional methods. I don’t have a head for heights – at least not sudden ones.”

“Please yourself. Now listen, Bob, you show our visitor here the way into the maze, then go back to digging up those potatoes.”

Then he turned to Jack and explained:

“I think you should go to the main public entrance – the quickest way by foot is through the maze. Just keep to the left in there, it’s simple. You’ll come out in a courtyard by the new extension of the west wing. I’m afraid I can’t be more specific about where His Lordship is right now. You’ll find an official to talk to. Frankly, I forget what the new duke looks like, I don’t think he comes out much – though his two daughters often come round and pay old Dadda a visit. Their own grandfather was such a stern gentlemen – never had any time for his grandchildren, even when he lay dying. Always referred to them as frog’s spawn, I suppose because there is some hint of a distant French connection on Her Ladyship’s side which he didn’t approve of. The dear little creatures. Such energy, such pranks! And Mr Alfred comes round now and then – he’s shown great interest in Bob since his little accident to the head. Anyway, he’ll point out the way for you – he’s a good lad, though he can’t prune for toffee. Good bye and good luck.”

Jack picked up the tool box and Bob, still prattling away, led him by the arm to the door on the far side. The last Jack saw of the head gardener when he looked back over his shoulder was of him bending over the emptied contents of Bob’s basket. There was a scuttling sound like the rustling of leaves accompanied by impatient little squeaks that disappeared in the direction of the main glass door through which he had entered. Though he couldn’t quite see what was going on, he suspected that the old man had sent the beans running off under their own steam to present themselves to the cooks in the kitchen.

Meanwhile Bob had tugged him out to the back of the greenhouse where a door marked ‘Private’ was set in the rear wall of the gardens. Above it could be seen a smoking cottage chimney. To his left Jack saw that there was indeed an exit from the maze – it must have been the one that he and William had never found from the other side. It came out through a two-way turnstile into the passage around the back of the

greenhouse. Was this really the only way into and out of the gardens for the public? Bob seemed to want to push him through that way but he hesitated, remembering how difficult it had been getting out of the place the last time. And when he looked between the bars he saw something that clinched the matter: stretched out on the ground between the last of the hedges before the turnstile was a prostrate figure. His badly torn clothes hung about him like rags. He was moaning for water and clawing at the metal grid with a skeletal hand. There was no way Jack was going to follow that pathway (however grammaticalized) – even if it meant taking a long detour round the back of the estate instead.

“No, no – I’m going *this* way,” Jack insisted and pushed open the door in the wall that led directly into the gardener’s cottage. “I’ve got to get back to William, he’s waiting with the carpet. There must be a way round.”

Bob didn’t put up much resistance but just followed behind, chuckling and providing some kind of running commentary to himself as they passed through a parlour and then a small kitchen, and finally out through a back door. From here a path led away between rows of vegetables and into the woods beyond. Jack stopped and turned to ask Bob which way would get him most directly to the back of the stables once he got in among the trees. He was feeling a bit disorientated by now – in a moment he would feel even more so.

“The stable way back of beyond? Riverrun, past Eve and Adam’s? – turns by a *commodius vicus* of recirculation – back to the castle and environs – bear right then wrong and left again – by swerve of bay and bend of shore – across the scraggy isthmus – just avoid doublin yer mumper – then over the hills and far away – alone a last a loved a long the – short cut the silly man off – who shot Cock Robin? – I with my bow and arrow – a narrow escape – twice round the bowling green on crutches – clutching at straws – take the first branch and head for the sauna – if you don’t meet a Finn again, let a Scot set you free – if you pine for a tree – you can’t miss it.”

After this not particularly enlightening set of directions, which involved much waving of arms in various directions, Bob grinned amiably and returned to the spade he had left stuck in the ground a little way off among the potato plants. There was nothing for it but to head for the woods.

15. Language in the wild: a forest walk

Once inside the woods, however, the way forked, then forked again, and the yellow arrows planted at ankle height along the way here and there did not help matters in the slightest. In fact, Jack had the distinct feeling that the arrows were leading him round in a wide bow in the general direction of the west wing rather than in the opposite direction as he had hoped they would. Soon he had to admit to himself that it was most unlikely that just following them blindly would bring him any closer to the stables. Well, at worst he would just wind up at the main entrance, which was where the head gardener had suggested he should aim for in the first place. It would be quicker now to proceed than to retrace his steps in search of an alternative way in that perhaps did not even exist. But before winding up anywhere, he had a lot of winding around to do. The criss-crossing paths appeared to meander through some kind of arboretum and he found himself sometimes following the yellow arrows, sometimes walking against the direction that they proposed. Did it really make any difference? He was beginning to feel distinctly hungry as well as frustrated. His stomach was grumbling its own sullen language, unused to having to forego its lunch for so long. The labels on the trees were no help either – they were not even in Latin, but seemed to contain words in a variety of different languages and scripts. Right now the surrounding flora was of a distinctly African cast, with baobabs and banana trees predominating. This was confirmed by a notice at the next bend that consisted of what looked like a Zulu shield stuck on a pole. Jack stopped and read the words on it: ‘Niger-Congo’, nothing more. It certainly felt like Africa. Brushing aside a swarm of persistent insects with one hand, he took his handkerchief from his pocket with the other and wiped his forehead. Something about the nearest tree behind the notice took his attention: he leant forward in initial disbelief. But yes, each leaf bore a word enscribed on it – *kiazi*, *furaba*, *udugu*, *uwingu*, *zabibu*, *mjumbe* – he searched among them at random but didn’t understand a single leaf of it. For all he knew each cluster of foliage on the same twig read as a whole sentence.

He moved on, driven by the heat and by hunger; although the former soon abated and the trees were soon replaced by tall spruce and fir, the latter did not. When, unable to suppress his curiosity entirely, he looked more closely at the foliage here, he found that each needle on the conifers could be unwrapped, like tightly rolled cigarette papers. On them were written words like: *puuska*, *rajuilma*, *vieraisilla*, *haalea*, and *kahina*. Just as opaque as before. But he was not surprised to read on the next notice (the parched skull of a reindeer stuck on a pole): ‘Uralic’. Rubbing his exposed arms he moved on – but the temperature fell even further around the next turning and snow began to fall. No doubt there was a word etched on every snowflake. He hastened past the stunted tundra shrubs, not even bothering to read the frost-encrusted notice bobbing on the end of a harpoon that was thrust into a hole in the surface of a small, frozen pond. It got warmer again in the following section, where the abundant eucalyptus and the cockatoos screeching noisily about made it quite clear which continent was represented here – even without the reddish thing that bounced (on its head) over the path in front of him and vanished in a flash. The same evidentiality was displayed by the section beyond, where rustling bamboo alternated with elegant weeping willows and ancient ginkgo trees. Sure enough, each leaf of the temple tree he examined contained a single Chinese character, like those he had seen in the courtyard (which he was beginning to feel he would never see again). The sign swinging from its little red lacquered arch read: ‘Sinitic’.

Thus he plodded on through successive regions of vegetation and climate, driven not so much by the conflicting arrows that urged him to follow now one route, now another, as by the image of an invisible sign reading in clear English: ‘cafeteria’ (he could swear he remembered seeing something of the sort near the courtyard). He passed dry bushes that clicked to themselves in the breeze, impenetrable tangles of mangrove, and banks of huge rhododendrons, without paying much attention to the shifting nature of his surroundings. But by the time he plunged into a dank, dark region of giant cedars and hemlocks from which water dripped disagreeably down his neck all the time, he began to look about him for alternative sources of sustenance nearer at hand. He had begun to detect the tantalizing smell of grilling meat or fish in the air – was someone barbecuing nearby? He must surely have almost reached the public way into the estate – he recalled that the map in the

courtyard had indicated some kind of picnic area near the car park by the bridge. He hurried forward, but what he came across around the next turn of the path was hardly what his senses had led him to expect: he almost fell headlong into a huge pit right in the middle of the way. At the bottom he could see a row of viciously sharpened sticks. Sections of rough matting lay strewn around the hole, some of them still overhanging its edges raggedly. That and the trail of blood on the far side indicated that something – something large – had recently been removed from the trap here. He just hoped it was not a tourist. There were limits to the notion of ‘theme park’ – and this was definitely going too far in the direction of authenticity.

He skirted the cavity cautiously and started following the trail on the far side. As he did so the smell of grilling grew stronger – wild men or not, the natives would surely not refuse him a bite... With this thought prevailing in his mind, he entered a wide ring of soaring redwoods and stood staring about him for a moment. In the centre was a large fire over which salmon were being grilled. Several men wearing woven, conical hats sat around on logs while their tattooed women tended the fire. The partially butchered carcass of a bear – perhaps the very beast that had been caught in the pit – hung in sections on a nearby wooden frame together with the entire skin and head. Set further back, nestling among the giant tree trunks, were a number of primitive plank huts, each with its elaborately carved totem pole in front of it. Off to the right there was a glimpse of water – an inlet from the moat perhaps? – and the noses of several beached canoes could be seen between the trees. At first Jack hesitated to move forward, until his stomach began to shout louder than the voice of caution and he started walking slowly forward, like a salivating zombie. The natives watched in sullen silence as he approached them. One of them who wore a colourfully decorated cedar-bark cape rose to his feet, picked up a spear and positioned himself defensively with legs apart. He did not smile, but nor did he look particularly threatening. He muttered something in a curious language bristling with strange spat-out consonants that meant absolutely nothing to Jack. His own “Hallo, pleased to meet you” produced no more of a reaction in the dignified figure than his had in him. He put the tool box down, took a deep breath and tried gestures, the universal means of communication, instead. First he pointed at the grilling salmon, then alternately at the chief and at his own mouth, repeating the sequence several times. Finally

the chief – if that is who he was – seemed to understand, nodded, and spoke again:

“Way ʔayuutstimutts ska ʔaalats’iits ʔalbtis’alb’ayakilb ʔalasmibk’ats skstutilb spanyatilb.”

Then he was silent, but continued staring warily at Jack, who just stood there, waiting for more. Perhaps he had not understood the ‘fish’ bit. Perhaps he thought he wanted some of the bear meat and had told him he would have to wait. Jack mimicked throwing a net out over the river and drawing it back in to remove the catch, then pointed again at the grilling fillets of salmon. The chief grunted and nodded again.

“Nacliwatulbluu tikw’putst’ayc kasi ʔayakaw tc ska ʔuqw’aw ʔalatmcw’ats.”

Then he just stared unflinchingly into Jack’s eyes again, as if awaiting his reaction.

“A calculating sod,” Jack thought. “Probably wants to know exactly how much I intend eating and how much I’m going to pay for it.”

Impatiently he began to make motions of rowing, trying to act out the catching and then the preparation of the fish.

“Kawtim ʔulxlb ʔula ʔaaxlb’ats,” the chief replied, becoming quite voluble. *“Uqw’awts ʔalatmcw’ats. Qtsamtsamkanawts’ anulbnuus ʔats ʔalbtimawalb tilbalast’ayc.”*

“Look, can’t we just drop this nonsense and speak English?” Jack burst out in frustration after these words were again followed by statuesque silence.

The chief’s eyes narrowed and several of the other men rose to their feet. It looked for an ugly moment as if he was going to raise his spear against the intruder, but just then another white man appeared from the entrance of the nearest plank hut. He was wearing, somewhat incongruently, a solar topi far too big for his short stature, white safari shorts and jacket – and a monocle.

“Hold on there, chaps,” the figure raised a hand in a placatory gesture (in the other he held a notebook). “Seems there might be a spot of misunderstanding here. Couldn’t help overhearing from in there – took a little look-see through the planks. I was just trying to elicit some pharyngealized fricatives from the jolly old chief’s squaw.”

“Ah good, you know the language then – could you just explain that I’m famished and would be much obliged for a taste of that salmon.”

“Ah, so that’s what you were doing waving your arms about like that. He’s used to my field methods, you see, thought you wanted him to

express your meaning in his dialect – Bella Coola, it’s called, by the way, famous for its long consonant sequences and its many short ‘bound’ morphemes.”

“So what was he saying?”

“Roughly this: ‘I will try to describe how we work on the fish, how we prepare them, and how we smoke them.’ Then his second sentence was: ‘First, we get the net ready so that they can use it when they drift down the river.’ His last short sentences can be translated together as approximately: ‘The men are given a ride to the upriver area, then they go drifting down the river. They keep casting out the net, two men in one boat.’ The words lose quite a bit in translation, of course – especially the complexities of obligatory deixis for specifying all the time who it is one is referring to. If you would like me to analyse each of them into morphemes, I would gladly –”

“That won’t be necessary, thank you. I’d probably starve to death by the time you got through.”

“Ah yes, you have a point. But just help yourself to the salmon, they won’t mind a bit – they’re a pretty hospitable lot, as savages go. They positively love to give things away to impress their neighbours. You can use his spear – here, catch.”

The chief just shrugged nonchalantly and sat down again when the linguist grabbed his spear and tossed it to Jack. He used it to spear a thick slab of salmon from the sticks angled over the flames and cast himself over it, burning his lips in the process. While he devoured the fish, the linguist elaborated upon what was obviously his favourite topic – field methods. The natives meanwhile turned their backs on them; every now and then they exchanged a few low spitting sounds among themselves.

“Take my word for it – nothing works better than the tried old method of walking up to the one who looks like he’s in charge, slapping him on the back like an old pal and asking him quite directly: ‘Look here, old man, how would you say such-and-such and such-and-such?’ You can always get them to conjugate a few verbs if they run out of steam – ‘I give, you give, he gives’ and so forth. Like I say, they love that sort of thing. They’ll conjugate away until the cows come home if you let ‘em. Just as long as you can keep up, scribbling it all down in IPA before you – or they – lose the drift. Keep a pocket full of sharpened pencils – HB preferably. Can’t abide those new-fangled tape-recorder

things. Cramps one's style, what? Not much help with this sort of language anyway. The background's too creaky – planks expanding and contracting, bare feet on twigs, fresh wood cracking in the fire, rain on the roof, that sort of thing. Plays havoc with ejectives. Better just to keep the old lug-holes well reamed out, eh?"

"Shouldn't I give them *something* in return? " Jack managed to interject after a while as he licked his fingers clean.

"Good God no, man, that's exactly how you end up with a spear up the old back passage in these parts. It's considered the worst kind of insult. A few glass beads left for the maid is quite sufficient. Better take something more substantial else the chief'll be mortified. If you're not after words, what about that daughter of his over there who's been giving you the glad eye...?"

"Those totem pole things over there," Jack quickly changed the subject. "What are they meant to –"

"No, you'd better think of something else – they're a bit on the heavy side, don't you know?"

"I wasn't thinking of – oh, never mind. I just wanted to know their significance. Aren't they sort of like family trees?"

"You could say that. They reflect a hierarchical way of looking at things all right. That one over there in front of chiefy's house, for example, it represents the well-known animacy hierarchy, which plays an important role in all the languages of this area. On top you've got a human being – represented by some ancestral spirit, of course. Immediately below comes a representative of the higher animals – in this case a bear. Then below that comes a frog – ah yes, I could tell you a story or two about that frog. I happen to have transcribed one of them with the help of the chief himself. I showed him the standard picture book story of the little boy and the frog in the jar, and let him tell it his own way. Throws interesting light on the question of linguistic relativity: it turns out that there are far fewer phrases expressing path of movement than in English versions of the story. This probably relates to the fact that it's a 'verb-framed' language, with simple verbs of motion indicating direction but not manner (like Spanish *entrar* 'go in'), as opposed to 'satellite-framed' ones like English, which can combine path and manner in its verbs of motion and generally express direction as an adverbial, like 'bounce out', 'roll in', etc. (Strictly speaking this is a matter only of *basic* motion stems in Bella Coola, since it expresses more specific direction

by ‘lexical affixes’ on the verb.) So the grammar of one’s native tongue does appear to have some limited affect on the way you see the world and describe scenes, for example. Here, listen to this –”

He began thumbing through his notebook, but Jack cut him off with what he intended as a concluding question about the totem pole – now that his hunger was allayed he was beginning to wonder whether he would actually be able to get back to William before sunset.

“And the amorphous shape below the frog – that’s presumably meant to be a rock, isn’t it?”

“Unless it’s a very dumpy woman – I’m not quite sure. Haven’t actually asked. Anyway, it’s not the only kind of pole there is. Take that one over there – it reflects the syntactic function hierarchy, which is involved in relative clause accessibility, for example. That proud-looking mask on the top represents the role of ‘subject’, the prototypical ‘doer’, which is the role easiest to access for relativization, as in ‘the man who axed his grandmother’, where the head of the relative clause – the relative pronoun – functions as subject. Next most accessible is the ‘direct object’ role – see the passive-looking mask below – as in ‘the woman whom her grandson axed’. And third comes ‘non-direct object’ – see the face below, turned the other way – as in ‘the man to whom I gave the axe’ or ‘the axe with which I killed her’. Then finally comes ‘possessor’ – the greedy looking mask below – as in ‘the man whose axe was used’. The order goes for Bella Coola as for any other known language, although individual languages can choose different cut-off points below which relativization is just not possible. Of course the means of forming relative clauses may also vary – pronoun-retention, relative pronoun, gap type constructions and so forth – and they may stand before their head noun, after it, or even contain the head within them, but none of that undermines the reality of the hierarchy.”

“But what are these – hierarchies – actually used for?”

“For keeping typologists like myself in work, old boy. You have no idea how many of us there are – and how competitive a market it is. Anyway, such things are ‘cryptotypes’. They lurk just beneath the surface of language and can pop up in all sorts of unconnected places in the grammar and the lexicon, having a certain universal basis in human experience. In English, for example, animacy is a category that is only directly relevant to the choice of pronouns (‘it’ against ‘he’ or ‘she’), although it also adheres to the prototypical subject of transitive

sentences. Unlike in some languages, however, English is not very strict here – subjects of passive sentences can be as inanimate as you like, whereas in many Native American languages the subject *has to* be higher in animacy than the object, or a special form (the ‘inverse’) is used.”

“If these hierarchies are the same for all languages why are these tribes so possessive about them? Or are the motifs inspired by some kind of crypto-democracy?”

“Their language *is* very different in some ways from English. Yet the dimensions on which it – or any other ‘exotic’ language – diverges from more familiar European ones are rather limited. First, as regards the degree of synthesis in its morphology. It is a polysynthetic language, which means that all sorts of morphemes can get sandwiched into single complex words, typically verbs, which are at the same time minimal sentences – it has typical ‘head-marking’ morphology, all sorts of relational elements being drawn into the heads of constructions. (This is opposed to ‘dependent-marking’ ones which mark such relations on nominal constituents, typically by case endings.) Take the word *mntsklqsakmts* ‘I am counting my fingers’, where the stem *mntsk-* ‘count’ is followed by a ‘lexical affix’ *-lqsak-* ‘finger’, a reflexive element *-m-*, and a subject suffix *-ts*. Can you guess the meaning?”

“I am counting my own fingers?”

“Not quite – the lexical affix merely modifies the nature of the action of the stem, it doesn’t introduce any specific object. In English we would say ‘I am counting *on* my fingers’. Let me write it down for you – along with another example I recorded earlier where the relationship of the lexical affix *-alb-* to the verb stem is even vaguer and more lexicalized. The object being discussed was salmon fillets put to dry in the smokehouse – most of their conversation is about fish, don’t you know.”

Here he scribbled the word in his notebook for Jack’s benefit.

Table 9

mntsk-lqsak-m-ts

count-finger-REFL-1SG

‘I am counting on my fingers’

ʔa-scw-alb-tu-tilh

PROG-burn-pertaining.to.food-cause-1PL/3PL

‘We build a fire to smoke them (in the smokehouse)’

“English is of course pretty much at the other end of the scale as regards the synthetic/analytic dimension – it doesn’t diverge very far from the principle of one-to-one correspondence between meanings and words. It also has very little productive morphology, apart from nominal compounding. But this is a matter of grammatical technique, cutting across degree of synthesis – languages differ in the means they use to express the same grammatical relations, for example by affixation or by word order alone. Bella Coola, for example, is more or less agglutinative in technique, one morpheme just bunged on after the other without them being collapsed into portmanteau morphs like in a typical inflectional language like Latin, where one ending can include person, gender and case, all at once. Chinese is a typical example of an ‘isolating’ language on this dimension, with no grammatical modulation of its basic words at all. But that’s not the only way languages can differ, there’s also basic word order patterns, for example – in English usually subject then verb then object, compared to verb plus subject plus object in Bella Coola. There are no really ‘pure’ examples of any overall type. Types are only rough frameworks, they can easily be mixed and individual languages like English can combine aspects of different types – it’s a matter of historical accident competing with universal tendencies. Some of these traits do hang together, however, so that you can expect – and do indeed get – possessors after head nouns in VSO languages like Bella Coola (as it happens they stand before them in English, which is *not* so typical of SVO languages). This trait is ‘in harmony’ with the basic word order pattern, reflecting some fundamental principle or other of cognitive organization. There are still other dimensions, like the ‘ergative’ as opposed to nominative/accusative orientation of transitive clause structure, typical of most aboriginal languages of Australia, but that is one dimension on which Bella Coola does not differ greatly from English. What chaps like myself like to think we are doing in general is unearthing universals behind the seemingly infinite diversity of human languages.”

“Their language still doesn’t *sound* like anything I’ve come across before – what can there be that is universal there?”

“Plenty. There are both implicational universals – like those I have mentioned – and substantive ones that limit the possible sound systems of languages. An example of the first kind of universal would be: if a language has voiced stops it will also have voiceless ones. Bella Coola

also has ejective ones – that is probably what gives it an ‘exotic’ flavour to your ear – but these are relatively rare amongst the world’s languages. If a language has them at all, it must also have ordinary voiceless stops. As an example of a substantive universal – well, it is correct to state that all languages have vowels as well as consonants. This includes Bella Coola, which may be pushing it with (according to some analyses) only one full vowel – although according to some it may in fact have three.”

“How can linguists differ in their analyses? I thought linguistics was meant to be an exact science.”

“A matter of leaky levels – here between the system of phonemic contrasts and that of phonetic reality. Sometimes the phonemic principle breaks down and simply cannot be shored up by simple commutation. By that I mean the rule of thumb that says that any replacement of a sound that simultaneously changes the meaning of a morpheme must involve a different sequence of phonemes, otherwise it is just a matter of phonetic variation. You can certainly analyse Bella Coola as having just one full vowel, /a/, but if you then analyse all phonetic [u]s and [i]s as allophones of the corresponding semi-vowels /w/ and /y/ there is a price to pay. For a start you have to allow for very complex sequences of consonants (say seven consonants on each side of a single full vowel) and that makes it difficult to motivate any definition of the syllable in this language. My own practical solution, as you can see here, is to choose a level of phonemic representation with three full vowel, although one could in theory do away with /i/ and /u/ if you recognize that the semi-vowels are realized as glides or the corresponding full vowels, according to specific context. That is justified since they stand in complementary distribution (there is no overlap in any given context) and the conditions determining the vocalic and glide realizations are the same as those affecting the sonorants (nasals and liquids), which also may be syllabic or not (I do not need to indicate the murmured ‘schwa’ vowel that precedes them automatically). The matter may actually be indeterminate – it depends in part on whether you see the syllable as a universal unit or are willing to abandon it in cases like this. It is the system as a whole that is real, and who knows whether, for example, the syllable really is a relevant psychological unit for speakers of *all* languages. In general we’ve had to abandon the idea of automatic discovery principles – spiffing though it was at the time. There will always be some element of art in the practice of our trade.”

“Well, I can certainly believe that something is leaking around here. I am getting quite damp just sitting here. It’s time I moved on – I have a carpet to deliver. I don’t suppose you could point me in the right direction for getting out of the forest?”

“Nothing easier, my dear fellow. In fact I was thinking of calling it a day, myself – my last HB is down to a stub and its replacement is in the boot of the car. I’ll come with you as far as the car park. Nice to get a bit of civilized jaw-jaw for a change.”

Jack accepted the offer with gratitude, picked up the tool box, and together they set off through the trees behind the settlement with little more than a desultory nod towards the Indians, who in turn paid little attention to their departure.

After a while the giant trees seemed to dwindle around them, and soon they were walking through a warm grove of sweet-smelling oleanders and gnarled old olive trees. The sound of raised voices wafted on the breeze and gradually increased until the path brought them level with the entrance to a clearing. It was from here that the voices – now clearly speaking English – were emanating. In the middle stood two bearded, robe-clad sages engaged in lively debate. It could have been Plato and Aristotle in person having it out on the matter of the relation between names and things. But what were ancient Greeks doing talking English?

“They are still at it, I see,” the helmeted little linguist commented. “They’d already got stuck into the nature of meaning – or *vice versa* – when I passed here this morning. They’re certainly persistent, these bally Greeks, you’ve got to give them that.”

Then he added, as if in answer to Jack’s unexpressed thought: “They are in translation, of course.”

“Speech is the representation of the experiences of the mind,” the younger of the two worthies was proclaiming, totally oblivious to the presence of an intrusive audience. “You yourself said so, my revered master – though admittedly you put it in somewhat different terms. So how could the forms of speech *not* stand in a relation of analogy to the forms of thought?”

“I fear you have not listened attentively enough, my young friend. Speech certainly expresses thought, but its *form* is largely arbitrary, otherwise the same idea could not be expressed in unrelated words in different languages. Greek, for example, is superficially just one set of

conventional signs, a system of anomalies that must be learnt by the child in order to refer in an acceptable manner to reality. Yet learning Greek is in a deeper sense like learning geometry – it is like remembering something we already know in rough outline, only the specific words have to be learnt that correspond to the overall meanings we need to express. Recall how Socrates showed that the uneducated slave boy really knew the principles of geometry already – it just had to be coaxed out of him. Language is similar. I confess I do not understand why this point should cause you such difficulty – even those quarrelsome Stoic upstarts have accepted it.”

“It is this business of convention, which you so rightly mention, and yet twist so insidiously. That ‘reality’ you are so keen on – in so far as it can be discussed in language at all – is precisely *determined* by the categories of our language. Otherwise it is just a formless mass bombarding our senses. I am talking about convention with a purpose! Your use of the word suggests unmotivated randomness. It has no substance. Language is for communicating. Naturally the infant mind is prepared in advance to search out meaning in the examples of conventional speech it hears around it, but it is precisely the instinct to search out meaning that drives it, not some pre-formed template that allows language to leap out fully-clad like Athene from the brow of Zeus!”

“So it seems to you, perhaps, but that is only because you are blind to the independent existence of the world of real things, irrespective of the language we use to speak of it. The realm of pure ideas itself is unchanging. Naturally the form of our minds and of our speech – its product – is a part of *physis*, the physical world. It was formed by it and can therefore be expected to reflect its nature, if only very indirectly and imperfectly. But this is not the same as to say that it should be replaced in our philosophy by the notion of *thesis*, the product of the classification of real things forced upon us by our language. It is the latter kind of convention that is truly arbitrary! The forms of Nature are there to be perceived and wondered at, but to describe them as they are requires a universal language – and such a language can only be one of pure mathematics, not one of daily commerce!”

“And such a language is precisely an impossibility, a fiction! One that only star-struck old men who shun the conventions of their fellow men babble when they are in their cups –”

“Hold it right there, sonny. What are trying to insinuate?”

“I’m just trying to put the truth to you in the gentlest way I can, you stupid old fart! There are no such things as ‘natural’ names for things!”

“Listen, you arrogant young whippersnapper, all I have maintained the whole time is that the form of a word *somehow* reflects the idea or thought it stands for, but that the connection is hidden and not at all easy to get hold of. We are all fallible. At least I admit that any particular etymology I have proposed may or may not prove right in the end – you simply have none to propose. How on earth can you be so sure of yourself when you scoff at the analysis of the word *phronesis* ‘thought’ (which, by the way, I only used as a hypothetical example of a general principle)? What is so preposterous anyway about suggesting that it arose naturally since ‘all that moves and flows’ (*phoras rou*) is ‘the thinking’ (*noesis*)? The sound symbolism of the ‘r’ sound, for example, is quite appropriate for expressing rapidly repeated movement.”

“Hah! Tell it to the marines – or, better, to Poseidon – ‘he to whom the sea is a bond’! All these words are quite arbitrary!”

“Even compounds? Why, names like Poseidon are quite patently made up of the combination of two others, each with their component meanings, regardless of whether I have grasped the right ones or not! You’ve been keeping bad company of late – this juvenile iconoclasm does not suit you, puppy!”

“I’ll puppy you, you decrepit old wind-bag! Tell me why your beard is called a *geneias* – was it because you were born with it (*ek genetis*)? Or is it not a beard at all, only the form of a beard?”

“Impertinent idiot! Sticks and stones can hurt my bones but words can never hurt me!”

“Oh yes? Can’t you feel it when I tug it then? Admit it hurts – it’s not just the idea of pain.”

“Not a jot! But I imagine yours has more substance in it – how’s this feel, wise guy?”

“Let go of me, you cur!”

The tone of the dialogue was deteriorating rapidly, with the two philosophers swearing and tugging at each others’ beards as each tried to twist the other to the ground, so Jack and his companion retreated hastily from this undignified spectacle.

“You know, we should not be too judgmental,” the linguist commented as they strode on along the path. “These early dialogues, primitive though they were in some ways, bore the seeds of many a serious

semantic or pragmatic issue concerning the nature of the relation between language and thought. If only they had realized that the relation between words and the world is not quite the same as that between language as a whole and the world in which it is used. Think of the old questions that have surfaced again in recent times – is meaning a purely formal matter, to be revealed *despite* the inaccuracies of language, or is it grounded directly in phenomenological experience? Are sentences ‘pictures’ of thoughts, or are they just bundles of clues or instructions for expressing and interpreting thought? What is the role of reason and individual imagination in such tasks – as opposed to the automatic application of hidden rules? Is language better described as external, social behaviour or as psychological reality? Is it innate or learnt purely from exemplars? Are the patterns of language ‘God’s truth’ or theoretical ‘hocus-pocus’ that can be juggled with by the linguistic practitioner? What is the ‘direction of fit’ between world and language, is it always the words that shape the world, or *vice versa*?”

“Is there always a simple answer to these things? Can’t both sides of an argument have a point?”

“Ah yes, they usually do in fact, but this requires a special kind of perspective to appreciate – like seeing one way with one eye and another way with the other.” (Here he popped his monocle out and polished it on his handkerchief as they continued.) “That is what gives you depth of vision. Language is simultaneously pattern – ideas or forms, if you will – and process, the grasping and expression of meaning. Linguistics has a rather unique status as a science, one might say – it is a particularly human endeavour, the intentionality of its subject is not reducible to physical fact alone, although it is anchored in it.”

“Is that intentionality with a ‘t’ or with an ‘s’?” Jack tried to be clever, recalling his first encounter with the gamekeeper.

“Both,” his interlocutor replied, perfectly earnestly. “Which reminds me of a dicey experience I had once when working with a Papuan tribe – over on the far side of the forest. You could say it illustrates in rather extreme fashion the way in which the grammatical structure of a language can affect the thought processes of its speakers. Their language, Kalam, one of the over seven hundred odd languages still crammed into that small corner of the world, has a complicated system for distinguishing two cases: when the subject of a clause is the same as – or includes – that of a following clause to which it is ‘chained’, and when

the two are different. This is what is called ‘switch reference’, a phenomenon which is very widespread in those parts. A mistake here can have disastrous consequences for the beginner – many an incautious field worker in the area has been summarily relegated to the pot for refusing to switch to local standards of correctness. I was uncomfortably close to that situation myself when the witch-doctor chappy who had agreed to be my informant invited me one morning to join them in hunting wild pig for a forthcoming feast. At one point he caught the scent of a huge boar whose path we had crossed and asked us to stay where we were and wait for him to return after he had intercepted the quarry. His wife looked extremely agitated. Trying to be helpful I put my arm on her shoulder with a grin and replied in my shaky Kalam what I thought meant ‘When you come we will go’. Wouldn’t you know it, he understood the intension of the utterance, but not its intention – and all because of one incorrect suffix. With hindsight I can now see that the suffix I had used must have indicated that the subject of the second sentence did not include the subject of the first one. By Jove, I was lucky to get away with just a spear through my left calf...”

“I don’t suppose he liked you touching his wife either.”

“Hadn’t thought of that... Maybe I did use the right affix after all,” he perked up. “Anyway, he soon calmed down after I produced my Diner’s Club card. I later managed to get from him some topping data on ‘serial verb’ constructions, as a matter of fact. This is one of the most fascinating aspects of these languages. Instead of saying ‘I fetched firewood’, for instance, which to us English speakers seems to refer to a simple unified action, one is obliged to express this in Kalam as a sequence of several more basic actions, roughly ‘I went and chopped wood and got it and came and put it’. And if you wanted to say ‘I have bought a present’ you have to say something much more concrete, corresponding to ‘I am coming from the store having bought a present which I am holding as I go and give it’. Here, let me write these down for you.”

He stopped for a moment and scribbled in his notebook.

Table 10

yad am mon pk d ap ay-p-yn
 I go wood chop hold come put-PERF-1SG
 ‘I fetched firewood’

Stoa ap-y tap-skoy taw-y d am ŋ-ng g-p-yn
 store come-ing present buy-ing hold go give-to do-PERF-1SG
 ‘I have bought a present (for someone)’

At this point the lesson had to be curtailed, however, as the path they were following emerged from the last of the trees. It opened out into a large gravelled car park. Here Jack noticed a sign pointing back the way they had come which read: ‘Forest Walk. Follow the yellow arrows. Do not disturb wildlife – no unaccompanied children or dogs’. To the right the road back towards the main road crossed a bridge; he could see that the boom outside the security post on the other side was raised at the moment. Beyond the car park, where the ‘moat’ widened out into the lake, was a picnic area with swings and tables and a kiosk selling ices and souvenirs – the T-shirt reading ‘Linguists do it with tongues’ that Jack had noticed on one of the visitors must have been purchased here. There was also a merry-go-round, from which faint fairground music wafted as laughing children – and several dogs – bobbed up and down on the revolving steeds.

“Well, I must leave you here, don’t you know. Got to get down to analysing my day’s notes. I write so fast I usually end up spending twice as much time deciphering them as taking them down. You’ll find the main public entrance over there to your left, where the new wing adjoins the old building. I see there’s still the tail-end of a queue, in fact. Cheerio, then! Nice talking to a sympathetic layman.”

Not quite sure whether to take this as a compliment or a put-down (was it up to which eye you looked through?), Jack gave a curt valedictory wave and hurried off in the direction of the entrance, leaving the helmeted figure rooting about in the boot of his parked Bentley – presumably in search of a hidden stash of HB pencils.

16. Linguistics through the ages

Why people should still be queuing to get in despite the advanced time of day puzzled Jack, but it did not unduly concern him, since he was delivering goods to the palace, not visiting it. But when he tried to make his way through the narrow doorway at the entrance, mumbling apologies as he squeezed past the waiting visitors, some of them began to get bolshy and voices were heard from further back complaining that someone was trying to jump the queue.

“Who do you think you are?”

“Get in line like the rest of us, mate!”

Somehow he managed to make his way to the ticket window just beyond the doorway with no more injury sustained than a couple of bruises from a poke in the side by an umbrella and a hefty whack around the neck from an old lady’s handbag (why would she be sneaking in a cannonball?). But here the young lady at the window refused absolutely to let him pass the turnstile without a ticket. All that Jack’s protestations about delivering a carpet resulted in was her ringing a bell to summon a security officer while the tourists behind him buzzed angrily at the delay. Waving his arms about and repeating his story about delivering a carpet had no more effect on the heavy with the brush moustache and close-cropped skull who now appeared than it had had on the young woman. With an icy glare the officer simply asked:

“Where is it then?”

Jack soon realized that the elaborate explanation this evinced from him was not going to convince anyone, so he decided that the quickest way to get past the hurdle was simply to pay – with any luck he would be refunded later. He fumbled for some money from the wallet in his back pocket and begrudgingly handed over a couple of notes. The girl thrust a brochure into his hands together with the ticket, and when he protested that he did not need it, she informed him primly that it was included in the price and that it explained about the exhibition in the entrance hall. He shrugged and hurried on through the unblocked turnstile.

However, this only brought him as far as the entrance hall where the new wing was attached to the building. He could not simply slip through

to the interior of the palace beyond: it was cordoned off, and the only other door led into the courtyard, from which he knew there was no direct access to the interior. Guides were waiting at the barrier to take the gathering crowds in as soon as enough of them had been sluiced through to form a group. He noticed the abominable Mrs Dorking among them and slunk off to the side of the hall, where various glass-topped displays were lined up. These could be seen to contain items of philological and phonetic purport – manuscripts, handwritten letters, at least one set of *pince-nez*, different kinds of pens and inkwells, charts, and obscure acoustical apparatuses that seemed to combine primitive surgical and telephonic components. The walls behind were hung with portraits of famous linguists. He put the tool box down and buried his nose in the brochure he had been handed. When the crowds were admitted he would slip in at the back and find his own way from there. Meanwhile he read almost the entire brochure, only looking up now and then at the portraits of the figures cross-referenced by names and dates in the text:

'The Emergence of Modern Linguistics

The beginnings of Linguistics as a well-defined scientific discipline, distinct from philosophy on the one hand and from the purely practical activities of grammar-writers, lexicographers and philologists on the other, cannot be dated much earlier than to the end of the eighteenth century. However, Linguistics in the broadest sense has roots that reach far back into antiquity, notably in the 'anomalist' versus 'analogist' debates in ancient Greece as to the nature of the relationship between language and the world. Already Plato was discriminating between the surface plane of language expression and a 'deep' plane of meaning, a view opposed by Aristotle, who saw no such separation since for him the categories of language directly reflected reality and its form was a matter of pure convention. The thread can be traced through the quarrelling of the Modists and the Nominalists in the Middle Ages right up to the clash between the formalist and functionalist viewpoints in Linguistics today.

The history of the modern discipline can conveniently be divided into three major eras, each characterized by a predominant 'mainstream' direction that reflects the influence of certain major ideas and theories outside of the immediate domain of language. These in turn affected the way in which practitioners of the emerging discipline saw their own field – for example as an 'exact' science consisting of absolute laws or as a

Viconian one in which human teleology and common sense rather than physical law is central. These three eras are (1) the Historical-Comparative, (2) the Structuralist, and (3) the Transformational-Generativist. A fourth, a Functionalist-Cognitivist one, may today be in the process of succeeding the third. In all these periods there were other approaches to linguistics that flourished, only somewhat more peripherally, and each era contained the seeds of following reorientations. There was also continuity in the sense that the major research direction characterizing one era was never entirely abandoned in the following: the evolution of the discipline has by necessity been cumulative, or even spiral-like, with certain themes receding for a while then flourishing again in a new light. Each era can be characterized by a number of dichotomies, some of them reflecting wider theoretical conflicts of ideas, some of them inherent to language as such. These provided the internal dynamics of each era: their final stages were generally quite different from their beginnings. It can be said that each era was the result of the centrifugal polarization of the basic dichotomy of ideas that characterized the preceding era collapsing centripetally in the formation of a new one. And following the emergence of each new 'paradigm', its own constitutive synthesis was in turn pulled slowly apart under the prevailing forces to form new poles that replaced those that it had attempted to abolish.

The major ideational poles affecting the centrifugal developments of the first of these eras – that dominated by Historical Linguistics – were, on the one hand, the notion of language as organism (this can be called the 'biologist' perspective), which found its theoretical underpinnings in Darwin's Theory of Evolution, and, on the other, a mechanistic framework shared with the natural sciences such as Physics, in which great strides were made throughout the nineteenth century (this can be called the 'positivist' perspective). On a still broader perspective one might see in these poles just the latest manifestations of a deeper dichotomy between rationalist and empiricist modes of viewing reality, traceable back to the 'anomalists' versus the 'analogists'. Between the 'biologist' and 'positivist' poles, the discipline of Historical Linguistics (or 'Comparative Philology') arose – in its earliest phase a rather compact approach to linguistic phenomena. It was nevertheless itself gradually polarized under the prevailing ideological forces into, on the one hand, the extreme 'Scientism' of the *Junggrammatiker* of Leipzig, and, on the other, the extreme national-romantic '*Sprachgeist*' doctrines

of influential figures like Wilhelm von Humboldt. The effects of the evolutionary pole were to persist into the next century in anthropological and typological approaches to Linguistics – especially in America, where (via Humboldt) it indeed had a distinct influence on the succeeding, generative era. The other major pole, the positivist one, persisted in the Scientism of certain forms of Structuralism. However, the overall feel of the transition from the 19th to the 20th century within Linguistics is not one of continuity but of a rather sudden emergence of something quite new ‘in centre field’ following a collapsed polarization, namely Saussure’s Structuralism. What was new about this approach was its characteristic severance from both extremes (the mechanistic and the evolutionary) and the proposal of a new, autonomous form of Linguistics, in which the inherent ‘form’ of language was concentrated upon at the expense of phonetic and semantic ‘substance’. It drew on a new ideational source that had only recently formed, namely Sociology and the view of language as an essentially social matter. The links between Saussure himself and more or less independent parallel developments in America (with Boas), and in the Prague and London schools in Europe may have been slender, but he typifies the core of what was happening to Linguistics at this junction and what was to become a new and enduring part of its heritage: henceforth it was to concentrate on synchronic rather than diachronic ‘reality’, and the historical approach, though it persisted, was no longer at the forefront of advance.

In turn, the first half of the 20th century was characterized by its own ideational polarization – with its ‘psychological’ versus ‘anthropological/sociological’ poles representing the metempsychosis of the mechanistic versus evolutionary ones of the previous era. This gradually pulled apart the initially rather compact ‘new’ form of Linguistics, so that by mid-century it was ready for a similar sort of implosion as at the close of the previous century. The ‘new’ Linguistics this time – Chomsky’s Transformational Grammar – again dissociated itself from the extremes of the previous era and reasserted its autonomy from other developing disciplines it had by now become entangled with. This time the extremes were, on the one hand, the Bloomfieldian variety of Structuralism that had become ‘tainted’ with the Behaviourism that now dominated the neighbouring discipline of Psychology, and, on the other, the increasingly sociological emphasis of European Structuralism. The ‘new’ Linguistics was neither Psychology nor Sociology, though it might at first

sight be thought to be closer to the former. In fact this is probably a matter of historical 'accident': the 'psychologistic' trimmings of Chomsky's approach seem in retrospect more of an attempt to find an alternative to the powerful influence of Skinnerian Behaviourism than a keystone of his thinking. This alternative Chomsky described in Descartes' notion of innate faculties as applied to language. Most of the formal apparatus of the new approach came, however, from the other extreme wing of the structuralist heritage. Elements of the new synthesis were salvaged both from the American variety of Structuralism (via Harris in particular) and from the more 'sociological' European varieties (via Jakobson and the Prague School in particular).

Again the new era began with a fairly compact approach, but the older polarity between the psychological and anthropological/sociological perspectives had now become replaced by – or reformulated as – that between formalism versus functionalism (one more avatar of the rationalist versus empiricist polarity). Between these twin poles the new 'generative' Linguistics was itself to undergo many splits and sea changes on its way towards its latest manifestation in Chomsky's Minimalist Program. What was different this time was that the functionalists – drawing on their own traditions and developing new sub-disciplines of Linguistics by cross-fertilization with neighbouring disciplines (notably in the areas of typology and pragmatics) – were by now becoming a counter-force to be reckoned with, especially in Europe, where continuity with the first half of the century seemed less radically severed than in America. The two sides gradually began to pay attention to – and then scramble for – the pluckings of the new cognitive 'revolution' within Psychology. Here the functionalists were quicker off the mark, while the Chomskyans continued to struggle with successive formal problems within their new theoretical approach, particularly as regards syntax, which had been seriously neglected in the structuralist period. They had little time at first for the typological or broader psychological aspects of language. It was nevertheless their challenge concerning the nature of language acquisition and learnability that spurred on the emergence of a functionally orientated Psycholinguistics, which now focussed more and more on the details of first language acquisition. As the era progressed, a succession of shifts of emphasis occurred within the mainstream. At first the emphasis was on syntactic rules and also phonology (the new direction had to position itself *vis-à-vis* the phoneme

theory of the preceding era) at the expense of semantics – again an inheritance from the situation at the end of the structuralist era. But this was to change – sometimes through vicious internal ‘wars’, sometimes by more gradual developments.

What appears to be happening today is the implosion of the Transformational-Generativist ‘mainstream’ approach of the second half of the 20th century, an implosion caused in large part by Chomsky’s insistence on the autonomy and innateness of language. Saussurian Structuralism too was eventually undermined by its own ultimately untenable definition of the (synchronic) autonomy of language. Now the keystone of the early generative approach – transformational rules that ‘generate’ syntagmatic surface chains from deep structure – has been abandoned, and what is left at the core of the latest version of the model no longer seems so very different from the centrepiece of Structuralism, namely the nature of the linguistic sign as a coupling of form and content. With the functionalists in turn admitting that not all in language is functionally determined, the scene appears to be ready for the appearance of another ‘centralizing’ fresh start, this time a Cognitive-Functional one, which has been building up in recent years and which may or may not represent the actual ‘compact’ start of a new era. If it does, what is ‘new’ about it this time is that it is no longer definable in terms of yet another drawing of boundaries around the discipline’s autonomy, but represents rather an opening out into the broader field of Cognitive Science, which made great strides in the second half of the 20th century.

The Historical-Comparative era

Although this was the first phase of the emergence of the modern discipline, as defined above, it did not arise out of a vacuum. One could say that the key factor in its appearing when it did was the expansion of knowledge among European philologists of languages other than the national ones in their own back gardens (and of course Latin and Greek). Already at the end of the Middle Ages Dante had discussed the ‘family’ relationships of Europe’s many emergent vernacular languages and dialects, within the framework, endorsed by the Church, of the monogenetic origin of all languages in Hebrew, the original language before the building of the Tower of Babel. As a later variation on this theme, Leibnitz was to propose that the languages of Europe were divided into a ‘Japhetic’ northern branch and an ‘Aramaic’ southern one,

reflecting the biblical dispersion of the sons of Noah. Exploration and colonization in the seventeenth and eighteenth centuries had brought with it the documentation of 'exotic' languages, particularly in India and the Americas. Emblematic of its origin (though it was hardly the only factor) was the famous speech made in 1786 by the lawyer and amateur linguist Sir William Jones to the Asiatic Society of Bengal in which he posited that Sanskrit and the known ancient languages of Europe all 'sprang from some common source'. With the 'discovery' of Sanskrit in Europe came also a growing appreciation of ancient Indian scholars such as Pāṇini, whose work, which dates back to around the fifth century BC, was more sophisticated than anything in Europe until modern times – especially as regards phonetics .

This 'era' needs also to be seen in the context of broader intellectual issues of the time. Discussion of the ultimate origins of language were 'in the air', but when Darwin's theory of Evolution burst upon the scientific world in the middle of the 19th century, it provided – or rather bolstered with scientific respectability – an analogy between language and biological species that was to dominate the rest of the century. It was rapidly grafted onto the burgeoning comparative philology of Indo-European languages, represented by the ground-breaking work of Jacob Grimm (1785-1863) and Franz Bopp (1791-1867) in Germany and Rasmus Rask (1787-1832) in Denmark. What these founding figures were responsible for introducing – and insisting upon in their work – was the systematic nature of sound correspondences between languages deemed related historically. The time for vague speculations as to genetic relations was past. Any development of the overall system through time other than by regular sound change was seen as a matter of *ad hoc* readjustment (by analogy) to counter disturbances caused by such changes at the higher level of morpho-syntactic patterning. Nothing could express this underlying framework more clearly than Schleicher's 'family tree', a way of diagramming the genetic relations between cognate languages still widely used today.

It was also an era of Determinism within Science, where any new discipline worthy of that name was required to present its credentials in the form of exceptionless laws. The effect of this second major theme grew ever stronger towards the end of the century, as the influence of its philosophical counterpart, Positivism, also waxed. It was to result in the 'revolt' of the 'Neogrammarian' *Junggrammatiker*, Brugmann and

Osthoff and others, from the purely philological origins of the discipline. Despite their ‘manifesto’ (published in 1878) this was not, however, a ‘revolutionary’ change in the sense that the appearance of Structuralism and later Transformational-Generative Grammar was to be – it was simply a sign of the increased polarization of the discipline as it was now inherited by a second generation that was coming more and more under the sway of Positivism. Whereas exceptions to laws (today one might say ‘generalizations’ rather) had previously been countenanced (if reluctantly), explanations of irregularities had now in turn to be explained by further exceptionless laws (thus ‘Verner’s law’ as a ‘correction’ to Grimm’s earlier, more general one). The emphasis continued to be on regular sound changes and correspondences, but now the very idea of semantics – i.e. historical semantics – was frowned upon as being just too messy for a true science to occupy itself with.

But there was – as implied by the very notion ‘polarization’ – also another ‘wing’ to the discipline, a less formal wing reflecting the National-Romantic views in the air in (especially) Germany of the time, in which Schiller and Herder were central figures and with linguist Jacob and his brother Wilhelm Grimm producing their famous collection of German folklore. The figures of Friedrich and August Wilhelm von Schlegel and Wilhelm von Humboldt typify this aspect of the era, which permeated the whole of its earlier phase (not for nothing was Humboldt’s brother a famous explorer in his own right). The Schlegels were early contributors to the extension of the ‘comparative’ side of Linguistics beyond the bounds of Indo-European – along with Humboldt they can be said to be the forefathers of modern typology.’

At this point, a stranger who was standing beside Jack in front of the portrait of Wilhelm von Humboldt gave a snort of amusement and commented as if they were old friends:

“Funny how brothers seemed to proliferate around the beginnings of Linguistics. It’s as if the system of binary oppositions it deals with were reflected in its own history. And what about the formalists versus the functionalists of our day – still squabbling twins, eh?”

“I really wouldn’t know – I’m just here to fit a carpet...”

“Ah, naturally... I see you are an adherent of the tool-box theory of language,” the stranger jerked his head towards the object deposited at Jack’s feet. “Say no more!”

The stranger gave a conspiratorial wink behind his glasses, tapped the side of his nose and moved on to the next portrait, leaving Jack with a distinctly nervous feeling, though why exactly he was not sure. Was the man one of the dons he had encountered earlier? If so, what was he doing sneaking round amongst the newcomers? He returned with a yawn to reading the brochure. Since they were still not letting people in through the barrier he felt he might as well read the rest:

‘Wilhelm von Humboldt (1767-1835) represented furthermore an important link to philosophical tendencies outside of Linguistics proper, including the French encyclopaedists of the end of the preceding century. For him language was not just an ‘organism’ (as Schleicher had put it), but an *‘energeia’* or dynamic spirit that affected the very way its speakers think. Moreover, as a linguistic ‘evolutionist’, languages were for him positioned on a dubious scale of evolutionary development (Sanskrit predictably near the top of the totem pole, Chinese nearer the bottom). More lasting were his ideas on ‘universal grammar’ (consisting of categories and rules) which he saw underlying the superficial variety of languages in the world. In this he followed the tradition of ‘speculative’ grammar rooted in the medieval Modists, as carried further by the so-called Port Royal grammarians, who were much influenced by the rationalist philosophy of Descartes. He was not drawn, however, to the extremes of the ‘Age of Reason’ approach to language typified by Leibnitz’ search for a universal ‘calculus of thought’, in which the seeds of modern symbolic logic can be found, or the attempt by Bishop Wilkins in England to create a synthetic ‘language of philosophy’, which broke down the meanings of all concepts (by way of a kind of precursor of componential analysis) to the same basic components then attached specific sounds to them. Moreover, as a Romantic, Humboldt’s ‘psychology’ was pitched at the level not so much of the individual as of whole nations, a kind of ‘internal’ Sociology.

There were also – as always – individuals who made major theoretical contributions to the discipline but stayed aloof of the mainstream, sometimes correcting its excesses. One such was Johannes Schmidt, whose ‘Wave Theory’ was a valuable counterbalance to Schleicher’s ‘family tree’ model. Other such individualists were the Frenchman Bréal, credited with the introduction of the term – and sub-discipline – of ‘Semantics’, and (crossing over into the following ‘era’) the Dane Otto

Jespersen, who had his own ideas on linguistic evolution, on the universals of grammar and broader ‘philosophical’ aspects of language such as the subject-predicate articulation of sentences (he could be characterized as an early functionalist in some respects).

Having achieved the goal of setting the discipline on a scientific footing, Historical Linguistics was to recede into the background during the following structuralist era with its scepticism as to the influence of historical ‘accident’ on synchronic systems. The major competing ideas of deterministic Scientism and evolutionary ‘teleology’ that characterized it would rise again in the course of the following century, however. Its origin in a novel synthesis of evolutionary and positivistic attitudes towards language had come unstuck and the time was ripe for a new synthesis.

Structuralism

The major figure that heralded in the era of synchronic or ‘General’ Linguistics that succeeded the historical one was the Swiss linguist Ferdinand de Saussure (1857-1913). This era signified in fact a geographical shift of centre, away from Germany towards francophone western Europe, and thence to England, Czechoslovakia and America. It was also within the Francophone world at the end of the 19th century that were heard some of the strongest attacks on the doctrines of the Neogrammarians – for example from dialectologist Gilliéron, whose claim that ‘every word has its own history’ was hardly in harmony with the key neogrammarian concept of the exceptionless law of sound change. It is no coincidence that the study of dialects and linguistic geography is a sociological form of science. The rise of modern Sociology in France with Durkheim at the end of the last century is of considerable significance for Linguistics, although the degree of direct influence of Durkheim on Saussure is debatable (it was more direct in the case of his pupil Meillet, around whom the French Structuralist school formed). For this was one of Saussure’s main lines of attack on his predecessors – that they neglected the obvious social, communicative side of language (which is after all its very *raison-d’être*). He also pointed out the inability of traditional Historical Linguistics to capture the systematic coherence of any given ‘*état de langue*’ outside of the historical flow. This must be seen in the light of the fact that he himself started his professional career within the framework of Historical Linguistics,

where he produced important work in comparative Indo-European, so it was in a way an attack 'from within'. He heeded in fact the Neogrammarians' call for greater emphasis on contemporary languages rather than the reconstruction of earlier common stages. It must also be borne in mind that he never published his new ideas himself – a singular position for a figure of such lasting import in his field. This was left up to his followers, who edited their class notes into the '*Cours de linguistique générale*' of 1916, through which their master's innovative ideas on the nature of General Linguistics are known today. The lens through which we see Saussure's thought was thus coloured to some degree by that of others – especially his student Sechehaye.

The centrepiece of the new 'semiological' way of seeing language was the linguistic sign, which combines a form ('*signifiant*') and a content ('*signifié*'). Signs relate to each other in terms of oppositions on both the paradigmatic and the syntagmatic axes (i.e. in terms of the possibility of their mutual commutation and of their linear combinatoriality respectively), and define thereby whole systems. The substance of a sound is of little importance – what counts is the role it plays in the *system* of the individual language. The contrast between this and the preceding historical perspective is emblemised by Saussure's own image of a game of chess: the possible moves a particular configuration of pieces allows at any one point in time is independent of all the moves leading up to it. Only the rules themselves constitute the language system, which is a purely synchronic entity. What his structuralist perspective demanded was not just emphasis on the synchronic, however, it also delimited its domain to '*langue*' – pure form – independent of actual individual usage or '*parole*', and here he distanced himself as much from Sociology as from determinism. Significantly, he also banished syntax (for him a matter of unsystematic 'personal choice' in speech) to the realm of '*parole*' – and thus mere 'substance'. This was an attitude to be strongly contested in the following generative 'paradigm shift' (it was perhaps attributable to his francophone background, where syntax was typically regarded as 'universal' and a matter of 'logic' – which of course would not have deterred Chomsky).

For a while the Neogrammarians' distaste for meaning persisted (Bloomfield specifically rejected semantics as 'unscientific'), and the practical emphasis was on investigating the expression side of form. But there was one major exception to this, namely Louis Hjelmslev (1899-

1965) and his 'Copenhagen' school of Glossematics. Of all the varieties of Structuralism that emerged, this was the most abstract and formal, in many ways a precursor of the formal systems of the subsequent era, but it was never spelt out in any comparable detail and has been of limited influence since. For Hjelmslev the binary perspective endemic to Linguistics reached an extreme – also the content side of 'language form' (semantics) was subjected to a kind of analysis paralleling that applied to 'expression form' (phonology).

As has been typical of each successive shift in paradigm, the centrifugal elements that were brought together in the beginning of this era began to pull apart again and form the basis of a new, transformed polarity – in this case the sociological aspect of the new paradigm was to dominate in Europe, while the psychological one (relatable back to the Neogrammarians) was to be stronger in America. The result was that Structuralism, originally rather 'compact', had drifted apart into a number of very different end results around the middle of the century, with a more mechanistic variety coming to dominate in America and a more 'teleological' or humanistic one in Europe, harking back to the ideological polarity of the preceding era.

In America it produced the behaviouristically tinged Scientism of Leonard Bloomfield (1887-1949) and his followers. From this perspective the linguistic endeavour reduced ultimately to unearthing 'discovery procedures' for mechanistically deriving complete descriptions of languages from raw textual data. There was much discussion as to whether linguistic analysis was a matter of 'hocus pocus' (up to the linguist's optimal description) or 'God's truth' (i.e. really reflecting 'the way things are'). Much faith was placed in phoneme theory (and in the 'separation of descriptive levels') and little attention was paid to potential universals. In fact Bloomfield himself was both anti-theoretical and anti-universalist in his stance. Although many fine descriptions of 'exotic' languages (not least American Indian ones) arose from within this general framework, not much additional theoretical insight came out of it apart from Bloomfield's development of morphosyntactic 'immediate constituent analysis' (earlier proposed by psychologist Wundt). One exception was the transitional figure of Zellig Harris, Chomsky's teacher, an extreme Bloomfieldian from whose early work on syntax Chomsky was to develop some of his own most characteristic ideas. Another was Charles Hockett, who added to general theory the distinction between three

approaches to morphology, 'Item and arrangement', 'Item and process', and 'Word and paradigm', all of which have their place still today. His proposal for the basic 'design features' of human language has also been widely cited.

By contrast, the Prague School (actually dominated at first by Russian exiles Trubetzkoy and Jakobson, but founded by native Czech Mathe-sius) was much more concerned with '*parole*' and language use – it had a very different flavour from other (especially American) schools belonging to the structuralist era and bore in fact the seeds of the functionalist approach to language of the following era. In its approach to phonology it laid greater emphasis on the paradigmatic as opposed to the syntagmatic axis, and was also much less inclined to sever the synchronic from the diachronic in the manner of Saussure. Innovative work on 'Functional sentence perspective' was also initiated, analysing the articulation of the utterance into theme and rheme, etc. In general, it contrasted with American Scientism in its broad concern with language as humanistic expression. The influence of this school spread internationally, notably through Roman Jakobson (1896-1982), whose peregrinations ultimately brought him to the USA, and through Frenchman André Martinet, who developed the idea of the 'therapeutic' nature of sound change, caused by competing functional forces. Its main areas of research was at first the theory of the phoneme (the concept of the 'phoneme' itself goes back further to the Pole Baudouin de Courteney and, independently, to Sweet in England). This culminated in Jakobson's theory of distinctive features, based on the hearer's (acoustic) rather than speaker's (articulatory) viewpoint. These abstract and hierarchically ordered features he regarded as universally ordered and innate (*contra* the relativism of Saussure and Boas) – a view that was to make this part of his work congenial to Chomsky.

A further variety of Structuralism that was to have lasting consequences was the London School, whose central figure was J.R. Firth. Although strongly associated with the native British phonetic tradition of Henry Sweet and Daniel Jones it was the most sociologically oriented of any variety of structuralism, coming under the influence of the anthropological ideas of Firth's colleague Bronislaw Malinowski (notably his conception of the 'context of situation' – the situational anchoring of language). Detailed analyses of non-European languages from the various countries of the former British Empire formed a significant

ingredient (Firth was professor of General Linguistics at the School of Oriental and African Studies in London). Like the Prague school, this school too was a forerunner of postwar functionalism in Europe. More peripheral to its activities was the theoretical work of Egyptologist Alan Gardiner, who followed psychologist Bühler in focussing on the individual 'speech event'.

Still further out towards the anthropological/sociological pole of this era (and with only tenuous links to 'core' Structuralism) were the American anthropological descriptivists, from Franz Boas (1858-1942), through Edward Sapir (1884-1939) to Benjamin Lee Whorf (1897-1941). The former, who came to America in 1880 and was self-taught as a linguist, represents in a sense continuity from Humboldt and the early linguist-explorers of the Romantic period, but he set an agenda for practical linguistics in America that still persists to this day, outliving all theoretical chops and changes. Sapir and Whorf in turn introduced further theoretical dimensions that had been in abeyance since the days of Humboldt and the heyday of Historical Linguistics, namely linguistic typology and drift (Sapir's term for the gradual change of type across time) and linguistic relativity. Especially Whorf's name is associated with the latter hypothesis that one's language (and its hidden 'cryptotypes') can affect, even control one's thinking. This was already modified by Boas' insistence (*contra* Humboldt) that race, language and culture rarely coincide and that there is no such thing as a 'primitive' language. All three of these important figures rejected Bloomfield's linguistic Behaviourism (unlike most 'mainstream' descriptive structuralists). A later American typologist, Joseph Greenberg (1915-2001), was to extend the framework of linguistic classification and categorization in developing his own influential theory of implicational universals.

One aspect of Saussure's program that would have to wait to bear fruit among linguists until somewhat later was his sketch of (a future) 'Semiology', a general theory of signs. In the meantime American philosophers Peirce and later Morris would develop their own, more elaborate 'semiotic' theories of the sign. Peirce in particular distinguished linguistic symbols (arbitrary) from icons (based on similarity) and indexes (based on proximity in space and/or time) and elaborated the sign's 'missing' dimension on the semiotic triangle – its conceptual meaning *vis-à-vis* an 'interpretant', which Saussure, with his anti-psychological stance, ignored. He also introduced the notion of logical

'abduction' (hypothesis-formation), which has been influential in recent times in the area of language acquisition. This work would really only come to the notice of the linguistic world in the following, post-war era, with the advent of Pragmatics as a discipline in its own right. Elsewhere, still other philosophical ideas were brewing during this period which would affect developments within Linguistics in the following era, namely formal logic (at the hands of Russell and Frege) and, at the opposite, functionalist pole, Ordinary Language philosophy, spurred on by the later Wittgenstein's iconoclastic views on meaning as use (the so-called 'tool-box' theory of language).

In a sense, Structuralism has persisted until the present day, especially in Europe, as an essential part of what linguistics is all about, just as Historical Linguistics has done. Our current picture of language as a structure consisting of several discrete levels or floors – those of the phoneme, the morpheme, the sentence, and (at least in theory) the whole text – date back to this era, although the notion that levels 'do not leak' has had to be abandoned, and the higher level of the organization of speech acts (previously dismissed as part of *'parole'*) has since been added to the edifice. One might even regard Transformational-Generativist Linguistics as simply a further development of American Structuralism – were it not for the essential ingredients that Chomsky integrated into his new 'mix' from Humboldt and the still earlier rationalist tradition. The shift to the new era was also accompanied by a generally waning faith in induction as the sole or principal way of conducting Science – hypothetico-deductive methods, where assumptions are made explicit and the role of empirical data confined to the verification of hypotheses, were becoming more and more respectable. Structuralism, as a 'compact' system of linguistic thought, bore – as with Historical Linguistics before it – the seeds of its own eclipse from centre-field. These were, on the one hand, its inherent antipathy to recursive syntax, for which there seemed to be no place in any static theory of *'langue'* (apart perhaps from in its Prague version). On the other hand, it seemed no longer able to hold together the psychological and the anthropological/sociological poles towards which it was being simultaneously pulled – the extremes were moving further and further away from each other. The scene was now ready for a geographical shift of centre to America following the devastations of the European war. One might say that American Structuralism was already more concerned with the syntagmatic axis of

language than its European counterparts and thus was a natural starting point for the upsurge of interest in syntax that was to come.

The Transformational-Generativist era

So the task that faced Noam Chomsky (1928-) and his associates at MIT in the early fifties was twofold: to shift the focus of Linguistics towards syntax and its seemingly infinite recursivity (without rejecting what had been won in phonology), and to replace the existing link between American Structuralism and a discredited form of Psychology (Behaviourism) with another, rationalistic or introspective kind of Psychology. (Bloomfield had been opposed to introspection as well as to the social view of language.) Whether he was ultimately successful in the latter endeavour is questionable, but there is no doubt about his success in the first. As to the sociological aspect of European Structuralism, this was simply disregarded, considered irrelevant to the new focus of interest. Chomsky has always denied the structuralist (and functionalist) view of communication as the central purpose of language – for him it is rather the expression of thought. It was necessary from the start to redefine the *langue* versus *parole* dichotomy in terms of ‘competence’ versus ‘performance’. In this new dichotomy ‘competence’ has the additional property beyond that of *langue* of being a psychological rather than a social concept – it generates a set of sentences rather than constituting a collection of elements (or signs). His ‘mathematical’ approach to the question of generativity brings him closer to the formal pole of the ‘new’ kind of intellectual polarity dominating the postwar era, namely that between the formalist and the functionalist approach to language (and to the ‘human’ sciences in general). The essential ingredient of ‘creativity’, however, derives from the ‘biological’ pole of the earlier Historical-Comparative era, namely from Humboldt – i.e. from the non-formal pole that was to be transmogrified into the anthropological/sociological one of the Structuralist era. This ‘biological’, evolutionary side of Chomsky’s revolution is often obscured by its more obvious formalistic aspect, although it comes out quite clearly in Chomsky’s less formal works. In these he has repeatedly acknowledged his debt to Descartes for the notion of the innateness of the language faculty (which was to be a centrepiece in the generative edifice) – and to the Port Royal grammarians, with their insistence on the universality of the underlying categories

of grammar. It is the assumed universality of that faculty that allows language acquisition by children to take place at all. Characteristically, Chomsky treats it as a (quasi-)biological organ, reminiscent of the viewpoint of the Romantic wing of the earlier era. In this respect the Chomskyan synthesis skipped right over the intervening Structuralist era.

The other main ingredients in Chomsky's new 'mix' came from closer at hand, in particular from his teacher Harris, as mentioned, and through him Bloomfield's own treatment of morphophonemics – the representation of the neutralization of phonemes by abstract 'underlying' forms. This can be seen as a precursor of Chomskyan 'deep structure' in so far as it is a matter of underlying and surface strings being related by ordered rules. It was Harris who actually introduced the notion of the structural transformation, although this was not linked to the Humboldtian notion of creativity as it was in Chomsky's first important work, 'Syntactic Structures' from 1957. At this early stage, Chomsky, in distancing himself from his predecessors, was very much concerned with the question of the 'grammaticality' of sentences and with distinguishing 'explanatory adequacy' (which he required ultimately of a transformational grammar) from mere 'observational' and 'descriptive' adequacy. He argued particularly forcefully against simple 'finite state' grammars (which connect successive words in a sentence not hierarchically but solely by association links).

There was also the strand linking Chomsky via Jakobson to the Prague School and its 'psychological' understanding of the phoneme (contrasting with Bloomfield's purely formal notion). The link was by way of his colleague Morris Halle's cooperation with Jakobson, who had by now developed his theory of 'distinctive features'. This became a central part of Generative Phonology, as worked out by Chomsky and Halle together for English within the new framework. In this approach the borderline between morphophonemics and phonology/phonemics is actually obliterated, replaced by the successive application of rules all the way from phonetic representations (in terms of feature bundles) up to word-forms. Having done away with the autonomous 'taxonomic' phonemics of the structuralists, the autonomy of *syntax* – understood now as including morphology – was raised to a cardinal principle in Chomsky's major work 'Aspects of the Theory of Syntax' of 1965, which was to be regarded by generativists as the 'standard' transformational theory for some time. In it semantics was reinstated, not as an integral part of

grammar, but as a separate ‘interpretive’ component, parallel to the phonological one.

The history of the development of generative grammar after this early phase is one of internal strife and continual revisions of the basic theory by Chomsky himself. One of the major episodes in that development was the attempted ‘rebellion’ by a group of younger generativists, including Postal, Lakoff, Ross and McCawley, who proposed a Generative Semantics in which they replaced the syntactic base of the Chomskyan model with representations taken from formal Semantics, as developed during the preceding era. More directly, the influence of formal Semantics (especially via logician Montague) was to result in a burgeoning of systems integrating semantics and syntax, notably Categorical Grammar and various essentially computational systems influenced to varying degrees by the advent of Artificial Intelligence after the War, such as Arc Pair Grammar, Head-driven Phrase Structure Grammar, and (with greater claim to representing ‘psychological reality’) Lexical Functional Grammar. Generative Semantics foundered because of its lack of constraints on derivations, and the standard theory also struggled to address its own over-generativity. This led to an increasing concern all round with the lexicon, from which syntax was seen to be projected. Other off-shoots of the standard model were Relational Grammar (which focusses on grammatical relations like subject and object) and Autolexical Syntax (which focusses on mismatches between morphology and syntax).

The integration of a semantic ‘component’ into the standard generative model was largely due to Katz and Fodor, who introduced their own brand of componential analysis of word meaning. Ray Jackendoff was later to make important additions to this interpretive component. He also introduced ‘X-bar theory’, a syntactic formalism that exposes the parallelism of structure between all kind of phrases. The number of syntactic ‘levels’ in the model has since continued to increase – much to the annoyance of linguists only casually acquainted with the latest formal debates within the school. Also typology has recently been taken more seriously within the mainstream, with typological variation now explained in terms of parameters (e.g. as to whether the language is characterized by head-dependent or dependent-head word order). These are seen as chosen by learners of specific languages from a universal set. ‘Government and Binding’, the form Chomsky’s model

took during the 80's, has been modularized further to include separate rule complexes for Binding (of anaphors), Government (syntactic control) and Case (in terms of semantic 'theta' roles), as well as the X-bar apparatus. Fodor's computer-inspired notions of the 'language of thought' and of 'modularity' have been influential among formalists here and reflect the lively commerce between Linguistics and Artificial Intelligence. The 'final' position Chomsky himself reached in the closing years of the century (his 'Minimalist Program') is much changed from the starting point in Transformational Grammar: transformations and deep structure have been dispensed with and even rules themselves have been replaced by universal 'constraints'. Individual languages he now sees as essentially a matter of lexicon plus some specific 'parameter settings', all languages sharing the same principles of Universal Grammar. But at the core still remains his unwavering adherence to the Cartesian notion of 'innateness'. Close to this position – but focussing even more on constraints than on rules – is Optimality Theory, a kind of generative grammar stripped of its generativity, and with Universal Grammar viewed in terms of hierarchically ranked but violatable constraints.

Although the Transformational-Generativist school constituted a 'mainstream' throughout this era, the functionalist 'opposition' was growing from strength to strength, especially in Europe but also – somewhat later – in America. In its so-called 'West Coast' variety, as represented by Talmy Givón, it has a greater biological and cognitive flavour than in Europe. Much of the development here has its direct roots in the preceding era (especially Prague and London functionalism) and was relatively little effected by the advent of the generativist perspective. Various schools of Functional Grammar have flourished, notably that of Simon Dik in the Netherlands and Michael Halliday's Systemic Grammar in England. The former is somewhat closer to the formal pole of the era, combining basic clause level formulae taken from predicate calculus with the accretion of successive functional layers. The latter school presents a more static network of functional choices with roots in the sociological functionalism of the London School (as worked out specifically for English). Halliday also represents a bridge to recent advances in text and discourse analysis. In general there has been increasing focus on texts rather than isolated sentences amongst functionalists (harking back to the American descriptionists of the

previous era). Important for most of these schools have been advances in the general theory of language typology and universals by Comrie and Croft among others. Role and Reference grammar has specifically grown out of concern for typological adequacy. Processing theories attempting to explain typological universals have also been proposed.

Sociolinguistics has developed as a sub-discipline in its own right, as represented by Trudgill and Labov on the British and American side of the Atlantic respectively, while anthropological linguists such as Dell Hymes have carried the Boasian tradition forward, especially in America. Noteworthy too as a general trend is the fruitful combination of classical Historical Linguistics with typological concerns in Grammaticalization theory, as developed recently by Traugott and Hopper among others, following Meillet's much earlier lead. The recognition that grammar is in constant diachronic flux has again made its return, but now informed by broader typological knowledge. Theories of language contact and spread have also benefited from this meeting. The internationalization of General Linguistics as such, with major input – both empirical and theoretical – now coming also from outside America and Europe (notably Japan and Australia), is another significant development.

One other major non-generative strand that has come to play a greater and greater role during this era is that which leads from Ordinary Language philosophers such as Austin in the immediate post-war period in Oxford to modern Speech Act theory as developed by John Searle and others. Arising from the same background, Grice's conception of 'maxims of conversation' and 'conversational implicatures' represents a keystone of modern Pragmatics. The treatment of such matters as inference and presupposition practised by these philosophers has proved more palatable to functionally orientated linguists than has the formal logic of Russell and the truth-conditional logicians (who influenced the generative semanticists). The work of John Lyons represents an influential synthesis of the formal semantic and pragmatic approaches to meaning.

A new era?

Counteracting the centrifugal tendency that has prevailed since the War, pushing the functionalist and formalist camps further and further apart, a centripetal pull towards common ground in 'Cognition' on both sides of the formal/functional divide has grown more apparent in recent years.

Symptomatic is the shift away from the 'hard' Fodorian digital computer analogy of the mind towards increasing interest in soft 'connectionist' modelling, which combines rather specialized mathematics with (in principle) relatively simple but 'distributed' neural network systems. These are claimed to be capable of modelling aspects of language learning without the intervention of rules at all. New approaches to uncovering the universals of language acquisition (more typologically adequate than previously) have been initiated by Dan Slobin and his associates, and more sophisticated, empirically testable modelling of linguistic behaviour is being undertaken by psycholinguists internationally.

A new 'school' calling itself Cognitive Linguistics has in fact appeared, associated with the name of Ronald Langacker and a number of the West Coast functionalists such as Leonard Talmy. The schematic diagramming of underlying cognitive 'schemata' and the employment of fuzzy-edged 'prototype' categories (rather than the absolute ones of the generativists) characterizes this approach to linguistics. George Lakoff has produced influential work on metaphor theory within this general framework, as has Wallace Chafe in his work on information organization and consciousness. Another ex-generativist, Charles Fillmore, has moved on from Case Grammar to Construction Grammar, an approach to language that stresses whole prototypical constructions-in-context rather than abstract rules or principles. This is symptomatic of the ongoing search for greater textual realism on the part of previous formalists. Another 'West Coast' development is the development of Mental Space theory from a meeting of 'possible world' formal semantics and the 'embodiment' view of the spatial (and metaphorical) basis of grammar.

Both formalists and functionalists of the previous era are heralding a sea change – which to some means a radical 'paradigm shift', but which others see as a synthesis of the two approaches. The choice between the exceptionless rules and clear-cut binary oppositions of the formalist stance and the 'pre-theoretical' – or at least teleological and 'open-ended' – functionalist stance no longer seems as central as it once was, although the temptation to fall into one form of reductionism or another remains endemic to linguistic theorizing. With his retreat into the abstract heights of his Minimalist Program, where many of his erstwhile most enthusiastic acolytes hesitate to follow him, Chomsky himself

appears to have withdrawn from the mainstream (one he was never too happy being at the centre of), and, still clinging to his Cartesian vision, devotes himself to pursuing his linguistic ‘Theory of everything’. In the broader theoretical arguments of today, meanwhile, elements of the debates of earlier eras that have fallen into abeyance have been resurrected, as during previous transitional periods. These include concern with the ultimate evolution of language, which since the excesses of the 19th century Romanticists has been virtually taboo in mainstream Linguistics.’

Jack had barely finished reading this last sentence when there was a surge of movement through the milling crowd. The cordon was pulled aside and the nearest heads of tourists were herded through in groups. Mrs Dorking, brandishing her scroll like a branding-iron, took control of the first of these. Jack deposited his brochure, picked up the tool box and went to join the second group. They ascended a short flight of steps to the familiar echoing hallway lined with portraits of the duke’s forebears. When they reached the central staircase and began to climb towards the state rooms, he hung back, then slipped aside – before the next group arrived – into the shorter hall that led to the old front door. Half way down it there was another, interior door set between two crossed maces. When he tried it, it opened at once.

The corridor beyond – despite its rather threadbare carpet and nondescript wallpaper – looked like it should lead him directly into the private part of the building. According to his calculations, the kitchens lay somewhere off to the left at the far end of the east wing in the direction he was now heading, and from there he could easily find the passage round the back where William would – he hoped – still be waiting. However, he had not reckoned with the numerous corners and parallel corridors that lay between him and his goal. Several times he had to retrace his steps from dead ends or ascending stairwells, and (based on previous experience) he hesitated to ask the way from any of the footmen or maids that now and then hurried across his path bearing chairs and tablecloths and candelabras as if in preparation for a great banquet. He suspected that they would as soon report him to the security guards as assist him with directions. He tried a couple of doors at random, but in both cases the rooms beyond were in semi-darkness, with dust-covers concealing whatever furniture was piled up inside them. Finally ad-

mitting to himself that he was thoroughly lost, he tried to catch up with two young maids who were carrying cutlery and plates along a somewhat grander hallway. They disappeared to the right through double doors.

Following them this way he found himself in a high-ceilinged dining room lined with mirrors and landscape paintings. Crystal goblets and chandeliers were glittering in the afternoon light that slanted in from the tall windows at the far end. The crisp linen cloth that extended the length of the table was already half laid out with sets of neatly stacked plates of different sizes, an arc of different sized glasses, and complicated parentheses of cutlery around each set. Between each opposing pair of place settings a pattern of silver condiment trays, containers for sauces and *crudités*, and shallow bowls with shellfish-extracting implements, was symmetrically repeated. Floral decorations were staggered between them in such a way as not to hinder the view of one's partner across the table. It looked like a banquet of strict Cartesians was under preparation – this was no *tabula rasa*. Indeed, there was even what looked like a slide-rule positioned beside each place setting. He vaguely remembered somebody having mentioned the duke's birthday, but could a family function call for such formal trappings?

“Excuse me, girls,” he addressed the two maids as they bustled about their business. “You couldn't just point me in the direction of the back door, could you? I left my father there.”

The older of the two looked up and gave him a disapproving glance.

“You sure he didn't leave *you* on the doorstep? You can't come in here dressed like that – there are guests about already.”

“I just want to deliver the carpet we've brought then go – the sooner the better.”

“The kitchens are off to the right down the passage to the left at the corner,” the younger one gave him a saucy look. “Just don't go pinching anything you take a fancy to on the way – we get the blame for anything goes missing.”

“Listen, you're the only one I'd be tempted to pinch, my lovely. I'm no thief. Come the revolution you'll have to learn to be more civil to your own kind...”

“Our own kind? Cheeky devil!,” the older maid snorted. “Go on, out of here!”

“All right, all right, I'm going. Wouldn't want to put any more demand on your precious time, I'm sure.”

He winked at the younger of the two – who giggled back – and swaggered out of the room again. At least he had directions for getting to the kitchen now. Or so he thought. By ‘off to the right’ had the wench meant ‘right’ from the perspective of the ‘passage to the left’ once he turned into it, or was he meant to turn down the passage to the left only after turning right outside? He could not be bothered going back in to get the precise deictic intent of the expression sorted out. With dubious resolution he turned right, as far as the first corner, then turned left. This corridor, as broad as the first, did not seem likely to lead to the kitchens either. He stopped and listened, but could not hear anything like kitchen sounds from any direction in the vicinity. Further along the corridor it was the same – but perhaps there was a vague murmur coming from the door at the end to the right after all. Hesitantly he stepped up to it and knocked.

“Pray enter,” a friendly female voice purred from within.

For an instant he hesitated, thrown by the intonation – was there a comma between the two words? Was some large carnivorous cat luring him into ambush? He shook off this absurd image and entered the room, opening his mouth to explain his errand as he did so. It remained open in astonishment: for there, perched on an armchair in the company of a group of elderly ladies, sat William. He was sipping tea from a porcelain cup, his little finger cocked in gentele fashion.

“What on earth – I thought...”

“Ah, you must be Mr Horricks junior,” the most elegantly clad of the ladies, who was seated on an Empire style couch next to William, addressed him. “We have been having such an amusing time with your dear father. He has been regaling us with such charming rustic tales.”

“Why yes,” an old biddy in a wheel-chair joined in, cackling. “We have heard all about you at school and the occasion of the porridge in the organ pipe – you naughty boy!”

Jack turned red and glared at his father, who just gave an imbecilic grin.

“But the carpet – we’re meant to be –”

“Oh, we have that situation quite under control. There it is, over there. Your father was just waiting for you to arrive so that you can take it up together to my husband, as planned.”

“You took yer time about it, zon, an’ no mistake – couldn’t vind yer way back from the gardens, were it? Or were you jumped upon and man’andled by nixies in the vlower-beds?”

“Well, it is easy to get lost around this great big old place,” the duchess smiled. “Anyway, there’s no harm done. We’ve enjoyed our little *tête-à-tête* enormously, haven’t we, Mr Horricks? But now it really is time for me to withdraw and prepare myself for dinner – it’s rather a special do tonight, I can’t be late. If you would just be angels and take the carpet on up to the study on your own. You can’t go wrong from here on. There’s a short-cut up the service stairs from the passage that leads towards the kitchens. That will bring you out on the first floor landing near the gymnasium – only don’t go that way. You just follow the corridor the other way towards the rear of the building, where you’ll find another flight of stairs going up opposite the music room – it has oak banisters and panelling. You might hear horseplay and sing-song from inside – that’s where the young people tend to congregate at this time of day. But don’t be distracted, just continue past. The stairs lead to the private bedrooms on the top floor, and the way up to Faithful’s study is through the annex of his bedroom – it’s a little tricky to find, though. I shan’t be up that way until later, after I’ve had a word with the housemaid and the butler, so I can’t take you there myself just now, unfortunately. My chambermaid should be up there in my own rooms, however. She’ll be able to show you the way. Otherwise just leave it outside his bedroom, that’s good enough. Just don’t make a mess or touch anything – Faithful cannot abide anyone touching his things, and he’s such a stickler for appearances, he would notice the slightest object misplaced. Now I must bid you both adieu.”

With a charming smile, the duchess rose to her feet, and William leapt to his own. Then he shuffled backwards, bowing and simpering all the while, to where Jack still stood rooted. After all his walking Jack would have loved to sit down for a while, but he was obviously not going to get the chance. They hoisted the carpet up onto their shoulders once more and manoeuvred it carefully through the open doorway. William dropped his end and turned to close the door behind them with a final bobbing farewell to the gracious company. Once outside, Jack, who had staggered forward a few feet to regain his balance, began berating William at once for the embarrassingly fawning spectacle he had made of himself.

“Just keep your end up and guide me in the right direction, you disgusting old lick-spittle. You’re the one who knows the way to the kitchens – *if* you can remember. While I was running round in circles trying to find my way back to you you were sitting all the while enjoying yourself with the nobs. I bet you’d forgotten all about the carpet. Imagine telling them private things about our lives – they’ll be laughing about us for weeks. Which way now?”

“Straight on. And don’t you go castin’ asparages on yer betters – ’Er Ladyship wouldn’t dream of mockin’ nobody – she were genuinely interested. ’Er vriendliness comes straight vrom the ’eart...”

“You pathetic old git...”

A short way along the passage they came across a flight of stairs that corresponded to the duchess’s description. Their bickering continued as they struggled up this way to the next floor.

17. Pull-ups and put-downs: how to transform your life by hopping on bars

At the top of the stairs William insisted on stopping and putting the carpet down while he mopped his dripping brow.

“Shouldn’t have drunk all that tea, should you? I suppose you’ll be wanting to find a toilet next.”

“Well, now’s you mentions it...,” he squirmed as he spoke and started looking anxiously about him.

“Naturally you didn’t notice it when you were in there socializing with the gentry – a nobody amongst the nobility. First we’ve got to find that other staircase else you’re liable to get us lost again. You can hold out that long.”

“*Me* get uz lost? You be a vine ’un to talk! You be young – you don’t ’ave a weak bladder to contain with. I gotta vind a place to go – vast.”

“Oh, all right, if you must, but don’t look any further than this floor, and come straight back here when you’ve finished, do you hear?”

After William had scuttled off, clutching at his flies, Jack began sauntering along the corridor in the other direction – he could hear faint thumps and rhythmical grunting from that direction. And when he looked round the next corner it was clear that the sounds were coming from behind the swinging doors at the far end. There were no stairs there; it was a dead end. Now the reason he had not protested more vociferously at William’s untimely call was the excuse this gave him to take a look at the rooms on this floor which the duchess had told them to pass by. She had said something about ‘the young people’ being around there at this hour. Perhaps Polly would be with them in the noisy one at the end...

He reached the doors and pushing one side open a fraction he saw that it was, as he had surmised, the gym. Within it a number of athletic-looking young men with short-cropped hair and matching gym shorts and vests were leaping about on vaulting horses and parallel bars. But neither Polly nor any other female was among them. Before he could withdraw again he had been spotted by a figure who appeared to be in

charge – he had been barking out rhythmical orders to the others. This muscular fellow marched over to him with an imperious and not overly friendly look on his face. Jack felt an immediate antipathy.

“I suppose you’re one of the functionalist lot who are demanding to get in. I concede that there has been some sort of unfortunate mix-up about practice times, but I would ask you and your fellows to have the graciousness to wait until we have finished. It’s a special event tonight, as you must know. We’ve had very short notice and simply have to get our act together for the entertainment this evening. It’s essential that we show His Lordship that we can still put together a ripping performance.”

“I think you are making a mistake – I’m not a ‘functionalist’...”

“Ah! Glad to hear it, dear chap. You must be a guest of Miss Polly’s. I imagine you will be involved in putting on the theatricals after our number this evening. I should have known at once you weren’t one of those uncultured blackguards – they would just have come barging in without as much as a by-your-leave, acting as if they’d already inherited the earth and the place belonged to them. Can’t imagine why His Lordship agreed to let them use the facilities at all. He listens too much to that gamekeeper of his – who has his own interest in the matter: his son is captain of the functionalist team. Along with the scum of the earth from among the offspring of the outside staff. If it were up to my own father – he’s the estate manager, you understand – they would not be allowed anywhere inside the premises. But His Lordship gets these odd ideas about ‘fairness’. It would be ‘fair’ if he left the management to manage, that’s Pop’s attitude. Anyway, come inside – take a look at the act as it’s shaping up now. I don’t suppose you saw last year’s show, but it’s been completely revamped since then. That’s the great thing about our theory, it’s so universal – and renewable. We just build on the previous stage, up and up, adding new layers each year – this year we are going to attempt a five level hierarchical tree structure at the climax of the show.”

“I’m not sure I ever really...”

“No, no, of course not – one can’t expect outsiders to grasp the finer points of syntactic theory all at one sitting. It takes years of practice. I’ll fill you in on the background, if you like. Let me just get the lads going on some traditional warming up exercises – that’s what we always start with. For example ‘affix-hopping’. This is rather a language-specific transformation, only immediately relevant to English – but that’s how

things were in the early days. Today we'd analyse it in terms of the interaction of a number of deeper universal principles. All right, line up for affix-hopping!"

The captain clapped his hands, and the other young men immediately lined up in a queue at the end of the parallel bars, jogging on the spot in perfect time. Each of them wore around their neck a kind of bib consisting of a triangular slate that hung on a ribbon and upon which words – or endings of words – were chalked in capital letters. The words on the fronts of the slates read respectively: HE, PAST, MAY, HAVE, -EN, BE, -ING, and SLEEP. The two adjacent pairs bearing HAVE and -EN and BE and -ING respectively each stood side by side, arms about each other's shoulders while waiting to leap separately. At a further clap of the captain's hands they all hopped onto the bars in turn until they were all suspended there, spaced out at equal intervals, one after the other. At a second clap of his hands, three of the team leapt into action, namely those bearing PAST, -EN and -ING, who somersaulted backwards in synchrony right over the heads of their neighbours. As a result of this manoeuvre the words now read in order from left to right: HE, MAY, PAST, HAVE, BE, -EN, SLEEP, and -ING. Then the captain clapped again and MAY, BE and SLEEP heaved themselves up and around, landing to face PAST, -EN and -ING, whom they clasped around the neck with one arm while holding their combined slates aloft in such a way that the word chalked on the back of their new partner's slate could now be read. Thus MIGHT replaced MAY and PAST, BEEN replaced BE and -EN, and SLEEPING replaced SLEEP and -ING and the whole sentence read: HE MIGHT HAVE BEEN SLEEPING.

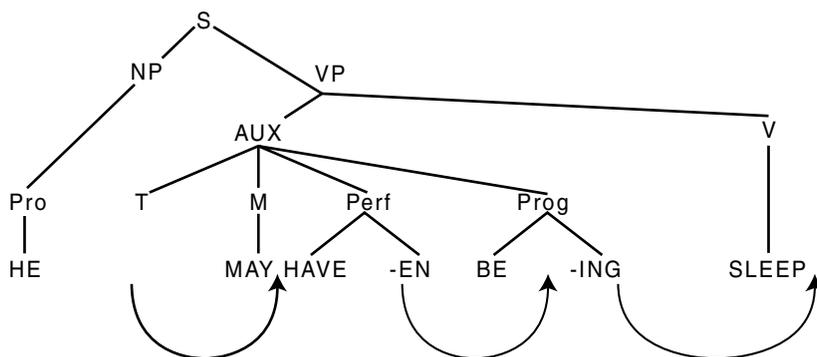
Figure 18

Affix Hopping

SA: X Af Vb Y
 1 2 3 4

SC: 1 3+ 2

- Conditions: (i) Af = T, EN or ING
 (ii) Vb = V, Perf, Prog, or M
 (iii) Y may be null



“Well, that was sort of impressive,” Jack commented hesitantly. “But why exactly did ‘PAST’ come first in the original row?”

“A matter of it coming under AUX, together with all other tense, modality and aspect elements of verb phrases – as defined in the early days, that is. Tense is obligatory in English declarative main clauses, whereas modality and aspect auxiliaries are optional but must be tense-marked if they are present. Of course, these moves are quite antiquated today – we wouldn’t dream of boring His Lordship with such elementary exercises. I’ll show you some of the X-bar configurations that we are actually going to put on for the show tonight.”

“All right, but, er, where are these X-bars?”

“Oh, we just use the bars on the wall at the back there. Let me explain a few of the basics while the lads carry on limbering up, then you should be able to appreciate the elegance of the moves without my running commentary. Now you will see that every other horizontal bar is labelled at the end with a large X with a different superscript after it, X, X¹, X¹¹, etc. – the unlabelled ones between are just for support. An ‘X phrase’

corresponds to a number of older constituent types, Verb Phrase, Noun Phrase, Adjective Phrase and so forth, but the whole point of the new system is that it generalizes across all such units. X ('zero bar') could thus correspond to a noun or a verb and on the next level up X^1 – marked with a single 'bar' – corresponds to the core of an NP or a VP, i.e. a head X, plus any complement (say a prepositional phrase modifying a noun or the object of a transitive verb). Still higher up, X^{11} ('X double bar') corresponds to a full NP or VP, etc., containing a 'specifier' (SPEC) – for example an indefinite or definite article if X is nominal or a tense inflection if it is a verb. What is common to all phrases is precisely the structure SPEC + X + COMP. This can in turn be extended to whole sentences (thus S, S^1 , S^{11} at the relevant levels) – although this side of the theory turned out in the long run to present problems and after much soul-searching has been replaced..”

“I’m glad to hear it. But tell me, if your school – if that is what you call it – is supposed to be universal, how is it possible to represent a specific language, like English, in it?”

“Ah, you are of course referring to the distinction between ‘externalized’ or E-language English (as spoken on the streets by Angles) or the ‘internalized’ I-language behind it (as understood – theoretically – by angels). It is true that it is the latter we are concerned with – we leave E-language to sociological field workers and other practical town folk. But of course behind the E-language you call English lies an I-grammar which is both universal and English – what is ‘local’ is determined by a limited choice of basic ‘parameter settings’. Whether a COMP follows or precedes a head constituent, for instance, is a simple binary choice affecting many syntactic configurations, and one language will go one way while another will go the other (as in Welsh as opposed to English basic word order). It’s long been realized that much of the superficial variation between languages relates directly to the lexical entries of specific words in the lexicon, which may have different requirements as regards complements, despite expressing a similar meaning. A given verb or noun, etc., has a ‘maximal projection’ at the double bar level, since it is at that level that its obligatory array of complements (those it subcategorizes) must be filled in in any well-formed sentence – beyond that it does not effect the syntactic configuration. Each head – i.e. lexical entry – also introduces its own case requirements in terms of semantic ‘theta roles’ like ‘agent’ or ‘patient’, which get mapped onto relevant

phrase structures in the sentence. The so-called Case Filter then insures that each noun phrase in a grammatical sentence is in a position to which case is assigned. Thus *‘criticism the girl’ is ill-formed (whereas ‘his criticism of the girl’ is fine) because a noun – unlike a preposition or a verb – does not assign case. Of course all this is still very elementary, and in recent years the number of layers – and therefore the possibility of representing richer and richer structural configurations in this general format – has greatly expanded, with for example Inflectional Phrases and Complement Phrases replacing the old ‘S’ levels. There isn’t time to go into the subtleties of agreement either – a matter of ‘percolation’ or ‘inheritance’. However, you should appreciate that there are other sub-systems involved apart from X-bar structure in constraining well-formed sentences. Let me just mention Government and Binding.”

“Be my guest...”

“I don’t need to go into detail about ‘c-command’, the central concept of Government theory, whereby a noun phrase ‘constituent commands’ other phrases standing in a particular structural configuration with it. I’ll just remind you that an element c-commands everything within its ‘domain’ (as determined by the maximal projection from the lexicon of the double-bar phrase containing it), and that a lexical category ‘governs’ another when it and the maximal projection of the other constituent mutually c-control each other. This relation is in turn involved in most of the other sub-categories of the theory, for instance in determining when coreference between a pronoun or an anaphor like ‘himself’ and its antecedent – both bearing the same ‘index’ in deep structure – can occur in Binding theory, namely only in those configurations where the binding element (the antecedent) c-commands it, as in, for example, ‘Noah meets himself.’”

“I hope he tastes good to himself. Look, I’ve heard about this before somewhere. I don’t really have time to –”

“However, there is just one other aspect of the newer form of the theory I must ask you to bear in mind as you watch us perform: all those complicated transformations in the earlier version have been jettisoned, or rather generalized into one, ‘Move α ’. This moves a given constituent (‘alpha’) – triggered principally by the requirements of the Case Filter – from one position on a structural tree to another, leaving behind an empty ‘trace’ relevant to interpreting the underlying role in the sentence of the moved constituent. It is determined by the interaction of various

principles rather than by individual rules. There are limits as to where an element can move to – though of course it is bound to move *somewhere* – and that is where Bounding theory comes in. The process can moreover be reiterated, leaving whole chains of traces behind; these you will not be able to see since they are of course invisible.”

“That sounds convenient.”

“Exactly. Maximal generalizations always are. In fact we are working on a still more generalized version of Move α which His Lordship has proposed that we launch as ‘Affect α ’ – in laymen’s terms: ‘do anything to anything’. This covers cases of moving, deleting or inserting any constituent. Along with a single ‘Merge’ operation it explains just about everything. In general, the somewhat unconstrained exuberance of earlier forms of our model has been substantially pruned. Everything has become very much more streamlined now. In fact, in the very latest form of the theory,” (here he looked around and lowered his voice conspiratorially) “we have done away altogether with the distinction between surface structure and deep structure – the levels at which respectively the phonological form and the logical meaning of a sentence are determined. We hope our demonstration this evening will please our dear patron on his birthday by illustrating to everyone’s satisfaction (despite the calumny of defectors who should know better) that the ‘Minimalist Program’ is able to prove, once and for all, that all languages are indeed essentially the same apart from their vocabulary and a handful of parameter setting choices. This has admittedly necessitated adding still more higher levels of abstraction – such as ‘Tense Phrase’ and ‘Agreement Phrase’ – to account for the complete spectrum of language variation in the world, but that is a price we consider well worth paying. The relegation of most of grammar to the lexicon has been becoming more and more inevitable after the conflict over the ‘Lexicalist Hypothesis’ some years back, which resulted in Morphology being returned to that component. Of course this will put some additional strain on the librarian and his staff – but that fussy old chelonian would complain even if he had nothing at all to do down there. By the way, I’m sure this is not necessary to mention to you, an impartial house guest, but please don’t breath a word of this to the functionalists: those undisciplined yobs would only distort it and gloat, make it sound like we’ve thrown in the towel and returned to the structuralists’ concept of the linguistic ‘sign’. It’s true that it has proved expedient to reassert that the individual *word*

links a phonological form to a semantic interpretation rather directly. But what of syntax? They still just refuse to understand the autonomy of syntax! Now you shall see what discipline and autonomy can achieve, hand in hand!”

The captain gave a nod and strode off with a lithe step and a self-possessed expression to join his team-mates. They were already clinging to the bars – some face-forward, some face-backward, some upright, some head-down – and were forming and reforming complicated patterns with their spread-eagled limbs. However, before he could reach the bars – and before Jack could discreetly escape – there was a furious cry from the doorway, where another team of young men had burst in. These were dressed in a variety of gear, one or two of them simply in scruffy T-shirts and gardening shorts held up by braces. Their unkempt appearance was definitely not on a par with the uniform smartness of the formalists. Jack stepped back to the wall, his line of retreat now blocked.

“Oy, what’s the idea?,” their leader – a hulking fellow with shoulder-length blond hair – shouted across the room. “It’s our time!”

“Sorry. We’re booked in all afternoon – we have a show to put on this evening,” the first captain replied with a look of utter disdain.

“Booked? What do you mean ‘booked’? We have a gentleman’s agreement with His Lordship – twice a week, Tuesdays and Thursdays from four to six, exclusive use of the gym! It’s part of our wage agreement – or rather in lieu of a wage agreement. Your father knows that perfectly well! “

”I mean ‘booked’ in a more abstract sense: it’s in the book that we’re to perform this evening. An uncommon event. Can’t be changed – special circumstances dictate. Pop said he’d have a word with His Lordship about it. If it slipped his mind, I can’t help it. Anyway, you’re only admitted in here at all on a technicality – there’s no money left to pay superfluous domestics.”

“By god, Potts, if you and your father try and do us out of our last scrap of privilege there’ll be rebellion! We need to train our competence as much as you do. You syntax jocks are getting far more than your fair share of practice time.”

“You leave Pop out of this, it’s really all about jealousy on the part of you losers. He’s heard the stupid jokes you make about our G and B workout room, calling it the ‘torture chamber’. Well, I’m sure it is – for wankers likes you! He’ll book you all right if you cause trouble. You just

don't have the breeding for this kind of gentlemanly activity. If you ever took over – God forbid! – there would be sheer anarchy. People like *your* father would be traipsing mud all over the antique carpets...”

“Take that back, you snotty prig! It's your father, not us, who makes the bad jokes, threatening to send innocent people to G & B! Us he fines for the slightest infraction, while you and your friends – well, when was the last time any of you was up before him? I could tell a pretty story or two about where you stole your best ideas from...”

“Huh! Dream on, scumbag! You are just furious because your own ideas are so colourless and green with envy like yourselves – none of *us* would lose any sleep if you clung to them for ever! Who'd want to steal such restless bedmates?”

With these arrogant – if somewhat obscure – words the captain of the formalists stepped forward to face the scowling newcomer. Their respective teams, having slithered silently down from the bars or in from the corridor, gathered menacingly behind them. There was a distinct feel of impending fisticuffs in the air.

“Hold it there, friends,” Jack felt obliged to intervene – and managed to do so without revealing who exactly he meant by ‘friends’. “Surely this misunderstanding about ‘booking’ is just a matter of alternative interpretations of the facts. You can iron your differences out – there's room enough in here for both of you to practise at once. You could even do it competitively if you have to...”

“I couldn't go along with competing with someone who hides behind the Law at every turn.”

“It's the spirit of the Law that counts, not the letter. If you can play by the rules, then so can we.”

“Your ‘spirit’ is pure artifice – it has nothing to do with the realities of life. You have never demonstrated anything that cannot better be explained by common sense.”

“Hah! I challenge you to knock down one single brick from our hard-won theoretical edifice!”

“Done! You choose the problem, we'll solve it for you. Only no sleight-of-hand!”

“And no dirty tricks either!”

With this the first of the two captains sniffed and sauntered off to the opposite side of the gym, drawing his smirking team-mates in his wake.

“You there,” the captain of the challengers pointed at Jack as he tried

to sneak away, his business finished. “You can adjudicate. We need a neutral party to ensure a fair verdict.”

“Listen, I’d love to help out, but I’ve got a carpet to –”

“I said we need a neutral party,” the hulking fellow muttered threateningly as he stepped towards him, cracking his knuckles as he did so.

“All right, all right, I don’t mind watching for a while...”

“Since you lot have an explanatory handicap,” the captain of the formalists called across in a superior tone from the far side, “you had better choose whatever format you can handle – bars or shoulder-stands. There’s no room for two teams on the bars.”

“We’ll manage nicely standing on our own – we have no need of props, thank you very much.”

“Agreed. We’ll stick to the bars then – that at least will ensure a minimum of disruption of our rehearsal procedure. But how are you going to manage movement without support? How would you represent the passive transformation, for example? I’ll tell you how *we* used to do it when we were toddlers.”

Here a few of the formalists – grinning as they followed their captain’s brief instructions – wrote some new words on their slate bibs and lined up displaying them thus: JOHN, PAST, SLICE, and THE SALAMI. At a clap of the captain’s hands they all squatted down in a row one behind the other, and at the next clap two others – bearing the words BE and -EN – ran up, shoulder to shoulder, and gave the last of their squatting team-mates a kick in the rear which caused him to leapfrog over the backs of the others until he came to land behind JOHN, whom he in turn gave a kick so that the latter tumbled forward then scrambled round to squat at the back of the line; at the same time BE and -EN leapfrogged into place behind JOHN and SLICE respectively. At a final clap of the captain’s hands there was some quick scribbling on the backs of slates, then BE and PAST leapt to their feet clasping each other round the shoulders; they presented the reverse of their conjoined slates, which now read: WAS. At the same time SLICE and -EN leapt up holding the word SLICED aloft, and the gymnast who had scampered to the back jumped up with BY JOHN displayed on the reverse of his slate.

The formalists remaining at the bars slapped their thighs and chuckled as if this was the most amusing game they had watched for

some time. The functionalist captain merely shrugged with a look of total disdain on his face.

“I think we’d prefer to do it our own way. Your complicated little game demonstrates one obvious thing: your passive ‘transformation’ lacks any kind of motivation. Compare this to our simple functionally motivated representation. We won’t even bother with slates.”

Here he just nodded at the four nearest members of his team, who formed up into a kind of circular, non-linear scrum, heads down to the centre, with the smallest of them standing on the backs of the others. Then he grasped the whistle hanging round his neck and gave it a blow, at which each of his men called out a word in the following order: JOHN – SLICED – THE – SALAMI; only the little chap on top – who presumably corresponded to the formalists’ PAST and was now straddling SLICE – kept silent. The four kept on repeating their ‘names’ rhythmically to themselves as the captain ran round to the side of the scrum and waved an arm as if he were signalling footballers to line up, then whistled again, which caused them to stand up in a line facing the other team, who were now lounging around on the bars, looking sceptical. From his position in the vicinity of JOHN – at whom he had been pointing directly – the captain ran round to the other end of the line, pointed at the two lads repeating THE SALAMI over and over under their breath, and blew his whistle. At once THE SALAMI pair strode forward a pace while JOHN at the other end crouched down. Another blow of the whistle caused them to reform a circular scrum, then, after spinning around in alternate directions grunting their names in synchrony for a few seconds, they straightened up again and froze. Now they were somehow lined up to form the following string of names, which they called out in succession: THE – SALAMI – WAS – SLICED – BY JOHN. It was the turn of the on-looking functionalists to clap and fall about laughing.

“Yes, yes, very amusing,” the manager’s son called across from the bars again. “But how is it that the little fellow on top was allowed to say a word of his own – WAS – this time? And where did JOHN get his BY from? I thought you eschewed all arbitrariness?”

“The little fellow’s an ‘operator’, he can do as he wants. Actually he was positioned at exactly the right level, marking the entire core predication, whereas PAST in your configuration really *is* positioned arbitrarily as regards scope relations. Your model has no *motivated*

layering at all, so it naturally lacks a distinct core predication level to link the proposition to the communicative situation. As for BY, it was simply slipped in by a late expression rule – an irrelevant matter as regards present purposes. The point was to show how alternative perspectivizations on states-of-affairs can be useful as an explanatory principle.”

“As always, you try and pass the explanatory buck to pragmatics, just pushing the really interesting structural stuff under the carpet of ‘late expression rules’. Anyway, your ‘explanation’ still doesn’t say anything about why the subject should always be put in linear position before the object. Isn’t that something you are supposed to be able to tell us?”

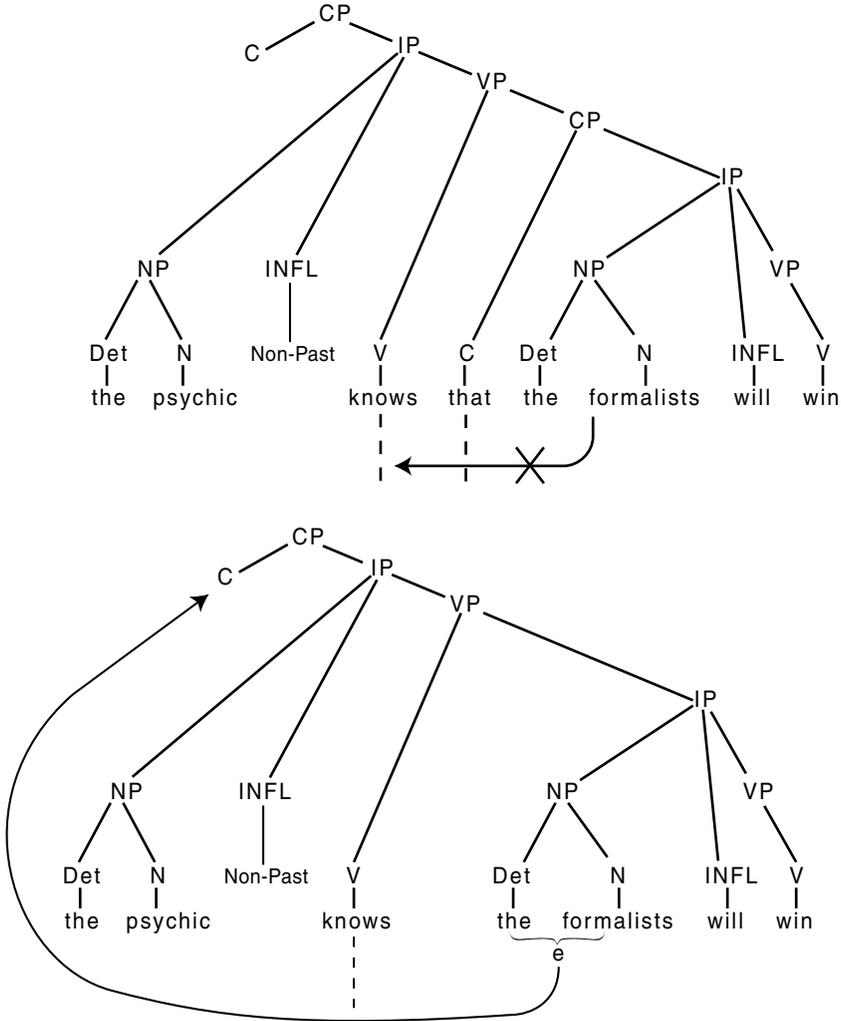
“Certainly. It’s not just an arbitrary fact about English, however, it has quasi-universal validity – at least as a tendency – because it is iconic. Subject nominals come earlier in sentences than objects because of their natural saliency in the prototypical transitive event – they reflect the source of the energy flow. This is so strong in English that it even prevails when the undergoer – or recipient – is chosen as subject in the passive construction.”

“Quasi-this, quasi-that – typical functionalist muddle-headedness. At least the sub-components of our theory are tightly integrated internally, whereas yours are just a mish-mash of competing forces, always changing. How on earth could such a grammar be transmitted from one generation to the next? The whole *raison-d’être* of a grammar is its stable arbitrariness, that’s what renders it repeatable despite all shifting external forces. Now let’s get serious. Try this one for size. How do you account for the fact that you can say ‘The psychic knows that the formalists will win’ and also ‘Who does the psychic know will win’ but not ‘Who does the psychic know that will win’? Here, we’ll make it easy for you by showing you how *we* account for the facts – in a simplified form of notation that even amateurs can understand. All you need to know is that ‘IP’ stands for ‘inflectional phrase’, with inflection INFL as its head (this accounts for obligatory tense marking in English), and ‘CP’ stands for ‘complement phrase’ – if we had greater man-power available we would want to break this up into further X-bar levels, each with its own Specifier and Complement. As it is I shall have to mark two levels on my slate, under a highest CP, in order to attach a C – or complement node – to which a relative pronoun can be raised.”

Here the formalist team leapt into action, scribbling words and abbreviations onto their triangular slates then scuttling up the horizontal

bars to form the following configuration with their interconnected limbs and slates:

Figure 19



Their captain, holding up his slate with an 'IP' and a Complement node chalked beneath a 'CP', stood on the topmost bars with his legs spreadeagled on the shoulders of two of his lieutenants, who in turn bore

an NP and a VP respectively, while suspended from his belt dangled another slate reading 'INFL' with 'Non-Past' added below it. Elsewhere on the intermediate bars another 'CP', another 'IP', and another NP-plus-VP pair of slates were held up by team-members, while crouching on the ground below were the rest of the team, holding slates on which both a category abbreviation and – below it – an actual word were written in most cases.

“Now the reason why Sloames down there – the chap holding THE FORMALISTS – cannot be prevailed upon to move his fat alpha across to front the matrix clause is a purely structural, semantically arbitrary ‘island constraint’ stating that you cannot move an element from a ‘that’ complement phrase. The trace – or ‘empty category e’ – left behind would be uninterpretable. This is because of the Subjacency Principle, a universal constraint on WH-word formation from embedded clauses across certain structurally defined boundaries. To put it another way, the corresponding sentence with a fronted WH-word would be ill-formed because it would violate the principle that only one ‘bounding node’ (whether sentence, clause or NP) can be crossed at a time by movement processes of this sort, and here there would in fact be two crossed by the same process. Incidentally, this is something that any child knows instinctively but which cannot be learnt from input alone. Go on, show them anyway, Sloamesy.”

The character thus named grinned and slunk across to the front of the sentence leaving his crouching, empty silhouette where he had moved from. There were angry growls from the nearest team-members, and he was hauled back to the slot he had tried to vacate.

“Now however, if we remove the complementizer phrase containing the ‘that’ – yes, rub it out, Rogers – hey presto, Sloames can move – like that. And no one gives a hoot. His trace remains in place and is interpretable now since it does not violate the Subjacency Principle. The explanation is that there *is* no explanation apart from the structural fact itself!”

Know-it-all chuckles arose from his fellows.

“Cheat! Trick question! We win by default!” the functionalists booed.

“Of course there is an explanation – a functional one,” the second captain silenced his mates. “Let’s forget about the biased content of the sentence for the moment, even though semantics and pragmatics – which obviously does not interest you in the slightest – are essential to

any plausible explanation here. It is a matter of ‘focus domain’, which is limited to material directly under a matrix clause node. This is a pragmatic matter, for a pragmatic contradiction arises if one places focal elements – such as WH-words – within clauses representing presupposed material, such as the ‘that’ complement clause here (note that the matrix verb ‘know’ is inherently factive in this construction). You simply cannot place narrow focus on the subject of such clauses – as opposed to similar clauses lacking ‘that’, which do not have the same presuppositional status. The ultimate source of your so-called ‘Subjacency’ constraint lies with the interaction of factivity and focality, which in turn is relatable to principles of conversational convention. *Incidentally* (to echo your favourite rhetorical trick), a ‘that’ complement clause is historically nominal, its head being the conjunction ‘that’. It would be unnatural to extract part of the rest of the clause since the relationship between the head and the remaining VP would be disturbed and potentially uninterpretable. If you *drop* the overt complementizer, on the other hand, there is no intervening head to confuse the interpretation...”

“Rubbish! *Ad hoc* speculation! That was two explanations, not one! Devious footwork!”

“Still in doubt? We can show it to you in a format you may just about be able to grasp. Come on lads, give them one of their own tree structures!”

Encouraged by their captain’s bravado, the functionalist team began at once to form a human pyramid by standing on each other’s shoulders in the middle of the gym floor. Since they were not wearing slate bibs like their rivals they simply called out the morphemes and categories they represented, starting with the captain on top (who cried ‘Sentence!'). The various middle men continued, then the six on their hands and knees at floor level called out, in sequence: ‘The psychic’, ‘knows’ ‘that’ ‘the formalists’ ‘will’ ‘win’.

“Right then,” the captain proclaimed, waving his hands about a bit to maintain his balance. “Let’s try turning THE FORMALISTS – that’s you, Bloggs, I’m afraid – into a WH-word and try extracting him from his presupposed clause to focal position at the front of the sentence. Give his head a tug, Rob, and see if you can pass it along to Fred.”

The one addressed as ‘Rob’ grabbed Bloggs by the ears as seecommanded, whereupon Bloggs immediately started struggling and wailing “Why me? I’m presupposed here – just leave me alone!”. The

result was that the entire structure of bodies tumbled down in a heap on the floor.

“There, you see,” the captain bounced back onto his feet with a grin. “It just can’t be done. If Jenkins the Complementizer hadn’t been to his left Bloggs could have just slid along quietly into focus position since he’d no longer be part of a presupposed clause. Admittedly not an elegant demonstration, but a realistic and – I think you will agree – graphic one.”

“Huh! It was merely graphic of your ignorance – you called that primitive thing a tree structure when all you could think of to call your top node was ‘sentence’! What about the universally valid distinctions between Inflectional Phrase and Complement Phrase?”

“Universal, my foot. They are arbitrary abstractions needed to make your bloodless theoretical chimera at least look ‘economical’, though they aren’t even interpretable in half the real languages of the world – nothing but empty categories hanging on barren branches. You postulate all sorts of mysterious and ambiguous categories – like ‘PRO’, your so-called ‘pronominal anaphor’, which is supposed to account for the ‘Equi-subject’ relationship in ‘I asked to go’, and then you state by fiat that it is universal, although it never appears as an overt lexical or inflectional item in any known language. Beneath all this ‘generative’ jargon there’s a terrible mix-up of linguistic structure and linguistic process. If you want really universal higher level structural nodes you need to think in terms of illocutions, or even higher, discourse categories like ‘Turn’ or ‘Move’ – not ‘Move alpha’ even, just plain ‘Move!’”

“Whether or not a particular category – such as PRO or INFL – is actually instantiated by an overt surface element can naturally vary from language to language. It’s the thought that counts. In fact ‘little pro’ – as opposed to ‘big PRO’, which is a matter of Control theory – is an empty category that is precisely chosen by some languages (those that have a positive setting of the pro-drop parameter, like Italian) but not others, so *faccio* corresponds regularly to English ‘I make’. Languages that make this choice will generally have inflectional means of expressing the subject, since the empty category needs to be properly governed, something English can’t provide, since it does not realize INFL lexically.”

“But there are plenty of ‘pro-drop’ languages with no inflections at all, like Chinese! Anyway, this is a discourse matter, to do with topic tracking choices, not with syntax at all.”

“And *you* are not talking grammar at all, just competing functions in performance. We don’t deny the validity of semantics and pragmatics and other aspects of linguistic performance – we just see the methodological prudence of assigning them to separate modules, where their own kinds of rules and categories may apply. As long as the interfaces match up. As for who is ‘mixed up’...” (He didn’t even deign to finish the sentence, but went on:) “Believe me, typological differences can easily be handled by parameter settings, you just have to deduce the right ones.”

“Well, how do you account for ‘non-configurational’ languages – ones with non-hierarchical ‘flat syntax’? I suppose the first parameter choice in your Universal Grammar must be between ‘syntax’ or ‘no syntax’ – the head-marking languages of North America, for example, have an embarrassing habit of going for the latter, don’t they? No, you should stick to structural generalizations for English and leave the serious typological stuff to those who have the experience – that is if you don’t want to expose your nice clean theories to the messy facts!”

“Messiness is in the eye of the beholder. That’s the beauty of the parameter setting approach, it’s so simple but explains so much. It’s early days yet, we are only just beginning to see how they cluster in larger groupings. You cannot accuse us of not taking typology seriously nowadays. It’s true that we rarely go for long treks out of doors – strenuous indoor exercise is perfectly adequate for maintaining a healthy mind. Anyway, enough empty mud-slinging, let’s take a specific case. Let’s see if all your typological ‘experience’ can help you do any better in explaining one particular parameter, the ‘Opacity’ or ‘Verb Raising’ choice. How is it that in French one can say ‘Vous embrassez souvent Marie’ but not *‘Vous souvent embrassez Marie’, whereas on the contrary you can say in English ‘You often kiss Mary’ but not *‘You kiss often Mary’ – why should that be?”

“Because French girls are often called Marie?” one of the functionalists quipped.

“Or perhaps English girls don’t like it as often as French ones,” another of his fellows grinned.

“You probably weren’t even aware of the facts and are obviously going to need all the help you can get,” the captain of the formalists continued, unamused. “Here is our simple explanation first: the rich, transparent agreement of French verbal morphology permits transmission of theta roles to verbal complements and syntactic raising of the

verb whose tense feature eventually has scope over the VP at LF. English lexical verbs, on the other hand, cannot be so raised because impoverished agreement blocks theta role transmission. The only possibility is I to V lowering of inflection. Tense, which must govern VP, and thereby eliminates the elicit trace of lowering, raises covertly to INFL at LF. This parameter is expressed in the Minimalist Program as the presence of a strong verbal function F_v in Tense in French which forces raising of the lexical verb, but is expressed in English by a weak F_v function in Tense, which requires Procrastination instead of raising – I hope I don't have to explain the difference between a weak and a strong 'function' for you? Anyway, the point is, Procrastination, which leads to covert movement, is deemed less costly, since it requires less effort..."

During this explanation the tittering of the functionalists turned gradually to outright guffaws, which were met by furious scowls from the opposition. When they had calmed down enough for him to be heard, the gamekeeper's son spoke again:

"No, I don't suppose you can even see what's funny about it. You are blinded by your own private jargon – the fate of all dogmatists!"

Thus insulted to their very foundations, the formalists began moving threateningly across the room towards the functionalists – hurt felines with their claws out. The functionalists in turn stopped laughing and began loping forward, gathered doggedly around their captain with hackles raised and provocative snarls on their faces.

"We are *not* dogmatists," the first captain hissed. "Our approach can flourish side by side with all sorts of variant formalisms – we regularly put our heads together with the Head-driven Phrase Structure Grammar team, for example, and sometimes with the bottom-up Lexical Functional Grammar team, or even the Autolexical bunch (at least one doesn't have to worry about spelling with them). We often join in Arc Pair flying exercises with the Relational Grammarians too. Has it never occurred to you that it's *your* categorical pronouncements that hinders progress in making our field more widely accessible?"

"Unlike yours, our categories are fuzzy," the second captain barked. "We can get along with anybody! We are as willing to talk with AI simulators about push-down stacks and immediate constituent ordering as with psycholinguists about response times in lexical priming tasks and with text linguists measuring the intervals between different kinds of NPs for topic tracking purposes. You just pay lip-service to the advances

in such areas while in reality you are still mesmerized by the whisker-preening meta-wailing of your guru! We relish competition – whereas for you it’s all Clash and Crash!”

“You’ve bitten off more than you can chew there! Up to now we’ve only been pussy-footing, but we can apply more than soft constraints on you ill-bred, yapping curs – we are still capable of hard core tactics!”

“That’s right, it all boils down in the end to the universal principle of ‘Might is right’ – call it what you like! Well, you don’t see us going catatonic at your threats!”

Realizing that at any moment a pitched battle could break out – with fur flying and jaws snapping – Jack stepped between the teams and intervened with a desperate suggestion:

“You asked me to adjudicate. Well, here is my proposal: show how open-minded you all are by just doing your own things separately on opposite sides of the gym. The only way you can convince an outsider that one of you is superior to the other is through actual demonstration. You obviously can’t even agree on the kind of problems that need solving, so why not just choose your own exercises and ignore the other side altogether?”

Despite much further growling and hissing the two teams seemed to appreciate the wisdom of this advice and withdrew to confer, each in their own huddle on opposite sides of the gym. When they went into their separate routines, it seemed at first that the tactic of separation was going to pay off. The formalists limbered up with energetic pull-ups at the suspended trapezes then went on to swinging back and forth on them and finally to performing daring pirouettes in mid-air as they exchanged trapezes in pairs. Meanwhile, the functionalists alternated between push-ups on the floor and running on the spot in the opposite corner. But then their exercises too got more exuberant and elaborate, taking them further and further afield as they somersaulted and cartwheeled into formations around the periphery or performed parallel back flips from the one side of the gym to the other in tight formation. Their respective activities inevitably began to overlap in territory, despite the determination of both sides to ignore the other. As Jack retreated gingerly towards the exit, heads were beginning to knock as vaulters hurtled in from opposite ends of the vaulting horse and simultaneous raising manoeuvres began to result in mid-air collisions. Was this what the slogan ‘Clash and Crash’ referred to? The attempt to ignore each other was at all events

clearly undermining the concentration of both sides. The formalists seemed to leap almost weightlessly through the air, bouncing off walls – or any available surface – and zooming through precision cross-overs like planes at an air show, just Moving and Merging with minimal effort – and no regard for function or apparatus. The functionalists, on the other hand, more aware of their own embodiedness, kept closer to the ground, but nevertheless began to speed up beyond their natural ability. In their over-enthusiasm to synchronize their movements rhythmically they were beginning to stumble over their own feet and misjudge their run-ups to the parallel bars, with the result that multiple pile-ups were becoming more frequent than orderly pull-ups. In fact the activities of both teams were everywhere becoming increasingly entangled, with bodies ricocheting off each other and pieces of loose clause-structure flying in all directions.

Taking advantage of this growing chaos, Jack escaped through the swinging doors back to the corridor. Here he found William already pacing about impatiently near the carpet, which was still propped up where they had left it.

“Zo where you bin gaddin’ about, leavin’ me to twiddle me thumbs?”

“Waiting for you to do your business, wasn’t I? Come on, give a hand getting the carpet back on my shoulder again... I suppose you found a suitable place to do it after all that?”

“Yeah, well, zeemed zuitable enough,” William mumbled as he struggled to position the other end of the carpet on his own shoulder. “Couldn’t vind nothink better ’tanyrate.”

“What’s that meant to mean? Don’t tell me you just went in some corner – that would tax Her Ladyship’s ‘heart-felt friendliness’ a bit, don’t you think?”

“Things jist bain’t conveniently placed round ’ere. I vound this Chinesy zort o’ vase thing in a window recess – vlowers looked like they needed waterin’ bad, like. An’ the noise it made when I vlicked it with me vinger zounded like it coulda been meant as a lav: ‘ming!’”

“You filthy old barbarian – you’re not fit to take anywhere...”

William gave something half way between a snort and a cackle.

“Come on, keep your end up, we’ve got to locate those other stairs. You’ve been down this way already – did you see any?”

The grunt from William, which was accompanied by a vague shaking of the carpet, suggested a positive answer. But before they had retraced

their steps much beyond the stairs they had climbed from below, the sound of drunken singing from a room up ahead distracted Jack once more. Was Polly perhaps in there, together with her noisy theatrical friends? He decided to take a quick look inside. This time it was William who grumbled about wasting time, but since Jack put his end of the carpet down he had to too.

“Ey – I can recognize that there toon,” he brightened up suddenly. “Reminds me of me own Zaturday evenin’ activities with the lads down the old ’Ammer and Tack avore I met yer ma...”

Together they poked their heads cautiously around the half-open door into what must have been the music room that the duchess had mentioned. Propped up against an upright piano stood three young gentlemen in an advanced state of inebriation – only slightly greater than that of the pianist. They appeared to be attempting their own randy rendition of the chorus from ‘The Pirates of Penzance’. A couple of girls stood smoking nearby, giggling and egging them on. Other guests were lounging around in armchairs, only their feet and/or tilted glasses visible above the padded arms.

18. A matter of phrasing

“Come on in, chaps, the more the merrier!” one of the swaying singers at the piano called over to them, having caught sight of their heads at the door during a brief pause between verses. “Any of you lot happen to sing counter-soprano? Double along with me!”

How many he imagined they were was anybody’s guess – certainly more than two, to judge from the more than moral support he needed from the piano in order to stay upright. Thus discovered, Jack entered the room with William close behind him, as the young guests launched forth into yet another bawdy verse. All Jack was interested in finding out was whether Polly was present. Which, as he quickly ascertained, she was not. But William was not so easily satisfied – he approached the piano with a grin, and somebody thrust a drink into his hand. He was soon joining in the merriment, bouncing up and down on his skinny legs like a puppet on a string and oom-pahing along with the music as if he were some kind of rubbery tuba.

Meanwhile, Jack swept the room with his eyes for clues that might reveal Polly’s whereabouts – perhaps she had been in there earlier and left some article of superfluous clothing lying about. On second thoughts, recalling vividly the last (and only) time he had seen her – outside her bedroom – he decided that this was unlikely. She hadn’t been wearing anything that could decently have been considered discardable. Nevertheless, he could swear he could smell – despite the pungent reek of cigar smoke – a faint trace of the perfume he had noticed as she brushed past him in the corridor. He tried addressing the nearest figure slouched in an armchair swinging his glass back and forth in time with the music but not actually singing.

“Polly? No, couldn’t shtay around – didn’t suit ‘er... Company too monotonous for such a polyphonus lass, alas... I just proposed helping her brush up her Shpanish for tonight – and off she goes in a tizzy...”

“Doesn’t sound like the place for a language lesson...”

“Ah, you should have seen her do her Carmen song and dance thing – her saucy come-and-get-it rhythm can’t be faulted, but the accent, well... It’s not the words that count, she says, it’s the phrasing. Claims the origin of language is in poetry and song – asks me if I haven’t heard

of Vico, the Romantics and all that. Well, course I have, my dear, I reply, but –“

”Do you know where or who exactly she went off to?”

“Does one ever with fair – as in fairground – lady?” he sighed, then brightened up at the sight of the abrupt end of the Gilbert and Sullivan number: the piano player, hit on the head by a champagne bottle swept accidentally off the top of the upright, collapsed onto the floor from his stool.

“Come on now, boys,” the would-be Spanish tutor cried out. “Let’s do ‘In the beginning was the wooed’, in honour of our bewitching muse, mistress Poll! Who needs the piano – just give us a B, someone!”

And in response came a rising chord on the syllable ‘be’ as the young gents started in on a kind of barber-shop serenade *sans accompagnement*:

“Be –”

”Be –”

”Be –”

”Be –” (This last one William’s)

“Be-eautiful Poll, oh ravishing Poll, be mine, be mine!”

Jack winced, foreseeing raunchier verses to follow, and continued his search around the periphery of the room until he noticed a sheet of writing paper crumpled on top of a desk. It lay amongst a scattering of staved music paper, a tuning fork, a stack of old 78 records, an ancient gramophone with loudspeaker horn in ‘His Master’s Voice’ style (with stylus), and – rather incongruously – a pair of castanets. As he carefully unfolded the note he caught another trace of the familiar scent. The words written on it in a hasty scribble read: ‘Time for a good time if you join me in the billiard room in five minutes...’

Thinking – or at least irrationally hoping – that the note had been deliberately left for him to find, Jack made at once for the doorway, whence he signalled to William (who may or may not have noticed) that he would be back in a while and that he was to wait for him there. He would surely find someone outside – someone more *compos mentis* than the carousers within – who would be able to direct him to the billiard room.

There was a pause after the barber-shop song came to an end, during which fresh supplies of champagne were uncorked. William found himself drawn along by one of the singers, a talkative young chap with a somewhat battered carnation in his lapel – presumably nipped from the

flower-beds. After picking up a half-empty bottle of champagne and filling both their glasses, he led him over to the gramophone on the desk.

“You just *have* to listen to some of these recordings that we found lying around in the shelves over there – must have belonged to the jolly old duke’s granddad. You might recognize the voice of some other old retainer – the readers must be about the same vintage as you, I’d guess. Here, what do you make of this one.”

He fumbled with one of the ancient vinyl discs, almost dropping it on the floor when he held it up to try and read the label, then slithered it around on the turntable until it fitted, cranked the apparatus up with the hand-crank, and shoved the needle scratchily into a random groove. What emerged from the horn was not music, as William had expected, but a posh-sounding female voice repeating the phrase ‘How now, brown cow’ with a number of different intonation patterns, each word enunciated with artificial exactness.

“Anyone you recognize?”

“I’ll be jiggered if I does. Not a vrase we be used to utterin’ round these parts, even when addressin’ cows – leastwise not over an’ over again like that. What be wrong with the old moo – lost ’er ’earin’ aid or jist plain daft?”

“No, no, you have it wrong, my old friend. This is the purest music to the trained ear – listen carefully. You can write it down on musical staves – that’s what I’ve been doing in fact, with the help of the tuning fork. Look over here.”

“Oh yeah,” William grinned as he tried to focus on the musical notation thrust before his gaze. “I zeen that zort of thing earlier today – down in the wine zellar. It ain’t got no stray veet stuck in it, by any chance?”

The young man with the button-hole looked puzzled, but another guest – the one whom Jack had tried addressing first – had come swaying up behind them, a half empty bottle of clear liquid clutched in his arms, and he now burst into guffaws.

“Know jusht what you mean, old chap. Was replenishing shtocks down there myself a while ago. Tripped in the shadows over what I thought was a bass clef full of minims and quavers – until I saw all these bally little ‘σ’ s spilling out all over the floor... Well, there *is* a certain similarity between syllables and singables – ha ha! Here, have a metrical

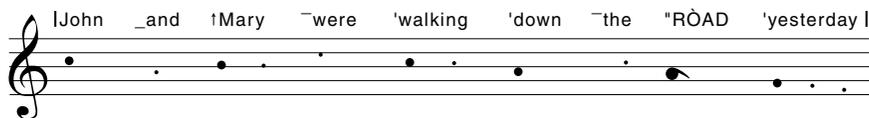
top-up while you're still on your feet, old man – nothing like booze for awakening the muse, what?"

Wiping several tiers of mirth away, he sloshed some liquid into William's glass then staggered off again towards the piano, where several other guests were trying to prop the piano-player back into place. The fellow with the button-hole shook his head.

"Such a philistine, that Bobo. Thinks sheer brawn and a powerful chest is going to impress a damsel of Polly's sensibilities – he has a voice better suited for rugby chants than for sweet melody. She keeps on giving him the brush-off, but he doesn't get the message. He should stick to the likes of Priscilla. Now Polly and I have a different kind of affinity altogether – she appreciates that I am the only real musician around here. One thing he's right about, though, that's the parallel between prosody and music, intonation and entoning. It's not for nothing one speaks of the 'phrasing' of classical music, or of the successive musical 'ideas' in a musical work. Both forms of expression are characterized by larger formal patterns, covering whole discourse topics or musical movements – for instance the classical sequence of 'orientation – complication – *dénouement* – coda'. I mean, just think of it, all the basic dimensions of phonation have their counterparts in music: tone, pitch range, pauses, loudness, breath groups, tempo and rhythmicity, also paralinguistic factors like voice quality, slurred or lax voice, laughing, sobbing voice, and so on. It's perfectly natural to analyse intonation units into pre-heads, heads, nuclei and tails, just like musical phrases. Here, look at this – you can even put intonation patterns directly onto staved paper."

He scrambled around among the sheets of paper until he found what he was looking for: a sheet on which a series of blobs of various sizes was marked straight onto a set of stave lines in the treble clef. These he now pointed at.

Figure 20



Nuclear tone type:

`-type	—conspiratorial;
`	—angry, matter-of-fact, vexed, impatient, satisfied, grim, irritated;
^-type	—excited, pleased;
^	—dismayed, haughty, amused, pleased;
ˇ-type	—worried, pleased;
ˇ	—dismayed, disappointed, apologetic, grim;
˘+˘	—haughty, puzzled, impatient;
˘	—puzzled, bored, questioning;
-	—bored.

“The nuclear tone – the one with the little tail – is fairly neutral or matter-of-fact here, but it could be replaced by others. Thus a rise-fall nuclear tone often expresses excitement or pleasure, and a fall-rise can express disappointment. Of course much depends on other contextual factors – the same basic contour can have various interpretations. Even the falling intonation at the end of the sentence here has its parallel in the return to the tonic at the end of a musical phrase.”

“Could do with a drop o’ tonic in this ’ere gin, now’s you mentions it,” William gasped after taking a sip from his glass.

“Ah, you’re on to the old ‘topic and it’, are you? A spot of this bubbly will have the same effect.”

Here he poured some of his own drink into William’s glass; William only made the vaguest attempt to stop him. The musician himself seemed to be growing less and less inebriated as his enthusiasm for the subject grew. Perhaps he was another of the characters around this place who rarely found an audience for their pet ideas.

“Talking of ‘topics’, one could also say that change of key is like change of discourse topic, wouldn’t you agree? Both can be led up to through transitional elements – conjunctions, suspended notes, and so on, that smoothly introduce modulations. And since both music and discourse unfold in time you can naturally only hold so much in mind at any one moment – you might say that this is the rationale for intonation units: they articulate thought in such a way that each unit contains just one new idea, one focus of consciousness at a time. Now information in

the mind can be said to exist in two other states of activation besides active focus, namely the inactive and semi-active states. A ‘topic’ then represents what is held constant in a semi-active state, it is the semi-conscious background out of which successive utterances arise into focus, each related to the next, until a major modulation shifts attention to a new topic. This is the basis for the universal theme-rheme or topic-comment modulation of sentences. The theme corresponds to topical material already ‘given’ by the preceding context, and the rheme typically consists of a predicate expressing new information about that topic, and is therefore intonationally highlighted. Naturally a certain competition for topic or for focal comment position can occur between rival elements, resulting in slight discords that need resolving one way or the other. An utterance is typically of sentence length – it combines smaller chunks each containing a single new item of information (that can be focussed on individually) so as to form ‘superfoci’ at a higher level of structure. These may well contain more than one such focal element. Let me illustrate how this works with an actual dialogue recorded on one of these old records. The material is a bit antiquated, but it illustrates my main point well enough.”

He fumbled for another record, which he put on the gramophone. From the horn came the following fraction of a dialogue:

“Oh Ron...”

“Oh Eff...”

“Oh *Ron*...”

“Oh *Eff*...”

“Ooooooh Ron!”

“Ooooooh Eff!”

“Primitive, but it gives some inkling of the role stress plays in matters of focus and presupposition, I daresay.”

This latter utterance was produced not by Eff (who was summarily silenced), but by a figure wearing a cape who had glided up behind them. The young man with the carnation frowned at the newcomer suspiciously, but William – who had a vague recollection of seeing him among other cloaked figures earlier that day – just grinned and raised his glass in an unsteady toast:

“I’ll drink to that. I’ll drink to anythink yer please right now. ’Ere, I zeen you avore zomewhere, ain’t I?”

“Here’s to mutual knowledge, then,” the newcomer raised a hip-flask

from beneath his cape and – after looking around quickly – took a brief swig from it. “Shared knowledge is the *sine qua non* of dialogue. Let’s keep it that way. I wouldn’t have butted in – but for hearing you, young sir, enlarging upon an interesting idea, one that I happen to have written about recently myself. I feel I ought to point out that the sentence-length utterance is not just determined by informational content, it is a structural unit in its own right, which may be imposed upon the flow of information, articulating it according to its own predetermined structure.”

The self-styled musician raised a sceptical eyebrow and poured himself another drink while the intruder went on:

“It is the morphosyntax, after all, that determines where the main tonal movement falls in an utterance – usually on its last stressed syllable, where the nucleus of the movement is found in declarative sentences. Moreover, primary and secondary stress placement can also be deduced from purely structural considerations. So the intonation contour and stress pattern is largely independent of the meaning of the utterance.”

“Now that is sheer nonsense,” the musician retorted. “Intonation directly reflects emotion, it articulates the propositional content for affect and attitude as well as grounding it in the ongoing situation by distinguishing focus from presupposition, new from given information, and so on. It operates in an essentially ‘analog’ mode, unlike the ‘digital’ segmentation of grammatical units. Or would you deny that intonation units and syntactic units often do not correspond at all?”

“On the contrary, I admit that there are mismatches – mainly due to performance failure, but nevertheless real. I think we can probably agree that the two aspects of speech stand in a complementary situation to each other – as reflected in the known involvement of the opposite hemispheres of the brain in handling them. But my point is simply that this is a chicken-and-egg matter. How can one be so sure that pre-linguistic information principles are responsible for the organization of speech into clauses and not the other way round?”

“Not so fast. Before you can assume that we’re in agreement you need to explain the undeniable context-dependence of the meaning of individual intonation contours – say the association of the rise-fall nucleus in British English with both excitement and amusement, as well as haughtiness, or the typical gliding fall-rise pattern, which can either be a question or a tentative statement, depending on context. In fact

what is a 'neutral' declarative pattern in one dialect can be perceived as marking a specific attitude – like boredom or superciliousness – in another (a source of deeply entrenched prejudices, alas). Blends of more than one basic pattern are even possible in one and the same utterance – depending on multiple emotional and pragmatic factors.”

“But there you are – these structural configurations have a wide variety of usages and are, as you say, highly context-dependent and susceptible to ‘analog’ blending. The common ‘meaning’ of any given pattern – in so far as there is one at all – is at a rather high level of abstraction. The correlation between intonation pattern and meaning is in other words extremely indirect.”

At this point William took the opportunity to dodge out from the discussion and weave his way back to the jollities around the piano, which were much more to his taste. The piano player had begun warming up again with a Scott Joplin rag. The bump on his head showing through his thin hair didn't seem to have done him too much harm.

“Luckily it was on the left side,” one of the wags leaning against the upright shouted. “Just as long as he doesn't have to talk.”

“I suppose you could contrast his case with Bobo's,” another slurred voice was raised behind him. “He took quite a crack on his right temple from the edge of a racquet this morning. They say that's where pragmatic skills as well as musical ones are centred. You wouldn't notice as regards the musical bit – but no wonder he's been making such god-awful jokes all day!”

“We shouldn't laugh – the poor blighter's sense of spatial orientation has been shot ever since.”

“Personally, I can think of another reason altogether why he should have fallen down the steps to the wine cellar...”

After more amused rise-falls there followed a few bars from some raucous bar song or other, at which point – the company having collectively plied him with more than adequate liquid inducement – William spontaneously broke into a kind of sea-shanty. He was soon hopping about unsteadily with a sailor's cap on his head provided by one of the girls, while someone else tried to work an accordion they had found in a corner...

Meanwhile Jack, in search of the billiard room, had tried door after door along the length of the corridor, only to find himself knocked backwards by an avalanche of game equipment that came bumping and

clattering out of the one door that had opened willingly. He pulled himself to his feet and began angrily kicking the rubble back into the closet. But then he stopped as if in suspended animation with one foot lifted in the air: revealed by the dislodgement of most the closet's contents was a body, an upside-down body belonging to what looked to be one of the young house guests. His former animation was definitively suspended. He was still wearing his tennis gear, and appeared to have been strangled with some medical support garment of the type used to protect tender parts in rough sports. The bulging eyes and blackened tongue lolling from his mouth suggested that he was beyond requiring support in any part of his anatomy. What on earth could this mean? Had there been disagreement about the score? Had some brutal slanging match got out of control? Was suicide even a remote possibility?

Beginning to panic in case he should be found here – after all, he had been apprehended by the authorities once already that day – he gathered up the remaining equipment and crammed it back into the closet, closing the door on it again by lunging against it repeatedly with his shoulders until the latch finally clicked into place. Then he hurried on to the next corner and turned immediately left down a further stretch of corridor. It proved to be a dead-end, but he noticed that a stair-case started up from half way down its length. This had to be the way up to the next floor. But before fetching William and the carpet he decided to take a quick look into the room at the end, for he could hear vague sounds coming from that direction. Approaching closer he heard the unmistakable sound of ivory against ivory, then a low rumble of scattering balls, as if someone was making a break in billiards – and he knew he had found what he was looking for. He took a deep breath, but hesitated with hand outstretched towards the handle, suddenly realizing that someone else may have beaten him to the *rendez-vous*. After all, it took two to play at – at what? There was no further clicking of ivory – only the ominous sounds of gasping and grunting and muffled voices calling out such things as ‘more spin!’ ‘pot it off the red!’, and ‘canon to the corner!’. Was someone in trouble in there? Was another guest being disposed of – this time savagely skewered on the end of a sharpened billiard cue?

He plunged impulsively into the room, ready to throw himself at the malefactor. Then skidded to an immediate halt. If there were malefactors about there were at least two of them here: the one on top of the other in the middle of the billiard table. Coloured balls were rolling randomly

all around them. It was Polly on the bottom, her bare legs clamped round the back of the pony-tailed male form pumping away at her from on top. She twisted her face towards the intruder and her grimace of pleasure changed at once to a frown of annoyance, but there was nothing she could do to extract herself for the next few seconds, while Jack just stood there perplexed and ashen-faced. For some reason it was the grey chauffeur's cap that had been tossed aside on the floor in front of the table that seemed to draw the focus of his attention. The cleft in the cleft sentence beginning 'it was...' contributed expressly to that effect.

"One more into the pocket!" the pony-tailed figure cried out at the height of his pleasure.

"Right on cue, sweetie," Polly sighed. "But I'm afraid someone else looks like they want to use the table..."

Then the chauffeur – if the cap was to be trusted as an index to the fellow's identity – rolled off the edge of the table and onto his feet. He just stood brazenly doing up his flies and tucking his shirt tails into his trousers while he leered straight at Jack. Polly adjusted her own clothing, but remained sprawled out across the green felt. Also Jack felt green.

"Well, big boy, cat get your carpet?" she drawled sarcastically.

"Excuse me... it's just that... a misunderstanding... I found your note..."

"Interesting? Rod's notes always are. Well you just run along now and do whatever it is you're meant to be doing. We were in the middle of a game."

"Of quoits," the chauffeur chuckled under his breath and began nonchalantly chalking a cue.

"I – noticed... I obviously made a mistake... I didn't mean to interrupt your... It's just – that is..."

"Is what? Do you have a problem with copular verbs? You're not embarrassed, by any chance? Come on, out with it. You're just another lower middle class prude, aren't you?"

"You're twisting my words. Listen, something terrible has happened – the body of one of your guests is in the closet out there..."

"There's staff employed to deal with that sort of thing," she clicked her tongue impatiently. "Though come to think of it, one of my guests *has* disappeared, last seen in the maze – one of my favourites, quite tame. Was it perhaps you who did it? How many more do you think you'll have to bump off to get your hands on me? Well, don't look at us like

that with your mouth open. I was just joking! Or does catching flies give you a buzz?"

Suddenly a clock began chiming in a corner and almost at once could be heard a distant wailing as of a muezzin calling the faithful to afternoon prayer from his minaret.

"Damn," Polly complained and reluctantly hopped off the table to her feet. "I'll have to stop him before he frightens all the tourists away – the future of the estate is dependent on them now. My inheritance is at stake."

Before hurrying off she gave a sweet smile to the chauffeur and whispered: "Tonight then!"; he just winked back. Then to Jack's mortification he smirked in his direction and made a gesture towards the table as if suggesting a new round of billiards. Jack stalked out of the room without a word. He had a good mind to tell Polly's father – if he finally found him – about her disgraceful carryings on. Perhaps he would wash his hands of her – which was most assuredly what Jack was going to do. What a presumptuous fool he had been. He might have known with aristocrats. A lifestyle he did not know the first thing about – and did not want to know, thank you very much. Now all he wanted was to finish the job and get out of this crazy place where he did not belong... But with her father's chauffeur! That lout? Did she have no taste?

He strode back to the music room, clenching and unclenching his fists and not even pausing to check if the door to the games closet was still firmly closed. Already from afar he could hear that the racket in the music room had intensified in his absence. Checking that the carpet was still where they had left it, he entered the room with the intention of grabbing William and getting them both up to the top floor as quickly as possible. But in the chaos that prevailed within he could not at first even see William. It appeared that several of the male guests, having put lampshades over their heads and wrapped rugs round their shoulders, were engaged in performing a travesty of a Chinese opera. Their shrill caterwauling to the accompaniment of a dinner gong and cymbals and some record being played at double speed on the gramophone had only the vaguest of similarity to the real thing. Bottles of champagne were still popping merrily, and in the corner round the piano another group was trying to help the pianist out with 'Land of Hope and Glory', producing a rival cacophony only somewhat muted by the malfunction of half the keys on the keyboard – a not surprising malfunction given the

feet sticking out from the opened top of the instrument. Amongst this lot Jack spied William and tried to make his way towards him over the sprawling bodies and upturned furniture between them.

But even before he reached him there was a great roar from the doorway behind and the music and singing trailed off into silence after a last disjointed clashing of symbols.

“What do you ungrateful miscreants think you are up to?!” the gamekeeper repeated – for it was he of the bristling moustache and furious gaze that now marched in upon the scene of blatant misrule. “You are behaving like savages. Have you forgotten that you are ladies and gentlemen? You are meant to set an example to the less educated.”

There was suppressed tittering from the periphery.

“But there was a genuine scientific purpose,” the musician with the carnation, emerging from under one of the lampshades, mumbled sheepishly. “Interesting effects occur when sentence contours are superimposed on strings of individual words in tone languages. The normal bandwidth of spoken Chinese, for example, is –”

”Silence! You can pull what you like over yours but you can’t pull the wool over my eyes. You are a shambles. If I were His Lordship I would send the lot of you packing at once. You are lucky he is nowhere in the vicinity at the moment. You are undermining the fundamental system of the place. This is built on the premisses of syntagmatic as well as paradigmatic order: the two axes must be equally respected – and that goes for *everywhere* within the domain. Every room is simultaneously linked to every other room to which it stands in contrasting opposition *and* it has its position in a syntagmatic sequence, whichever route you take through the building. What you are doing is disturbing the equilibrium of this whole wing by preventing the natural syntagmatic flow from room to room. Your cavorting just does not fit into any serious presentational sequence. You’ve got to play by the house rules if you want to remain as house guests! Things must move forward towards a resolution. If I hear one more complaint about your behaviour none of you will be allowed anywhere near the celebrations this evening, Polly or no Polly. You’ve had your last warning!”

“Look, it’s nothing to do with us,” Jack protested as the gamekeeper’s sweeping gaze came to rest on him. “We’re just trying to do a job...”

“It is very much to do with you, young man. Have you never heard of observer effects? If you get on with what you’re meant to be doing,

which is laying a carpet, things will unblock around here all the quicker. You have been told more than once to keep moving and not poke your nose in where it doesn't belong. I had my doubts about letting you two in right from the start. I could see you were potential troublemakers. Now I don't want to have to be called back to sort out problems in your wake again. There are limits as to what I can do for you if you get into any more scrapes. If Potts had found you first it would have been straight to the dungeons with you – as experimental subjects. God, I need some fresh air. Things are so much simpler out of doors.”

With this he turned on his heels and stalked out again before further protests could be made. Jack turned – in turn – on his father, to work off his accumulated frustration

“Look at the state you're in, you old fool. You stink of gin. He's right. It's a disgrace. Carry on like this and we'll never be able to do any work around here again. I just hope you're capable of keeping your end of the carpet up – we've at least one more floor to go.”

“Ang on, zon. I be jist beginnin' to get into the zwing of this place, the blinkin' carpet can wait a bit longer – 'elp yerself to a drink – the lads 'ere be right genderous, an' no mistake...”

“You're coming with me – right now!” Jack insisted, and dragged William whining after him.

In the corridor outside he lifted the carpet onto his shoulders and made sure William had some kind of attachment to the other end. Their progress towards the steps he had located near the music room was nevertheless punctuated by numerous divergences and collisions with walls thanks to William's straying feet. Jack's curses and William's inane chuckles echoed all along the corridor behind them.

19. Events come to life

They climbed the stairs in silence (apart from the alternating giggles and complaints that emanated from William's end of the carpet). The chanting of the muezzin could no longer be heard – Polly must have silenced him effectively. For a moment Jack imagined the scene, then chased it from his mind. She did not mean a fig to him now – she was just a figment of his imagination. He tried to think instead of his girl in town, Betty. Admittedly she was not as pretty as Polly, but she was all right. A reliable Bet. At least they shared the same kind of attitudes and background, found similar things funny, similar things a pain. No pretensions. She was even game for the odd Saturday night booze-up with him and his mates. He just wished she were a bit more intelligent...

Anyway, the thing that mattered at the moment was to locate the private chambers of the duke and duchess – and the chambermaid who would help them through to the duke's inner sanctum if they could not find the way on their own. Would it turn out to be the same young lady in uniform they had seen on this floor earlier? But the corridor they found themselves following now did not look at all like the one she had been bustling along with her duster before. The windows facing outwards were much cleaner, allowing clear views down over the sun-dappled lawn towards the lake at the back – or was it the front? – of the palace. And there was not a stray word in sight. Framed pictures of aristocratic country life lined the way, mainly scenes from the hunt. The parquet floor and the wall fittings – the bracket lamps and *fleur-de-lys* wall-paper – were elegant in an old-fashioned and sombre sort of way. The doors they passed with their elaborately moulded but slightly flaking jambs and tablatures were unremarkable and unmarked as to function. They turned a corner, but the continuation of the corridor looked much like the last stretch, as did the next one after they turned left further into the interior of the building. Only now there were doors on both sides. They needed to get their bearings – some fixed frame of reference which would curtail any further fruitless wandering. Jack stopped in front of one of the doors at random and dumped the tool box and his end of the carpet onto the parquet floor. William – whom it turned out he had been dragging along lifelessly since the top of the

stairs – remained with his head on the end of the carpet and promptly started snoring. Jack gave a sigh of despair – he had thought the carpet seemed heavier than ever, but had put it down to his own weariness.

He turned to grasp the gleaming brass door-knob but then hesitated, mesmerized by his own distorted face peering back through the interstices of the extended hand that seemed to have leapt out at him from the surface of the knob. And as he watched, the hand drew back until it completely filled the surface of the knob, then gave a twist as if from within it, and the door creaked open. Almost against his own will he stepped forward into the interior – of a village post office. The bespectacled, middle-aged woman with her hair done up in a bun who sat behind the counter addressed him in a friendly if somewhat mechanical manner.

“Well, dearie, what can I do for you today?”

“Actually,” Jack heard himself say, “I have something to deliver...”

“I’m sorry, I don’t understand.” The woman looked perplexed. “We are the ones that do the delivering. You buy a stamp, put it on your letter or post-card and give it to me and I make sure that it gets delivered. That’s what you pay for. Or is it perhaps a parcel? You’ll need to fill out a contents label in that case. They’re the green ones to the left over there. Would you like to borrow a pen?”

“It’s outside. I need to get it to the duke.”

“That’s right, dear. You just write the address on nice and legibly and I’ll weigh it for you.”

“But it doesn’t need weighing – it doesn’t need a stamp.”

“Now don’t be silly, what else would you come into a post office for?”

“But I didn’t...”

“Now you are being very awkward. You can see what kind of a place this is – it has everything you expect of a post office, and that is what determines how your words – and mine – are supposed to be interpreted. Without that kind of framework how would I know what to do when you ask me for a stamp, say – am I to give you one of these little square things, sticky on the back and costing a small fixed price, or am I to come round and stamp on your foot?”

“Listen, I’m telling you I’m not asking for either sort.”

“No, you listen, sonny – you are undermining my whole reason for being here, you are making me feel very peculiar indeed. Go on, clear out of here, before I do give you a stamp.”

“For Christ’s sake, just tell me the way to the duke’s study, you stupid cow!”

“All right, you uncouth yob, that does it. I try to do my job in a civil manner and look what thanks I get!”

With that the woman lifted the hatch in the counter and advanced rapidly on Jack. But by the time she had lifted her foot to deliver the promised stamp he had scuttled back out into the corridor – he heard her foot hit the floor just before he slammed the door shut on her. Outside he turned and saw his own balloon-like face grinning back at him from the door knob.

“Mad, quite mad they are around here,” he muttered and moved quickly to another door further along the corridor.

This one he rapped on with his knuckles, avoiding looking at the door-handle altogether. When no reply was forthcoming, he gripped and turned it and strode in with determination. This time he found himself in a cafeteria. There was already a queue of people pushing their trays along the parallel metal rails in front of steaming tureens of soup and glass-fronted displays of cold sandwiches and pies and the hot dishes of the day. In the area behind there were several nondescript women in greasy-looking uniforms, and at the far end, beyond the coffee and tea machines, another one sat at the cash-register. He stood there, hesitating, for a moment, until someone jostled him from behind as they tried to reach the stacked trays beside him.

“Come on, mate, don’t just stand there like you don’t know what you’re meant to do next.”

“But I don’t... know what to expect,” Jack murmured truthfully.

“From abroad are you? It’s very simple. This is how most of us eat at lunchtime in this country. You take a tray, also the cutlery you think you’ll need. Then you move along the line selecting the items you want as you go. If it’s hot food one of the servitors will ask you what veg you want with the main course and put it on a plate for you. At the end the cashier will tell you how much it costs. You pay her, wait for the change, then take your food to a table, where you remove it from the tray and –”

“I know all that.”

“There you are then. So what’s your problem? Can’t make up your mind?”

“I just don’t need food – I’m here to deliver a carpet.”

“No, no, you’ve got it wrong,” the man – a drab-looking clerk little

older than Jack – insisted. “You are here to eat. That’s the whole purpose of the place. That’s why when you reach the end of the line and the lady at the register says to you ‘That’ll be five ten, love’, you’ll know exactly what she means. She won’t be telling you the time, she won’t be predicting the state of play at Wimbledon, or informing you of your height, or offering you her body for a price, she’ll be asking you unambiguously to pay for your meal. She is the cashier, you are the customer, those are the only relevant roles in here. Now will you please move on or get out of the line – some of us are hungry, you know!”

“All right, all right, enjoy your meal. I’m out of here.”

“The same to you.”

But Jack was already elbowing his way back through the waxen-faced customers who had accumulated behind him. He began grappling with the inside door-handle – for one panicking moment he had the feeling that it would not open again. Then he was back in the same corridor as before, leaning back against the door and breathing deeply. Was it just him – had the scene he had witnessed in the billiards room so deranged his judgment that he was hallucinating? Was it some sort of subliminal substitution of what was actually going on in these ‘private’ rooms? There was only one way to find out. He returned to where William was still slumped over the carpet and began shaking him violently by the shoulders.

“Wake up, Dad. You’ve got to help by trying some of these doors yourself else we’ll never get the job finished. They all look alike on the outside.”

William snorted and protested groggily, but a brisk slap across the cheeks brought him instantaneously to his feet, punching out ineffectively in all directions.

“That’s more like it. You try the doors in that direction, I’ll carry on the other way.”

But Jack hung back a little further along the corridor and watched as William, muttering angrily as he rubbed his cheek, shuffled over to the first door that Jack had tried. He disappeared inside, half closing the door behind him. After a couple of minutes, during which nothing further happened, Jack trod carefully back to the door and pulled it fully open. Inside was not the post office he had entered himself, but a bedroom. And there, curled up on top of the bed and snoring away again, was William. Jack did not know whether to be furious or relieved.

“Come on out of there, you lazy old bugger!” he shouted, and then, when that outburst produced no results, he strode over to tug his father grumbling from the bed. “What do you think you’re doing lying down in the middle of a job?”

“What else be a bedroom vor? You zent me in ’ere, you go deliver the carpet, I’ll wait vor you... Nighty night...”

But Jack would not let William adopt his fetal position again with his feet up on the expensive-looking bedspread. As he dragged him protesting towards the door a curious detail caught his eye: there on the floor lay a postage stamp, right about where he calculated the post-office lady had tried to stamp on his foot. Suddenly there flashed before his mind’s eye and ear the word ‘stamp’ and all the associations it held for him – and they seemed to spread far and wide through successive rooms and floors, with roots leading back all the way to the library down on the ground floor... But he had his hands full escorting William and had no time to ponder this mystery any further.

“All right, the next one we try together.”

He marched William back down the corridor to a door they had passed earlier. He pulled it open without further ado. It was immediately apparent from the hushed atmosphere and the miserable looking figures waiting in chairs along the side of the room that this was some kind of doctor’s waiting room. There was a further door at the far end, and at a desk beside it sat a portly woman in a starched uniform looking fixedly at the appointment book before her. On the wall behind her hung an obscure diagram labelled ‘States of Affairs’. Jack advanced towards the desk, pulling William after him. He glanced at the diagram, but could not quite see its point – was it meant to be funny?

“Last time?” Jack protested, his arms akimbo. “He’s never been here before in his life – and how do you know his name, anyway? Do you keep files on everyone that enters the building?”

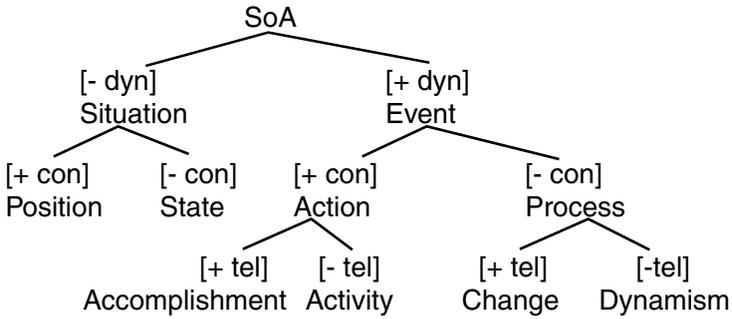
“Do you gentlemen have an appointment?” the portly doll came to life and raised her head to address them.

“We don’t need one – I’m not ill!” Jack sneered, encouraged by the fact that he had a witness now.

“Speak vor yerzelf, zon,” William muttered behind him as he massaged his temples demonstratively with both palms.

“Ah, so it’s your father that’s poorly. I’m sorry to hear it. Mr – Horricks, isn’t it? Now what is the problem today? The same as last time?”

Figure 21



Position: The doctor kept John in bed

State: John is in pain

Accomplishment: The doctor took John's temperature

Activity: John was coughing blood

Change: John's liver fell on the floor

Dynamism: John's heart was still ticking

“Now if you would just care to take a seat over there, the doctor is a little behind schedule this morning. This flu thing is really reaching epidemic proportions, I’m afraid.”

“Listen, the old goat doesn’t have flu, he’s just drunk himself silly – give him an aspirin or something and we’ll be on our way.”

“Or a dram o’ zomp’nt medicinal?” William whispered hopefully through one of the gaps between Jack’s arms and his sides.

“Yes, it’s the season for influenza. At your age you should stay warmly wrapped up when the weather breaks early like this, Mr Horricks.”

She smiled at William, who gave a pathetically wan little smile back. It was as if Jack weren’t even there between them. In this place, being perfectly healthy, he obviously had no right to exist. By definition.

“Now while you wait I’ll get you a blanket and make you a little grog to sip, would that tide you over?”

William began to nod enthusiastically, but Jack had had quite enough of being treated as a ghost. He turned and shook his father by the shoulders again.

“We’ve seen quite enough – remember the carpet!”

“The car-pet?” all the patients repeated in mechanical chorus, looking back and forth at each other in perplexity. Out of nowhere the image of Polly leaning lasciviously over the bonnet of a blue sports car jumped into Jack’s mind, but he dismissed it at once.

“Spoilsport,” William grumbled as Jack hustled him out into the corridor again.

“We’re obviously nowhere near the duke’s quarters. We’ve got to find that chambermaid. Here, pick up your end and we’ll be off again. This time – *this way*.”

He led the way around two more corners then chose a short corridor that should have taken them – according to his reckoning – towards the back of the building. The view through the first outside window that they came to at the next junction was indeed down over the formal gardens, but the corridor running along this side of the floor bore little resemblance to the one he remembered from their earlier sighting of the maid. William again sagged to his knees in exhaustion as Jack hesitated whether to continue to the left or to the right. Instead of either, he turned from the window, took a few paces back and grasped the nearest door-handle. Pulling it open quickly he stepped into the carpeted foyer of a cinema. There was a queue at the box office, but this was enough to indicate that he still had not found the right place. He gave a cursory glance at a large poster on the wall billing the film apparently being shown further inside – some kind of remake of a romantic adventure involving musketeers. He was about to turn on his heels when something familiar about the poster caused him to look a second time. The face of the actress playing the heroine – surely it was Polly. She was being swept off her feet by some nincompoop in pseudo-17th century military uniform. This featured a rapier and a prominent (and anachronistic) cod-piece, and the grinning nincompoop himself bore an uncanny resemblance to that unspeakable blackguard of a chauffeur... He stepped up to peruse the lettering below the title of the film (“On Parole in the Langue d’Oc’), but the name of the female lead was not one he recognized.

However, there was something in smaller print crediting the story with a play of the same name by the 23rd duke of –

“Ze usual cheap ’Ollywood re’ash of ’istory,” a voice, bristling with accents acute and grave, commented behind his back. “But ze original script – oh la la! – zat is somesing else!”

“I know, I think I’ve heard it already,” Jack retorted dryly with barely a glance at the dark little man with a moustache like an inverted circumflex who had just spoken.

“Oo asn’t? Zat is ze reason it’s gone over so big with ze public…”

But already Jack had hopped back out into the corridor, where William, miraculously enough, was still swaying on his legs, looking around as if trying to ascertain where his vanished offspring had sprung off to.

“It’s better we stick together,” Jack announced. “Anything seems like it could happen up here – only the options are a bit narrower if they have to accommodate two viewpoints at once. We mustn’t lose each other again. We’ll leave the carpet here and try the next door together.”

William put up no resistance to the proposal and followed Jack to the next door. A moment later, having stepped in across the threshold, he was already regretting his compliancy. For an instant they both thought the same thing: that they had stepped right back into the manager’s office on the second floor and the two uniformed bullies who stepped out of the shadows on either side of them were about to deliver them up once more to the judgment of the redoubtable Mr Potts – and, indeed, the huge face peering at them suspiciously from the bench at the end of the hall looked all too familiar. But there were also differences. For one thing, Mr Potts – if that was who it was – was now wearing a wig and black gown, and the uniforms worn by the men gripping their arms were the uniforms of policemen, not just security guards. This was a *real* court.

“Bring forward the accused,” the judge, leaning forward, ordered the clerk below him.

“Yes, m’lud. Bring forward the accused!”

The policemen marched them towards the bench. There were vague murmurs from the public seated on either side as they passed. When they were installed in the cramped little box provided to the right of the bench, the judge addressed them directly:

“Now, very serious charges have been raised against you two. Not the same charges, I understand, but since we only have the one box and the one barrister and the one solicitor for the defence we needs must combine your cases. This is not the first time you have appeared in my court. Do not expect leniency this time.”

“What charges?” Jack sounded defiant. “We haven’t done anything – yet.” (There were intakes of breath amongst the public at this flagrant implication.) “And when we *have* done it – then we’ll be the ones who charge accordingly.”

The judge banged his gavel angrily on the bench top.

“There’ll be no sarcasm in my court. This is a place of serious business. Sergeant Dixon – read out the charges. First the old man.”

“Mr William Horricks,” the policeman grasping William’s arm raised a stentorian voice. “Accused of first degree murder.”

“What yer gettin’ at? I ain’t killed nobody – where be the body?”

“I’d keep quiet if I were you, old fellow,” the sergeant lowered his voice for William’s benefit and made a motion over his shoulder. “You’ll only make it worse for yourself. *We habeas the corpus* – it’s sitting at the back there. A whole lot more of them may turn up if you start protesting too loudly.”

Indeed, when William looked over in that direction he saw to his horror the figure that he had found dumped in the wine cellar earlier that day. He was now propped up in one corner on a seat; flies were buzzing about his lolling head.

“Is that man dead or just cluttering up my court?” the judge enquired of a tall bald-headed person seated in the front row of the public who stood up when thus addressed.

“Oh he’s dead all right, m’lud, dead right he is.”

“That’s good enough for me, Mr Snodgrass. I always respect the opinion of a coroner on such technical matters. Please be seated again. Now, sergeant, what were the charges against the other one, the old man’s accomplice – I mean his son?”

“Accused of exposing himself to two young girls of noble birth in the palace gardens.”

“What? Debs and Dabs? You must be mad! What do you mean ‘exposed myself’ to them? I only saw them for a few seconds when they ran out of the greenhouse...”

“Are you denying that they ran away because of your sudden

appearance in front of them from behind cover?" the judge leant forward again and peered sharply at him over his *pince-nez*.

"Nay – I mean no..."

"Then by the letter of the law you exposed yourself to them! I suggest you allow your designated defence counsel to speak for you from now on. Not that he'll be of much use to you – wherever he's got to. This sounds like a closed case to me already."

"We bin vramed!" William yelled.

"That's right," the sergeant beside him leered and pointed towards a 'wanted' sign that hung in a frame on the wall nearby. Below a picture of the two of them looking particularly villainous was the caption: 'The Horricks gang – wanted dead or live'.

William turned white and gasped, his legs giving out beneath him – he would have collapsed entirely if the sergeant's grip had not prevented it. But, unexpectedly, Jack just started chuckling.

"Don't worry, Dad, we'll be out of here in a jiffy. I see through this charade: this isn't a specific court case – it's a type, or a travesty of one. Look, I'll prove it. Change the formulae and the roles will be redefined. Listen 'm'lud' – you also do weddings, don't you? It comes with the role."

"Well, yes, I do."

"And you, Mr Snodgrass, you are familiar with the workings of organs, I believe?"

"Yes, indeed..."

"And you, the public, love a good wedding, right?"

"Right!!"

"Then let's do it! Say after me: 'Do you, Jack Horricks, take this woman to be your legally married wife, to have and to hold until death do you part?'"

"Do you, Jack Horricks, take this woman to be your legally married wife, to have and to hold until death you do part?"

"I do! Now the next bit."

"Do you, William Horricks, take this man to be your legally married wife, to have and to hold until death you do part?"

"Wha'???"

"Go on, you simple old twit, say it, it's our way out of here."

"I does then, by jiggery, I does."

"Then in the powers invested in me," the judge, as if struggling

against some higher power, squeezed out through his teeth, “I hereby declare you man and wife! You may kiss the bride.”

“No thanks, we’ll skip that bit. Look, William: he’s a puppet, he has no will of his own – and that face, it’s just wax. Let’s hear the music, Mr Snodgrass!”

Things got a bit blurred at this stage, especially for William – the next thing he knew there was organ music playing and Jack was leading him on his arm back down the aisle in the direction of the door they had come in through, and he felt as happy as only an eighteen year old virgin on her proudest day could feel, radiant in her lovely white dress and veil, while the jubilant public cheered and the policemen and court officers pelted them with confetti – the torn up remnants of confessions. Even the corpse danced a little jig in his corner.

Then suddenly they were out in the corridor again, dressed as before. Jack, who had slammed the door behind them, stood grinning while William staggered about in confusion as if trying to pull an invisible veil from his face. But Jack’s mirth was short-lived:

“The carpet! Someone’s stolen the carpet!” he cried as he stared in disbelief at the place on the floor by the window where they had left it.

“That be a blow below the proverbial belt, that be,” William commented, rapidly sobering up.

It was Jack’s turn to start looking wildly all around him, running first this way, then doubling back on himself, and finally choosing the first direction again.

“Follow me, they can’t have got far!”

But the corridors were as empty and as uniform as before, and the more he hurried the more it became clear that they were getting nowhere fast. At every corner he had to stop and angrily urge William, struggling along behind him, to keep up. Now and then he thought he heard footsteps far ahead – but it was difficult to distinguish from the echoes of their own feet. To make things worse, the light seemed to be dimming and flickering as if a power cut were imminent, and a strange chilling mist began to rise through the floorboards and condense all about them. Soon they were groping their way in slow motion along a stretch of corridor Jack could swear he recognized from before: there was the same sequence of pictures looming one after the other from the wall on the left. He stopped abruptly, holding up a hand – which caused William, who had no desire to be left on his own, to bump right into

him. The sound that he had heard – like someone groaning in great pain not far away – was followed by a rattling of chains that set William’s teeth chattering. The sounds seemed to be coming from behind the door immediately to their right.

“Nay, nay – not thik’un!” he pleaded as Jack moved towards it with a scowl.

Jack too hung back as a blood-curdling scream replaced the clanking and the thickening mist almost quenched the last glow of lamplight.

“Don’t be daft – none of this is real. If you believe there’s a unicorn in there then there will be. What else is the word for? They’re taunting us – I’ll bet you half of my cut of the delivery charges that the carpet is behind this door.”

William grabbed his arm, unconvinced even by a wager he was sure he would win if he took him up on it (it was, alas, an *irrealis* conditional), but it was already too late – Jack had turned the handle. To his relief (and, if the truth were to be told, also to Jack’s) it was locked. There was more clanking of chains followed by insane laughter from several voices on the other side.

“Quick, back out of sight!” Jack suddenly whispered and tugged William into the misty shadows – farther away from the door.

William’s eyes and mouth opened wide and Jack had to hold his hand over the mouth to stifle the whimpering that emerged from it as an ambiguous figure floated out of the mist on the far side and hovered – some inches off the floor – in front of the door they had tried. It raised a vague semi-transparent appendage to rap on it – a ritual preliminary to gliding through it perhaps. But before it could accomplish this, Jack had sprung forward and grabbed the arm, with a triumphant cry of “Ghost!”.

To William’s amazement the figure didn’t just slip through the locked door, but remained struggling – more in perplexity than fear – in Jack’s grasp.

“You see,” Jack proclaimed triumphantly. “Give things a name and they become perfectly tangible. You can do with them what you want.”

“And what do you want with me?” the ghost sighed as it twisted half-heartedly from side to side.

“I want to know where my carpet is, that’s what!”

“Listen, I know nothing of any carpet. You must believe me. I was just on my way to a little shin-dig with my friends in there – a kind of

joint birthday party. You caught me at a vulnerable moment – out of context. I was just making a dash across the corridor...”

“Friends? What friends?”

“Oh, don’t expect me to remember their names. Just old pals – unfortunates like myself who have become disassociated from any fixed context, or are associated with an antiquated one that has faded away...”

“There wouldn’t just happen to be a duke among them? You wouldn’t be one yourself by any chance?”

“Duke? I’m not sure... but it’s funny, now you mention it, I rather think I might have been once. It was so long ago – my memory, you understand, is getting a bit...”

Jack’s grip must have loosened a trifle at this pathetic disclosure, and suddenly the dim figure tried to jerk itself away.

“Not so fast! You’re a ghost *and* a duke. Do you want me to make you even more solid than that? It might well hurt, depending on the adjectives I choose to describe you further with...”

“No, no, stop there. But how else can I possibly help you?”

“First we need a little more privacy – I don’t want your pals coming out looking for you. We’ll try this next room, then you can tell us what you really know.”

Jack bundled his prisoner unceremoniously through a door – one that did open – that stood a little further down the corridor, and William followed, rubbing his hands together in trepidation at the sight of his son manhandling an aristocrat. He was, after all, a potential client, even if he appeared to be one that had been defunct for several centuries. The room behind the door was unlike any other they had entered so far: it was quite empty. Its walls and floorboards were bare; it contained a single overhead lightbulb and no windows at all. There was, however, a single rickety chair in the middle of the floor, and here Jack forced the spectre to maintain a position approximate to sitting while William hung back at the closed door, trying hard not to let his dentures start chattering again. It was as if they had a garrulous will of their own, however.

“Dear friends, do let me get back to the party,” the dim blur above the seat began to whine. “There won’t be another one for a hundred years. I’ll be missing the choral gibbering...”

“Believe me, you are going nowhere until you do some explaining. For a start, you can tell us where the present duke is lurking.”

“Look, I’m not at all sure about this duke thing – it was only a vague

feeling. Perhaps if I tell you something about the context here it will come back to me...”

“That’s more like it. What are all these strange rooms, why do they keep changing?”

“Well, as far as I recall each one is supposed to contain some simple frame – ‘a structured mental representation of acceptable actions and speech events within a given institutional setting’. That’s the formula I remember discussing with the architect.”

“So the post office, for example, was, as I suspected, just the minimal ‘frame’ needed to interpret the words used at the counter – like ‘stamp’?”

“Frame, script, scenario, whatever you want to call it. How else do you think all the contexts necessary for understanding language in real situations could get packed in here?”

“But there must still be thousands of such frames – and thousands of variants of each. My idea of what goes on in a post office isn’t necessarily exactly the same as yours. I sort of doubt it, given our age difference. There couldn’t possibly be enough rooms here...”

“Quite so – that is why a rather unorthodox architectural solution was required. You can pack a lot more rooms into a relatively confined space if you get them to overlap and share certain features at lower levels of structure. Remember that they’re only rough ‘prototypes’, although they’re built up from token experiences – that’s why everyone experiences them slightly differently as regards the detail. There will always be alternative construals of the same events and alternative perspectives on the same situation. Things may be seen in a summarizing or in a sequential manner, for example, and different figure-ground relationships may be focussed upon. This may also result in different grammatical choices: what is to be regarded as the subject and what as the object of a transitive action – whether it is to be expressed as a passive or active clause, and so on. The essential elements are abstractions. Each room in the palace has its own local structure and function, but it also shares in the experiential meaning patterns distributed throughout the building – the same overall structure can be used for both. The woof and the warp of the same fabric, if you will. Or think of a sonnet – it is a framework that has dimensions of both structure and content. On the one hand the number of syllables and lines, the pattern of rhymes, and so forth, and on the other the full range of themes associated with that form, some conventionalized, others less so. The results are in principle

infinite, although rigidly circumscribed. You have only scraped the surface of the complexity of the associations involved – you need at a minimum two or three centuries to really begin to find your way around in it.”

“Does that go for the lower floors of the building as well?”

“Certainly. You may have noticed on your way up that even such small-scale local matters as morphological derivation and noun phrase organization refer by necessity to the organization of texts at higher levels. Thus clause-level choices – say the arguments and their semantic functions that are to be filled in around a given verb – are linked both to the entries for the verbs catalogued in the library on the ground floor and to types of ‘States-of-affairs’ on this floor (you may have seen a list posted somewhere round here). Event types are loosely associated with arrays of ‘arguments’ (and other less central complement phrases) in the predicate frames stored in the library. Of course the librarian would claim that *everything* is projected from the frames of individual lexical items – he is so stubborn and possessive. He’d save himself a lot of trouble with multiple entries if he admitted that there are both lexical *and* functional frames – constructions corresponding to whole States-of-affairs – and that they interact all the time, generalized construction types being responsible for the specification of many things left vague in lexical entries. But of course he won’t listen to me – in fact nobody seems even to hear me these days. I’m surprised you seem able to... Anyway, if you went back to the library and looked in the appropriate box under ‘stamp’, for example, you would doubtless be referred both to your post office and to a simple action where the verbal meaning of the word of that shape is illustrated by a bodily action. As an ‘accomplishment’, it involves ‘control’ by an agent – the role which must be matched with the sole argument of the verb, its subject – and it is also ‘telic’, that is, reaches a definite end-point. The predicate frame for that verb can further take a ‘goal’ (or ‘theme’) argument as its object, if that is something other than the default value of ‘the agent’s foot’, and also a location complement like ‘the floor’ is possible, but neither of these is obligatory. Of course such an action could *also* be illustrated in a post-office, or practically anywhere else for that matter.”

“That I’ve already figured out. But you still haven’t told me how it is that things that happen in the rooms up here manage to mix ingredients from all over the place?”

“That was the challenge, I seem vaguely to recall – it is not just a matter of building rooms but of blending them, of allowing for an infinite number of possible combinations. That is what language is meant to prepare you for, after all. One room can be ‘mapped’ onto another, given certain basic similarities – let us call them ‘homologous’ relationships. Once such a homology is recognized you can apply any logical relation holding in the one room across to the other, by analogy, ultimately spreading inferences across all possible rooms (or ‘mental spaces’, or ‘belief contexts’, if you prefer). You can go presupposition-floating from space to space – believe me, it’s fun – until the inherited presupposition gets cancelled. Take any sentence and jump onto one of its presupposed propositions and let her ride! Only two things tend to put a limit on how far you can float: clashes with broader knowledge accumulated from your past, and the varying referential opacity of walls. Of course you have to make sure in advance whether your sentence has an inherently opaque *de dicto* reading – say if it involves visiting ‘a room’ in the sense ‘any room’ (as defined) – in which case you may have trouble ever finding your way back. Best stick with transparent *de re* readings and visit a specific room with a definite location *vis-à-vis* at least one known reference space.”

“Now I’m losing you. Can’t you give me an example of ‘blending’ I can relate to?”

“Let’s see, now. Say you walk into the foyer of a cinema and see a poster for a new film and somebody near you makes the comment that it is the usual Hollywood tripe, but that the original script is something else. Say you then reply ‘I know, I think I’ve heard it already’, that would be a blend of at least two different spaces – the on-going ‘basic’ one in which you stand and respond to a comment on some understood or negotiated subject (i.e. one relevant to the concrete situation in the foyer), plus one where you heard the script being practised by the leading actress at some other time and place altogether. Agreeing with the commentator’s comment you might simply have said ‘Oh, is that a fact?’ or ‘No it isn’t, I’ve just seen it – even the script sucks’ or the like, without necessarily involving another space at all. But you said what you said and ‘heard’ implies that you didn’t see the film. Hearing it could only have referred to a setting in which you heard it being read or rehearsed – unless you are blind or saw the film wearing a blindfold, which, given the circumstance of your reading the poster, seems less

than likely. A perfectly transparent interpretation of your utterance is brought about by blending the two spaces, which is easily affected if you and the script are present in both. We could go on and take into account the irony that was hidden in your words – irony and humour are also kinds of blending. Not that I would want to defend the quality of my own distant relative’s scribblings, mind you, but...”

“That won’t be necessary – what I really wanted to ask you about was cases where you actually *see* one room that is a blend of more than one. This is what happened – for me at least – in the courtroom a little while back. I could swear it contained all the principal elements from the manager’s office on the second floor, besides the usual court trappings.”

“Of course it did. When you were in that office didn’t you have the feeling all along that you were somehow also in a courtroom? “

”Yes, but that’s not what I mean. I managed to incur my own blend – with a marriage ceremony – by just bending a few words. It was an impulse, but it worked. How did I do it? If I could rationally control that sort of thing I could find the carpet and take it to the duke right away – I take it you still disclaim all knowledge of the whereabouts of either of them?”

“I really can’t think of two things at once – let me finish with this chain of thought. The other may come back to me in a while. Yes, now, that certainly was a more advanced form of blending, but again you need to think in terms of homologies between roles. Actually what is impressive here is not so much the merger of marriage and court case as the manipulations at the purely physical level that were required. I mean consider the basic knowledge of event structure presupposed. Things can happen, objects can be in a place or move from a source along a path to a goal – with or without legs – and be self-propelled or set in motion by an external agent (who can also transfer them to recipients); forces can be applied or countered, actions can be done, situations experienced or avoided. All of this must be mastered before extensions to more figurative usage is possible. All ‘higher’ meanings are inferred via metaphor and metonymy from such concrete schemas applied to known states of affairs. Take a basic schema like that for ‘having’ something, for example. Prototypically it refers to situations of material possession where a patient-like possessor has the possessed thing about their person, but it can be extended to mental possession (‘to have an opinion’), to the relationship between affected and affecter (‘having the flu’), or to wholes

‘having’ parts. More complex still are purely socially sanctioned types of ‘having’, like having a wife (‘to have and to hold’).”

“Or *habeas corpus*,” Jack grinned.

“Now you’re getting it! In fact you knew it all along – it’s tacit knowledge everyone has. Your case puts me in mind of my own dear late wife. I remember the very first night I had her –”

What transpired on that night Jack was never to learn, for at that moment there was a commotion from the corridor outside. William hopped nervously away from the door and fell over his own legs in the process. Thinking that it was perhaps the carpet being dragged back along the corridor – or transported further afield by its purloiners – Jack ran to the door and pulled it open. But it was nothing of the sort. What he saw from the doorway was a group of footmen wearing firemen’s helmets. They were feverishly bashing the floorboards with fire spades at a point where the floor had begun bulging upwards as if under some tremendous pressure from below.

“What on earth’s going on out here?” he called, but none of the men had the time to spare for an answer.

“Oh pay no attention,” the spectral duke explained as he glided up behind him right over the prostrate form of William, who was stretched out moaning to himself. “It’s probably just the young people getting a bit too recursive in their gymnastic activities below – unless it’s another case of rampant polysemy got into the woodwork. That could be more serious. Either way, they’ve taken care of it – see.”

And indeed the bulging had subsided again. Satisfied with their work, the footmen scuttled away again without a word.

“Can’t have done the parquet floor much good,” Jack commented. “Pity it’s not protected by something. You’d think an establishment like this could afford –”

“A carpet! There it is, over there, just where you left it, I believe.”

“Jesus – it is too! How’d it get back there?”

“Back? Are you sure it wasn’t there all the time?”

“You knew! Go on, admit it – you knew all along!”

“I swear I didn’t touch it. Now I may have changed the context a trifle – can you remember if that window was looking out onto the gardens like that when you saw it ‘missing’? All right, it was naughty of me – but we get so little opportunity for fun around here. It’s just boring, grey grammar and vocabulary day in, day out...”

“All right, all right,” Jack grumbled. “But as a consolation prize for having indulged your need for entertainment, the least you can do is to tell us the way to the duke’s – the present duke’s – study.”

“The *present* duke’s...? Oh, yes, now you mention it, that does ring a bell of sorts. All I can tell you is that it’s still higher up – I have no head for heights myself. In fact I don’t appear to have any head at all. Oh well, if I were you I’d concentrate on keeping track of the context. The content will pop up of its own accord – as it just did. Nice talking to you boys, but I can’t hang about any longer – sounds like the gibbering is getting going in earnest next door. Can’t miss that!”

With that the dim presence made some vague ectoplasmic gesture down the corridor, then floated rapidly off in the other direction, towards the first door they had tried – and straight through it. The half-hearted gibbering behind it rose at once to unprecedented heights of dismalness. Jack turned and plucked William from the open doorway, where he stood peering fearfully out, his eyes still wide open. But he cheered up rapidly when he saw that they were alone and reunited with their carpet. Jack picked up the tool box and together they headed off along the corridor with the carpet once more firmly on their shoulders.

“Still higher up, he said,” Jack murmured. “Keep your eyes peeled for any staircase leading upwards – this is the top floor already, I’m sure, so it may just be a service hatch into the attic.”

And a service hatch into the attic is precisely what they found around the next corner – a ladder had been lowered and left in place at the bottom of a short dead-end leading from the main corridor. Perhaps a workman was up there still. It was an unlikely place for the duke’s study to be situated, but Jack had by now had ample indication that His Lordship was an eccentric who valued his privacy.

“This time you stay with the carpet while I take a quick look up there.”

As he began climbing the ladder he heard a faint sound like sighing from beyond the hatch. It grew louder as he ascended. Was he imagining things or was it the sound of vowels being articulated again, like those they had heard in the pipes below the palace? He opened the hatch carefully and peered over the top step into the gloom. The sounds were louder now and more vowel-like than ever, though his first impression was that they were caused by the wind through the gaps between the low rafters, where shafts of light were also piercing the dusty air. Then he

saw that there were bundles of pipes up here too. They closely followed the edges where the floor met the roof, rising sinuously here and there to cross the low walls that divided the attic into hall-like compartments. As his eyes adjusted to the dim light he made out various boxes and trunks and other less perspicuous shapes lying about – some were oddly reminiscent of Greek amphoras. He pulled himself onto his hands and knees and crawled across to investigate some of the nearest objects. Only in the very centre was it possible to stand upright. The whole place smelt ancient – and not just because of the dust and the mould. There were very specific smells, smells that he could not quite place, vaguely redolent of incense and pomade and old herbs in jars, but with hints of oil paint and aeroplane glue too. The first objects he examined turned out on closer inspection to be mainly discarded toys. There were a few alphabet blocks, some puzzle boxes, a doll or two, and – most prominently – a familiar rocking horse. A clone of the one they had seen in the nursery?

But none of this was of any immediate relevance to finding the duke's study. Jack was about to give up and start crawling back towards the hatch when he noticed in the light coming through from below that there was something raised on trestles on the far side, some huge surface surmounted by amorphous masses whose shape he could not quite decipher. It stretched far off along the middle of the attic in the other direction. With bent knees and neck he shuffled a little closer to investigate. As he did so it suddenly dawned upon him that it was a model railway built into a three-dimensional landscape containing mountains and valleys and rivers and bridges and villages. It must have covered a huge area of attic – perhaps corresponding to the whole east wing. Turning his head this way and that he managed to locate a lamp, and when he groped the surface of the upright it was attached to he found a switch and flipped it. At once the landscape lit up. Not far from where he stood here was a miniature station complete with signal box and ticket office, and tiny wax figures could be seen waiting patiently on the platform for the next train or in line for tickets within. Half concealed behind the station was a full-sized control panel that presumably controlled the whole system.

When he approached and looked more closely still, he saw what he took to be the name of the station written in miniscule lettering above the ticket office, but it turned out to be some kind of slogan: 'In the

beginning was the wired'. The owner evidently had a sense of humour of sorts. But who was the owner – surely not the duke himself? More likely his brother, the one who was supposed to conduct strange experiments in the crypt – perhaps there were secret passages behind the wainscots all the way up through the outer walls. Was this thing also an experiment? There were wires running in all directions from the tracks, some of them spiralling up the nearest beams like spindly copper ivy. Surely that was a bit superfluous if they were only meant to drive the trains....

He discovered a whole battery of switches on the control panel. Unable to restrain his curiosity, he chose one of them. At once the rails hummed into life, and he noticed that all the figures on the platform were now staring to their left – had they been that way before? It did not take long for what they seemed to be waiting for to appear: a working model of an old-fashioned steam train painted black with brown trimmings and pulling several passenger carriages behind it. It glided into the station and stopped automatically. On the side of the engine could be seen painted the name 'Topic of Capricorn', and attached to the sides of the carriages were signs reading 'Special Study Tour'. Nothing else happened. Not even when he tried pulling other switches at random. He shrugged and started moving towards the lamp in order to turn it off and get back to William – and the train pulled slowly out of the station again, leaving the row of little figures still staring forlornly in the direction from which it had come. He turned back at once to the control panel – at which the train just stopped again and stayed where it was a few feet out of the station. And when he moved away it started up again. Was his movement through some kind of magnetic field being converted into power to the lines? He tried experimenting with different kinds of movement and soon realized that only movement of his whole body in a direction perpendicular to that of the tracks would cause the train to move, movement parallel with them had no effect, so it was impossible simply to follow the train along as it kept moving. Only by tacking back and forth between the elevated landscape and more distant parts of the attic was it possible to keep it moving, but doing so necessitated losing sight of the train for at least half of the time, since mountains and tunnels intervened. Moreover, it soon became apparent that there was more than one train in motion around the system. There were at least two other trains – one painted red, the other green – and he

found himself thinking of the first as the ‘black train’ now, not simply ‘it’. In order to keep track of the first train he had to extrapolate where it would emerge from successive tunnels or around concealed bends. The longer he lost sight of it – or got sidetracked by what another train was doing – the more likely he was to have to remind himself that the one he was interested in was black. For some reason it seemed worth finding out where it was bound for. Did he really believe it would lead him through to the duke’s study? If so he must have been sorely disappointed when he found himself tacking back to the first station, having completely circumnavigated the system.

He gave up, switched the lamp off, got down on his hands and knees again and started crawling back through the semi-darkness to the open hatch. Then stopped at once, hearing the train again humming into action; in his mind’s eye he saw the little black train in all clarity, as if right before him. The train too stopped, and its image vanished just as quickly. Was the system left permanently activated, in a state of latency? But from his present perspective it suddenly seemed that another interpretation could be thrown on the situation: what if one took the whole building as the relevant context? His purposeful motion through that broader context seemed to activate meaningful images within it, like an electrical wire moving through a magnetic field – meaning which was suspended as soon as he stopped and hesitated, and it reverted to an ordinary static edifice... But what *did* it all mean? What was this latent, invisible background that would spring into life every time he traversed it the right way? Was it to do with his own experience – or was it the building’s own memory, interconnected and distributed through every room in the place? It was nothing he could rationally read off his surroundings, only tacitly sense. He moved again and as the train behind him also moved he saw a vivid image of William waiting impatiently by the carpet on the floor below him. Well, as it happened, this was where he was heading anyway...

Jack scrambled down the ladder, full of ideas as to how to proceed. He began explaining excitedly to William about the magnetic tug of meaning that they should feel only when they were going in the right direction:

“That must have been what the ghost meant by keeping track of context – the way forward should just pop out by itself!”

But William didn't seem impressed – in fact he stood there looking about him distractedly, his knees squeezed together, as if his mind was on something else altogether.

“Oh no, don't tell me – you want another pee...”

“Can't 'elp it – Nature's little call won't be hignored.”

“Nor can the call of free drink, where you're concerned. You'll just have to wait this time, we've almost reached our goal, I'm sure of it.”

“Zorry, lad, can't be done, gotta vind a gents – otherwise it be back to that old vase downstairs...”

“No, no, not that. There's got to be somewhere nearer up here – but be quick, damn it!”

Jack paced up and down impatiently after William had scurried away rattling successive doors along the next stretch of corridor. He experimented moving a few paces first one way then another with his eyes closed; surely he could feel the direction in which a concentration of meaning lay. He was more or less convinced it was back to the right and very close – but he could not risk going off on his own to verify his intuition for fear of losing both William and the carpet again.

When William did show up at last, sauntering slowly towards him with a silly contented grin on his face, Jack was fuming.

“Bloody hell, where have you been all this time? Come on, come on, it's just down this way.” Then added suspiciously: “You haven't been back to that vase, have you?”

“Zertainly not, zon of mine,” William gave an affected gesture supposed perhaps to imitate an aristocrat waving a scented handkerchief. “I've discharged the old bladder in a most classy zort of rezepticle, specially wrought vor the purpose, I dare zay.”

“All right, so you found a urinal, good for you. Now –”

“Not jist *any* kind of urinary it weren't. One shaped like a great big porcelain zea-shell it were, with a little vountain in the middle when yer presses the pedal. Didn't 'alf pong nice in there too...”

“You unmitigated peasant, you've used a bidet! Wait a minute – a bidet? Could you have stumbled into the duchess's apartment by any chance?”

“Well, I vound it back of a pretty posh-lookin' bedroom in through there...”

“Which door? Quick! Pick up your end of the carpet – you lead the way.”

The door which William led them to looked much like all the others, but sure enough, on the inside was a most spacious and elegantly furnished lady's bedroom. Jack was jubilant, though his jubilation was somewhat tempered by the fact that it was William who had found the way – and by the lack of any sign of the chambermaid he had hoped would be here. The duke's own quarters could not be far away. And indeed a little investigation soon revealed an adjoining door behind a hanging curtain that led through a short passage to the duke's equally spacious bedroom. It had a beamed ceiling, and was furnished with an old-fashioned four-poster bed, a built-in wardrobe that covered the whole back wall, and a solid oak dressing table and chair. Everything was meticulously tidy though Spartan. On the walls there were no pictures, only the family coat of arms – just like the one they had seen in the moulding over the main door that morning, but carved in wood and painted like the one on the letter head (though the colours had faded with their passage through time). Here the trail stopped abruptly, however. There was no further way out of the room, except for the door at the end of the passage leading back to the corridor. They put the carpet and tool box down and searched every corner of the room, but to no avail. Loath to give up after coming so far and having undergone such frustrations in order to carry out what in essence was a very simple job, Jack stood at the window and looked down dejectedly over the driveway and the tops of the poplars towards the distant lake.

“Clues, we need clues,” he muttered.

Meanwhile William sat on the edge of the bed and stared with a bemused look at the coat of arms on the wall opposite as if it concealed the one clue necessary to find the way forward. But all it brought to mind for him was one of his earliest – and only – memories of his own father getting progressively more red in the face as he tried drunkenly to get into an ill-fitting jacket while his mother, dressed up prettily in a feathered hat, complained bitterly that they were going to be late for some do he obviously did not want to attend. He could not remember whether it was a funeral or a wedding or what – only that his father kept on muttering thickly about it being all arms and no sleeves...

“Where,” Jack mused to himself, “would you expect to find the secret retreat of a man of wealth and breeding who shies away from the public gaze but is meticulous about his own appearance, one who is obsessed by the past and yet would rather watch his inheritance fall into decay than

open it up to the crowds that he both fears and feels superior to, one who loves his family above all else but turns a blind eye to the scandalous things some of them seem to get up to...?”

For a moment his thoughts wandered and he found himself wondering how the window he was looking through looked from down below, there on the driveway where they had stood so much earlier... He felt a sudden prickly feeling at the back of his neck as if some ghostly meaning were tugging at him and it came to him consciously a moment later: the bedroom must have been located near the centre of the building, stretching back almost to the cupola – and why should the cupola not contain a further room? He had seen the whole context in a flash. There was only one place the duke *could* be, one level of the palace they had not yet investigated. Now he swivelled on his heels and looked straight towards the inbuilt wardrobes: the door immediately opposite the window was fronted with a full-length mirror in which the window itself was reflected.

“I have it!” he announced as he strode towards it.

“Were that ’ave as in ’avin’ the vlu’, or ’ave as in ‘to ’ave an’ to ’old’?” William chirped up, right back on form.

Ignoring him, Jack grasped the wardrobe handle and pulled it smartly towards him. It did not surprise him in the least when behind the door there appeared a clear passage through between parallel rows of neatly pressed suits to another room on the far side. Only a curtain of some sort blocked the view at the end, and light filtered round it from beyond. Moreover, a faint clicking sound suggested that something – or someone – was moving about in there...

20. The inner sanctum

But when Jack cleared his throat and – in a choked kind of voice – called out: “Your Grace?” the clicking sound simply continued. Annoyed at himself for having used this demeaning form of address once more for someone who had caused them such trouble already, he made a clicking sound with his own tongue and just went straight through to take a closer look. The curiously shaped room beyond the false wardrobe was empty, although there were ample signs that someone has just left. Was this really the ‘annex’ the duchess had referred to? There were no windows, just bare floorboards and walls, with a simple chair in the middle facing a screen on an adjustable leg. The source of the faint repetitive noise was immediately apparent: a home movie was being projected against the screen. Moreover, there was a still smouldering cigar stub in an ash-tray on the floor beside the chair. And dropped next to it was a slightly damp and crumpled handkerchief – picking it up with two fingers Jack recognized at once the family crest stitched in one corner. They must have missed him by moments – had their voices next door in fact frightened him off?

“Well, look’ee now – bain’t thik prancin’ vairy ’Is Lordship’s daughter when she were a mite younger?” William commented as soon as he saw the screen.

Jack looked up smartly from his examination of the handkerchief, and for a minute he stood as if transfixed watching what most certainly was Polly some fifteen years younger. She was dressed up as a nymph with a wreath holding her bouncing blond curls in place as she leapt and pirouetted in exaggerated fashion across the lawn in front of the palace. The hand-held camera, erratically trying to keep up with Polly’s cavorting, swung suddenly to capture the moment of her careering straight into the duchess – who in shorts and loosely buttoned blouse looked as youthfully vibrant as Jack remembered Polly from that morning. The duchess’s glass of champagne went flying and mother and daughter collapsed laughing and struggling together on the grass. Presumably he was witnessing some private family picnic before the palace had been opened to the public gaze. This was embarrassing – he felt he was trespassing. Suddenly what could only have been the duke’s

own hand appeared at the edge of the frame, its fingers signalling an upwards movement towards the ladies as if ordering them to get to their feet and compose themselves – which they did during the last few seconds of the film. Arms about each other, they stood for a moment smiling sheepishly towards the camera, just before the screen was bathed in white light, and somewhere behind the intrusive viewers, where the light emerged from a slit in the wall, the end of the film started clattering loosely round the spool.

“There must be a concealed projection booth – if he’s anywhere around he’s in there,” Jack deduced out loud, having looked about and ascertained that there was no other obvious way out of the room other than the one they had come in by – plus a little door in the back wall. “Now why should he have left the projector running like that?”

“Must’ve bin runnin’ ’izzelf. Any’un’d think ’e didn’t want our lovely carpet...”

There was only one way to find an answer. But this was not forthcoming even when they penetrated the narrow, curving cubby-hole that functioned as a projection booth at the back of the room. At least there was no duke there to give them an answer. What they did find, when they shaded their eyes from the glare of the projector, was that there was indeed a further way up and out: a metal ladder was fixed in position against the wall at the far end of the curved wall, beyond the projector. When Jack switched off the projector a faint square of light could be seen in the ceiling at the top of the ladder. He quickly climbed the rungs and poked his head through that way. Once his eyes had adjusted to the dim light, he saw that he was looking into a windowless hollow space completely surrounded by a circular wall. The shape corresponded to that of the ceiling with the zodiac painted on it at the top of the central staircase – that would explain the curiously curving back wall of the ‘annex’ below. The cupola dome must have been immediately above him. It was a strange thought that they were literally walking on stars – with nothing below them but a fall of several floors. An inverted universe. As for the faint light, it appeared to be coming from a large shallow bowl that filled the central part of the floor. And that light was in turn being projected down onto the bowl from a kind of wooden periscope tube in the ceiling.

Jack pulled himself right through and stood up. Now he could see that the bowl was completely filled with a dappled image. An image that

was not entirely static. He appeared to be inside an old-fashioned *camera obscura*. As Jack squinted at the surface he saw what at first looked like two tiny flies flapping their wings excitedly as they walked across a ceiling – then realized that the scene was upside down: what he was seeing was two gowned participants from the conference engaged in lively debate as they crossed a familiar courtyard. Moving part of the way round the circumference of the bowl he discovered a simple control rod that descended from the tube affair. By manipulating it you could swivel the periscope – which projected the scene through a series of encased lenses from beyond the dome overhead – and aim it into any part of the palace grounds you wanted to observe.

Further investigation revealed that there was another way out that led still higher: a narrow open staircase curved up around the rear half of the wall to a hatch in the circular ceiling. There was just about sufficient room to drag the carpet up – if they could get it to bend around the curves without falling off themselves. It would be a tight fit. Jack clambered down the ladder again to explain to William what lay above, then went back up to try the narrow stairs and see what was up in the dome itself. He already had a fair idea as to what he would find.

After a moment left on his own, William climbed the ladder, curious to take a look for himself inside the obscure camera. He could remember the one by the suspension bridge at Clifton – the thing had been an object of marvel to him in his distant childhood. When his eyes had adjusted, he leaned out over the illuminated bowl, screwing up his eyes and tilting his head first this way then that at the two little figures still progressing across the courtyard, engrossed in scholarly exchange.

“What makes you believe, Dr Mortimer, that one should not be able to read off propositions applicable to the real world from our mental models of that world, if they directly reflect facts in it?”

“Because, Dr Creighton, just as Wittgenstein put it so succinctly over half a century ago, you should not always think that you read off what you say from the facts.”

“But haven’t you forgotten that Wittgenstein also said that the proposition is a picture of reality, and a picture is a fact....”

With a sudden “Got’yer there!” William plucked the first of the two academic fly-men up between thumb and forefinger and held him struggling and moaning in front of his eyes.

“Dr Mortimer! Where on earth have you gone?” the other one

gasped, and began running back and forth wildly, looking in all directions – except up. “All right, a picture both is and is not a fact, I concede the point, there’s no need for such histrionic demonstration!”

William grinned and dropped the first figure back to the position from which he had plucked him up.

“Sorry, got a bit carried away,” the first don mumbled apologetically as soon as he appeared back at his colleague’s side and began preening his ruffled gown. “Wittgenstein will do that to a chap, you understand...”

But there was no time for further games. Jack came back down now with the news that he had found the duke’s study – if not the man himself – at the top of the spiral stairway.

“Come and help me get the carpet – we’ll find a way of getting it up the stairs. We’ve got this far, we might as well finish the job off properly.”

“I suppose you got a point, zon,” William sighed. “But don’t go expectin’ me to take all that weight at the bottom – them be powerful steep stairs. What with me bendy knees and all, I’ll ’ave to go virst...”

“All right, all right, just help me get it up here from the bedroom.”

This was easier said than done. First they had to drag the carpet through the wardrobe, across into the projection booth, squeeze it past the projector, then on up the steep ladder through the hole into the *camera obscura*. The second stage – up the spiral staircase – was even more problematical. It took several near-catastrophic tries (right along the edge of Chaos) before William at the top managed to bend the front end of the carpet along the curve of the outer wall so that it stayed put while Jack strained at the bottom like a highlander trying to toss the caber. There was also precious little light to see by. The end could just be inched on up – but only if William himself got out of the way above it, which reduced his effective role to pulling the tip of the carpet up a few inches now and then so that it could be pushed over the next step. Each time he did this he would shout down infuriatingly irrelevant instructions from above for Jack’s benefit. But Jack’s stubborn shoving finally won the day, and a couple of minutes after William had backed his way through the hatch in the ceiling, leaving it open after him, the end of the carpet flopped out at last onto the floor of the study. A few more shoves, accompanied by enthusiastic calls of encouragement from William, brought it right out into the middle of the floor. Jack went back one last time and reappeared with the tool box, on which he sat down,

breathing heavily, at the edge of the faded, severely geometrical, monochrome old carpet that their new one was to replace.

In fact the whole room had a decidedly faded, geometrical and monochrome look to it. When he had recovered enough to take in the details of their surroundings, Jack was at first quite unable to associate this dingy circular garret with the private study of a nobleman. He had expected something old-fashioned and idiosyncratic, but in a more elegant style, reflecting the social status – or pretences – of its occupant, something consonant with the impressive state rooms in the west wing below. It was orderly enough, in the same Spartan sort of way as the duke's bedroom, in fact the neat rows of books in the low shelves and the charts and diagrams pinned equidistantly around the circular wall bespoke a meticulous spirit, one that dwelt, however, amidst higher things than concern for the trivial comforts of everyday life. Obviously they knew very little about the man at all, except what they had acquired by hearsay. The room was not only dingy, but stuffy – its grimy little windows looked like they were rarely opened, and the smell of stale cigar smoke hung in the air. He could see dust and dead flies on some of the ledges from where he sat. Obviously no servants were allowed anywhere near the place. The wall looked flimsy – just an outer layer of tar-paper on some kind of wooden frame, wallpapered over on the inside?

Actually Jack could only see half the room, since the shaft housing the *camera obscura's* periscope system rose as a pillar in the middle of the floor and the space behind it was reached by even less light from the windows, the wall there being largely filled with chests of drawers and stacked bundles of paper. He could vaguely make out some kind of drapery in the shadows back there hanging over the position where one of the small windows should have been. All the others on that side of the room were either blocked or completely grimed over. The old carpet covered only the central area of the half of the room they were in, and by eye he could tell that the new one was roughly the same size. Why had the duchess not considered ordering a semi-circular carpet instead of another rectangle to cram into the same space? The place could be done up pretty tastily for a few thousand quid – as it was the new carpet would probably just look out of place amidst the tatty old stuff. Well, it was their money, not his. There was a much worn leather armchair in the middle of the carpet, and a desk with its own chair against the wall opposite it. Otherwise the curving wall of this half of the room was

punctuated solely – apart from a couple of small bookcases – with protruding tubes and levers.

William, not surprisingly, appeared somewhat less done in by their joint efforts. He paced about examining the room inquisitively, blowing down tubes and pulling the odd lever. He clucked aloud to himself each time he did so, as if he was discovering all manner of wonders, not just further bits of inscrutable apparatus. The distant creaks and clunks elsewhere in the building that may or may not have been occasioned by his fiddling seemed to make no interpretable sense. He ferreted unashamedly among the neatly stacked papers on the desk, going so far as to unstopper and sniff the decanter of whiskey that stood there. Then, tiring of this, he pressed his nose up against the pane of each of the small windows in turn – those that were accessible from standing on the bookcases, that is. Here at least was a cause for puzzlement if not wonder: the weather outside seemed to vary alarmingly depending on which window you looked through – sunny blue sky on the one side, heavy rain on the other, snowflakes falling at one window and autumn clouds scudding past at the one diametrically opposite. But perhaps this was in part the effect of the varying accumulation of grime adhering to them. Only one of the windows was almost clear – that above the desk, and through this, if one stood on the chair, one could look out at what appeared to be the real sky. Here dull grey clouds could be seen.

Jack felt too weary to try and stop the old fool from poking about amongst the duke's private things. If he broke anything up here they would probably have it deducted from their fee. Well, bloody hell, it would be from *his* part of the fee. Why was he so frisky anyway? Didn't he realize he was not going to meet any duke? He would have to call it a day with a duchess. It was painfully obvious that the duke himself was not about, did not wish to be about – they would just have to lay the new carpet and find their own way out again. And yet, he could not entirely dismiss the possibility that perhaps the duke really was lurking somewhere in the shadows behind the central pillar, observing them. Or there again – he had that odd feeling once more – perhaps it was the whole house that was observing them inside itself, shrinking away from intruders, parasites...

Finally he pulled himself to his feet. It was going to be getting dark soon. They had better just accept that they were alone and get on with the job while they could see what they were doing. The single lamp on

the desk did not look like it would be enough for very much longer. He opened the tool box and removed a claw hammer, which he tried to hand to William.

“Come on, Dad, pull your finger out and loosen that carpet. We can just dump it in the back there when we roll the new one out – we’re not being paid to remove it, are we?”

“Nay, don’t reckon as that were in the agreement. But listen, yer don’t expect an old veller like me to do all the ’ard work, do yer? What *you* gonna do while I be down on me ’ands ’n knees zlavin’ away?”

“I’m going to bash you over the head with this hammer, ram you under the floorboards and nail the carpet down over you – that should stop your endless whining. Listen, I’m knackered – let me just walk around for a minute and get my wind back. I’ll do the heavy stuff – I don’t have any choice. You can at least manage pulling up a few tacks, can’t you?”

With this he pulled the armchair off the old carpet and wandered away, arching and stretching his back muscles while William begrudgingly got down to pulling it up. Noticing the various tubes and levers and telephone receivers coming up out of the floor around the periphery of the room he went to take a closer look – he had not paid much attention to them so far. The levers were attached to ropes as if they formed the controls of a complicated set of bell-pulls below the floorboards, while the mouthpieces were clustered in groups here and there, with a main concentration on either side of the desk. They were attached to flexible lengths of tubing so that they could be pulled across by anyone sitting there. On the wall between the main array of levers and the desk several tree-like diagrams were attached; perhaps they indicated channels of control between here and the floors below. Whatever the various elements were meant for, they apparently formed part of some extremely elaborate communication system comprising a tangle of tubes and wires that were funnelled down and distributed to various other parts of the palace.

Jack sat down at the desk and put his ear to one of the flexible tubes – it was cryptically marked ‘2W13’ at its base. He heard at once a muffled voice. By covering up his other ear to cut out William’s mumbling behind him he could actually make out what was being said – by someone who sounded remarkably like the redoubtable Mr Potts (though he had his doubts again):

“... this banquet could ruin the estate entirely – but will he listen? Of course not, he’s just not interested in matters of economy, doesn’t see its relevance. I remind him again and again about cost-effectiveness – I am as subtle as possible, I try and invite his own inferences rather than impose my own – but he just yawns and changes the subject. I try to impress upon him that he must make an effort to take the advice and legitimate requests of his staff seriously. Sometimes he just seems ignorant of the basic conventions of dialogue with others – or pretends to be. It’s most vexing, and I am the one who reaps the blame from all sides. The efficient speaker needs to assess all the time the hearer’s knowledge state – or rather their shared, mutual knowledge – in order to decide whether the activation cost of formulating a given sentence is worth it, given what the hearer needs to know. It is the same simple principle of balancing economy and clarity as in running an estate. Activation costs are generally higher for content words than for function words and unstressed pronouns (which represent more accessible information), so in a situation of dwindling resources one should stick to monosyllables and at least appear to listen. But he doesn’t want to hear anything about dwindling resources – nor about the increasing price of maintenance of the aging infrastructure. He expects *me* to make all the difficult decisions for him!”

“That’s what’s called delegation of powers, Pops – I thought you thrived on it,” another, younger voice retorted facetiously, confirming that it was indeed the estate manager’s office at the far end of the tube. “You’ve made sure you got your share of the cake until now.”

“Now don’t you get smart with me, my lad, you can’t say you haven’t benefited too from my position here! It’s your job to keep an eye on security arrangements – they will have to be doubled this evening. Fusby simply doesn’t have enough men of his own. We can expect attempts at disturbances, I’m afraid.”

“You needn’t worry on that score. I and my friends can handle any jobs that try and break in from outside.”

“But discretely, mind – stay in the background. Her Ladyship is not to be alarmed by anything out of the ordinary.”

“I take it that includes the latest body that was found in –”

“Quite so, quite so. Keep your voice down. In fact come over to this side of the desk and look at this seating plan...”

The voices faded away, replaced by a vague background murmur and what sounded like the rustling of papers. Jack tried putting his ear to a neighbouring tube, but nothing was coming through this one at all at the moment. Among those on the other side of the desk was one that immediately caught his attention. It was labelled 'FROG'. But when he put his ear to it all he heard was a faint sound like water dripping into a pond. He listened for a while, as if mesmerized, staring at the same time at the sheets of paper pinned neatly to the cork-board between the back of the desk and the window in the wall above. They appeared to consist mainly of alternating lists of principles – maxims or rules of some sort – and mathematical formulae. Amongst them he noticed a diagram that was rather different from the others; it contained a list of 'conditions' and some symbols explained below:

Table 11

	Directive (Request)	Commissive (Promise)
Preparatory condition	<i>H</i> is able to perform <i>A</i> .	<i>S</i> is able to perform <i>A</i> . <i>H</i> wants <i>S</i> to perform <i>A</i> .
Sincerity condition	<i>S</i> wants <i>H</i> to do <i>A</i> .	<i>S</i> intends to do <i>A</i> .
Propositional content condition	<i>S</i> predicates a future act <i>A</i> of <i>H</i> .	<i>S</i> predicates a future act <i>A</i> of <i>S</i> .
Essential condition	Counts as an attempt by <i>S</i> to get <i>H</i> to do <i>A</i> .	Counts as the undertaking by <i>S</i> of an obligation to do <i>A</i> .
Ass.	$\vdash \downarrow B(p)$	
Dir.	$!\uparrow W (H \text{ does } A)$	
Com.	$C \uparrow I (S \text{ does } A)$	
Dec.	$D \downarrow \emptyset (p)$	
Exp.	$E \emptyset (P) (S/H + \text{property})$	

What the arrows and capital letters were meant to stand for, he had no idea. Was this some kind of code? He pushed the tube away, none the wiser, and looked around at the contents of the desk-top. There was an

array of pencils and pens and rulers and note-pads, all arranged with precise accuracy within easy reach. More interesting were the books and journals stacked around the edges, and – with a glance over his shoulder to make sure that William had not observed him giving in to his own curiosity – he glanced quickly at some of those lying on top. The first book he opened contained architect's drawings of the palace from various perspectives and in various stages of construction. Sheets of tracing paper were wedged between some of them, on which diagrammatic cross-sections had been traced in pencil. Other loose pages were sketched in freehand and appeared to represent ideas for new extensions. Remarks had been scribbled in the margins, and changes had been pencilled in here and there. One or two sketches had been carefully crossed out with heavy strokes of the pen. The text consisted largely of lists of construction materials and furnishings for the rooms and towers in the illustrations. This was odd: had they not heard from several independent sources that the duke was indifferent to the task of maintaining – let alone renewing – the estate?

There were other paradoxes in evidence here. Among the books on the desk Jack noticed – with some surprise – an old edition of Mrs Beaton's famous cookery book. He opened it to a bookmark which marked a passage giving advice as to how to deal with 'the tweeny'. Where had he heard that curious word used earlier in the day about some kind of menial servant? What exactly did it mean? Should he read between the lines? Why should the duke concern himself with such trivial domestic matters anyway? No, they clearly did not know the first thing about the man – and it did not look now as if they would get the opportunity to form any direct impression themselves. He glanced at some of the other titles. Most of them seemed to have something to do with language – things like 'Speech Acts Up', 'How to Do Things to Words', and 'Illocution, Better Locution, and Perlocution'. He picked up one of them that was entitled 'Felicity Conditions for Tongue-tied Cats'. The blurb on the back read: 'This work aims at showing you how to prepare your utterances from scratch, how to be sincere about them, how to propose topping up your food bowl with them and, more essentially, how to be sure that they actually count with humans as what you intend them to be taken as, thus avoiding social gaffs'.

He was about to open one of these curiously titled books when he noticed something equally curious: an old-fashioned telephone apparatus

fitted to the left-hand side of the desk. The receiver was hanging on the vertical shaft that contained the mouthpiece. He had the distinct feeling that two live wires were almost making a connection in his brain and needed just a little encouragement to meet. When he looked more closely at the dial set in the base of the mouthpiece he suddenly realized what the connection was: doubling the ordinary array of numbers on its face was a selection of alphabetical letters and other symbols corresponding to those in the diagram on the cork-board. Perhaps there was some internal telephone exchange he could get through to in order to inform someone in authority that they had started laying the new carpet. Surely the duke – or at least the duchess or the manager – would be interested in knowing this and come up to supervise. For a start he was not really sure if they were meant to lay it precisely where the old one had been. He decided that the code labelled ‘Directive’ sounded the most hopeful, and dialled ‘! ↑ W (H A)’ accordingly. He lifted the receiver and held it to his ear, and sure enough, he could hear ringing, somewhere far away.

“Oy, what yer up ter then?” William grumbled from the middle of the floor. “Ringin’ yer girlfriend vrom a customer’s private vone, eh?”

“I think I’ve found a way of getting some attention round here,” he called back over his shoulder, then signalled him to be quiet: someone at the far end had picked up the phone and was listening in silence.

“Hello? Hello? Is anyone there?”

“Yes?” a suspicious voice finally answered.

“I need to get in touch with the duke – or someone else from the household.”

“That’s what they all say...,” the voice muttered after a long pause.

“Listen, who are you?”

“I’m the hearer.”

“You sound more like a speaker to me.”

“No, that’s you.”

There was silence again. This was getting nowhere.

“Look, I dialled ‘Directives’ – do you or do you not give out directions?”

“You want the library. Try Commissives.”

“Thank you.”

“Are you sincere?”

“I beg your pardon?”

“Obviously not.”

The voice hung up abruptly. Jack dialled ‘C ↑ I(S A)’, the code given for Commissives. This time someone else answered: a timorous little voice that Jack recognized at once. He knew better than to ask for the duke directly – it had produced only a regrettably negative reaction from the librarian at their previous encounter. A more indirect tack was called for. His eyes roamed the titles of the books on the desk and lightened on one at random.

“Listen, I’m calling from upstairs. I need some information on a book I’ve had sent up – some key words I don’t know. Could you tell me the exact meaning of ‘illocution’ and ‘perlocution’?”

“I might. Do you promise not to tell anyone I told you?”

“Well, if you insist...”

“I don’t insist. You need to call Assertives for that –”

“No, don’t hang up. I promise.”

“So it is your sincere intention to carry out the obligation to realize the proposition ‘not tell anyone’ in such a way as to cause the world to come to correspond to your words?”

“Well, I suppose so...”

“Please don’t waste my time – if you want to make an Assertion rather than commit yourself to something binding, you know the number.”

“I’m sorry, but –”

“Don’t waste Expressives on me either, you have a fat chance of winning my sympathy. I’m a busy man, no time for phatic chit-chat. Now, what was it you wanted to know – illocution versus perlocution, wasn’t it? One moment, let me just get the relevant volume down... Yes, here we are: ‘An illocutionary act – as opposed to a mere locutionary one of producing an utterance with a propositional meaning – is an act performed in saying something, making a statement or promise, issuing a command or a request, asking a question, christening a ship, etc.’”

“It’s definitely not the last that I’m after, at any rate...”

“Whereas a perlocutionary act is an act performed by means of saying something: getting someone to believe that something is so, persuading someone to do something, moving someone to anger, consoling someone in distress, etc.”

“The last one sounds particularly relevant – I am definitely undergoing a touch of the old stress here. I need someone to come up and take a look at the job we’re doing, make sure we’re doing it right. I don’t want to have to come back again and redo it later. I can think of one obvious

way you could console me – by putting me through to whoever’s in charge...”

“All I am employed to dispense down here is words. The effect the information I supply has on you is your own look-out.”

“Couldn’t you at least explain about these telephone codes to me – I could probably get through to the right party on my own with a bit of perseverance, if I knew what they meant.”

“That sounds more sensible. Our in-house system breaks down the wide array of speech acts expressed by English performative verbs to a manageable basic five types, namely Assertives, Directives, Commissives, Expressives and Declaratives. Examples of these are, respectively, when one states, insists or hypothesizes that something is the case; when one requests, commands or insists that something come about; when one promises or intends to do something; when one compliments or thanks someone or deplors that something is the case; and when one declares in some capacity or other that something is the case. Languages rarely have more than these basic five speech act types expressed by grammatically distinct mood categories. The code corresponding to each of these always starts with a symbol or letter indicating the ‘essential condition’, namely that an utterance of the type in question should count as representing the basic illocutionary type – for example the exclamation mark for Directives, which are aimed at getting the hearer to do something, or the C for Commissives, which indicates obligations the speaker commits himself to carry out, and so on. Then there is an arrow pointing up or down – or in both directions – to indicate ‘fit between words and world’. The arrow points upwards for both Directives and Commissives, since the ‘point’ is to get the world to correspond to one’s words in both cases, whereas it points down for Assertives, whose words simply reflect some state of affairs in the world. Then comes another letter or symbol indicating a psychological state on the speaker’s part presupposed by the act, for example ‘W’ in the case of Directives, indicating that the speaker wants the hearer to undertake the action referred to, ‘I’ for Commissives, indicating the speaker’s intention to undertake the act himself, or ‘B’ in the case of Assertives, indicating that the speaker believes what he is saying to be true. The final element in the code indicates the propositional content of the utterance – just ‘p’ for an Assertive but ‘HA’ for a Directive, meaning that hearer H does action

A, and 'SA' for a Commissive, where the proposition indicates that the speaker S will do action A."

"Well, I think I see the logic there, but doesn't this small number of codes limit rather drastically the messages you can convey with them? What if, for instance, I wanted to phone down to the kitchens to order some caviar and champagne to be sent up immediately to this room. Just dialling the 'Directive' code is not going to be sufficient, is it?"

"Of course not. You misunderstand the system entirely," the librarian sighed. "It is hierarchically organized in such a way that a higher level choice – up at your end – narrows down the choices further down the line. Typically you need to go through several way stations in order to get down to specific words expressing your communicative intent – the details about caviar and champagne are only relevant to the staff down in the kitchens. The propositional content of your request, for example, is contained in the 'HA' of the code, whatever it may be. You will be asked about the realization of that content in precise words further down the line. What we are dealing with here is maximum efficiency, including the suspension of sub-routines until they need to be spelt out. But whether one distinguishes five or a dozen illocutionary types, they are still only very indirectly relatable to specific intentions. Perlocutions are in principle infinite in number, as determined by the specific intentions-in-context of the speaker. So this is a way of simplifying an otherwise very complex chain of command."

"But are you saying, then, that there is only one way of expressing a particular type of illocution in a given language, say English?"

"Certainly not. The system is highly flexible – hence the many stages and relays involved. It allows – indeed encourages – nuanced modulations of the conventionalized illocutionary message type on the way down towards final instantiation. There are discourse management choices to be made as to style and genre and subjective attitude marking, and as to how to divide the message into discourse units – clauses related by parataxis or hypotaxis and so forth; there is topic continuity to be taken care of in terms of anaphora and pronominal reference over larger stretches of text; there is the addition or subtraction of presupposed background or framing material according to the norms of conversational practise; there is the question of the broader embedding of the message in a complex discourse event involving moves and turn se-

quences and the like, not to mention the whole dimension of bolstering a rhetorical argument with specific words and constructions.

There is also the interaction of the hearer and speaker to bear in mind, each with their own set of attitudes and assumptions, and much much more. No, no, it is quite wrong to think of the system as rigid and mechanical. The way from intention to expression can be highly convoluted. The precise meaning to be conveyed isn't necessarily all there from the start – some of it has to be negotiated *en route* with the various parties one encounters at relay stations. All the more reason for the hearer to know right from the start where to start in his interpretation – namely in a limited number of illocutionary types which the given utterance can manifest. After that he can figure out for himself, by inference from context and situation type, what the complex intention behind that choice may have been. Apart from the most basic, grammaticalized way of expressing a given illocution there are all manner of indirect ways of conveying the same thing. But even these display a certain systematicity, the most common of them referring to the sincerity and preparatory conditions necessary for the act to be felicitous. Thus one can perform a Directive – say get someone to deliver the comestibles you mentioned – by asking *if* they can perform that action, this being a preparatory condition for all Directives.”

“Ah, yes – there’s something about that on the diagram in front of me now...”

“Where exactly are you, anyway?”

“Well – since you put the question so bluntly, I’ll be direct too: in the duke’s study. But the duke isn’t here – it’s him I need to contact.”

“Oh my God, oh my God,” he heard the librarian gasp – and could just see him cringing back into his shell. “I shouldn’t be aiding and abetting burglars. I’ll be fired, I just know it! That’s what’s happening to everyone these days!”

“Take it easy, don’t jump to conclusions – we were sent up here by the duchess herself –”

But the line had already gone dead. He did not feel like trying any other number – there was no time for further diversions. They had a job to do, duke or no duke. William had finished pulling out the tacks from the old carpet and was now rolling it up. There was just one last thing that had attracted Jack’s attention on the desk: beside one of the thicker hollow tubes that penetrated the desk-top from the floor below lay a

metal cylinder of the kind he had seen behind the librarian's desk. It was of just the right diameter to fit into the tube and was apparently ready to send. He picked it up and observed the address – 'Archives' – written in block letters on a slip of paper slotted into the cowling. Curious, he removed the cap over the end, stuck in a finger and pulled out the scroll of paper inside. There were several handwritten pages rolled up together. With a growing sense of apprehension he read the title on the first page: 'The Domain of Language'. But the text that followed, consisting largely of mathematical formulae, was quite unfamiliar – it seemed to be some kind of technical treatise on how to define a language in terms of the set of well-formed sentences its grammar generated. Was this a coded version of a quite different text? There was some kind of obscure resonance with something he had seen in the archives room downstairs, although he could not quite put his finger on it. All he could recall, for some reason, was the gamekeeper's words about the paradigmatic and the syntagmatic aspects of the palace, and how every room coexisted with – and was in some sense present in – every other room. He started flipping through the journals and folders stacked on the desk top, as if looking for something quite specific. If it was a continuation of the manuscript he was after he was to be disappointed. Then he noticed the waste-paper bin beneath the desk. He pulled it out and onto his knees and began scrabbling through the contents.

"'Ere, come an' give us a 'and with this old carpet!" William called to him from his own knees as if oblivious to Jack's furious rummaging.

"Hang on a moment," Jack muttered impatiently. "There may be something important here."

He fished out and flattened on the desk top one of the screwed-up pages that had been tossed into the receptacle. It was an earlier version of the page he had just read, with various words carefully crossed out and notes added in the margin. Among these he read: 'Try and distinguish object language from meta-language a little more explicitly – a question of representation – emphasize that surface structure is not enough on its own...'

He pulled out another one. This appeared to be a letter – and his heart skipped a beat at the thought that it might be another teasingly ambiguous message from Polly. But it was not from Polly, it was from – God. Well, it was not signed, but it was evidently directed to the duke's attention from on high. The tone was biblical at least, and it

appeared to represent some kind of eviction order. Who else was in a position to order a duke about? The following words were written in an elaborately florid orthography full of bombastic loops and sweeps, quite unlike the duke's own stolid handwriting:

‘Thou shalt get thee hence from this tower that thine ancestors raised up in the sweat of their brows. Since thou no longer canst pay the rent of righteousness, thou deservest not to abide herein. Thou hast in thine pride forgot that it was built to praise the Word, not to take it in vain – the world is to fit the Word, and those who strive to bring about the reverse shall be cursed, yeah unto the hundredth generation of their seed. Take thy wife and they chattels and remove thee forthwith to the scattered lands beyond the walls that surround this holistic place. There thou mayst bring the remainder of thy days thinking upon the great sin against credibility thou hast committed here. I Who Am – or was that Is? – have spoken.’

The letter ended with a postscript introduced by the words: ‘To whomsoever this concerneth not’. It read: ‘Thou shalt not stick thy nose where it belongeth not. Get lost. Pronto.’

Was the letter forged? A joke? Surely the duke would not pen his own eviction order even as a joke, Jack pondered – that surely was the one thing he feared most. Whoever the author was, he was heavily into Directives, all right. But what if the letter was *bona fide* and he *was* being evicted – was the duke trying to cover up just how serious the situation was, even to his own wife? One thing it seemed clear he had been wrong about: the duke was very much concerned about the future of the estate – concerned enough to tempt fate by just tossing an order from the highest authority into the waste-paper bin like that. Well, you had to admire the bloke's *chutzpah*...

What *was* it to do with them, anyway? Jack got to his feet with a sigh of resignation, realizing that he had reached some kind of solid wall beyond which his comprehension was not going to be permitted to pass.

“Glad yer could tear yerzely away and lend a ’and,” William clucked as Jack took hold of the end of the rolled-up carpet.

He dragged it to the cluttered area at the back of the room then pulled the new one into position from the top of the stairs so that it exactly covered the area of the floorboards where the old one had been.

“Might as well place it just like before, else someone's bound to complain. Myself, I'd have positioned it further forward, but still.”

Taking the hammer from William and some more tacks from the tool box, he soon had it fixed firmly to the floor. This accomplished, he slumped down in the chair at the desk, having swivelled it around to face their handiwork. William had already done the same in the armchair, a look of simple professional pride plastered across his face. In fact the carpet, nicely stretched out, didn't look at all bad in the position it was in – its bright reds and oranges, enhanced by the thinner black and white lines, gave the gloomy dome-shaped room a certain feeling of brightness, of potential new meaning. Well, Jack admitted to himself, perhaps the duke might think it did not quite fit into the surroundings he was used to, but the duchess had been right in choosing this design. It was the surroundings that would have to go. A great improvement, if he did say so himself – even the most stick-in-the-mud of aristocrats would surely have to admit that. It was just a pity the lord of the manor was not there to bestow his approval in person.

As he sat wearily admiring the coloured surface, it dawned on him that the pattern was not just any old pattern – it actually formed a schematic map of the palace and grounds, flattened into two dimensions. This he discovered when his eyes drifted out of focus and the lines of the pattern suddenly leapt into three dimensions – he found himself staring at the recognizable shape of the palace, its transparent walls revealing the lay-out of all its interior rooms. Then just as suddenly it reverted to two. Was this some kind of chance optical illusion, brought on by fatigue? No, if he made a slight effort at focussing just beneath the surface he could cause it to spring back into three dimensions and keep it there while his eyes moved around it, following schematic passages and halls, out into the courtyard and the driveway and the gardens and lawn behind them. In fact the outermost black line around the pattern could be taken to represent the surrounding walls and the thin interconnected strips of white within it could represent the ring of moats and lake – the whole estate compressed into a geometrical rectangle. He amused himself making the centre pop out of flatness into solidity a few times, then tired of the game. Was there no more to it than this – a rather clever portrayal of the estate as a stylized map? It felt like there ought to be one more dimension – it still looked somehow too rigid and static – but it was beyond him to carry that thought through to its conclusion. He had seen enough, he decided: it was a perfectly suitable birthday present for the owner of the property – from one who assumed he was

going to carry on owning it. Obviously the duke himself was not going to show up. They needed to find the quickest way out again if they were to get back before dark .

He leant forward and found the corner of the carpet which seemed to correspond to the way they had come in at the end of the old driveway – there was a crenellated line crossing the schematic moat that could well have represented the bridge they had crossed. If so, the point where it met the outer black line – even though there was no gate marked through it – must have been level with the spot where their van was parked on the outside. But was it really legitimate to read such a concrete proposition off an abstract model? At all events, by retracing his way along and between lines, up through the three-dimensional skeleton of the main building to the cupola where they now were situated, he felt reasonably sure that he had located a relatively direct way back down to the bridge.

“Oy, take a look outta this ’ere telescope thing!”

William’s sudden shout from the other side of the room brought him out of his reverie – he hadn’t even noticed that his father was no longer sitting in the armchair. He was standing on tip-toe on a crate of old off-prints behind the drapery they had seen in the murkier part of the dome. Only his wiry ankles and calves were visible below it. Jack got up and walked across to see what he was up to now, suspecting that his devious old ancestor was just prevaricating on the odd chance that the duke would still show up. Pulling aside the drapery he found that William had indeed found a telescope. It was trained through the only open window in the dome, down in the direction of the lake, to the right of the hunched shoulders of one of the winged gargoyles that guarded the edge of the roof in front of the dome. The lake itself lay in broad sunlight, although Jack could have sworn that there had been rain beating drearily against the pane above the desk where he had just been sitting. Had the duke been standing here, concealed, before and then slipped back deeper into the shadows while they were at work?

“Now why d’yer think it should’ve been pointin’ down at thik boatshed? Take a look-zee yerzelv.”

Jack took over the eye-piece and saw that the apparatus was indeed focussed sharply on the little boathouse they had noticed earlier at the edge of the lake. Was the duke expecting visitors that way – or was he really thinking of escaping surreptitiously himself? But surely the lake

joined the moat in a circle that simply led back upon itself, swallowing its own tale, so to speak...?

Unanswered question upon unanswered question. Somehow the substance surrounding the static form of the clearly demarcated palace seemed blurred and – insubstantial. Only through the telescope was part of it quite clear, but then of course only a tiny sliver of it was visible at one time. Jack took the cylinder in both hands and twisted it around to the left in several moves, checking what he could see through it at each shift, until he was satisfied that he had it trained on the gate through the section of the wall where they had come in that morning. There was just enough of the twilight left to see it in. The visual image interlocked with the schematic escape route he had memorized from the carpet. He hoped. Though the last words of the eviction letter still echoed ominously in his mind...

“Right. This is where we make our exit. The receipt’s been signed, we don’t have to hang about. You’ll just have to give up the idea of cosyng up to a real duke.”

“Oh well, whereof one cannot speak thereon one must remain silent,” Jack could have sworn he heard William mumble, but when he swivelled around his father was just standing there looking sulky.

“Where on earth did you pick that up?” Jack asked, amazed, then – recalling with a shudder that William had spoken of attending Chapel in his childhood – added: “No, don’t tell me *you* wrote that letter...!”

But William just stared, uncomprehending. Finally he grumbled uneasily:

“Well, I reckons yer be right, zon, we better’d be orf. Mrs H’ll be gettin’ all hagitated as usual...”

Jack put the absurd idea out of his mind. In this place, he told himself, any sort of nonsense could seem plausible – for a moment. Their business was over and done. The goal he had been striving after so obstinately the whole day was suddenly fulfilled and removed – though a niggling feeling of not quite having achieved *complete* success remained. What rushed in to fill the vacuum was the image of a frothing pint of bitter before him in the snug of the Hammer and Tack. The sooner they were in the van and on their way the better. He just hoped he was right about finding the way out of the labyrinth again.

21. The way back

Retracing their steps back down to the projection room and through the wardrobe to the corridor outside the duke's bedroom was simple enough, especially now that Jack only had the tool box to carry. Nor did they encounter any problem locating the stairway down to the floor with the games rooms. Or *was* this the same stairway? There was no sign of the billiards room nor could they hear any sound from the music room on the unfamiliar corridor where they now found themselves. Jack only hesitated for a moment. It really did not matter now. Once outside they would be able to find the driveway again, one way or another. They just needed to continue downwards. This they did after turning a few corners and discovering that they were back on the landing of the central staircase with the constellations of the zodiac circling above them.

Here they became aware of sounds of tumult rising from below: over the banister they could see people running back and forth in confusion. The words that were being shouted were obscured by the echoes, but clearly bespoke a growing atmosphere of panic. What was going on now? Who were these people? Amongst the small groups down there Jack thought he recognized some of the conference participants and a gaggle of lost-looking foreign tourists, but there were also roughly clad workers marching about wielding spades and rakes and the like. One particularly egregious group consisted of half a dozen little negritos wearing nothing but penis sheathes – apart from the pieces of ivory and tin-ware stuck through their noses and ear-lobes. They came to a halt at the foot of the stairs that divided and curved up from the main hall where earlier a red cordon had blocked the way. Here they dumped the sacks they were carrying – one of which, to judge from the squeals and struggling within it, must have contained a small pig. Their leader, a curly-haired fellow with a large curved bone through his nose and a sharpened bamboo cane in one hand, positioned himself on the third step and surveyed the milling crowds with a frown, as if searching for somebody in particular.

Jack descended towards him – there seemed to be no alternative – while William hung back nervously at the top of the stairs. When Jack was just a few steps from him, the little wild man leapt around as if about

to attack him with the cane. Jack waved his hands in a defensive gesture and opened his mouth to explain that they just wanted to get past, but already the fellow had shouted at him:

“Yu save tok Pisin?”

“What was that, sorry?”

“Mi laik putim haus sel long hia na stop long nait.”

“Stop long – what? Where?”

“Tok isi, boi. Em dispela no hotel?”

“A hotel? I’m afraid –”

“Yu no pret,” the black man grinned suddenly and slapped him on the arm. “Mi no kilim yu dai pinis!”

Jack jumped back with a glance at the penis sheath tilting up threateningly towards him.

“Bas bilong mipela i bugarap. Yu gat rum i gat tupela bet? Mi laikim rum i gat pepek. Mi laik waswas. Na wantaim kaikai”

“What, what do you want me to do?”

“Yu karim i go ol bek bilong mi long rum, kwiktaim tru!” the man began to show signs of aggression, waving his arms towards the sacks; he appeared to be every bit as frustrated as Jack was at their obvious lack of communication.

At this juncture, however, a familiar figure, no taller than the others but wearing khakis and an over-sized solar topi, popped up from behind the natives.

“Hallo again – couldn’t help notice you weren’t exactly getting through to my friends here. I just passed them in the hall back there on the way to the library to sharpen a pencil. Their bus has broken down somewhere on the main road near here. You could do with a spot of interpretation, I imagine.”

“I certainly could. What on earth is he talking? Sounds like an endless string of rude words to me.”

“Ah, you recognize the Australian basis of the creole. Tok Pisin is the official language of Papua New Guinea. They probably want a room to pitch their tents in. That last thing he said was a request to carry his bags up to the room, at the double.”

“Well you just tell him where he can stuff his bloody sacks – I’m no bellboy!”

“Oh, I wouldn’t recommend that tack – those spears are pretty sharp, believe me.”

“How does he think he’s going to get the duke to let them have a room? And what’s with this ‘pekpek’ and ‘tupela bet’ and ‘kaikai’ stuff – sounds like there’s a whole lot of things he wants.”

“Oh, that would be a double room with a bath – and with food included. Let me introduce you properly first, then he might calm down.”

Here he turned to the native with the words: “Mi laik bai yu bungim dispela Jack – it is Jack isn’t it?”

Jack nodded and gave a half-hearted twitch of a smile.

“Nem bilong mi Jon. Yu marit pinis? Yu gat pikinini? Mi gat tupela liklik meri,” the black fellow grinned again in Jack’s direction, apparently happy to meet any friend of someone who knew his own language.

“Don’t start getting fresh with me again!”

“He’s just asking you if you’re married with children. Notice the interesting word ‘*pinis*’ from ‘finish’, used to indicate a resultative state, not just the termination of an action as you might think. Of course it reflects an element typical of most Papuan languages.”

“Oh. Tell him no. Sorry. Ask him – well, where he comes from.”

“Yupela kamap long wanem ples?”

“A – mipela kamap long Clapham,” he frowned with a suspicious glance towards Jack.

“I’ve never heard of any ‘Long Clapham’...”

“You misunderstand – ‘long’ is a preposition, actually *any* preposition. Here it corresponds to ‘from’. Listen, he seems to mistrust you – probably thinks you represent the government, asking for papers and all that. Don’t take it personally – could just be the colour of your hair: only parrots have red hair where he comes from. If I were you I’d just tell them to go on up and pick their own room. *Après nous le déluge*, what? I think we’re all thinking of leaving pretty smartish, right? Things getting pretty choppy outside – trouble brewing...”

Here he conferred with his dusky acquaintance for a while, his back turned to Jack.

While he did this William finally ventured down behind him and tugged nervously at his sleeve: “What do they nignogs want, lad?”

“Nothing, I’m just giving them directions. And don’t make your xenophobic ignorance so obvious. We’ll be out of here in a jiffy. This bloke knows the lingo, he’s sorting them out.”

“Hm, seems there may be a slight complication with our plan,” the

linguist reported back, stroking his chin thoughtfully. “They insist on a guide to show them up. Also, they don’t have any money with them, only travellers’ cheques – and a pig.”

“Sori. Mi no gat moni,” the black fellow elaborated (for once in completely understandable words), then added with a worried look: “Dispela rum i kostim hamas?”

“If he’s asking what it costs, I haven’t the faintest idea – tell him he’ll have to negotiate with the chief upstairs.”

The linguist nodded and, after a remark on the characteristic use of ‘pela’ from ‘fellow’ as a general noun classifier and as a plural marker and on the suffix ‘-im’ added to all transitive verbs, he exchanged a few more words with the native. Then he reported his response:

“I told him what you suggested, but he’s wary of going without a guide – thinks they may be ambushed by other tribesmen. I still think it would be wise to offer them your assistance. How about this old gentlemen you are with? They seem to be under the impression already that he’s a guide. He could just take them up to the next floor, then come back down and join us at the main entrance – you know, at the end of the hall there.”

“Well what do you think, Dad – it might get us out of a tight spot. They’re suspicious of me. Just take them to the manager. He’ll know how to handle them – that is if they don’t get the fat swine first.”

“No way d’yer leave yer old pa alone with these devils!”

“Gait i save dispela ples o nogat?” the chief eyed William hesitantly.

“He wants to know if the guide is experienced in this region.”

“I bain’t goin’ back up them stairs, I can tell yer!”

“Dispela rot i orait o nogat?” the native continued undeterred with a wave of his free arm back up the stairs.

“He wants to know whether this track is still in use,” the linguist explained for William’s benefit.

“Not by me it bain’t!”

“Yu tok stret!” (Here the leader – who was of about the same height and wiriness of limb as William – slapped him appreciatively on the back.) “Baimbai yumipela go.”

“Off you go, old chap. We’ll be waiting for you at the entrance. They may give you a tip, if you’re nice to them. Mrs H would appreciate a bit of sucking pig for supper, don’t you reckon?”

“Ow, ow, me legs couldn’t carry me another voot uphill – ow, ow, now it be me teeth...”

“Gait i nogat?” the black man asked, looking suddenly concerned for William’s well-being.

“Gait i pen long tit,” the linguist tried to convey to him that William had had a sudden attack of toothache.

“Dokta bilong tit i stap we?” he put an arm around William sympathetically and all the other dusky fellows went “Ow, ow, ow!” in ritual sympathy with their guide’s evident pains.

“Wants to know if there’s a dentist round here somewhere.”

“Up there – up there – let him show you himself,” Jack waved impatiently up the stairs. “We’ve got to get going. See you later, Dad – as arranged. It’s you’re own fault pretending you’ve got toothache – they’re just trying to help you. For some reason they seem to find you loveable.”

With this he turned and marched off in the direction of the main entrance. The linguist shrugged and waved at the Papuans, who were already pushing a vainly protesting William up the stairs ahead of them.

“Lukim you bihain!” the little chief waved farewell from half way up the stairs.

“I wonder if we’ll ever see the poor blighter again,” the linguist mused out loud as he dodged through the contraflow, trying to keep up with Jack.

“Don’t worry about him, he’ll be back like a shot soon as he’s delivered them to the manager’s office – those gammy legs of his can gallop like a jaguar’s once the spirit moves him.”

“I wouldn’t count on it. Did you notice that inclusive first person pronoun the chappy used when addressing your aged friend – ‘yumipela’? Sounded like they’d really taken a shine to him. Next time you see him he may be wearing nothing but a penis sheath and a nose plug himself...”

“That would cause a few raised eyebrows from our customers. Especially if he picks up their way of speaking too.”

“Could happen, of course. Language contact is a potent thing. Pidgins and creoles aren’t the only things that can result.”

“What’s the difference between the two, anyway?”

At this point they were forced back into the short passage to the entrance of the library by a surge of people heading for the central staircase. Jack took the opportunity to put down his tool box and

massage the back of his neck while his companion replaced his solar topi, which had been knocked clean off his head. He then proceeded, quite unfazed, to give an elaborate answer to Jack's question while they waited for the crowd to pass:

“Well, they are both ‘mixed’ forms of language, imperfectly learnt from some target language – usually a colonial one like English. But pidgins are only a first stage of the normal development, don’t you know. They are not the native language of anyone – not even the natives – but represent a kind of unstable *lingua franca*, especially in situations where there are many local languages spoken. A creole is established when a pidgin is ‘nativized’ and established as the first language of a community, passed on from generation to generation in the normal fashion – as in the case of Tok Pisin, which isn’t a pidgin any longer. They can be classified as ‘basilects’ or ‘acrolects’ depending on the degree to which they are subsequently influenced by the standard ‘donor’ language. Another thing that can happen to them is ‘relexification’: the same pidgin can become creolized in different places with a partial replacement of the original vocabulary by that of some other prevalent local language. Actually this is quite a controversial matter, since there are some investigators who would claim that all creoles and pidgins come from the same origin – usually conceived as a Spanish-based pidgin spoken by plantation slaves from certain parts of West Africa. This is supposed subsequently to have undergone relexicalization in different parts of the world, wherever slaves were taken. Others would say that this is an unnecessary hypothesis since natural pressures lead towards the simplified kind of grammars typical of pidgins – as a kind of built-in biological ‘default’ which may arise spontaneously in different geographical locations, wherever social conditions of a certain kind prevail. This ‘bioprogram’ is supposed to come into effect not only in pidgins but also in child language acquisition and in aphasia, which share a number of common traits. It’s said to reflect the innate and universal nature of language. Lot of poppycock if you ask me, but still, what do I know, I only deal with real languages.”

“I suppose it is remarkable that languages have so much in common though – I mean you can translate back and forth between them for a start, can’t you?”

“In a rough sort of way, but things rarely mesh exactly, old boy. There’s a lot of arbitrary historical residue in any natural language that

reflects the accumulation of centuries of complex changes and replacements in a shifting sociological setting. That's where interference – your interlanguage effect – steps in. One language requires certain things to be overtly marked while another relies on inference from context but may in turn require other things marked that the first language doesn't. Some languages may mark a category morphologically, another syntactically or by intonation or not at all, and so forth. But languages don't exist in isolation from other languages for very long, all manner of contact effects can be expected that counter internal 'drift'. It's like viruses injecting bits of their DNA into host cells, which pass them on to the next generation, the way French has given English its 'of' type genitive construction, now competing with its native '-s' one. If you want to unearth explanations for the type of changes that arise from contact you have only to examine the way in which bilingualism works – this is the normal state of man, after all. The monolingual world most people in this country live in today is thoroughly anomalous. Scratch an Englishman and you'll find a Norman or a Celt or a Pict lurking somewhere in the depths.”

“Some of us do know French – even William knows a bit...”

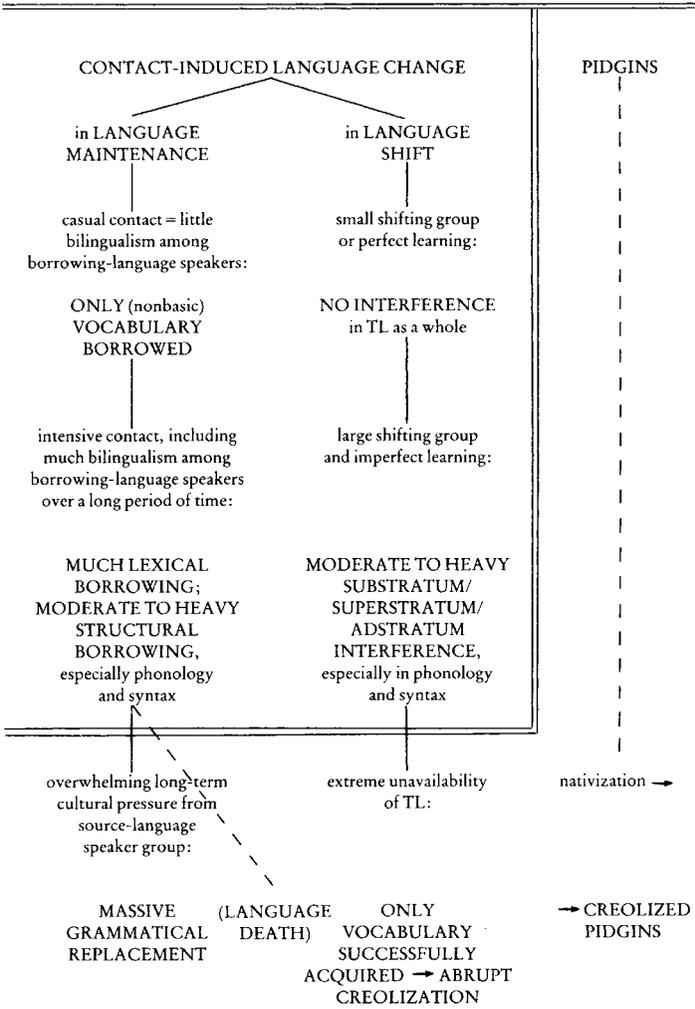
“A Latin superstrate imposed over a Neanderthal substrate would explain it. Anyway, there are two basic processes of 'normal' language transmission: language maintenance – albeit influenced by neighbouring languages – and language shift. Within each type one can find varying degrees of influence from without. In the case of maintenance situations this goes all the way from casual contact resulting in some degree of lexical borrowing, to heavy borrowing, grammatical as well as lexical. Here, let me sketch the various possibilities on the back of this notice – luckily I have a sharpened pencil at hand.”

The linguist plucked a hand-written notice which read 'Closed until further notice' from the door of the library, squatted down and scribbled away for a bit using the top of the tool box as a support. Then he handed the envelope back to Jack. (*see Figure 23, next page*)

“You can see here that the major difference between the effects of language shift and language maintenance is the strong effect on phonology and syntax that the former can have without necessarily resulting in much lexical borrowing at all. This is usually due to substratum effects influencing the way the language that is shifted to is spoken. Where it really starts getting interesting, though, is in cases of

non-normal transmission – that’s everything outside of the double line. This includes the case of ‘mixed’ languages like creoles, but these, it turns out, can have two sources, either the gradual nativization of pidgins (which I have already mentioned), or abrupt creolization, where virtually the whole vocabulary of the donor language is taken over by a native population. This requires special social conditions of course.”

Figure 22



“I notice you’ve also written ‘language death’ there – is that really the result of contact?”

“Pretty much so, old boy. It goes hand in hand with accelerated change as the dying language undergoes more and more structural influence from the dominant language of the area. But there are always exceptional cases – like that of the last two speakers of a certain obscure Patagonian dialect, two sisters found living quite alone in a cave ten years after their tribe was massacred by neighbours. They each blamed the other for what had happened and refused to speak to each other. When they were found, one of them had become stone deaf and the other was quite off her rocker, babbling like an infant. The interesting question is, when exactly did that language die?”

At this point a bell started tolling lugubriously somewhere far above them, and people again began to rush past in panic – this time in the opposite direction. A violent jolt that caused Jack to grab for the nearest door handle ran through the floor and curtailed any answer to the last question the linguist might have been about to provide him with, since the latter was himself catapulted over the tool box, head-first into the wall. This resulted in the helmet being rammed right down over his eyes. Whether the jolt was caused by stampeding feet or from an incipient earthquake it was impossible to tell, but another tremor, equally violent, followed hard upon the first. Were the very foundations of the palace beginning to give way? Jack was not sticking round to find out. He grabbed the tool box in one hand and the arm of the linguist in the other and tugged both of them into the crowd that was surging down the hall towards the main exit. Voices cried shrilly all around them:

“It’s coming! The old order is going!”

“A new Great Vowel Shift!”

“This way – there’s shelter just round the corner!”

“We must learn a new language!”

“Won’t American do?”

“We have to learn the new *lingua franca* in order to survive, to communicate with the newcomers – they say they’re quite ruthless if you don’t answer them!”

“Where can we get lessons?”

“Out in the courtyard – they are starting up crash courses – intensive drilling – “

”There’s no time – better the direct method – total immersion!”

There were footmen and kitchen assistants and other domestic staff running around among them, their starched uniforms in disarray as they harangued the fleeing guests, apparently trying to get them to turn back and listen to their side of things. Amidst all this confusion, a familiar wild-eyed, straw-headed figure jumped out from the shadows just in front of them and hovered at the head of the steps down into the entrance hall. He appeared to have slipped through a pivoting stone door that was fitted flush into the wall there – the wall of the old palace. Perhaps it led down to the crypt under the chapel. Jack caught a fleeting glimpse of a hunchbacked figure in overalls pulling it closed again from within. The linguist, who was still struggling to free his head from his helmet, saw none of this.

“Chaos! How I welish it!” Alfred chuckled as he rubbed his long hairy arms together. “Such opportunities for wesearch!”

He skipped about among the fleeing visitors and the workers from outside who were forcing their way back in the other direction. He would duck down then pop up again next to some unsuspecting victim, groping their heads as he repeated in a kind of phrenological frenzy:

“Bumps? Anyone weceived any nice bumps?”

“Hey, get your hands off me!” Jack protested as the duke’s nutty brother tried it out on him next.

“Oh, hallo, you’re the one who said he had a carpet for my bwother – any luck finding the wogue?”

“No, but we managed to deliver it to his study in the end. Took us all day traipsing through the house – right up to the attic.”

“Then you must have seen my twain set – what did you make of that? Pwetty nifty, eh?”

“Well, I’m not sure I understood its purpose exactly –”

“No, you wouldn’t – can’t give the game away too soon. There’ll be time enough when I take over wound here – then I’ll be able to move in permanently up there. But I’ll give you a little clue – imagine a gwoup of bwain-damaged patients, each linked up to his own little choo-choo... Hee hee, can’t say any more!”

“Brain-damaged patients? Where on earth will you get them?”

“Hah! That’s the easy part – just look aaround you. Conditions for studying aphasia are getting better here by the minute. There goes a Wernicke’s case wight there – a pwime example of so-called ‘fluent aphasia’.”

Here he pointed at the garden assistant that Jack had met behind the head gardener's cottage earlier that day. Now he was sauntering back into the interior of the building with his spade over his shoulders and a grin on his face, babbling away about have-beans and have-nots and worn-out war-nuts.

"And there's a case of Bwoca's or 'expwessive' aphasia coming the other way – have you ever heard anything so blatantly agwammatic in all your life?"

The figure he pointed out this time was wearing the white uniform of a chef and came running past with a meat-hatchet implanted in the side of his head. His blood-curdling 'Aaaaaghghghgh!' trailed off as he disappeared towards the exit.

"God almighty – isn't someone going to help the poor bugger?" Jack exclaimed.

"He's beyond help – too bad, he must have known the wisk when he signed up as a chef."

Here he grabbed Jack excitedly by the arm and would not let go as he rattled on:

"Ah, look! Now here are some weally intewesting cases: this is an entirely new form of aphasia discovered by yours twuly. I call it 'astwo-twopic aphasia'. Chawactewized by a total inability to see stars in fwont of unacceptable sentences. Appears to be bwrought on by excessive avoidance of Pwagmatics. Gwice's maxims go by the board. They seem to think ewevything is well-formed. The wires to weal world knowledge are tangled, the capacity for infewence completely shot!"

A gaggle of confused-looking dons rapidly approached. Swirling in circles, capes flapping all about them, they lamented: "Whither? Whither? Whither?". For a moment two of them hit an eddy just in front of them and hovered there addressing each other incoherently for a while. Jack could make little of their exchanges:

"So hard John hit Bill."

"Ah – John intentionally struck Bill as funny."

"That was Mary's doing. She shouted: 'Strike Bill as funny!'"

"Mary is the brighter between John and Mary."

"They rumour Mary to be a Mormon."

"I hereby hint that your slip is showing."

"Thanks a thousand."

"Was it hit that Fred Bill?"

“No, Seymour, Franklin, with the salami.”

“John relished that he was sick.”

“Truthfully, John is a fink, but he isn’t.”

“It was John who socking Harry amused.”

“John had a smoke of a cigarette. Then he finished to peel the potatoes.”

“Meanwhile Mary had a wash of the babies – she loves doing that.”

“A bicycle is not a fish as such, but loosely speaking, a six-sided figure is hexagonal.”

“John was being touched by himself.”

“I doubt that anyone came, and neither does John.”

“In no time at all they had finished anything.”

“A rock hit the house on the roof.”

“That doesn’t seem fair, but that Fido barks seems.”

“It’s true, the dog looks barking.”

“Every dog seems that Fido barks.”

“Fido had a bite of Mary’s hand.”

“Drown that cat which is goddamn!”

“She gave him the same kick twice.”

“To open the door was wanted by Bill.”

“‘The man’ll at the door’, he said.”

“They took the door off its hinges then walked through it.”

“A very walking person appeared...”

Here the dons swirled away towards the exit, pulling the diminutive linguist along in their wake. Jack tried to wrest himself away from Alfred’s grip and catch up with his companion, but Alfred insisted on elaborating upon his previous commentary:

“You see how intwiguing it all is, don’t you? I mean, we are looking here, in these vawied forms of insult to the language centres of the bwain, as if thwough a window back in time to the vewy owigins of speech! The way language bweaks down is the weverse of how it develops in childwen – and in the species. You can imagine the pwoto-language of our shuffling ancestors – before gwammar became automatic, mere conventions passed on by the elders of the twibe. It must have been something much slower and more laden with emotion than our kind of language, cwies and gestures barely fused into the pwe-gwammar of pure expression. Its stwucture would have been based on pawataxis – the chaining together of simple expressive elements – wather than on

hierarchical hypotaxis. The word order would have been pragmatically controlled and iconic, with almost no morphology. Look at pidgins and creoles and sign language – they share many characteristics that hark back to proto-language, like the absence of a copula, the use of a ‘have’ word for existential sentences, and the emphasis on verbal aspect rather than morphological tense. We can see it before our very eyes in the pathetic babbling of infants – and even more so in the breakdown of language, in aphasia and language death itself!”

“Six more down, only 4,256 left to go!” some passer-by yelled cheerfully across to them, as if they had asked for the score of some on-going match, then was gone.

Jack was saved from the continuation of Alfred’s manic peroration by the appearance of yet another familiar figure, who was stumbling along wringing his hands in despair as he tried to catch up with his colleagues.

“Dr Pym,” Jack clutched at his cape in a desperate attempt to extract himself from Alfred’s drooling attentions. “How is your conference going?”

“Don’t ask, dear boy – contemptible – probably last of kind – devastating plenary lecture by respected colleague – proved acceptability intuitions of isolated sentences only access metalanguage, not object language – carpet pulled out from under whole venture – banged head against wall – saw stars – not just ours – others left over from Historical Linguistics conference last week – abandoned reconstructions floating round everywhere...”

Jack could hold him back no longer and away he swirled in the direction of the exit.

“Don’t bother with him – it’s just incipient Bwoca’s,” Alfred sniffed. “Function words are generally the first to go.”

Then suddenly he released his grip on Jack and, with fingers raised and twitching, leapt after a confused nun in a wimple and thick glasses who had just passed by in the direction of the interior, nervously mouthing prayers and fingering her rosary. Jack took off at once down the steps in the opposite direction. It was not easy making progress, what with people shouting and clawing at each other to get to the exit. Further tremors through the floor sent whole family groups careening into their neighbours, and several bodies were already being trampled underfoot. The agile little linguist appeared wriggling his way back through the throng, his helmet now at its proper angle.

“Things are getting pretty dicey down there,” he frowned. “We’d better take a side exit, dodge through the courtyard. Follow me.”

Jack let himself be guided that way. His head was beginning to spin and he was no longer sure whether he was coming or going. The door to the courtyard was guarded by some of the young men he had last seen in gym shorts – now they were in smoking jackets and bow-ties and held revolvers and shot-guns at the ready. Getting past them into the courtyard was not difficult, since they were more intent on keeping people out than in. Here their way was blocked again, however. The sky was almost dark by now, but the courtyard itself was full of flickering light. Dozens of torches were being brandished aloft by an offensive-looking rabble – apparently villagers and workers from outlying farms working themselves up to a major offensive. Some carried rakes and scythes and other improvised weapons. At their front stood the unmistakable figure of the ancient head gardener; he was waving in the direction of the palace walls what looked like a staff of ash that omitted sparks from its tip. He must have led them all in from the back through the maze. Were they going to join up with the rebel servants within? Already some of them must have liaised with them – Jack recognized the old nurse and the chambermaid he had seen earlier in the upper corridor: they were now sitting on an upturned sofa near a large bonfire in the middle of the flagstones. The nurse was knitting what appeared to be a tricolour bonnet, and the chambermaid was making some kind of banner from the gossamer-thin word-webs she had teased from her duster. In the flickering light he saw looks of gleeful anticipation on their faces. The bonfire must have been fuelled by the wooden sculptures and wall-plaques that previously had been displayed in the courtyard but which now were nowhere in sight. In the shadowy entrance to the maze at the back a rough platform had been knocked together and a noose could be seen dangling from a beam that was wedged between the tops of the two Mayan stelae. Here and there platoons of men and women were marching back and forth in tight formation chanting pattern drills in some language unknown to Jack.

Perhaps one of the formally attired young men guarding the door panicked, or his gun went off by accident, but this was the catalyst that caused a roar of indignation from the crowd followed by a massive surge towards the narrow entrance. After a few more *pro forma* shots fired into the air the defenders beat a hasty retreat as hordes of angry villagers

bearing very functional-looking lynching instruments stormed in upon them. Were they intending to loot the palace, capture the duke and his family in the middle of his birthday celebrations and haul them out to the yard? Anything could happen – Jack and the helmeted linguist scrambled out of the way in the direction of the French window that gave access to the new wing. Behind them they heard a medley of conflicting slogans being shouted, like: “Bring back the bioprogram!”, “Down with the generativist tyranny!”, “Free admission for the public!”, and “Another nail through the coffin of School grammar!”

There were further muffled crashes and explosions from within the building as the bell continued its relentless tolling overhead. William had still not turned up by the time they forced their way through the French window into the relative safety of the conference hall. He must have been trapped somewhere inside the ancient building, which was shaking as if it could collapse at any minute. Jack fretted and paced up and down. He regretted now his sarcastic jibe about the sucking pig – almost his very last words to him! He couldn’t just abandon the old clown, however annoying and embarrassing he could be at times. But the linguist was not about to delay his own get-away back to the field.

“We can nip out through a window straight into the car park,” he proposed. “Got the old Bentley turned and ready to leave right by the bridge. Always prepared, that’s the motto. I can give you a lift into town, if you like, old boy, but we’ve got to leave at once – they’ll soon find their way in here.”

“Thanks, but I can’t leave William to that mob, not after all we’ve been through together. He is my father after all.”

“Oh, if you insist,” he shrugged. “Cheerybye then. Keep the old pencil sharpened.”

With this he opened the nearest outer window and rolled through it, leaving Jack to do as he pleased. Well, it was not exactly pleasure he was thinking of as he took a deep breath and walked across to the locked door that separated him from the entrance hall.

Surprisingly, the hall was almost empty when he unlocked the door and cautiously stepped through. But it was strewn with broken furniture and rubbish – also a looted cash register and the odd crushed body sprawled here and there. Great thuds ran through the tiled floor and muffled shouting echoed down the hall from the interior. He ran in this direction, picking his way through the piles of brochures and the

portraits of famous linguists that had been kicked around all over the place. The lights on the walls flickered, as if they were about to go out and plunge the palace into total darkness.

The source of the clamour was the area round the central staircase, where the staircase itself – both curving wings of it – appeared to have collapsed, leaving nothing of the great flight of stairs but a vague gesture upwards – towards escape. A tall, rabid-looking footman with his collar loosened and jacket cast aside was addressing the crowd there in a strong Scots accent. He stood on the third step – the highest that remained intact. Above them there were flames on the first landing, where burning torches could have been thrown up from below.

“It was nae unexpected, brothers – the deathwatch beetle has been at it for ages, ken. But dinna fret – there’s another way up. Follow me into the east wing!”

A roar of approval went up and the mob surged off after him round the back of the collapsed structure and into the far corridor, where the way through was now gaping wide, the heavy wooden door hanging to one side on a single bent hinge. The only figure left when Jack moved forward out of the shadows was a young boot-boy in a scruffy uniform who just sat there morosely on the remains of the staircase.

“Is there really some other way of getting up to the next floor, some short-cut?” Jack wanted to know, then shook the little fellow by the shoulder in frustration when he just stared at him as if in shock. “Come on, pull yourself together, all hell could break lose any minute! My father’s up there – I’ve got to get to him out of the way of danger.”

The terrified eyes of the boot-boy focussed at last on the anguished face thrust in front of his own. He opened his mouth, but nothing emerged except a vague choking sound. Slowly he raised a hand, however, and pointed directly overhead.

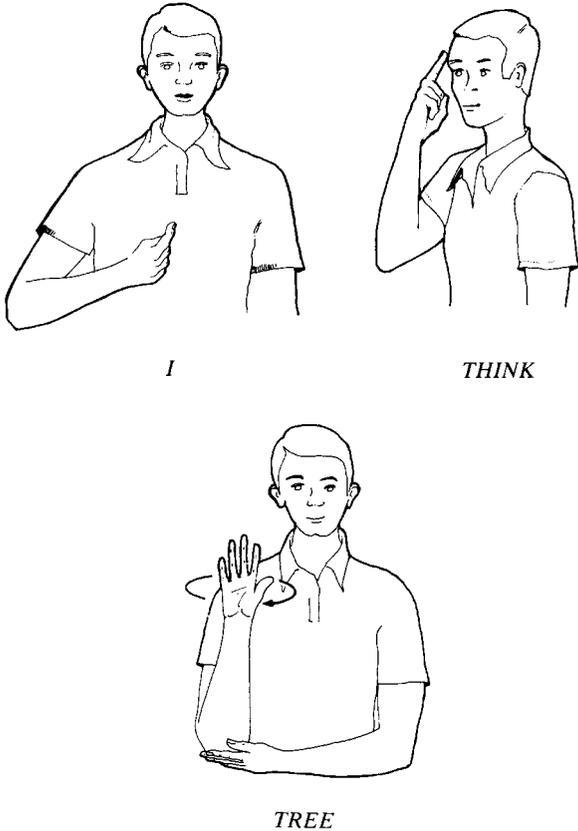
“That’s right – upstairs, I’ve got to get upstairs!”

“-ars..” was all that came from his mouth, but then it broke – unexpectedly – into a wan grin.

Jack realized now that the fellow was deaf and dumb, but when he looked up at where he was pointing he saw that indeed the heavens far above them were filled with slowly revolving stars. But was it the sky or was it the painted vault with the zodiac figures? Were they real stars, or were they all the ghostly stars from the conference being drawn up towards the ceiling by some invisible slow vortex in the air? The light

was now so dim – provided solely by the flames on the landing above – that it was difficult to tell what was going on up there. Jack started to gesticulate, trying to mimic climbing up a tree or a drainpipe to some external window. For a moment a gleam of comprehension appeared in the boy’s eyes and he shaped his right hand and arm into what could have been the sign for a tree – the vertical forearm the trunk and the spread fingers the branches – which he swivelled in the direction of the driveway beyond the old main entrance. Jack vaguely recalled the row of poplars out there – did the branches really reach the walls at some point? Then the deaf boy pointed at Jack and made a climbing gesture with both hands. There seemed no mistaking the intent. Or was there? He pointed at Jack and grinned again, touching the side of his head with his extended forefinger. Was he telling him to think for himself? Or that it was all in his mind? Or was he simply taking the piss?

Figure 23



The answer to these questions he was never to know. For at this point he heard noises from up on the landing and, looking up, shaded his eyes from the gathering smoke and saw that a number of vaguely humanoid shapes had gathered there on the still unconsumed side of the landing, their shadows cast against the wall behind them by the flickering tongues of flame. Were they cave-men? Or Polly's guests? Or Alfred's apes leaping up and down in panic? Was that one gesticulating wildly down towards them now William? There was something in the silhouette of the head that suggested a cloth cap... But the only sounds that descended from up there were grunts and whoops and shrieks of alarm. And suddenly the prancing forms disappeared too behind smoke and flames as the entire east wing collapsed in a deafening explosion. Jack was thrown half way across the hall – only to be trapped a second later as a charred beam flattened him to the floor before he could scramble to his feet again. Opening his blood-shot eyes one last time before losing consciousness he saw what was left exposed as the rubble of the east wing settled: the walls and roof had all been blown away leaving just a three-dimensional frame of corner beams and plumbing. He could see right through as far as the dining room, where the duchess and all her guests in evening dress and dinner jackets sat frozen around the elaborately set dining table – only the seat at its head was empty, as if they were still waiting for the main actor to appear before commencing the feast in his honour. He raised his eyes through the minimal framework of the east wing and saw only the odd piece of furniture – a billiard table, a double-poster bed, a bathtub – swaying perilously on one of the few remaining floorboards or balanced on the end of a still intact pipe. The image of the pattern on the carpet that he had laid flashed through his mind, and with a final effort he twisted his neck and swivelled his eyes directly upwards – yes, the painted ceiling was still there, so the dome above it must also have been intact, supported on its central shaft. Was it as peaceful as it looked on the other side? Then his eyes clouded over and all he could see was stars swirling in towards the centre of the zodiac, everything revolving faster and faster, the individual signs merging into each other like the steeds on an accelerating merry-go-round... It was as if someone had pulled the plug on the sky.

Jack had been right about one thing. Up in the dome everything was peaceful. The duke, a frail, thin-faced figure embedded deeply in his armchair as he sipped his whiskey, was only dimly aware of the disturbances far below. He was staring through his owl-like glasses with a mixture of fascination and distaste at the new carpet spread out at his feet. He was glad the workmen had finally left – he thought they would never finish laying the thing. Gertie had no doubt meant well by it, but what was wrong with the old one? And as for that hideously garish colour! Was this the latest thing in ‘taste’? That was the trouble with Gertie – she was always so convinced she knew what was best for him. Well, of course it was a nice idea presenting him with a ‘surprise’ gift that was meant to sum up the essence of his long career, represented in clear, minimalistic outline, and the thought that even if the estate fell apart around his ears this essence would remain, fixed in the pattern of a carpet, was reassuring – but the colour, my god, the colour! Basically, he just hated a fuss being made about him. Did she really have to go and invite so many friends and relations to this dinner party? He was surprised there were so many of them left. He looked at his wristwatch and groaned. He had promised to change and come down as soon as he had had his drink. Well, his second, or whatever. His old velvet smoking jacket was so much more comfortable than formal evening dress. Why did he have to change? Was he not the lord and master of his own domain? He could easily invent some excuse or other for not going to dinner... But it was already too late, he would hurt Gertie’s feelings, she had gone to such trouble, the poor dear. Besides, as she kept on reminding him, he was famous as a formalist, it was expected of him.

True, he was a formalist to the marrow, a rationalist who abhorred sloppiness and intellectual dishonesty in the world around him, but with age he had grown to see the place of syntactic theory within the broader semiotic picture. Well, that may have been a bit of a rationalization... Who among his disciples would have guessed that he had been slipping away for years to practice Speech Act theory in the privacy of his den? Not even his wife. The thought produced a familiar little twinge of guilt. At least that was better than no feeling at all. If anyone had caught him at it he had plenty of explanations at hand. For instance: it was just a distraction, a necessary relaxation that allowed him afterwards, refreshed, to concentrate fully on the serious business of his lone quest...

It all came down to the question of economy. Despite what his estate manager claimed, this had always been at the centre of his concerns. It made sound rational sense to demand that a generative grammar should involve the fewest possible movement processes, and restrict those that remained to the shortest possible trajectories to the landing points at hand. Perhaps the most sensible sub-principle of them all was that of Procrastination, whereby one refrains from movement altogether unless forced by some more specific principle of Universal Grammar. The only difference from his earlier stance – as the essence of Universal Grammar came ever closer to his grasp, resolving itself into more and more abstract and general principles – was that he had had to relax the inviolability of the Economy Principle. This could not be construed as a concession to messiness, it was out of respect for an ideal. It was man – *his* economy of effort – that was violable, not the Ideal, the Platonic order hidden beneath the anomalous surface. Grammar as such remained autonomous – its pure Pattern of heads and specifiers and complements and the simple elegance of ‘Move alpha’ referred to nothing but itself, the wellspring of its own creativity. It was a computational system capable of generating a full set of admissible derivations, nothing more, nothing less. Yet he could not escape the niggling feeling that irritated and distracted him all the time: surely there was still too much redundancy between the various components of his system, a little more could be pared away at the interfaces between the lexicon and the modules of logical and phonological form. Just one further nudge towards the Emyrean, and the ultimate synthesis would click into place in all its pristine simplicity. How the system was actually used – for better or for worse – belonged to the world of mundane affairs. Let others muddy their hands toiling there. He was still a generativist, if a mellowed one, and was not about to become a bombastic semiotician. He was, however, ready to concede their point about everything in man’s mind having some correspondence in the ‘outer’ world – it was just that this had nothing to do with Grammar as such, not with Internalized Language. Once that was accepted, semiotics was no longer so threatening. As its practitioners would say, all there is inside the mind besides signs is thoughts and feelings – and they are perhaps all signs too. The whole world is like a book made up of signs – albeit obscure, Talmudic ones. The mind was semiotically transparent, although its grammatical underpinnings and biological source were hidden, and his functionalist

opponents who thought that language was just internalized ‘social psychology’ were simply slaves to hearsay. The abstractness of language was a persisting touchstone of his thought. Sometimes he himself felt that his thinking had grown so abstract that he must surely have lost all distinctive facial features – another reason for not wanting to be seen in public any more.

As he stared absently at the carpet, lost in these thoughts, it suddenly occurred to him that its pattern could be seen in several different ways, depending on how you squinted at it. There was the level of icons, of configurational types to which tokens could be assigned, the basic woof and warp of threads behind the signs. Then there was the level of indexes, which took icons from the basic level and grouped and related them into higher order relationships. And finally, at the level of symbols, indexes were in turn grouped and related among themselves – so that when you pulled the rug of indexes away the pure symbolic forms were left floating in their pristine arbitrariness. That young fellow who had laid the carpet had almost seen this, but he had been too obsessed with indexes to hold on to it. As for the old fellow, he was obviously trapped in a world of sheer icons – to copy or to ignore. Well, you needed a certain breeding to appreciate the higher levels of abstraction, to be capable of deriving symbols from simple pattern and, in reverse, to unpack symbols back through indexes to the experiential icons they arose from...

Suddenly he felt a curious compulsion to get down onto his hands and knees and fly off on the carpet towards the ultimate reaches of mathematical abstraction, away from all problems of economy and succession, far above the petty bickering of formalists and functionalists, but then he smiled ironically at his own wishful thinking and took another sip of the whiskey. For a while his thoughts drifted into darker regions of metaphor and allegory, concerning the nature of consciousness and reason and the role of conventions versus individual creativity in human affairs.

“In the beginning was the wide,” he murmured to himself. “But in the end the way narrows...”

That was the way left for his successors – smart-Alecks like his estate manager’s cocky son. Let them survive if they could. It was their turn now... He recalled himself as a youthful scholar, as a firebrand with revolutionary new ideas, always undermining and questioning accepted

authority. Now he represented that authority himself, he had abstracted himself beyond the reach of all but his most ardent followers. He had been accused in his time of being an extremist – well, uncompromising where principles were concerned he certainly was. He had always been prepared to stand up for what he believed. When some of his misguided younger followers had rebelled and started goading him – in an unconscionably rude manner – with the claim that he had ignored semantics (which he had not, he had merely put it in its right place), he had been plenty rude back again! There were times – more and more frequent now – when he felt drained and threatened, as if the world were turning against him, taking advantage of his weakened condition, brought on by a lifetime of intellectual struggle and strife. He used to stand up for the rights of the servants, now they too were showing signs of turning against him, threatening to abandon him. And the worst of it was he could only feel disdain for them. What could he say? The world out there had simply become too messy for words.

And Linguistics itself – its future did not look too bright to him. Perhaps it would prosper through various practical and technical applications, but this had little to do with the great issues he was largely responsible for having raised: the creativity, the innateness and the autonomy of language. These central pillars he would be remembered for. Replacement and renewal as regards the details of the theory there had to be of course. The taxonomic phoneme went long ago, along with non-leaking levels and discovery procedures, and in recent years he had been forced – purely for the sake of theory-internal consistency – to let transformations go, even the distinction between deep and surface structure had now evaporated. Only his principles and the lexicon – his library, built up through generations – remained of the original model. These he would never abandon to the wolves. As for radical alternatives to his form of linguistics that had been so vociferously championed of late – for these he had nothing but contempt. Contempt tempered only by apprehension. Which was the most dangerous – the anarchistic experiments of his brother or the earthy delvings of his head gardener? Which of these equally insidious rival factions could represent the future – Alfred's mindless reductionism, or Dadda's spooky emergentism? They both came with the estate – there was no question of disposing of the one or of dismissing the other.

Here the duke's musings took still another turn – he found himself wondering why and how Polly's unsuitable suitors were being disposed of, one after the other, of late. Could it really be Alfred who was responsible? He had certainly inherited a strain of the ancestral madness... And he remembered his own unguarded words at dinner a few weeks ago, about 'wishing the blighters would just go away'. Alfred must have heard – perhaps he took them literally? He was as zealous of preserving the family's autonomy as the duke himself. No, this was impossible, he had enough sense to know what would happen to him if he were caught: his train set would be confiscated for good. Much more likely was that uncle Gerald lay behind these grizzly occurrences. Only he had been locked up in the eastern tower since his father's day, supposedly writing his memoirs in invisible ink. Had Aunt Penny been letting him out? She was every bit as mad as her brother, though deemed harmless. As pretty in her time, they say, as Polly was today. She was convinced she controlled the weather and that the father of Alfred, her illegitimate son whom she gave birth to shortly after being hit by lightning during the last of the Historical Philology Hunts, was none other than Zeus. That fatal bolt from the blue that kept her mind locked in the past. She was constantly shouting and waving her fist at the sky – well, certainly the weather was exceptionally changeable in the vicinity of the palace. One way or another he would have to do something about the matter, although he always felt a disinclination to involve himself in these unsavoury aspects of family business. Perhaps after his birthday was over...

He got to his feet and paced back and forth, trying – with little enthusiasm – to think about what it was he was meant to change into, but then he noticed something, a slight disturbance in the normal arrangement of the study. He moved into the dimmer recesses of the room where the drapery over the window had been pulled aside. Was this further Prevarication? There was no rush – why move unless forced? Let them get stuck into the birthday cake without him if they were unable to wait. He put down his half empty glass on top of a low bookcase. The telescope was still trained through the crack. Standing on the crate of off-prints positioned below it, he pushed his glasses up onto his forehead and put his eye to the eyepiece. The workmen had been playing around with it so it no longer pointed at the lake, where he had earlier been checking for infiltrators – he was no longer sure he could

rely wholeheartedly on his gamekeeper in that department. Moreover it was dark out there and at first he didn't see a thing – but there was a flickering source of light that cast some faint illumination over what he now recognized as the old bridge across the moat to the back way out of the estate. When he swivelled the telescope to the left, trees cut out the source of the light for a moment, but then it returned as he focussed on the driveway leading out of the woods to the back of the palace. The point where it split was visible over the folded bat-like wings of one of the gargoyles, as was the beginning of the fork that led around towards the garage. He could not actually see the front wall or the roof of the building over there, however – there seemed to be a lot of night mist about. The heads of the gargoyles were swathed in the mist – or was it smoke? That would have been more appropriate. He knew each of these misshapen, crouching monstrosities by name: the 19th duke (one of the more twisted of his line), had installed them, and on the back of the plinth of each of them he had had carved a term taken from Latin grammar – a subject he had apparently abhorred at school. The one just below the window was called 'Ablative Absolute', and the one after that 'Subjunctive'. To the left of them all, beyond the sloping outline of the roof of the east wing, the little tower at the angle of the building – Uncle Gerald's 'minaret' – was just visible, as was the wildly pivoting weathercock that surmounted it. Strange flashing lights seemed to be emanating from behind the tower's single window. Was he playing with his canon in bed again? Or was the light being reflected from outside, somewhere behind his angle of view? When he swivelled the telescope back downwards, he saw shadowy figures running back and forth waving their arms about for no apparent reason. Was there really a fire somewhere? That would account for the crashing sounds and the smoke. Well, the staff was trained to take care of such things – it was not the first time it had happened. There was plenty of water in the moat to put it out. This could hardly have been as serious as the legendary occasion on which great-uncle Harold had blown up the orangery...

What really grabbed his attention, however, was not so much the unseemly disturbance taking place down there as the two parallel beams of light that suddenly projected along the middle of the driveway from the garage. Following close behind came the Jaguar – *his* Jaguar. Was some cad making off with it? But there was only one other person who had a key beside himself – and as the car glided forward he was not

surprised to see the outline of a chauffeur's cap through the windscreen. What did surprise him – what simultaneously shocked and almost blinded him with rage – was the sight of the passenger beside him: it was Polly, his little girl! He saw her only for a moment as the car pulled out onto the main driveway, turning its tail disdainfully towards him as it accelerated between the trees towards the bridge, but that was enough. There she was, there was no doubt about the fact, leaving without a single word of explanation or farewell – and in the company of an insubordinate, illiterate upstart of a flunkey! He felt utterly betrayed. He decided instantly that he would write her out of his will. He stepped down from the telescope, reeling a little, and had to support himself against the wall for a moment. He suddenly felt very weak and old. Why should she care about the will – she knew there was virtually nothing left of her 'inheritance'. Was it her fault that he would definitely never have any male successor now? It was he who had been remiss, he had been so distant and out of touch with her of late, he had not considered her as an active participant in family matters, one who might have her own plans for the future. He had had so much on his mind recently with completing his book. The final distillation of the Great Alchemist. The great blind alchemist. His glasses fell back into position on the bridge of his nose.

He finished off the glass of whiskey in a single swallow and went across to top it up from the bottle on the desk. Then he sat down heavily again in his old armchair and simply stared at the pattern in the carpet in front of him, letting his eyes go slightly out of focus until one three-dimensional floor loomed up, then another, then another. Then let them collapse back into two again by focussing on the surface. Again and again.

After remaining for a while in this position, quietly sipping his drink, he regained an approximate state of calm detachment. Nothing was anybody's fault. Sacrifices had to be made, that was all. Thus it had always been if progress was to be made. Perhaps it really was time for a paradigm shift. But it would not be with his participation. Let the peasants take over – those who had always smiled and pulled their forelocks at him. See what kind of a hash they would make of things. At least he still had Gertie by his side. He would go down to their guests presently – just for her sake... But already his head was beginning to nod and his eyelids fluttered. In the distance there were crepitations like fireworks going off.

“They really shouldn’t...,” he murmured.

As his chin sagged and his eyes closed a vivid eidetic image replaced the fading input from the outer world: he saw the whole palace sinking into the moat – the tortoise-librarian swimming away with the catalogue between his teeth – then only the croaking of frogs and bubbles where the palace had been – and the obstinate muffled clanging of the bell beneath the surface, calling him in vain to wake up and face his guests...

“Not a bad story,” one of the frogs commented to his smaller companion on the adjacent lily pad. “Though it did get a bit squelchy at the end.”

“Mmm, maybe in another million years or so our own great-great-great-great-cradock-cradock-excuse me-grandchildren will be able to tell stories like that to their tadpoles.”

“That would be nice, dear.”

Questions that might be asked

Chapter 2. Semiotics at gunpoint

- If the carpet is symbolic, as the gamekeeper claims, what could it be symbolic of? What is the content of the *word* ‘carpet’ when unrolled? What is arbitrary here? (p. 16)
- *Is a signature a sign? If so, of what kind? How about a coin - how many distinct types of sign (icon, index or symbol) does it embody?* (p. 16-17)
- What is the extension (referent) and what the intension (concept) of the word ‘domain’ in the title of this book, for example? Is the word ambiguous? Is it used metaphorically? (p. 17)
- Answer Jack’s question: is the weathercock indexical here? Do you have to know more about this world in order to answer? (p. 23)
- Find further examples of icons, diagrams, indexes and symbols in the text of this chapter. (NB: What about the topiary figures and the sounds from the tennis court? And the peacock, for that matter?)

Chapter 3. Plumbing the depths

- Transcribe the technician’s utterance “A lot depends on context” phonemically (between obliques). Assume he speaks standard (‘Received Pronunciation’) southern British. Use some of the IPA symbols in Figure 3 – you will need two relatively high unrounded front vowels, one relatively low rounded back vowel and one central one. Are any of these inherently unstressed in English? (p. 31)
- Draw a formant diagram similar to the one in Figure 4 for the syllables ‘bi’ and ‘bu’, given a characteristic reference frequency for transitions involving labial plosives of 800 cps. Do the same for ‘gi’ and ‘gu’, where the relevant frequency for the first is 3000 cps and 1200 for the latter. Is

it the same sound we hear in both cases then? How can you justify calling /g/ a single phoneme in English? (p. 32)

– From your own experience with horses, try producing an alveolar lateral click. Do you regularly use any others? How can you be sure they are not phonemic in your language (that is, if you do not happen to be a native of southern Africa)? (p. 35)

– Assuming that the speech recognition/synthesis system here is not as stupid as it sounds, how would *you* transcribe William’s West Country rendition of ‘Be so kind’ approximately phonetically (between square brackets)? (p. 36)

Chapter 4. The library

– Provide an entry for the verb ‘win’ of the same kind as that for ‘defeat’ in Table 1. Add the extra information needed for irregular forms of this verb (not necessary with regular ‘defeat’). Include syntactic frames for both the transitive and intransitive use of the verb. Are there any selection restrictions or common syntagms you think should be mentioned in this entry? (p. 41)

– So what do you think, are there two homonyms, ‘hard¹’ and ‘hard²’, or do these belong to the same polysemous word? Which meaning probably came first historically – and what makes you think that? (p. 46)

– Carry on with Miss Arbuckle’s good work by expanding the word to ‘antidisenfranchisementarianism’, with suitable brackets (no need to speculate as to whether she would actually support such a hypothetical ideology). What do the successive further affixes do to the word - and do all of them constitute new ‘heads’ of the construction? (p. 47)

– How would *you* answer the librarian’s questions about enclitic future ‘-ll’ and genitive ‘-s’? Analyse ‘The king of France’s wig’ll be on sale’ into words/ wordforms/ grammatical words. (p. 49)

Chapter 5. Of syntax and thumb-tacks

– Given the unordered string of items in the formula under Figure 5, what kind of expression rules would one need in order to produce the surface sentence ‘Seymour hit Franklin with the salami’? Does any of the information provided warrant storing in the lexicon along with the individual words involved? (p. 57)

– Construct a tree diagram similar to that in Figure 6 corresponding to ‘I think I’d prefer him drawing pins’. Is this ambiguous too? What is the underlying embedded sentence here? What are the conditions that force the subject-raising construction (the subject of ‘draw’ becoming the object of ‘prefer’)? Is there something we should know here about the verb ‘prefer’ (as opposed to, say, ‘predict’)? (p. 60)

– Now construct a tree diagram for the expanded sentence: ‘He claims that I think I’d prefer to use drawing pins’. (The complementizer ‘that’ can be treated as a separate node under the first embedded ‘S’ for the time being.) Is this the only complement structure subcategorized by ‘prefer’ that is possible here? What if the subject of the deepest embedded clause is a third rather than first person? (p. 61)

Chapter 6. Feeling the way forward

– What do you think is wrong with (some of) the starred sentences here? Distinguish between morphosyntactically and semantically/ pragmatically ill-formed (i.e. as to whether the problem lies in the form or in the meaning) – can one always separate the two? (p. 69-70)

– Could one argue that there is a certain degree of iconicity in the phonetic as well as the semantic part of the compound characters in Table 2? Why do you think it is that all the forms listed under a given phonetic determinative do not sound the same today? (p. 74)

– Is the following an example of material implication or of biconditionality: ‘If they followed the brochure to the letter they would soon be through the maze’? Does natural language really give a damn? (p. 79)

– Analyse William’s conclusion upon seeing the same statue again (namely that the way they had come in was on the left) as an example of abduction. (p. 81)

– Sketch underlying phrase structure (tree) diagrams of these garden path sentences to illustrate the two misleading starts and the two correct readings (i.e. the ones capable of being completed). At what point in hearing them could you be sure you had been led up the (wrong) garden path? (p. 82)

– Can you do any better than Jack in defining ‘garden’? How can the context help narrow it down? Can it be defined apart from its function? (p. 84)

Chapter 7. Sentenced (almost) to death

– What *was* the context of Jack’s original utterance cited by Mrs Dorking and how did she misinterpret the intention behind it? Discuss the various ways in which that sentence could be said to be ‘acceptable’ or the opposite. (p. 91)

– Find examples in the surrounding text of the breaking of all the maxims in Table 3. (p. 93)

– Which of the three possible readings of ‘actually’ does the second use of that word have in Dr Pym’s utterance: “Well, ‘actually’ is actually polysemous”? What presupposition, if any, is involved? (p. 94)

– The gamekeeper suggests here an ‘instructional’ definition of the meaning of the definite article in English. Can you provide a similar one for the indefinite article? Consider both the speaker’s and the hearer’s point of view as regards the potential specificity of the referent intended. (p. 98)

Chapter 8. *A discourse concerning the family archives*

– Try and find examples in the philologist’s own exposition of the following means for ensuring textual coherence: conjunctions, co-reference through pronouns, substitution (referring to the same referent with different expressions), ellipsis (e.g. two sentences dropping a shared subject), anaphoric use of demonstratives like ‘this’, and various kinds of parallelisms and lexical associations. (p. 106)

– What is background (including framing and introductory material) and what is foreground (narrative sequence) in this text about Sir Nigel and the *stelae*? Do particular kinds of constructions and/or verbs (and the tenses in which they are used) play any role in distinguishing them? (p. 110-111)

– You must have made at least one other bridging inference on reading this bit of *déjà vu* text for the first time – how, for example, did you know what ‘their load’ in the 15th line referred to? Is this quite parallel with the way you understood that the men were trying to force it through the ‘narrow fissure’ (as opposed to the gate) – or did something else, more overt, help you? (p. 119-120)

Chapter 9. *Nursery talk*

– Children learning languages with many agglutinative affixes like Turkish or Eskimo start using the most common of these productively before English children acquire the corresponding non-lexical morphemes – already before the two-word stage, in fact. Can you think of reasons why this might be so, despite the overall similarity of language acquisition processes everywhere? Note that in these languages overt NP subjects (or objects) are typically not obligatory, so inflected verbs can constitute whole sentences. (p. 131)

– What *should* the plural of ‘wug’ be (phonemically)? What is the actual phonological distribution of the three allomorphs of the English plural, and what might have led Dabs and Debs to go for ‘wuges’ anyway (assuming they had never heard this or any form rhyming with it

before)? Think of the plural of another animal they know. It may also be relevant to note that ‘children’, plural of ‘child’, contains two older plural morphemes, ‘-r(u)’ and ‘-en’ respectively, and that the plural of ‘horse’ used to be ‘horse’. (p. 133)

– You can doubtless think of a better explanation than Mr Fitz’s here. More to the point is this: how might a child learn that ‘himself’ in ‘The boy’s father hurt himself’ cannot refer to ‘boy’ from positive data alone, i.e. without ever having heard such a sentence used in the other sense or having been corrected for erroneously intending one in that sense? Think of how you would express a corresponding sentence where the object of the verb is *not* the same as its immediate subject. Do you hold with the nurse’s or with Mr Fitz’s view as to whether knowledge of ‘Principle A’ is necessarily ‘innate’? (p. 138)

– Does the last part of this chapter suggest to you how a child might learn the words ‘cat’ or ‘beetle’ (apart from by sheer word magic)? What kinds of sensory information (as regards both form and content) is associated with them? And how do we as adults know that the child using such a word when pointing at a suitable object is using it (say) to classify it? (p. 143-145)

Chapter 10. The kitchens

– Give an Item-and-process rule for the form *faccio* here – is there any alternative to regarding the infinitive form *FARE* as the starting point of such an analysis? What is the root in all the Italian forms cited here – or can you argue for there being more than one? How would your answer vary depending on which of the three approaches you took? (p. 152)

– Provide a similar analysis for the second Sanskrit word given as that applied to the word in Figure 11. The relevant morphemes (plus some of the glosses) are: *virāj(at)* ‘gleam out’, *katīpaya*, *komala* ‘tender’, *danta(h)*, *kuṭmala* ‘bud’, and *agra(m)* ‘tip’. Don’t worry about the case form of this compound. (p. 154)

– Would the opponents in the argument about ‘divine’ vs. ‘divinity’, etc., find common ground if they considered the diachronic rather than the synchronic side of the matter? The fact that ‘divine’ was pronounced approximately /divi:n/ in Chaucer’s time (before the Great Vowel Shift) may be relevant. Is the shortening of the final syllable vowel before the ending ‘-ity’ regular in English – did any such rule come with the ending when it was borrowed from French? Is it the language or the individual speaker that ‘remembers’ such regularities? (p. 158-159)

– Certain of the distinctive features in Figure 12 are redundant, since all segments marked as positive (or negative) for some lower feature must by necessity be marked positive (or negative) for some higher feature. Can you spot any? (p. 165)

Chapter 11. In a manner of speaking...

– What are some of the general features of William’s admittedly rather synthetic dialect? Include phonological, lexical and (especially) systematic morphological traits.

– William and his son were evidently confused by the reference of the expression ‘front door’, which could be interpreted either according to ‘inherent’ or to relativistic ‘deictic’ orientation. From the deictic (egocentric) perspective of the duke’s family the door referred to is at the back of the building (since they come in and out on the other side), whereas from the carpet-fitters’ perspective it was at the front of the building as they approached it from the moat. What about from the building’s ‘own’ perspective – looking at the frontispiece ‘map’, what would you say its inherent ‘front’ is? Is the van parked in front of or behind the ‘back gate’? (p. 173)

– What *are* the conditions the duchess is alluding to here in her comment on William’s pronunciation of the words containing ‘ng’? Is ‘hyper-correction’ (using the ‘correct’ form even where it does not belong in standard speech) involved in any of them? Can you recall another aspect of William’s speech which sometimes displays hyper-correction? What could the sociological reasons behind such forms be in his case? (p. 178)

Chapter 12. Back to the apes

– What do you think of Bonsai’s capacity for syntax here? Does he really display mastery of something like a rudimentary generative system for ordering words? (p. 189-190)

– What might you in fact be able to discuss with a dolphin if you were able to crack its sonar code? Assume that this is iconically based (and that you further understood the purport of the different social signals that dolphins make). Construct an exchange – concerning mackerels, if you like – using simple iconic diagrams and indexical arrows for the sonar signs and punctuation marks and other arbitrary symbols for the social calls. (p. 191)

– Do you share Alfred’s belief that at least some of his primates display communication involving ‘duality of patterning’? Would this put their form of communication on a continuum leading to human speech, or is there in your opinion an unbridgeable gulf between the two? (p. 192)

– If the brain capacity of modern man has not increased significantly since *Homo erectus* or Neanderthal times and if it is true that earlier hominids had only some rudimentary form of proto-language that combined iconic gesturing with a limited range of social calls, how can we explain the fact that modern languages are all highly complex grammatically? What are the alternatives to further overt biological evolution? Are the factors you can think of compatible, or does one rule the other out? (Assume that the larynx in late *Homo erectus* was already low enough in the throat for stable phonemic oppositions to have been possible.) (p. 193-194)

Chapter 13. Birds of a feather

– Make a list of features or ‘meaning postulates’ for the concept ‘bird’ in the formalist vein, as propounded by the mynah bird, then draw a ‘prototype’ representation of the concept in the manner recommended by the bulbul (this can be in the form of concentric circles containing different types of birds with the prototypical kind of your choice

portrayed at the centre). What are some of the problems you face when you try to correlate the two representations directly? Note that categories involving discrete 'leaps' of meaning (say metaphorical or purely conventional) around a central 'prototype' are sometimes called 'radial' – is that term applicable here? (p.198)

– When the bulbul claims that also linguistic categories are 'fuzzy and leafy' he may be right as regards a category like 'subject', since the grammatical subject of a sentence may be more or less 'prototypical', displaying more or fewer subject-like properties (from 'Jack slew the dragon' through 'The stone blocked the way' to 'That this sentence is true is debatable'), but what of tense, aspect and modality, that he expressly mentions? These are usually organized into discrete binary or ternary choices such as 'past/present/future' tense forms or small systematic sets of modal auxiliaries like 'may', or 'must', which have either a 'deontic' or an 'epistemic' meaning, for instance, but never something in between. 'May' can thus be used either about permission or about a conjectured state of affairs (so 'You may go to the greenhouse' is ambiguous), and one can use the English present tense about the (historical) past and the past about timeless conditions ('If I had a million pounds...'). Are such categories themselves 'fuzzy', or is that rather a characteristic of states of affairs in the real world to which sentences containing them may be applied? (p. 203)

– What *do* the formulae carved in the stone pyramid correspond to in ordinary English? The two logical symbols here are called respectively the 'universal' and the 'existential' quantifier, by the way. Are the equivalents in ordinary English vaguer or more ambiguous? With regard to which of the two sentences was Jack's uneasiness warranted? (p. 206)

Chapter 14. The historical propagation of language

– If the major factor behind the kind of 'drift' seen in modern European languages is the natural tendency for endings of words to 'wear down' phonologically, would one not expect all the world's languages to be in the process of becoming monosyllabic like Old Chinese? Given the wide variety of language types still around today, what other counterbalancing morphological mechanism must be at work? (p. 214)

transitively inflected verbs, the ‘absolute’ for objects or intransitive subjects; ignore the compound tense construction with auxiliary verb ‘do earlier’.)

Yoruba:

iṣu tí mo rà láná náà
yam REL I buy yesterday that
‘that yam I bought yesterday’

Aleut:

tayaRu-m saX kalu-l angali-i
man-REL bird.ABS shoot-CONJ do earlier-3SG/3SG
‘the duck that the man shot (earlier)’

Japanese:

te-ga chiisai hito
hand-NOM small man
‘a man whose hands are small’

(p. 234)

– Well, all right, let’s hear your opinion of the helmeted linguist’s ‘field methods’ in general.

Chapter 17. Pull-ups and put-downs

– Is it possible to argue that this ‘affix-hopping’ rule is in some way motivated and functional? On the other hand, if it is confined to capturing the way elements in the English auxiliary verb system are structurally ‘scrambled’, has it any place in Universal Grammar? (p. 273-274)

– If, at the climax of this altercation about ‘motivation’ as opposed to ‘explanation’, the functionalist captain had been given a chance to respond to the challenge about grammar having to be ‘stable and arbitrary’ in order to be passed on from one generation to the next, what might he have replied? Bear in mind that few functionalists would claim that *all* aspects of grammar are functional and few generativists would claim that languages do not change all the time. (p. 281)

– The ‘Subjacency’ principle evidently varies in its stringency from language to language, as seen in the follow rather common kind of ‘intertwined’ clause construction in Danish, which would be impossible in English:

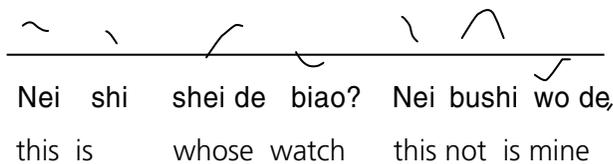
Den ved jeg ikke hvor ligger
 that know I not where lies
 ‘I don’t know where that is’

Construct a deep-structure and a surface-structure tree for this sentence (you may use CP as well as S if you want, as well as VP and NP). How many movement or extraction relations are involved? How many S (or CP) and VP nodes separate the fronted ‘topic’ and its trace in the embedded clause? Can you think of any reason why a Danish child might be able to figure out and produce such sentences while an English one cannot? Note that in Danish virtually any nominal or adverbial constituent can be fronted when given special emphasis. (p. 283)

Chapter 18. A matter of phrasing

– One possible aspect of the parallel with music has not been mentioned, namely the content or meaning of language on the one hand and that of music on the other. *Is there such a parallelism? What does one mean by the ‘meaning’ or ‘content’ of music anyway? Of the ‘design features’ of human language listed in Table 7 (in the ape-house), what features are not shared by music (ignoring words that are sung)?* (p. 294)

– All stressed words/syllables in Mandarin Chinese have one of four tonal ‘shapes’, illustrated in the order 3, 2, 1, 4 at the top of Table 2 (‘Feeling the way forward’). Here is an example of a basic sentential intonation pattern superimposed on two sequences of words, each with their own ‘shape’:



What has the sentential pattern contributed here? Does this have a natural (universal) explanation? The first is a question, the second an answer, but that is not relevant here (questions are in general marked by question-words or by final particles). Note that *biao* ‘watch’ has its own inherent third tone, as does *wo* ‘I’ (here followed by an unstressed particle). The wordform *bushi* combines two independent words with the 1st tone – can you think of a reason why a ‘sandhi’ (linking) phenomenon should cause the first one actually to rise here? (p. 302)

Chapter 19. Events come to life

– Describe a ‘frame’ or ‘script’ of your own by ‘reading off’ a few propositions from your internal representation of it. What did you do and see (or otherwise experience) in carrying out this instruction? How do you know you have just described something from your general knowledge as opposed to some particular instance(s) in your memory? Are they in fact distinguishable? Could the ‘types’ be abstracted from ‘tokens’ in the same way words as types may be abstracted from individual tokens of use? (p. 317)

– What is the *de dicto* and what the *de re* reading of the following sentence: ‘I’d love to find a room where I can be in any other room just by closing my eyes.’ Could there be two readings if the description applied equally well to any conceivable room you know of? (p. 319)

– One can easily think of similar extensions of the basic physical sense of ‘raise’ in ‘They raised the carpet onto their shoulders’. What are the relevant contextual frames in: ‘I’ll raise you five pounds (and see you)’, ‘Let’s see if we can’t raise five pounds’, ‘The presence of a strong verbal function F_v in Tense forces raising of the lexical verb’, ‘He was raised from the dead’, ‘If they raise taxes again I’m emigrating’, ‘I thought that would raise a laugh’, ‘Raise your hand if you think you have the answer’, ‘When we get to Vegas we’re going to raise hell’. In how many of these is metaphor involved? Bear in mind that metaphor involves a transfer from one domain to another, so you had better be able to say from and into *which* domain exactly. (p. 320-321)

Chapter 20. The inner sanctum

- The sequences of symbols under Table 11 form patterns which vary in a consistent manner, but do they really constitute a ‘code’ in the same way as a human language is a code? What is the difference? (p. 337)
- Analyse Jack’s request for information on the meaning of the two terms with reference to the conditions in the table above. Speech acts are also associated with expectations as to appropriate answers, so is the librarian’s answer appropriate here or does he break any of the maxims listed in Table 3 (‘Sentenced (almost) to death’)? Carry on analysing the speech acts in the following few exchanges in terms of the five basic categories. (p. 340)
- Which kind of condition is Jack asking about when he performs the following indirect act of requesting: “Couldn’t you at least explain about these telephone codes to me?” And what is the mesh of perlocutionary intentions that probably motivated this (and the following) utterance? Are these intentions fully or partially satisfied by the librarian’s response? Can the illocutionary force of an utterance ever be responded to appropriately without the perlocutionary force behind it being at least partially satisfied too? (p. 341)

Chapter 21. The way back

- Try to translate the Tok Pisin into straight English (NB: the phonemic spelling obscures many familiar words). What are some of the typical characteristics of pidgins/ creoles illustrated here? (p. 350-353)
- What *are* the signs of ‘incipient Broca’s aphasia’ in Dr Pym’s speech here? It is known that different parts of speech are differently affected by damage to different parts of the brain. Apart from function words, which major English parts of speech would you think particularly affected by damage to Broca’s and Wernike’s areas respectively, given that the former is in the part of the brain concerned with the coordinating of complex actions and the latter is close to the association area linking phonological words to visually analysed forms? (p. 361)

– The signs for ‘tree’ and for ‘climb’ may vary from one sign language to another. In American Sign Language the former is represented much like in the British Sign Language version on Figure 23, with the open right hand swivelling left and right a few times, and ‘climb’ is represented by the two hands, with their index and middle fingers extended and bent in towards the mid-line, moving upwards in alternate stages, a little at a time. Movements involving the hand in this V-shape typically indicate a human subject (so this can be called a ‘classificatory’ verb, indicating the shape of the subject or object). The specific subject can be indicated by pointing towards the sender or the receiver or towards some locus in space which has already been assigned to a ‘third person’. What is iconic and what is arbitrary in all of this? (p. 365)

– Need the duke feel guilty about practising speech acts on the sly like this? Is the investigation of language use (‘performance’) incompatible in your opinion with the study of language structure (‘competence’) within one and the same framework? (p. 367)

Acknowledgements

I am grateful to the following for permission to reproduce copyright material:

The University of Chicago Press for J. Bybee, R. Perkins and W. Pagliuca 1994 *The Evolution of Language* (Figure 17); Cambridge University Press for T. Bynon 1977 *Historical Linguistics* (Figure 15), J.K. Chambers and P. Trudgill 1980 *Dialectology* (Figure 15), David Crystal 1969 *Prosodic Systems and Intonation in English* (Figure 20), and P.J. Hopper and E.C. Traugott 1993 *Grammaticalization* (Figure 17); Edinburgh University Press for L. Campbell 1998 *Historical Linguistics* (Figure 16); University of Hawaii Press for J. DeFrancis 1989 *Visible Speech: The Diverse Oneness of Writing Systems* (Figure 8); The International Phonetic Association for the 1996 IPA chart (Figure 3); Dial Books (an imprint of Penguin Putnam Books for Young Readers) for Mercer Mayer 1969 *Frog, Where Are You?* (Figure 10); The Canadian Museum of Civilization, Hull, Quebec, for H.F. Nater 1984 *The Bella Coola Language* (Chapter 15); Person Education Inc. for W. O'Grady, M. Dobrovolsky & F. Katamba 1997 *Contemporary Linguistics: An Introduction* (Tables 2 and 7, Figure 12); University of California Press for S. Thomason and T. Kaufman 1988 *Language Contact, Creolization, and Genetic Linguistics* (Figure 22); Oxford University Press for Clive Upton and J.D.A. Widdowson 1996 *An Atlas of English Dialects* (Figure 13). For the Mayan glyphs in Figure 9 my thanks go to Søren Wichmann.

Every effort has been made to trace the owners of copyright material, but in a few cases this has proved impossible, so apologies are offered to any copyright holder whose rights may unwittingly have been infringed.