CHAPTER 4

What Future Remains?

Remembering an African Place of Science

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Seeing a Place of Science in Africa

This chapter traces remnants of transformation, in forms of landscape and architecture and in divergent narratives of change—hope and promise, decay and disappointment—and their affective resonances and effects in the present, in a key place of African science some thirty years after its foundation. Rather than defining and critiquing the present in an unambiguous way, or explaining this present from past events, my main interest is in the diverse futures—past, present, and yet unimagined—held by the place, in monuments and buildings and its inhabitant's memories and objects.

Intertwined with diverse, sometimes contradictory traces of past futures—visible and meaningful for some, at certain times, and obscure to others—are two larger narratives of transformation. On the one hand, familiar stories of modernization and development, associated with mid-twentieth-century science and social science, which continue to be retold in the legitimizing texts of African science and in public claims to scientists. And on the other hand, interpretations of the present in terms of progressive loss, decay, and abandonment since the 1970s, sometimes shorthanded with reference to underlying economic processes as "neoliberalization," which have been fashionable among Africanists and critics of global health for a while and which also resonate with some of the local protagonists' viewpoints, at some moments, in certain situations.[1]

While in the first narrative, science equals progress and advancement, the second delineates—against the backdrop of science's potential to engender betterment and emancipation—the emergence of a new kind of governmentality, premised on economic and political "liberalization," and based on

bioscientific knowledge, extending and transforming colonial and postcolonial "developmental state" biopolitics, radicalizing it toward "experimentality" (Nguyen, in this volume) or even "experimental domination" (see Rottenburg 2009).[2] While providing seemingly radically different outlooks onto the historical process, both narratives reiterate similar, postcolonial geographical distinctions of center and periphery, Africa and the West, and both share a similar temporality, the figure of a great transformation. My interest in time and place here is different; instead of pursuing a particular teleology, I want to explore the diversity of temporalities that is contained and simultaneously present in a given site, at one point in time.

WHAT FUTURES REMAIN

Transnational bioscientific interventions, funded by agencies outside Africa, implemented among African populations—exemplified by humanitarian emergency intervention, African anti-retroviral (ARV) programs and vaccine and drug trials (e.g., Redfield 2006; Nguyen 2009; Fassin and Pandolfi 2010)—lend themselves at first sight to critical interpretations in terms of *experimentalization* (see, for exemplary studies outside Africa, Rajan 2006; Petryna 2009). "Northern" control over scientific resources and outputs, the enclosure of scientific institutions, the sidelining of national academic and health care institutions, and the establishment of real-time transnational information flows resemble moreover the external control, outsourcing, and enclaving described for neoliberal African regimes of resource extraction, exploitation, and accumulation (see Ferguson 2006) or urban planning (e.g., Jürgens and Landman 2005; Murray 2010).

The institution explored below, the National Clinical Research Organisation (NCRO) of a sub-Saharan African country, shares certain traits—political-economic, organizational, topographic—of this description, and its history does coincide with the period of the "neoliberalization," which for the nation in question began with a momentous late 1970s governmental shift. Tied in with wider processes of privatization and drastic reductions of government funding, driven in part by external economic policies, the new government-founded NCRO, through a specific legal act that liberated bioscientific research from its previous place in government ministries and state universities, was encouraged to engage freely with academic bodies and other sponsors from outside the country.

Indeed, *collaboration*, as it came to be called, was not merely the institution's mandate—explicitly written into its statutes—but essential for

its functioning, as government funding never allowed it to engage in sustainable, independent scientific endeavors. In the early 2000s, the NCRO's government-allocated budget was about £7 million a year, barely enough for core staff salaries and the basic maintenance of buildings, while its actual operating costs were six times this amount, the gap being filled by transnational partners and collaboration. The NCRO is thus a prototype of *parastatal* science, and its regional research center, my field site, which by contrast to other, neglected NCRO centers was blossoming with transnational funds, can seem its incarnation.

This constellation does not equal simply an order of "foreign domination."[3] As a leading NCRO scientist explained, countering such simplification, the NCRO bears full legal and scientific responsibility and ownership for its work. Global inequalities leave more subtle imprints and remain always contested. For example, the same scientist described that while new research projects indeed often are defined abroad and arrive at the center through the Global Health Agency (GHA) (subsequently approved by the NCRO), ultimately "if something happens" in the project, international PIs remember that the NCRO is the site's actual owner and turn to its director for help, who at that point is able to underscore his own role in the given project. But, he went on, his own and the NCRO's agency was curtailed, not just by who holds the purse strings, but also by the political leverage of the GHA, as major health donor, in the national capital. As such, collaboration is continuously contested and remade, an open-ended process (within obvious material limits) rather than a clear-cut hierarchical structure.

My aim here is not to reiterate the vision of an epochal shift or to provide a critique of the present structures (nor to counter such narratives of rupture with evidence of continuity). I want to suspend the desire to unequivocally describe the present and instead try to render visible some of its layers and inherent contradictions. To do so I shall focus on the (asymmetrical) coexistence of different pasts in the present, conflicting narratives of transformation and persistence in one place, positioning our own analytical timelines among other stories. Such ethnographic reading of this place of science in Africa, attending to material forms, movements, and stories, shifts our attention from the contrast of past and present (purifying the present as a specific "regime") to the compression of multiple temporalities within lived-in space, open to continuous interpretation and contestation by multiple actors. As such, the past constitutes a reservoir for the future rather than a mere counterfoil to the present.

This chapter is about science in time. Examining one major site of African scientific production, engaging the lay of the land, commemorative events, and narratives about past and future, I trace relationships between past and present and between diverse pasts in the present. First, I describe the place, the research center, exploring its geography, architecture, and circulations around one social event: the thirtieth anniversary celebrations of the collaboration between the NCRO and its main partner, the GHA. This reveals certain forms of memory and representation and also registers absences, amnesia, and invisibilities. Subsequently, I will extend my gaze beyond first impressions, and beyond the moment of institutional memorialization, and attend to other traces and remains, less prominent movements and circulations, and other evocations of memory. This reexamination of the present landscape will lead us, finally, to the memories and expectations of those who for generations have lived around the research station.

Rather than showing that "the place of science has changed" (which it certainly has), I show that the place—as material object and collective—contains ongoing engagements between pasts, presents, and futures. This is not just the (important) point that different actors (African doctors, visiting expatriate scientists, European anthropologists, local staff, research participants) hold different "perspectives" on one material world and history, shaped by position, identity, and interest. The place itself contains different pasts that engage and collide in concrete practices and specific events and that extend, through the present, into diverse possible futures.

A Social Situation in Global Health Science

THE NCRO

Some kilometers outside the major provincial city where the NCRO station is situated, one turns off the battered tarmac road onto a smooth side road—streetlights, pavements, sign-posted speed bumps. After one kilometer one passes a first gate, and after another short drive along a security wall one reaches the second gate, flanked by cameras, operated by an international security company. The guards check one's pass or confirm with one's host inside before opening the double gates. Outside the wall is what seems like dry wastelands, similar to the surrounding bushland partially used for small-scale agriculture; at some distance one makes out thatched village homes. A small Researchers Cafe offers soft drinks—its ramshackle construction from recycled timber and iron sheets rising from black cotton soil provides a stark

contrast to what one glimpses through the gate: lush, well-trimmed lawns, straight alleys of palms and shade trees, demarcated parking and pavements, and shiny buildings with newly tiled roofs: this is the NCRO Centre for Global Health.

Depending on the speaker's affiliation and the conversational context, the place is variously referred to as the NCRO, the NCRO/GHA, the GHA/NCRO, or the GHA field station.[4] This multitude of names may be indicative of different ways of seeing the place and remembering its past, although the variation and slippage is also due to inattentiveness and habit. Aware of the contested politics of naming, after discussions with the NCRO, the GHA management standardized the terminology to the NCRO/GHA field station—replacing the GHA stickers on new cars with an NCRO/GHA label, and correcting the language of research proposals and e-mails—although lapses into GHA/NCRO or GHA remain common in everyday talk.

Local staff and participants consider themselves proudly linked to the GHA—a resource-rich organization and a source of global scientific knowledge and policy (see, e.g., Fairhead et al. 2006). The GHA is by far the largest of the center's collaborators, paying the salaries of over a thousand African staff. Involving hundreds of thousands of research participants in surveillance and clinical trials (with attendant financial and medical benefits), and managing, in addition to research, HIV care and treatment in large areas, it is a highly visible and much admired regional source of medical care and knowledge.[5]

The field station is the central node through which staff, samples, and results of scientific investigations circulate: most staff live in town and travel back and forth either by private cars or, for the majority, with GHA shuttle buses; international scientists are regular visitors. In the opposite direction, field staff and data collectors travel from the field station out "to the field"—that is, the GHA funded "health and demographic surveillance system" covering several neatly mapped rural districts with over 200,000 inhabitants that have been surveyed for a decade, and upon which most clinical trials are conducted—to access rural study populations and collect specimens and other data that are transported back to the laboratories to be processed and analyzed.[6] Data, in turn, can be transmitted from the station to other research centers and the distant coordination points of multisite clinical trials. The field station is, thus, a well-connected conduit of people, materials, and data linking peripheral villages to global centers of scientific investigation, an intersection in rapid global circulations. At the same time, this enclave

of world-class scientific possibilities is physically separated from the surrounding countryside—and the circulation of people, specimens, and data between this realm of science and surrounding public health and care institutions is at times more challenging than information flows and travel to international centers.[7]

Inside the NCRO/GHA compound, one passes a turn toward single-story 1980s bungalow structures with the national flag in front of them. Overshadowed by the more imposing buildings behind them, a visitor would be forgiven to overlook these, although this is the actual center of the center, the offices of NCRO scientists and the director of the Global Health Centre. However, the main landmark and the first destination an uninitiated visitor would direct herself to is the new, multistory building, with antisun windows, air-conditioning, uniformed guards, security checks, and magnetic access badges, which houses the offices of the research programs funded by the GHA collaborative agreement. Next to it are the collaboration's extensive laboratories, housing, and state-of-the-art equipment, such as DNA sequencers, serviced and maintained by international laboratory suppliers. On the neat lawns between them, spacious pavilions and the clean staff canteen offer a pleasant meeting space, and on the parking lot stand the 4×4s of lead scientists and some of the station's white Land Cruisers, many of which at the time of our ethnographic fieldwork still bore red diplomatic number plates.

In such comfortable conditions, expatriate and African scientists produce and analyze data and manage trials, overseen by the GHA heads of disease-specific divisions and the scientific director of the GHA field station and his administrator, who at the time of fieldwork were still expatriates.[8] Although the station director at the time of our research, genuinely committed to the ideal of collaborative partnership, had removed his own national flag from the office entrance, the premises are recognizably different in style and atmosphere from others in the nearby city. The young staff's dress, comportment, and communication styles leave little doubt that one is within a leading international organization. As staff occasionally remark, one feels "out of Africa," which is why African staff jokingly refer to the field station by the name of the distant GHA headquarters. To scientists, the field station presents an island of possibility and validity, security and hygiene, a place not only out of Africa but also ahead in time, beyond the prevailing temporality of the surrounding lands, which in terms of science and public health fall further and further behind global standards.

A SCIENTIFIC ENCLAVE

To an anthropologist of postcolonial science, the field station's spatial order and resources, and the material inequalities between those inside and people living around, between science workers and trial participants, and between international and local research staff—may give the impression of a scientific enclave shaped by foreign scientists and funding. The combination of seeming local disconnect and global high-speed connectivity—transferring resources and data, bypassing local entanglements—is reminiscent of critical anthropological analyses of "neoliberal" topography and its "modularity."[9] One discerns the outlines of an "offshore" science production, with connotations of domination and exploitation.[10]

Such interpretation does reflect some important features of the station's institutional and architectural order. Many people inhabiting the site, including anthropologists, scientists and technicians, expatriates and locals, observe inequalities and exclusions—and experience tension between them and their own personal morality, as well as the inherent egalitarianism of public health work. Few of them would agree with a unifying interpretation of their endeavor as "neoliberal science" or worse, "neocolonial science" (Boshoff 2009) or "scientific imperialism" (Wilmshurst 1997), but many—Africans and expatriates alike—experience occasional discomfort with current arrangements, which may be articulated in private conversations or ironic comments, through detachment or absences, or confronted through cultivation of friendships, egalitarian leisure activities, charity work, and other social engagements that aim to transcend inequality and boundaries.[11]

I therefore suggest that the narrative of African science's regress into *experimentality* (or whatever other pejorative epithet one may chose) is not a conclusive diagnosis, but one story among many that emerge from this territory's layered morphology. A narrative that gives preeminence to certain forms and objects—the largest, most obvious ones—and overlooks or deems irrelevant more subtle features.

Spatial configurations and size—power, wealth—are certainly important; they render visible or invisible, constrain circulation and movement, prevent or enable action, exercise force. But the visibility of structures and remains, of pasts and futures, is also affected by characteristics of the beholder—position and associations, historical experience, intentionality—and different people weave different stories out of the available, more or less recognizable materials, connecting past and present toward different futures. This is not simply about setting the record straight—"bringing to

the fore" alternative renderings of place and history, for the sake of it, irrespective of their relative visibility, force, and effect. Tracing multiple historical trajectories from past to future cannot erase inequality, but attention to their intersections, tensions, and potential alliances may restore unpredictability to a seemingly monolithic and static present. In the next section, I will begin to pursue the intertwined stories embedded in this place of science around the celebration of the thirtieth anniversary of the NCRO/GHA collaboration, which does reiterate some obvious features—inequalities, maybe "dominance"—observed above, but also reveals alternative teleologies, contradictions, silences, and absences.

Happy Anniversary

CELEBRATING 30 YEARS OF NCRO/GHA

The official celebrations of thirty years of collaboration between the GHA and NCRO, the country's largest research infrastructure, lasted several days, moving from the capital city out to the field by way of the field station, where the main event was held.

This was a "smart" occasion. Participants were influential and wealthy people, including an ambassador and members of Parliament, senior scientists, leading NGO representatives, and some civil servants. Dress ranged from the dark suits of local officials and embassy guests and the uniforms of security personnel to the emphatically informal, often Africanized, attire of younger expatriate scientists, to the carefully tailored wax-cloth dresses, in recent West African fashion, of female research staff. It was matched by the quality, cleanliness, and uniformity of the white awnings erected on the center's well-kept lawns, plastic chairs, table decorations, and flower bouquets, hired from an event management business run by an expatriate wife. Preprinted badges, conference packs with glossy brochures on the collaborations activities, uniformly wrapped presents, handed out by cheerful junior female staff, added a flavor of corporate hospitality and emphasized resources; PowerPoint presentations screened on multiple screens gave the occasion a scientific, "international" outlook.

It is not easy to pinpoint the material and aesthetic qualities that brand this event as distinctive. And yet, having taken part in a range of similar events by the GHA/NCRO collaboration, they have commonalities. None of the material objects at display—awnings, decorations, technology—is unique, but as a whole, things appear as cast from one mold, neat and effi-

cient. Key participants and prominent speakers belong to the expatriate community whose self-confidence and leisurely dress give it a distinguished yet informal feel. Many of the materials are expensive and not easy to get locally. And small aesthetic decisions—the decorations and entertainment at the anniversary, the decision of what might constitute fun, or, at other occasions, the kinds of games played, the role of sports, competitions, and physical team building exercises—create a setting "out of Africa." Their peculiar materiality, order, and cleanness conveys, against the background of a provincial African town, a sense of stability and strength—the ability to control space in a setting where such control is otherwise rarely attained. Such control is something of a luxury and as such also a pleasant experience for all participants.

Yet it is not simply a matter of size, cost, or exclusivity. "Time management" is in these events not limited to the proceedings, which progress without the otherwise common technical hitches and delays. The up-to-date smoothness and cleanness of materials and surfaces themselves exercises control over time by insisting on the primacy of the present; lacking historical reference, erasing traces and leaving none, avoiding material frictions and seemingly untouchable by decay.[12]

Local Pasts in Global Present

The celebration's imposition of a certain temporality not only defines a static present but also creates its own versions of a given past. As a highlight of the celebrations, the directors of the GHA field station and NCRO center honored their "elders": previous GHA field station directors and senior scientists, who had come from overseas; senior NCRO scientists who had worked alongside shifting generations of overseas visitors for up to thirty years, and leaders of important research programs; and also some elderly local technical staff, including an octogenarian laboratory technician who had been recruited as a malaria microscopist twenty years ago, after retirement from decades of government service. The award consisted of a custom-made traditional stool—associated with elder-hood and kinship—embroidered with NCRO/GHA logos in colorful beads. After receiving the stools, wrapped in bright gift paper, the elders squatted upon them and presented some pertinent memories. These circled around the poor material state of things when they began working on the site, and the vast improvements since.

The idiom of elder-hood, the stools and the other memorial gift—an African waistcloth, printed with the anniversary logo and the slogan: "NCRO/GHA research and public health collaboration: Celebrating 30 years"—as well as performances by traditional musicians and dancing schoolchildren reflect a conscious effort to take up "local" forms in the transnational celebration and reference a particular localized past associated with "the community."[13] The posters the GHA made for the memorial celebrations praise accordingly "the community . . . our most important partners without whom any form of research would not be possible," under a photograph of a traditional dance group with painted faces and elaborate traditional headgear; another one shows the mentioned congregation of GHA/NCRO elders and the wrapped stools with the caption: "The African stool is a sign of leadership and respect. Previous and current directors as well as the long serving staff received African stools."

While some of these aesthetic decisions and representations can seem idiosyncratic, it is important not to overlook that they also reflect a genuine desire, on account of the organizers, to "bring in the community" and to break through the separations that uncomfortably mark the overall situation. The complementary aesthetics of presentist high-tech material perfection and the imagined past of "traditional culture," contrasting "local" or "community" (also "grass-roots," "ground-level") elements with transnational science, which is characteristic for GHA events, is at least partly owed to the progressive and egalitarian morality of many public health scientists, and in particular the leadership of the GHA at the time of our fieldwork. The performance of being part and parcel of place and community references collaborative values of respect and recognition and seeks legitimacy from localized togetherness. Yet this collage achieves not simply a move toward the local pole of a local-global continuum but also the opposite: a confirmation of the celebration as "international"—as local parlance has it—or maybe "expatriate."[14] Resourceful enough to incorporate seemingly incongruous but carefully selected elements among its decorum, while leaving out others; demarcating radical otherness between modern science and a particular rendering of traditional culture. This otherness implies social distance, and it suggests a historical trajectory in which science, and the establishment of the research station, constitutes a rupture away from a very different past—a narrative of creation that I shall presently return to.

Juxtaposing present, universal science and local traditions represented as curios and ancestor worship, something in between is less visible. What would the occasion look like had it been organized by Ministry of Health employees or the staff of a nearby dispensary or school—local agents, too, but not quite as much as grass skirts and drums? As a senior observer commented, "savvy events," skillfully staged and funded by international research budgets, are trademarks of the NCRO/GHA collaboration. Certain characteristics of ordinary local public events are not visible in this NCRO/GHA occasion. And it is their invisibility that is the point: it is not whether those more typical local celebrations, with their more improvised furnishings and equipment, long speeches, conspicuous displays of respect and hierarchy, extensive meals and fluid timings, are preferable or more authentically "local"; they are, obviously, equally hybrids of sedimented postcolonial traditions, nongovernmental inspiration, and government habits, and given ample resources, the ministerial staff very likely would have preferred the GHA's styles. The point is that the sedimented routines, time-hallowed symbols, and well-worn materials characteristic of the local administrative, medical, and academic elite are not there on this occasion, making the event to some extent alocal and atemporal. These absences are noticed by some but not others.

Another absence from this event is the anniversary of the NCRO itself, which was not celebrated, partly because of political unrest during its anniversary year and because of transitions in the leadership of the NCRO itself, after its long-serving founding director had been dismissed after misappropriating the GHA's research funds as well as, as later emerged, his own staff's pension funds. The limited role of the NCRO was underlined by the fact that permanent, senior NCRO scientists (that is, those paid by the national government rather than GHA funds) and local health system representatives were less visible at the celebrations. As one of the co-organizers explained, the celebration "was on a Saturday and we really had to convince some guests to come." Experiencing the celebration as "a bit of a GHA thing," some of them, though of course invited, only made brief appearances. Such absences are visible to those who have been in the place for a long time and know who else could be present. They are invisible or irrelevant for others, including foreign visitors who lack these memories.

Absence from an event like the anniversary can be due to more pressing local or political commitments or the choice of an inconvenient weekend

day. But it may also express critique in a local idiom. Such critique by silence or invisibility is open to multiple readings: a transnational visitor, ignorant of local institutions, might not observe it at all; for a resident expatriate scientist, the absence, if noticed, may confirm the impression of "weak state structures" or can be explained away with a particular absentee's personal idiosyncrasies; an African scientist colleague might read the absence of a senior colleague as an act of defiance, but she or he might equally understand it as acceptance of defeat and accordingly judge it as a sign of strength or of weakness, wisdom or stubbornness.[15]

The absences reinforce the impression of the collaborative celebration being a GHA thing; as one senior NCRO scientist privately expressed a propos the anniversary: "I keep wondering: what *is* the NCRO?" His statement led our conversation back to an earlier speech by the then overall NCRO director to staff, GHA colleagues, and distinguished foreign visitors, which was vividly remembered among NCRO/GHA staff, even after the director had been discredited. The director generally considered himself as the NCRO's "founding father" and missed few opportunities to narrate the story of the NCRO's creation as a nationalist postcolonial project. In his speech he drew upon African patrilineal idiom—"a house has only one door and one kitchen"—to underline that that there was only one institution, the NCRO, to which people belonged. Visitors to his house should not assume the role of the host, and the home's children, that is, staff, should remember which father they belonged to, in the end a remark that took on an ironic tone after the director's misappropriation of staff pensions had become known. Recalling this event in a conversation with the author, the NCRO director reiterated proudly: "I said this to them last time I went there, even in the presence of their ambassador," and went on stressing that there was "one, only one" institution, the NCRO, and that the foreign collaborating institutions "do not exist," adding that "the research center is the NCRO only. The GHA has no title deeds. It is all property of the NCRO!"

These memorable statements resonated with the inclination of other older NCRO scientists and might have momentarily enhanced the director's legitimacy and authority with some staff, before his downfall. Local scientists' insistence on the profoundly national character of their institution was frequently reiterated, for example, by an NCRO scientist who contested my rendering of the NCRO as a *mere* para-statal collaborator in an earlier draft of this chapter. He rightly stressed that the NCRO was a truly *national* agency—though of course ruefully underfunded at present and thus, in

the long meantime, entirely reliant upon foreign funding. Rather than accepting a representation in terms of dependency, he drew attention to the contradictions this meant for his position, being "answerable to the MoH" as well as responsible to foreign funders. This double bind, and the nationalist undercurrent, are important, not only as a key feature of twenty-first-century African politics (open to populist misuse), but also because it marks the presence of another potential future, seeded in the founding moment of the NCRO, when young scientists shed the (post)colonial yoke and took the helm of African science (as the disgraced ex-director recalled)—and this is all but forgotten.

Yet such evocations of other futures easily go unnoticed by expatriate colleagues or they are, as in the case of the ex-director, dismissed as "mere talk," counterfactual posing in the face of forceful political-economic realities (and of personal culpability): proclaiming ontological or legal doubts about the GHA's existence will not make it go away. And more crucially, who would want it to go away? Least of all those recalcitrant orators, who enjoy the good working conditions at the field station and whose careers and scientific opportunities have co-evolved with the GHA collaboration. Thus, rather than voicing actual opposition to collaborative research, the nationalist narrative opens, between fiction and reality, a space for one's imagination of alternative futures, and as such it finds resonance and is remembered and retold by the center's inhabitants. It ties the present transnationalized situation back to the NCRO's origins in nationalist science and modernizing African biomedicine—origins that still have effects despite contemporary neoliberalized fictions of the NCRO as profit-generating biotech producer-to-be. Rather than simply countering manifest reality with a fiction, this narrative seeks to counter the dominant story of the GHA's making of the NCRO, relating the present to a different past and possibly to a different future.

MEMORIALIZING THE PRESENT

Untouched by these deeper historical memories, the public historical narratives during the anniversary focused on the GHA/NCRO collaboration and began accordingly from the GHA's arrival in the country. An official GHA website remembered: "30 years ago, a doctor from the GHA arrived in [the capital city] to start a research station with the NCRO. That time, which for him was one of the best in his life, started the GHA/NCRO field research station, what has now become one of the largest investments in the history of medical research [in the country]."

This short story on the collaboration's beginnings could be understood to imply—enhanced by the anniversary iconography—that the GHA came to an empty space. Yet before the lonely medical officer's arrival, the local scientific community had been anything but a void. Indeed the country was one of the leading science nations in Africa during the decades after independence, and the NCRO recruited many of its first staff from a respected group of regional research institutes, which had led African science for decades. The first director of the research center—prior to the beginning of the collaboration—had previously been the first African director of one of these well-renowned research institutes, from where he had come back to his native area when the regional collaboration dissolved in the late 1970s. Together with his staff, he had, prior to the GHA's arrival, laid the foundation of what became the NCRO's Global Health Centre.

The NCRO website places less emphasis on these shared regional roots and seeks its own origins instead in the capabilities and needs of the postcolonial nation-state: the NCRO was here founded out of the drive of a new generation of African protagonists—led by young, often U.S.-trained specialists in new scientific fields such as immunology—in a particular innovative nationalist moment when a new government took over. In this narrative many different international organizations collaborated (the GHA hardly features) in the creation of a *national* medical science, but the leadership lay in the hands of a new generation of postcolonial scientist-entrepreneurs.

During the official anniversary celebrations of the collaboration, this nationalist narrative was not prominent. Addresses by the minister of health and the directors of the NCRO and GHA, published in a major advertising feature in a national newspaper, emphasize instead transnational resource transfers. The minister stresses the gift-like nature of collaboration, expressing thanks for: "technical support and capacity building," "infrastructure as well as manpower," "donations of state of the art equipment and renovations," adding up to an "invaluable contribution to the health of [local people] and indeed, the world." The NCRO director praises the GHA's contribution to producing research capacity and laboratory facilities, while also mentioning—by contrast to other contributors—the fact that the NCRO had already been in existence when the collaboration started. The GHA country director—with long personal experience of research in the region—recalls how the GHA "began a partnership with the organization newly mandated to carry out public health research . . . [the] NCRO, . . . starting in a small office at the . . . district hospital, [and since then] the partnership has grown

extensively." He underlines that the collaboration falls "within GHA's international focus, which is to protect the health of all people," to which end the "GHA employs more than 14,000 employees . . . in [the country], the NCRO/GHA collaboration has about 1,200 dedicated staff compared with an initial two in 1979." While emphasizing partnership and expressing thanks to the ministry "for enabling the GHA to build a strong partnership with the NCRO," the text includes what actually are NCRO staff among the global GHA workforce and describes the emergence of the NCRO as intertwined with the GHA's contribution; the highly trained and experienced NCRO staff already present when the collaboration started, and who had laid the foundations for the collaboration's malaria research when they moved from the postcolonial malaria research station to its present location, do not feature.

In his keynote speech at the anniversary celebration itself, the GHA country director similarly began by focusing on the GHA's contribution. One of his slides, "30 years—Then and Now," contrasts the access road in the 1980s and today, mud versus tarmac, and (West African) drums and a network diagram over Internet "Connectivity by GHA," underlining progress in communications and transport (a theme reiterated also in many official anniversary posters, which documented achievements by way of contrasting old and new: "NCRO/GHA has come a long way in terms of infrastructure"). This message is amplified by the next slide that presents a young student Obama in front of an African hut and then President Obama at the handover ceremony, under which is written: "The journey is long and we have come from far . . . yes we can."

However, what at first seems like an unabashed praise of northern achievements is quickly qualified by this leading public health man's modernist, meliorist, and egalitarian commitments when—during the subsequent slides—President Obama is quoted promising to use government to "restore science to its rightful place" and address "the needs of the poor," moving on to John Snow's, or scientific knowledge's, famous victory over cholera in London, emblematic of progressive public health science. The GHA features here—common among the progressive and highly dedicated GHA staff—as public governmental project, reminding us that the GHA itself is a state entity with a strong public ethos and its staff are government officers with an outspoken ethos of serving the public through science.

The speech by this highly respected international scientist dedicated to life and work in Africa contains diverse renderings of history and possible futures and defies easy categorization. The audiovisual "monument" to the anniversary, a ten-minute video produced by the GHA communications team, conveys, at first sight, a simpler message. The opening scene shows a man's back on the side of the driveway to the station. After putting on traditional headgear, he squats on the ground and commences playing a lyre, singing a praise song to the NCRO/GHA and specifically to the first overseas scientist of the collaboration who had arrived in 1979, accompanied by images of gardens, lawns, and the large GHA building.[16] The song fades over to a telephone interview with the same scientist, who recalls the foundational moment: "I was the one who started the station, I was the first person there." He goes on explaining how they started research with few resources, "nothing," borrowed from the Ministry of Health. His voice speaks over the images of rundown government hospital premises and laboratories. Yet the old doctor praises his host country as a "beautiful country—our time there was one of the best in our lives." The video meanwhile underscores radical infrastructural progress through superimposed before—and after—photos.

After a short interval with the singer, a GHA station director from the early 1990s describes how he, on a minute budget, "struggled with bats in the laboratory" and lived and worked with little communication with the headquarters, against a background showing hypermodern laboratory technology and the celebration of the laboratory's ISO accreditation. Two African scientists working with different GHA programs then briefly remember that they had found the compound "overgrown," with "just one administration building, and a very bad road, no tarmac, purely mud." A former lead scientist recalls how there had been no water supply in the early 1990s, and as the NCRO water tower was broken, the GHA had drilled its own borehole, "so for the first time there was running water in the toilets." He goes on to say that the canteen then had only had a wooden table, and the chickens for lunch had still roamed under the tables at breakfast.

The skillfully edited video focuses the site's story on the trajectory from one man's initiative to a large-scale endeavor. Similar to practical arrangements and commemorative discourses at the anniversary, it assigns a dominant role to the overseas partner. Yet the inevitably truncated quotes do not exhaust the speakers' experience, which can point us to different pasts and other ways of remembering. For example, the video's apparent "first sci-

entist" draws in his CV upon the time's characteristically modest idiom of "participation" to underline that local "people . . . maintained control of the program throughout," and that he himself had been "mentored by . . . the senior project leader" (an African doctor), and in a subsequent conversation he placed strong emphasis on the firm rooting of science in Africa—and indeed his and other GHA scientists' long ties to Africa—and the fact that he was part of a strong team of brilliant local scientists who "shaped the agenda" and who then all were equal staff members of a NCRO center, rather than a GHA station.

Likewise, the video interviewee's graphic descriptions of distance from headquarters, practical tinkering and improvisation, and scientific commensality, although emphasizing rough conditions and by implication the long way traversed, also reveal excitement. The time in Africa had been one of contingency and pleasure precisely because things were less well defined and controlled then. Thus, the previous director, who had overseen the main building work, described not only—to a background of historical images of construction work, fading into recent images of shiny roads—"mud everywhere and big equipment," but concluded that "it was by far the best job I ever had. It is surely fun to think about." In similar words, many other GHA veterans enjoyed remembering what many described as a "great time."

The last witness was the long-term African NCRO center director. He, too, appreciated what had been achieved and what "keeps us together here as a family." Although the *family* terminology suggests togetherness, he also implied that his perspective might be different from that of the expatriate witnesses who only saw sections of the overall process, while he has seen it all. In the same vein as his expatriate colleagues, he too appreciated, in a later conversation, the "early days" of improvisation, before the establishment of a massive, rolling bilateral funding program, when "there was a different working model" and fluid structures, and when he, for example, together with his overseas PhD supervisor had creatively made ends meet by jointly applying for various smaller grants.

This underlying praise of openness, of ongoing future making, underwritten by fond memories of improvised work and small surprises and shared by scientists of different origins, is an important, if less visible, take-home message from the anniversary video. Upon first viewing the film—rounded off by a series of staff members saying "Happy anniversary NCRO/GHA"—seems to present a linear narrative of creation ex nihilo, driven by the resources of the foreign partner; a narrative of "bare fields rendered fer-

tile" that recalls older mission narratives (or corporate historiography's "rags to riches"). Yet what its protagonist's recollections evoke is much less bold pride in achievement, teleological satisfaction, than a shared yearning for an original sense of possibility.

MULTIPLE NARRATIONS, MOMENTARY POSITIONINGS

The tensions between the protagonists' progressive commitment to public health—with its egalitarian, social justice undertones and a palpable desire to cooperate and do "the right thing"—and the anniversary celebration's materiality reveals divergent and contradictory intentionalities and interpretations within the present situation. Different actors experience and interpret the anniversary celebrations setting differently, and one actor may account for it differently at different times: while the linear, congratulatory version seemingly dominated official representations, many people held more differentiated views in private, especially people who worked in the site for a longer time, or independently of the GHA, held different versions of history—if not necessarily *a* different history as such. The anniversary celebration (and by extension the collaboration) can thus be read as a consensual performance; a collective ritual that works and takes effect—if for the moment—irrespective of participants' "belief" in its narration or full commitment to its practices.

The anniversary resembled in this regard other public events by the GHA/NCRO—targeted either at the collaboration's internal public, such as team building, or at a wider public, as in dissemination and mobilization. Although usually working smoothly and to most participants' satisfaction (if of very diverse expectations), these events, too, were commonly accompanied by a running commentary by participants (across diverse institutions and origins) concerning perceived incongruities, ethical tensions, or aesthetic oddities. Awareness of occasional absurdity and futility is certainly also found among expatriate scientists, one of whom summarized her experience of the anniversary as "a waste of time and money" (which did not prevent her from enjoying the party). Such observations do not necessarily oppose the celebration or what it stands for; rather than nascent ruptures, they form part of the connective tissue. Voiced in private, ironic, or self-conscious remarks, they sometimes express a sense of detachment (notably when physical team-building exercises are involved) that runs counter to the optimistic, inclusive thrust of the activities, speeches, and displays, but this skepticism also makes inclusive participation possible.

This coexistence of contradictory elements within and between descriptions of the present (and underlying different historical narratives) qualifies the overly simple dichotomous interpretation of northern versus African institutions and reveals a potential of contestation and change inherent to the present condition.

Mutually engaged memories are also contained and engendered by buildings, ruins, traces, and other objects, as people engage with the landscape and things they live and work with (see Tousignant 2013). In the remainder of this chapter, I will explore the foundations—architectural and geographical—upon which the present field station is erected and which are palpable to some (but not all, nor at all times) of those inhabiting the present. From this, I hope, we will gain a better sense of the lasting contradictions—and thus also of the possibilities—of the edifice.

Foundations of the NCRO: Traces of Futures

BLUEPRINT AND LANDSCAPE

When the anniversary visitors approached the field station, most would have perceived the second gate as the actual entrance, because of its materiality and the rigid protocol, and because only the space behind it displays the distinctive aesthetic features described above. The space between the gates looks much like the surrounding countryside. Yet it is the first gate, manned by elderly NCRO staff rather than private security, which opens into the territory of the NCRO center, while the second gate gives access to an enclosure covering less than a third of the NCRO site. Today's field station was thus carved out, in the early 2000s, from the original forty acres acquired by the NCRO around 1980.

Between the gates one passes a modernist water tower and multistory housing block; well-worn concrete structures, which few foreign visitors would have given much thought to. Only long-term NCRO staff, such as the center director and his age-mates among the permanent staff (who share a marked sense of their own historicity), know the significance of these spatial arrangements and structures. In a drawer of his desk, the director keeps the original 1980s blueprint, by a local architect, for the NCRO center.

The drawing is striking in its vision: an entire scientific-cum-civic community, complete with laboratories, workshops, and administration, as well as staff housing for different ranks, from subordinate to senior scientists,

flats for visiting scientists, and communal facilities: clinic, kindergarten and school, tennis courts and pool. This self-contained science city was projected at a time when the country's actual cities and municipal services were declining under a new government that, advised by foreign institutions, demolished or shrunk governmental structures—from commodity boards to health care, from universities to transport and public works. The blueprint reformulates, under changed political-economic conditions, an older dream of the polis, a civic space guided by rational government and scientific advance. It proposes a contraction of the erstwhile dream of national development and expanding modernity—but does not abrogate it.

This vision of a science city, a few miles outside the actual municipal entity, is different from older postcolonial landscapes of science. The leading site of national medical-scientific research—and government public health—between the 1940s and the 1970s had been a division of the national Ministry of Health, whose fifty stations reporting to a headquarters in the capital city had covered the country, radiating outward in order to transform the nation. Its local research station was located at the city center, adjacent to other administrative and health institutions with whom it worked. When northern government institutions started to work in the city from the late 1970s, they initially utilized these by then underused government staff and laboratories in the city and subsequently took technicians and scientists along with them to the NCRO center outside town. These now elderly staff hold memories of a different way of conducting scientific inquiries and public health work, more firmly integrated into the texture of city and nation.

Similar experiences were brought along by those who joined the NCRO/GHA after commencing their laboratory and scientific careers within the aforementioned regional research institutes, a network of disease-specific scientific institutions located in different sites across the wider region, which produced world-leading science and advised postcolonial national governments. Like the ministry's research division, these were integrated with the state apparatus and informed national governments. When regional collaboration collapsed, the first African director of the oldest of these famous research institutes came with his staff to the NCRO research center's present location to build up national malaria research. His plans for the NCRO center, including suggestions for new buildings and extensive staff housing for a large malaria center (see Hutchinson, forthcoming), were never built. Yet

they lived on in the field station blueprint, which moved the center out of town and contracted these flights of fancy into a seemingly more achievable scale.

These two layers of unrealized blueprints for an African place of science had in turn an architectural precursor in the aforementioned regional research institute, where the first African director, immediately after his institute had been "Africanized" in the 1970s, had commissioned plans for an impressive multistory modernist laboratory block. To make room for this vision he demolished—to the chagrin of his European predecessors—the existing functioning laboratory built in colonial times. Today a short flight of stairs leads to a level patch of grass where the grand laboratory should have been erected: a void that variously references colonial infrastructures and postcolonial hopes—as well as serving as a conveniently canopy-free lawn for meteorological measurements.

Underneath the present NCRO/GHA center depicted in the opening of the chapter is thus a deep genealogy of unrealized projects for postcolonial African scientific futures; while not ruins in a conventional material sense, these ruined visions—underscored by stories about the ruined lives of some of the protagonists, which are told among older African scientists—form part of the research center's landscape. To those who remember them, like the NCRO center director and his elderly secretary—who began with the regional research institutes and retired one year before the anniversary—they reference buried hopes and aspirations, failure and disappointment. To the many young staff born in the 1980s, let alone to many short-term expatriate staff, they are invisible.

Remembered (by some) in the transnational research center at the time of its anniversary, the project of 1970s national governmental science exemplified by the national ministry's research arm or the regional research institutes has an exotic feel, as if a radical break had happened since. But this departure was not obvious in the early 1980s, when new forms took shape within older plans and landscapes. The blueprint's field station did not propose a radical break with the idea of scientific government and citizenship, representative of the mid-twentieth-century developmental nation-state. On the contrary, the NCRO's foundational rhetoric was emphatically nationalist, proposing a step up in decolonization, away from British colonial funding toward more diverse and especially North American collaboration, replacing colonial remnants with new institutions. Little suggested the return of transnational inequalities. Instead of proposing something radically

new, the blueprint merely adapted an older vision of national science-as-government. It leaves the city behind, proposes a center in and by itself, but it preserves the dream of civic unity, a polis that integrates life and science.

PARTIAL REALIZATION

The building of this hypermodern fiction, extending the lease of scientific modernity by exaggerating traits of the modern imagination,[17] was stopped during "phase 1" of the envisioned three-stage building process. When I first came to the center in 1993, one administration and laboratory bungalow, a few staff houses, and the water tower had been built on the forty-acre site. When the GHA, around the year 2000, resumed building to accommodate its expanding program, it was based on a new architectural outline, drawn by an international architectural firm and covering only a section of the site.

The older blueprint's island city was reduced, a smaller enclosure superimposed and surrounded by a protective wall. Only laboratory and administrative sections were included; housing, welfare, leisure, education, procreation, and transport did not feature here as parts of the science site. The few staff houses originally realized remained outside the perimeter wall and have not been further developed—apart from vegetable cultivation coordinated by NCRO staff. Today—and apparently after a period when nobody wanted to live in these isolated houses—the flats, owned by the NCRO, are in demand on account of their stable water and electricity supplies and their security, in contrast to similarly priced housing in the city. They are mainly inhabited by senior NCRO scientists who avoid the city's choked traffic and skyrocketing rents. Other staff commute from their rented accommodation in town, relying on private cars or the GHA shuttle bus. Short of either, it is a long walk from the nearest main road's minibus services. Periurban circulations with the National Railways—the center site had originally been chosen next to a railway station—have ceased to work after decades of neglect and privatization.

FURTHER INSCRIPTIONS: MOVING ACROSS THE PLAN

Today's research station's apparent centerpiece is the GHA administration building and laboratory (both with provisions for doubling their size). The GHA plan left untouched the single-story NCRO administration bungalow and laboratory, apart from redoing walls, windows, and roofing, achieving a consistent overall impression.

The idea of the GHA building as the center of the center—not merely a

project within it—is reflected in its size and the fact that the GHA planners imagined the NCRO's administrative structure to be incorporated into the building: in the senior management wing we find, in the architects drawings, two large offices, reflecting the partners' collaborative symmetry, complete with identical desks and seating groups, for respectively the director of the GHA and the director of the NCRO.

Adjacent to these offices one finds senior staff and administration for the entire field station. The building also contains spaces for researchers, including individual offices for the GHA section chiefs of malaria, HIV, and the other larger GHA funded programs. The inclusion of the NCRO center director and his administration into the GHA designs resonates with the historical narrative discussed above. For some of the permanently employed NCRO staff, the incorporation of the NCRO into the GHA plan, as equal partner, appears less generous than gregarious—too much of a collaborative embrace. For them the NCRO center remains to be found in the small, older buildings separate from what they refer to as the GHA building—or more to the point: they are engaged in a struggle to maintain a vision according to which the GHA building is, in the NCRO center director's words related above, "only a project among others" of the NCRO and in which the NCRO is, in accordance with the legal situation, the sole owner of the site.

This alternative gaze onto the historically formed landscape took material form when the then NCRO center director decided not to move into the office designated for him by the GHA architects but to remain, with his elderly secretary and a handful of permanent NCRO staff, in the pleasant older bungalow accommodation. He explained his decision with the fact that he was "not GHA," that the proposed equivalence between the directors did not reflect the legal situation or the NCRO's vision. He perceived his proposed position in the GHA plan as a misinterpretation of collaborative relations and chose to inscribe his opposite view, adding: "I prefer to be on my own." As a result, the equivalent office of the GHA field station director was not used by the NCRO director but for the GHA employed, expatriate deputy field station director, administering collaborative program funds. Thus, the senior management section of the new building was in 2009 inhabited by those who oversee GHA funding and activities, reflecting political-economic realities maybe more appropriately than the architects' symmetrical vision of collaborative partnership.

A practical choice by the NCRO center director provides here a lasting commentary on competing historical narratives about the origins and pur-

pose of the NCRO center and inscribes an alternative interpretation into the landscape—waiting to be transposed into an alternative future.[18] I hasten to stress that this gesture, though resonating with critical remarks and telling absences noted above, does not express opposition to the collaborative arrangement; the director himself is a pillar of the collaboration and has developed his scientific career within it—and for all scientists related to it, its resourceful laboratories and effective management provide vital conditions for scientific creativity and innovation and professional satisfaction. But alternative futures can remain latent in spatial distributions and circulations, potentially to be reanimated when the opportunity arises.

The blueprint, the remnants and ruins of its vision, and the circulation and placement of people in the resulting landscape reveal diverging memories and historical narratives—and diverging intentionalities and futures—are tangible alongside the more prominent shapes of the contemporary order and their myths of origin. They remain present in the seemingly overdetermined social situation of the anniversary celebration, not only in participants' inscrutable consciousness but also in buildings and landscape. But who actually notices and engages with these traces, and who doesn't? For a young foreign visitor, the archaeology of past projects is at first invisible. A long-term African scientist, on the other hand, might know everything outlined above, and more, about the history and original visions attached to the place, but in the given situation, his eyes might be focused on the necessities at hand: maintaining collaborative relations, sustaining funding for staff, getting access to laboratory equipment, and learning, jointly with others, how to make better science.

The ethnographic tracing of such other histories is only a first step in responding to dominant strands of commemoration; from here begins the task of discerning what people *do* with memories of past projects, and how they practically engage contradictory histories, pursue divergent futures, and associate with others positioning themselves on different historical narratives. How does a senior African scientist, long familiar with the place and since recently employed by the GHA, make his way, every day, between the 1980s senior staff housing on a field outside the center, into the scientific enclave? And how does his expatriate colleague, driven by her origins in progressive health politics and committed to ideals of justice and equality, travel from her 1940s bungalow in the former colonial administrative district? How do international visitors (including the ethnographers), in search of collaborative field sites, enter and move across the center, which locations

do they engage, and to what ends? Which temporalities are evoked by addressing the site as, respectively, the NCRO or the GHA? And what difference does it make who speaks and where? And how does telling and juxtaposing stories—as in this chapter—evoking the affective resonance of traces, contribute to ongoing struggles?

Memories of the Land Returning

Around the time of the official anniversary celebrations, partly triggered by the publicity attendant to it, communities living in villages around the center or involved in long-term research asked yet another time what benefits research, after thirty years, had brought to the place and its people. Such encounters between villagers and scientists, in Community Advisory Board meetings and community consultations at the field station or at local *barazas* in the field, preparing new research projects, turned around concrete material outcomes: employment, health care provision, and infrastructure development, including education and sanitation.

These historically rooted local claims resonated somehow with African scientists' commentary on political and economic inequality, encountered above. Yet, rather than justice, the issue here was responsibility within hierarchical relations of accepted inequality. While scientists aspired to an equal place in universal scientific space, and for sovereign national science, villagers did not challenge unequal distributions of power, resources, and knowledge or evoke global and national frames, but they sought to access the scientists' local resources, evoking shared responsibilities for human well-being that arise from conjoined lives upon one piece of land. After three decades of cohabitation, the argument ran, some local development—the concrete localized effect of science (and its production process)—some benefits toward the original owners of the land were due. *Development* (in the local vernacular also *growth*)—a prominent term in local praise for the NCRO and GHA, as well as in critical demands—has here implications of sharing substance, recognizing local relations in resonance with local kinship idioms of belonging and becoming.

Such claims are based on a different strand of memory from the institutional remembrance examined above. They are raised by those who, since they decades ago signed a piece of land over to the NCRO, witnessed or bodily participated in the NCRO/GHA's research and enjoyed benefits and nurtured hopes attached to scientific field trials of new treatments and vac-

cines, and who felt that the larger promise of scientific development had not been fulfilled—for them, in their place.

Development references here also local histories of progress. The NCRO center is part of a periurban area, where since independence hopes for development and modernization ran high. A prominent national politician hails from here—a modernist, pro-Western trade union leader trained in the United States and murdered by political opponents, who remains for many the embodiment of disappointed political hopes for modern, improved lives. Moreover, the area is the location not only of the scientific center but also the recently expanded international airport, itself embroiled in over five decades of legal controversy with local landowning clans over compensation and benefits and subject to recurrent speculative hopes, and an enormous but dysfunctional industrial plant, built around the same time as the NCRO center and owned by one of the country's leading industrial and political families, involving corruption scandals leading back to the mentioned politician's murder. The question as to what local benefits the appropriation of fertile lands for such quintessentially modern enterprises accrues is thus ripe in the area.

The NCRO/GHA site, with its securitized concentration of resources, technology, and expertise, and its connection to circulations beyond local control, raises similar questions as a huge factory that never produced but made its owners rich(er) or an expanding airport most people only ever see through its fence and land speculation along its boundaries. Sometimes this is expressed in rumors about nefarious practices, be it the popular lore about political murder, rumors about the Chinese contractors expanding the airport, or indeed about scientists stealing local people's blood, but much more commonly these questions are put forth in concrete practical requests: for water supplies, food aid, employment opportunity, school buildings, and a local hospital, which are directed at the NCRO/GHA collaboration rather than the NCRO as such.

The institutions' response to such demands, raised repeatedly over decades, must, despite everyone's best intentions, remain limited. Human resource procedures and scientific meritocracy do not allow preferential employment of neighbors, and at the time of field research, funding levels were stabilizing or declining in response to the financial crisis and hiring stagnated. Requests for infrastructure projects or permanent health care provision could not easily be accommodated because of cyclical project funding and because the NCRO and GHA are research bodies, not aid organizations.[19] Sometimes the questions did not even reach their addressees: in public dis-

cussions, community representatives supporting the NCRO/GHA's argumentation thus sometimes criticized or silenced allegedly "selfish" compatriots' excessive demands, presumably because they were considered inappropriate and potentially harmful to working relations with the NCRO/GHA.

The fact that the institutions could not adequately respond to these demands does not mean that the individual actors—African and expatriate scientists as much as local field staff—did not wish to respond and assist. An earlier GHA director had thus given neighboring homes the right to use water from the center's borehole via a tap near the gate and to utilize the center's electricity and telephone exchange for further connection; the center's staff clinic was opened to patients from neighboring villages; in various meetings, the NCRO/GHA promised, if possible, to utilize (and thereby partially support) local clinics for future research; individual scientists did commonly try, on an ad hoc basis and limited by regulations, to use some research funds for improvements of health care standards. On a more personal level, field staff often felt compelled to assist individuals with small personal donations, and some senior scientific staff engaged in considerable charitable projects as funders and fund-raisers. After the end of my fieldwork, a more systematic "corporate responsibility program" began to take shape, which included suggestions to pool staff contributions for ad hoc charitable responses and an initiative to pass on waste paper and decommissioned furniture for income generation to villagers living around the center.

Another, more sustained response to persistent and occasionally accentuated local requests was the field station's expanding community engagement program.[20] Considering communication, rather than just material exchanges, as a panacea to strained relations, its tools were information focused: public meetings, dissemination events, a newsletter, and a magazine. One important strategy was to hold events in schools around the field station, which would contribute to knowledge about research and general health education and improve relations between community and researchers.

One larger school event included an essay and painting competition, where pupils were given opportunities to articulate ideas about medical research and the GHA. The prizes for the best essays and drawings were gifts, donated by the staff of the field station.[21] The celebrations involved performances of poems and songs, school milk donations, and health lessons to the children by disease-specific researchers. The shining white awnings, Land Cruisers, plastic furniture, loudspeakers, and the elegantly dressed female NCRO/GHA staff, presenting neatly wrapped prizes, side by side with

decayed rural primary school buildings without electricity or water and children in worn uniforms on coarse wooden benches confronted the timeless, near-perfect materiality of the anniversary celebrations, described above, with the surrounding landscape. The well-intended gesture toward engagement certainly provided an enjoyable and instructive occasion for the local children and their teachers, both because of the new medical knowledge and because of the material displays and the physical contact with NCRO/GHA staff and resources it involved. The wider historical hopes for material development will remain lingering inside and outside the research center's fence, engaging particular interests with the overlapping temporalities of nation, place, and habitation in the memories and aspirations of scientists as well as local schoolchildren.

As for the latter, the competition images depicting the field station in its place give us some idea of the memories that the present will leave behind in future generations. Many of the drawings depict hopes for the future fulfilled by the NCRO/GHA: health care, enlightenment, and improved lives. Others focus on the present sufferings of families and children, implying the need for the NCRO/GHA's assistance to make present ailments past. Others again focus on the shiny surfaces of the present field station—the Land Cruisers with embassy number plates, the uniforms and cars of the expensive security company, the beautiful houses rented out to international NCRO/GHA staff, and their fences. One picture is split in the middle by a fence and gate, with colorful and neat buildings and cars inside the research station, and mud houses, graves, and a family without shoes outside the massive gate. Attention to these alternative narratives of science, history, and place—told outside the center and out of the limelight of the anniversary celebrations—gives us some idea of the memories and hopes that are embedded and continuously reinscribed and revised by those who live, work, and engage with each other upon this place of science in Africa. This is not a matter of contrasting narrations by those inside and outside, researchers and community, foreigners and Africans. On the contrary, the interest of this ethnographic-archaeological inquiry lies in the intertwining, within one place and in the lives and stories of its inhabitants, of diverging and contradictory attempts to connect past, present, and future.

Looking at a place of science in a moment when it looks at itself and represents itself to the public has opened our view to different ways of seeing

and being in one place at one time. These are not just positions shaped by different stakes and interests, different perspectives onto the same material reality. Rather, the historically shaped landscape and the narratives occasioned by it—different for different storytellers—co-constitute a present on its way between past and future. Attention to the place and its stories renders the present as process rather than as the outcome of global transformative causalities operating shifts between states. Such "processual ethnography" of an African present suspended between diverging pasts and multiple futures (Moore 1987), which reads diagnostic events as localized intersections of historical processes, reveals the present as a site of struggles, past and present, and the terrain of future possibility. It dissolves visions of the present as stable "regime"—defined by contrast to a past historical state—revealing instead diversity and opportunity. Instead of telling one history, it provides starting points for new stories.

The succession of failed projects for an African science—the 1970s grand laboratory in the regional research institute's station or the 1980s NCRO blueprint—are invisible ruins in the landscape and the memories of the protagonists above. These ruins do not simply reference nostalgia, but neither do they emanate mere resentment (Stoler 2008, 207). To those who can see them, their resonances shape present visions of the future, guide attempts to change the order of scientific space, and avoid the pitfalls of change. This chapter on an African science site's past and futures is offered to those working on the site not as testimony to failure nor as nostalgic time travel but as a contribution to ongoing contests about the shape of the future and an extension of many a pleasant conversation.

Notes

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1 Neoliberalization's temporal-cum-spatial implications have been described in broad strokes by Harvey (e.g., 2006; see also 1990; May and Thrift 2001); for more specific accounts, see, e.g., Ong (2006); Sassen (2006); for Africa, see, e.g., Ferguson (2005); Comaroff (2007); see also Rottenburg (2009).

2 Rottenburg (2009) proposes that Africa has become progressively marginal in political and economic terms and yet evermore central to global forms of experimentation and knowledge production.

3 For a discussion on "legitimate domination" and global health, see, e.g., McFalls (2010).

4 The NCRO was founded by government act in the late 1970s as one of several para-statal scientific institutions. The GHA is a main collaborator, conducting research on malaria, HIV, and emergent diseases. The NCRO and GHA have, since the late 1970s, jointly built the field station, which expanded during the 1990s to become one of the leading medical research sites in Africa, with an annual budget around US$30 million (2009)—excluding projects funded by other sources and expatriate staff salaries and allowances. It engages over 1,000 national staff on renewable short-term NCRO contracts (paid for by the GHA), some NCRO staff scientists on permanent, pensionable contracts paid by national government funds, a handful of expatriate scientists, and thousands of participants involved in surveillance and clinical trials.

5 While all staff members funded by the GHA collaboration formerly are NCRO employees, the perception among staff and outsiders is that the collaborative work between the NCRO and GHA is set apart from the smaller non-GHA activities on the site—which is why it is variously referred to as the NCRO/GHA or the GHA—and the staff members in question (most staff working on the site) are different from ordinary NCRO employees (also referred to as NCRO-NCRO) in that they are not permanently employed but usually on rolling one-year contracts and describe themselves commonly as "being with the GHA" (just like volunteers and trial participants do).

6 Data generated by rapid testing or interviews in a rural home or field laboratory can be transferred through local wireless networks and satellite connections in real time for analysis at the research center or in the distant centers of multisite clinical trials.

7 Contact, through meetings and direct information exchange with local public health authorities, although universally deemed desirable, is not always easy; due to the limited capacity and cost of the ISO accredited laboratories, these cannot simply extend their services to surrounding health care facilities, and due to the processes of careful institutional data validation and academic publishing, findings must be circulated widely before being fed back into national health policy (although preliminary results are presented at regular seminars at the field station).

8 During the time of fieldwork, some major changes concerning the role of African scientists were set in motion: in accordance with some major funders' regulations, many projects began to employ local principal investigators (PIs) on project-funded contracts, while previously PIs had usually been expatriates and research coordinators had been locals. Moreover, several heads of disease-specific sections were during subsequent years replaced with African scientists. At the time of publication, this shift includes also the station director, who for the first time is not an expatriate. Expatriates serve thus increasingly as mere advisors; while continuities and change always remain intertwined in such efforts to establish new patterns, their significance lies in the intentionalities they indicate and in the horizons of possibility they open.

9 For example Ferguson's (e.g., 2006) description of African resource extraction enclaves run by multinational companies and global "capital hopping" associated with foreign direct investment (see also Appel 2012 on "modularization"); Ong's (2006) analysis of Asian export production zones and "variegated sovereignty"; or Caldeira's (2000) seminal studies of urban segregation (see also Murray 2010).
10 This evokes the work of Petryna (2009; see also Rajan 2006) on the recent offshoring of (for-profit) clinical research by the pharmaceutical industry. An important difference between the literature on pharmaceutical outsourcing and biocapital and the present case—indeed most African bioscience—is that most African research is not for profit but funded by and accountable to national governments and public charities.
11 Indeed, these features are so obvious that the critical anthropologist's task cannot be limited to exposing—as in the old Enlightenment vision of revelatory and iconoclastic critique—the "truth" of the place. Rather, it raises the question of how inequalities and exclusions can be "public secrets" open to view and yet seemingly unchangeable and irrelevant to the working of public health science and how this reading coexists, articulates, and conflicts with other descriptions and historical narrations inscribed in the place.
12 The atemporality of materials that (seem to) reject traces and resist decay, and their use in architecture and domestic life in an African village setting, is also discussed in Geissler and Prince (2010).
13 The particular vision of the "local" embodied by these artifacts points toward the role of community, widespread in transnational collaborations, as the deserving recipient of support and collaboration, with which progressive global forces link up directly, rather than through national government.
14 The concept of the *expatriate* and processes of *expatriation* deserve further unpacking as a key to contemporary forms of dwelling and political ethics; as, e.g., Redfield (2012) shows, the peculiar commitment to no-place, while residing and acting upon specific places, makes not only for particular patterns of consumption and work but also for characteristic moral conundrums.
15 When I asked GHA colleagues why the NCRO had not played a more central role in a particular event, or why a particular senior scientist or official had not attended, answers had a resigned tone, although they certainly recognized the desirability of a more "balanced" collaboration: "Had it been up to them [the NCRO], this [celebration] would not have happened"; "You know that he never attends these things"; "We keep inviting them, but you know."
16 The traditional song's lyrics were directed at the grandchildren of a fictive "white man, son from abroad, who is a gentle man wearing spectacles"—presumably a reference to the scientist and medical doctor who started malaria work on behalf of the GHA in the 1970s—who is the hero figure praised by the song. The singer refers to being called by a relative "from abroad, who calls me when I'm inside the interior bush" and being told of the arrival of the said white man, evoking images of backwardness and progress as well as transnational connections.

17 The architectural blueprint of the field station resembles the legal foundations of the NCRO itself: a law from the late 1970s facilitated the creation of new, so-called para-statal, research institutes, which at least in the vision of their founders aimed to replace much of the research activity that earlier had been carried out by government institutions. This document is strikingly Janus faced—calling for reinvigorated post-postcolonial, nationalist government science, while at the same time establishing the foundations of science as transnational and, to some extent, private business. The earlier sections of the act emphasize the duty to advise government and guide the nation through science; the latter sections do not mention the nation but describe instead the future research institutes as corporate bodies, holding private property rights in their assets as well as their future scientific findings and attracting, generating, and administering income, separate from government budgets.

18 This move kept options open. At the time of this chapter's publication, after another change of the station's directorship, the former NCRO center director has been appointed to replace his expatriate predecessor as director of the GHA/NCRO collaboration. He now inhabits the office formerly designated as belonging to the director of the GHA. While these were momentous changes, outcomes of contestation, they do not resolve built-in tensions but constitute another move on a historically layered board.

19 This explanation was not always understood well, partly because of the official slogan of the NCRO/GHA collaboration, "for research and public health," and the public acclaim for the collaboration to have benefited the health of local people (see discussion of anniversary advert above), and partly because the NCRO and GHA have long been involved in HIV treatment and care in the area, which makes this sort of institutional "therapeutic misconception" at least understandable.

20 In her recent doctoral thesis, Chantler (2012) traces how "community engagement" in global health research has come about since the 1980s in response to the growing gap between science and its national public, and how it evolved out of "participatory" approaches in the 1980s to become a professional domain preoccupied with "communicating" science to study participants and their communities in order to facilitate research.

21 This insistence on "real" gifts was meant to emphasize personal relations between those inside and outside the station. Moreover, the station had no designated budget for this, and using research budgets could have appeared as unethical "undue inducement."

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