



Gongsheng Across Contexts

A Philosophy of
Co-Becoming

Edited by
Bing Song · Yiwen Zhan

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Bing Song
Berggruen Institute China Center
Beijing, China

Yiwen Zhan
School of Philosophy
Beijing Normal University
Beijing, China



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NOTES ON CONTRIBUTORS

Frank Adloff is Professor of Sociology at the University of Hamburg, where he is also Director of the Humanities Centre for Advanced Studies on “Futures of Sustainability.” His recent publications include *Politics of the Gift: Towards a Convivial Society* (2022).

Alain Caillé is Professor Emeritus of Sociology at Paris-Ouest-Nanterre University. In 1981, he founded the *Revue du MAUSS* (Mouvement anti-utilitariste en science sociale, or Anti-Utilitarian Movement in the Social Sciences). He is the founder of the International Convivialist Association. He is the author of some forty books, including, in English, *The Gift Paradigm: A Short Introduction to the Anti-Utilitarian Movement in the Social Sciences* (2020).

Xia Chen is Research Fellow in Chinese Philosophy at Chinese Academy of Social Sciences (CASS), Beijing. She is an executive committee member of the International Council of Philosophy and Human Sciences (CIPSH), Co-Chair of Scientific Panel, UNESCO Silk Roads Youth Research Grant, and 2022-2023 Berggruen Fellow.

Judith Farquhar is Max Palevsky Professor in the Department of Anthropology and the College at the University of Chicago, retired. She has published books and articles on philosophical aspects of Chinese medicine, everyday health practices, and the life of bodies as seen in Chinese popular culture.

Jun Gong is currently Professor in the Department of Philosophy at Sun Yat-sen University. His research interest covers Chan Buddhism and Chinese philosophy. He has authored a number of influential monographs such as *Theses on the History of Chan Buddhism* (2006).

Jun He is Professor of Human Ecology at National Centre for Borderland Ethnic Studies in Southwest China and the School of Ethnology and Sociology, Yunnan University, China. He serves as Associate Editor for *Society & Natural Resources*. His research interests lie in global value chains, indigenous knowledge, non-timber forest products, agroforestry, and forest governance. His publications have appeared in *World Development*, *Development and Change*, *Journal of Peasant Studies*, *Land Use Policy*, *Human Ecology*, *Forest Policy and Economics*, and *Development and Change*, among others.

Tsuyoshi Ishii is Professor of Chinese Philosophy at Graduate School of Arts and Sciences, the University of Tokyo. He is also Director of East Asian Academy for New Liberal Arts, Tokyo. His English works are seen in *The Varieties of Confucian Experience: Documenting a Grassroots Revival of Tradition* (2018), *Li Zehou and Confucian Philosophy* (Roger T. Ames and Jinhua Jia ed., 2018), *A New Literary History of Modern China* (David Der-wei Wang ed., 2017), and so forth.

Lili Lai is Associate Professor in the School of Health Humanities at Peking University. Her research interests focus on body, everyday life, and medical practices. Her publications include *Hygiene, Sociality, and Culture in Contemporary Rural China* (2016), and *Gathering Medicines: Nation and Knowledge in China's Mountain South* (2021, with Judith Farquhar).

Xiao Ren is Professor of International Politics at the Institute of International Studies (IIS), Fudan University, Shanghai, China, and Director of the Center for the Study of Chinese Foreign Policy. Previously, he was Senior Fellow and Director of the Asia Pacific Studies Department, Shanghai Institute for International Studies (SIIS). His work has appeared in scholarly journals such as *The Pacific Review*, *Third World Quarterly*, *Asia Policy*, *East Asia: An International Quarterly*, *Journal of Contemporary China*, *British Journal of Politics and International Relations*, among others. He worked at the Chinese Embassy in Tokyo from 2010 to 2012. He received his Ph.D. in Political Science from Fudan University in 1992.

Bing Song is Senior Vice President of the Berggruen Institute, responsible for the strategic direction and development of programs at the Institute's China Center. She has been leading projects under the research theme of Frontier Science, Technology, and Philosophy and edited *Intelligence and Wisdom: Artificial Intelligence Meets Chinese Philosophers* (CITIC Press 2020 and Springer 2021). She is also the Editor-in-Chief of the Chinese language journal *Cuiling* (萃嶺), published annually by the Berggruen Institute.

Genyou Wu is Professor of Philosophy and Director of the Institute for Advanced Study in Dialogue of Civilizations at Wuhan University. He has published more than 10 academic monographs and more than 200 academic papers. He is the editor of *Journal of Comparative Philosophy and Comparative Culture*, which has published 17 volumes as of 2023. His areas of expertise include Ming- and Qing-era philosophy, comparative philosophy, political philosophy, and pre-Qin era Daoism and other classical thought.

Shijian Yang is Associate Professor in the Department of Philosophy at Xiamen University. His research focuses on the philosophy and history of life sciences. His book *What is the Unit of Life: A Study of the Concept of Individuality in Modern Biological Thought* won the fifth “Young Writers Award in History and Philosophy of Science” in 2020.

Yiwen Zhan is Lecturer at the School of Philosophy, Beijing Normal University. He mainly works in metaphysics and epistemology. Recently, he has been particularly interested in exploring the question-sensitive structures in epistemology and decision theory, and more broadly, in their implications in our understanding of modality and existence. He also has interests in the applications of plural logic in metaphysics, as well as the (meta-)metaphysics in Chinese philosophy.

Liping Zhao is the Eveleigh-Fenton Chair of Applied Microbiology and the Director of the Center for Nutrition, Microbiome, and Health at Rutgers University. He is also a fellow of the American Academy of Microbiology and a senior fellow at CIFAR. In addition, he lends his expertise to the Scientific Advisory Board for the Center for Microbiome Research and Education of the American Gastroenterology Association. His research utilizes the integration of metagenomics and metabolomics tools, coupled with dietary interventions. This approach facilitates a

systems-based understanding and predictive manipulation of gut microbiota, aiming to improve human metabolic health.

Weijia Zhou is a Ph.D. candidate at National Centre for Borderland Ethnic Studies in Southwest China, Yunnan University, and an assistant professor of development studies at Institute of Ethnic Culture, Dali University. Her research examines the agrarian study by using assemblage thinking to understand the local dynamics with multi-stakeholder involvement in resource governance.

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PART I

Introduction



What Intellectual Shift Do We Need in a Time of Planetary Risks? Inspirations from Symbiosis in Life Sciences and the Notion of *Gongsheng/Kyōsei*

Bing Song

CONTEXT AND INQUIRY

We live in an age of crises, some of which are planetary in scope and existential in nature. These include extreme social and political divisions, the looming global economic recession, lingering pandemics, climate change-induced extreme weathers and natural disasters, and more recently nuclear war threats in the ongoing hot war in Europe. So far, very few globally coordinated and effective efforts have been taken to address them. Worse still, a zero-sum mentality continues to shape and drive the “great power” contests, and as such, trade and financial sanctions, weaponization of currency, ideology and technology have taken the center stage of global geopolitics of late. We continue to lead our lives as if we were all independent and self-contained entities, with clear boundaries between “us” and

B. Song (✉)
Berggruen Institute China Center, Beijing, China
e-mail: songbing@berggruen.org

“them.” We firmly believe in unconstrained human agency with which we freely define and redefine who we are and take action or inaction as we see fit to advance narrowly conceived personal, group or national agendas.

Recognizing the increasingly deteriorating planetary condition, the co-editors and contributors to this book would like to contend with this framework of segregated thinking and put forward different perspectives on the accepted notions about what counts as an individual, whether our perceived self-sufficiency can withstand challenge, and how we are related to each other and to the rest of nature. In the process, we hope to tap into intellectual resources of the East and West, humanities and sciences, and identify globally shared ideas, which may guide humanity to reset our self-perception, our relationship with “others,” and help us better understand and address planetary scale challenges.

To that end, we would like to introduce the notion of *gongsheng* or *kyōsei* (共生 in both written Chinese and Japanese *kanji*), which has been used in China and Japan to translate the ubiquitous biological phenomenon of “symbiosis” discussed in life sciences. It has also been broadly used in social, economic and political contexts to refer to the conception of the world as consisting of mutually embedded, co-existent and co-becoming entities. So, what is symbiosis and what is *gongsheng/kyōsei*? How are they related to each other? What are the philosophical origins of *gongsheng/kyōsei* in the East Asian context? What implications can we draw for novel thinking about planetary challenges we face, and how can they inspire new thinking and action in dealing with the rapidly deteriorating planetary condition?

Symbiosis and Symbiogenesis in Life Sciences

“Symbiosis” is a Greek-inspired term coined by the German microbiologist and mycologist Heinrich Anton de Bary in 1878 to describe a biological phenomenon of the “living together of two or more different organisms,” in various relationships such as mutualism, parasitism and commensalism.¹ Modern life sciences research has found that symbiosis is ubiquitous—it exists in the world of plants, insects and animals, and it also underscores the relationship between human beings and the rest of

¹ Francisco Carrapico, “The Symbiotic Phenomenon in the Evolutive Context,” in *Special Sciences and the Unity of Science*, ed. Olga Pombo et al. (Dordrecht: Springer Netherlands, 2012), 116, <https://doi.org/10.1007/978-94-007-2030-5>.

nature. In recent decades, symbiosis has become a core principle of the contemporary study of biology, supplementing if not entirely replacing the essentialist concept of “individuality” in various branches of biological studies.² This has led to many biologists calling for a different definition of human being. For example, biologists Karmyar M. Hedayat and Jean-Clause Lapraz, after surveying how human organisms are intermingled with organisms around the human body, concluded that, “[t]he human being, more accurately, is an epiorganism consisting of both the human being proper and the commensal flora.”³

Contemporary microbiologist Liping Zhao, a contributor to this book, echoed this call for a redefinition of human being. Zhao first challenged the conventional notion of “organs,” which generally refer to well-defined units of a living organism with designated functions, such as heart, lungs and livers. Their state of well-being determines the state of health of the living organism. Based on his extensive gut microbiota research, Zhao noted that everyone has gut flora, which is indispensable for maintaining the individual’s health. In addition, similar to the conventionally defined organs, gut flora can be transplanted between living organisms. So, from medical and well-being points of view, it only makes sense that we group gut microbiota together with other organs and include them in the anatomical structure of the body. This would alter the definition of an organ. However, different from other organs, the boundary of one’s gut flora is not clearly delineated. Zhao noted that “[w]e might even say that this organ extends out of our body and into the bodies of the people in the environment closest to us.” So, from this point of view, we not only should revisit the definition of an “organ,” but also challenge the notion of boundaries when defining an organ and consider including symbiotic flora, as exemplified by our gut microbiome, in the biological definition of a human being.

As all-pervading symbiosis continues to challenge the notion of classical individuality, scientists have also introduced the notion of a “holobiont” in the study of behaviors of organisms and their evolution. A holobiont is an assemblage of a host and many other organisms living in or around

² Scott F. Gilbert, Jan Sapp, and Alfred I. Tauber, “A Symbiotic View of Life: We Have Never Been Individuals,” *The Quarterly Review of Biology* 87, no. 4 (December 2012): 326, <https://doi.org/10.1086/668166>.

³ Karmyar M. Hedayat and Jean-Clause Lapraz, *The Theory of Endobiogeny* (San Diego, CA: Elsevier, 2019).

it, which together form a discrete ecological unit through symbiosis.⁴ In this framework, some biologists claim that almost all development is co-development, whereby multispecies grow and adapt in tandem with each other—that is, in symbiosis with each other.⁵ This way, “natural selection” in an evolutionary process is more about nature selecting “relationships” rather than individuals or genomes.”⁶

In the field of evolution theory, the idea of symbiogenesis, literally “becoming by living together,” refers to the crucial role of symbiosis in major evolutionary innovations. It has been viewed as a curiosity in the scientific community until recent decades.⁷ One of the most vocal proponents of the symbiotic evolution theory was Lynn Margulis (1938–2011). Margulis’s symbiogenesis theory was based on her research on the emergence of eukaryotic cells from endosymbiosis. Her research revealed that “out of prokaryotic-prokaryotic symbiosis emerged eukaryotes. Out of prokaryotic-eukaryotic symbiosis emerged more competitive eukaryotes. And out of eukaryotic-eukaryotic symbiosis emerged multicellular life.”⁸ In her later work, Margulis went on to argue that symbiosis has been a primary force of evolutionary innovations. In summarizing the key debates involving evolutionary theories of symbiogenesis and Darwinism in recent decades, biology philosopher Shijian Yang noted in this book that Margulis believed that the prime source of evolutionary novelty was not random mutations or natural selection, but symbiosis. Yang further explained by quoting Margulis that the role of natural selection was simply to act as a filter for extant species.⁹ While Darwinian evolution

⁴ Lynn Margulis and René Fester, eds., *Symbiosis as a Source of Evolutionary Innovation: Speciation and Morphogenesis* (Cambridge, Mass: MIT Press, 1991).

⁵ Anna Lowenhaupt Tsing, *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins* (Princeton: Princeton University Press, 2015), 142.

⁶ Scott F. Gilbert et al., “Symbiosis as a Source of Selectable Epigenetic Variation: Taking the Heat for the Big Guy,” *Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences* 365, no. 1540 (February 27, 2010): 672–673, <https://doi.org/10.1098/rstb.2009.0245>; Tsing, *The Mushroom at the End of the World*, 142.

⁷ Carrapico, “The Symbiotic Phenomenon in the Evolutive Context,” 113.

⁸ Bradford Harris, “Evolution’s Other Narrative,” *American Scientist* 101, no. 6 (2013): 410, <https://doi.org/10.1511/2013.105.410>.

⁹ Lynn Margulis and Dorion Sagan, *Acquiring Genomes: A Theory of the Origins of Species* (New York: Basic books, 2003), 72.

theory speaks of species-by-species, self-organized evolution, predator-prey antagonistic struggle and the survival of the fittest, the symbiosis hypothesis centers on the dynamic encounter between an organism and its environment, multispecies entanglement and co-evolution.

In Yang's view, the debate between the two seemingly opposing schools of thought on evolution is reflective of two scientific traditions and two views of nature. While those who stick to the general conceptual framework of Darwinism are the loyal followers of the mathematical scientific tradition with a mechanistic view of nature, the school of symbiogenesis championed by Margulis has been heavily influenced by the natural history tradition with an organismic view of nature. In recent years, some scientists have begun to reconcile the differences between the two schools by proposing a framework of collaboration whereby both cooperative and competitive activities contribute to the maintenance and transformation of a system. Under this framework, Yang noted that in a holobiont, two sides of the symbiosis (i.e., cooperation and competition) are closely related for most of the life cycle, thus forming an integrated organism. This integrated organism can be regarded as a unit of natural selection. Therefore, Yang concludes that cooperation and competition actually constitute two different perspectives in analyzing the living world and that they are "not antithetical but complementary and interconnected."

This commonsensical conceptual framework of cooperation and competition comports with our experiences and observations about the human society and our relationship with nature. As a result, symbiosis and symbiogenesis theories in life sciences have in recent decades provided much support and intellectual inspiration to ecological and environmental studies as well as social and policy analyses across the globe.

The Notion of Gongsheng/Kyōsei in Contemporary Japan and China

As noted earlier, "symbiosis" in life sciences has been translated as *gongsheng* in China and *kyōsei* in Japanese, sharing the same two characters (*kanji*) "共生". The first character "*gong*" (or "kyo") 共 means commonality, sharedness and togetherness whereas "*sheng*" (or "*sei*") 生 means growth, production, thriving, living and emergence. Both characters date back to more than 3000 years ago, and each has been used in ancient classics, poems and literatures, but the combination of the two words into a

term of “*gongsheng/kyōsei*” was rarely referenced in ancient pre-Qin classics. The term, however, appeared in many writings and commentaries of Confucian, Daoist and Buddhist classics and history annals in later historic periods. The term appearing in these writings had the meanings of co-survival, co-growth or co-mingling.¹⁰ Contemporary Daoist philosopher Xia Chen pointed out in her contribution to this book that there are over 50 references to the term *gongsheng* in the Han Dynasty (202 BCE - 220 CE) Daoist classic, *The Scripture on Great Peace* 太平经 (*Taiping Jing*). In this scripture, similarly, *gongsheng* refers to the co-creation of all beings, humans included, by the primordial *qi* or co-growth and prosperity of human beings, creatures and other natural surroundings.

As if emboldened, and certainly partly inspired, by the development of modern life sciences around symbiosis, the terms *kyōsei* and *gongsheng* caught on in both modern Japanese and Chinese societies, respectively. The modern notion of *kyōsei* has had a long history in Japan. Many traced its modern origin to Benkyo Shiiō’s *Tomoiki* Buddhist Association, beginning in the late 1920s and lasting until after World War II, which promoted teachings of self-independence and a symbiotic and harmonious social life amid a disintegrating social order during and after the world wars.¹¹ In post-industrial Japan, the notion of *kyōsei* took on new meanings. Under the backdrop of economic boom and bust cycles, environmental degradation and social dislocation in the industrialized Japan, social and political analyses inspired by the notion of *kyōsei* bloomed in Japanese society, from academia and business organizations to social movements.¹² Contemporary philosopher Tsuyoshi Ishii pointed out in this book that the term *kyōsei* has become a common part of modern Japanese vernacular since the 1980s, and others have also viewed it as a

¹⁰ For example, *gongsheng* in “桑穀共生于朝” referred to the natural phenomenon of commensal plants, i.e., two different tree species growing into each other. *Gongsheng* in “羊肝共生椒食之，破人五脏” in 《金匱要略》 (*Jinkui yaolüe*) referred to co-mingling of food ingredients of different textures and tastes, thus producing conflicting energies. See databank of xueheng.net.

¹¹ Kishō Kurokawa, *The Philosophy of Symbiosis* (New York: Academy Editions, 1994).

¹² For an overview of the growth and development of *kyōsei* thinking since the 1980s in the context of public philosophy in Japan, please refer to Shinsuke Yasui 安井伸介, “Public Philosophy and the Thinking of *Kyōsei*—Diversity Theories in Modern Japanese Political Thoughts 公共哲学与共生思想:现代日本政治思想中的多元论,” *Taiwanese Journal of Political Science* 政治科学论丛 90 (December 2021): 1–34.

“key concept of the twenty-first century.”¹³ *Kyōsei* inspired broad-based discussions around issues of political diversity, social justice and women’s rights. As Ishii noted, “Regardless of the differences that existed between oneself and others (differences of gender, body, nationality, culture, language, ethnicity, religion, political views, economic status and so on), one still has to co-exist and grow with others.” In 2002, Ishii together with Yasuo Kobayashi and Takahiro Nakajima, fellow Japanese philosophers known for their expositions of public philosophy, co-founded a research center dedicated to the development of an international philosophy around the notion of *kyōsei*. At its core, the new institution was calling for a reconstruction of human subjectivity (人类主体的建构). In recent years, the discussion of *kyōsei* philosophy is no longer featured prominently in public debates in Japan. This is because, according to Ishii, this notion has been broadly assimilated into the thinking and practices of many aspects of Japanese life including educational institutions, corporations and social policies.¹⁴

The hotly debated *kyōsei* in the 1990s in Japan has also caught the attention of Chinese scholars. Since the mid-1990s, translated and introductory works on *kyōsei* discussions in Japan began to appear in China.¹⁵ Almost effortless and instinctively, the contemporary notion of *kyōsei/gongsheng* has been quickly absorbed into the Chinese society. Today, the

¹³ Contemporary Japanese philosopher Tatsuo Inoue noted that the widespread use of “symbiosis” in philosophical, social and political contexts in Japan, quoted in Yoichi Kawada, “Buddhist Thought on Symbiosis—And Its Contemporary Implications,” *The Journal of Oriental Studies*, 2010, 92–93, 96.

¹⁴ Author’s conversation with Japanese philosopher Tsuyoshi Ishii. See also Lai Shi-San 赖锡三 and Mark McConaghy 莫加南, “The Current World and Across Straits Tension in Urgent Need of the Philosophy of *Gongsheng*—In Conversation with Takahiro Nakajima 共生哲学对当前世界、两岸处境的迫切性: 与中岛隆博教授的对谈,” *Reflexion* 思想, July 28, 2022.

¹⁵ Shinsuke Yasui 安井伸介, “Public Philosophy and the Thinking of *Kyōsei* – Diversity Theories in Modern Japanese Political Thoughts 公共哲学与共生思想: 现代日本政治思想中的多元论,” 4. Earlier translated or introductory works on the discussion of *kyōsei* in Japan include (i) *The Idea of Kyōsei: Modern Interaction, Kyōsei and Commonality* 共生的思想: 现代交往与共生、共同的思想, by Ozeki Shuji 尾关周二, trans. Bian Chongdao, Liu Rong and Zhou Xiujing (Central Compilation & Translation Press, 1996); (ii) *New Gongsheng Thought* 新共生思想, by Kisho Kurokawa, trans. Qin Li, Yang Wei, Mu Chun-nuan, Lü Fei, Xu Suning, Shen Jinji (Beijing: China Architecture and Industry Press, 2008); and (iii) *Fusion and Symbiosis—Japanese Philosophy in the East Asian Context* 融合与共生: 东亚视域中的日本哲学, by Bian Chongdao (Beijing: People’s Publishing House, 2008).

term *gongsheng* is ubiquitous, and its meaning is viewed as plain and self-explanatory. The *gongsheng* narrative has been widely adopted in social, economic, business, environmental, ecological, ethnographic, medical and linguistic contexts. The term has even entered the Chinese Communist Party's official document of the 20th Party Congress concluded in October 2022, in which “harmonious *gongsheng* between humanity and the natural environment” (人类与自然的和谐共生) was cited as one of the goals of the Chinese-style modernization.¹⁶ While the notion of *gongsheng* hasn't been much discussed in the contexts of political diversity or social justice as in the case of Japan, Chinese scholars have extended the notion to wide-ranging areas such as international relations, sociology, environmental studies, ethnography, medical practices and business practices, some of which I will discuss later in this Introduction. Some Chinese scholars have also developed educational curriculums and textbooks on *gongsheng* teachings for use at high schools and universities.¹⁷

Structure of the Book and Note on the Translation of Gongsheng/Kyōsei

Without doubt, *gongsheng/kyōsei* has been viewed as a highly desired framework of thinking in social, economic and political contexts in both China and Japan. It reflects a deep cultural and psychological construct of East Asian societies, so much so that people rarely pause and reflect on the philosophical origin and foundation of this notion. This book represents a modest effort in helping address this lacuna. In Part II of this book, we will explore the intriguing parallels between the biological phenomenon of symbiosis and long-held worldviews and social practices of *gongsheng/kyōsei* in East Asia, which emphasize relationality and mutual embeddedness of all beings and the resulting ethos of “live and let live.” Scholars of Confucianism, Daoism and Buddhism share their thoughts on the philosophical origins of the thinking behind *gongsheng/kyōsei*. In Part III, we will examine ways in which notions of symbiosis and symbiogenesis revolutionized the studies of contemporary biology and evolution of life in recent decades and how the notion of *gongsheng* has been

¹⁶ Xi Jinping, “Report at the 20th Congress of the Chinese Communist Party” (Xinhua News Agency, October 25, 2022), https://www.gov.cn/xinwen/2022-10/25/content_5721685.htm.

¹⁷ For example, Ren Weibing, *A Reader on Philosophy of Gongsheng* 共生哲学读本 (Jinan University Press, 2016).

manifested and applied in broader contexts such as environmental ethics, multispecies ethnography, international relations and traditional medical practices. Finally, in Part IV, the book will end with contributions of two European convivialist intellectuals, Alain Caillé and Frank Adloff. Convivialism and *gongsheng/kyōsei* have been widely viewed as the functional equivalents in Japan and China although our European friends may be skeptical. I will explain the parallels and differences between convivialism and *gongsheng/kyōsei* later in this article. But in a nutshell, philosophical foundations for *gongsheng/kyōsei* and convivialism are different, but they are concerned about the same global crises and share many ethical and policy aspirations.

Before I go on to address key points arising from the chapters of the book, a note on the English translation of *gongsheng/kyōsei* is in order. As noted earlier, early commentators of *gongsheng/kyōsei* were much inspired by the development in the contemporary study of biology around symbiosis, as a result, *gongsheng/kyōsei* in social and political contexts has also been translated as “symbiosis” and *gongsheng/kyōsei*-ism as “symbiosism.” However, as chapters of this book will show, the scientific term “symbiosis” simply cannot express the rich philosophical and ethical connotations contained in the term *gongsheng/kyōsei*. Also, biological symbiosis on its own does not express ethical judgment or value preference. In the two workshops we convened in Beijing in 2021 and 2022 on the topic of *gongsheng*, participants including all the contributors of this book agreed that we should just use “*gongsheng* or *kyōsei*” in social, political and geopolitical contexts and avoid equating biological symbiosis with the notion of *gongsheng/kyōsei*, which implies mutual embeddedness, co-creation, co-generation and co-existence in broader contexts.

However, the term *gongsheng/kyōsei* is still foreign to most members of the international intellectual community. To facilitate understanding and inspired by the term “human becoming” (rather than human being), contemporary Japanese philosopher Nakajima translated “*kyōsei*” as “human co-becoming.”¹⁸ As we will see in later discussion, the notion of *gongsheng/kyōsei* truly speaks to planetary issues and has gone beyond the human sphere. For this reason, editors of this book suggest dropping “human” from the translation. As a result, for convenience’s sake, we will use “co-becoming” as a rough translation of *gongsheng/kyōsei*. But

¹⁸ See note 4 of Tsuyoshi Ishii’s chapter of this book.

in most cases, we will use *gongsheng* or *kyōsei* in the hope of introducing this important notion into the global discourse on planetary philosophy.

To make things even more complicated, the term “convivialism,” coined by Alain Caillé, the leader of the European intellectual convivialist movement, was translated as *gongsheng*-ism or symbiosism (in Chinese characters 共生主义). As my later discussion will show, philosophical foundations of *gongsheng/kyōsei* are different from those of convivialism, particularly at an ontological level. It is more appropriate in my view to translate convivialism as the doctrine of co-existence or co-prosperity, in Chinese characters 共存主义 or 共容主义. This way, we can clearly distinguish between the notion of *gongsheng/kyōsei* and that of convivialism in European, and Chinese/Japanese languages.

This is just one of many examples, which illustrates the difficulty of translating concepts across disciplines and across cultures.

PHILOSOPHICAL ORIGINS OF THE NOTION OF GONGSHENG

Philosophical origins of the notion of *gongsheng* in the East Asian context are two-fold. One is the native Chinese philosophical traditions, which include teachings of *Yi Jing* 易经 (Book of Changes), Confucianism and Daoism. More specifically, the thinking behind the contemporary notion of *gongsheng* can be traced back to the ancient propositions of the Unity-of-Tian-and-Man 天人合一, Oneness-of-All-Beings 万物一体 and *shengsheng* 生生, which are themselves mutually embedded and closely related. The second intellectual source of the *gongsheng* thinking is Buddhism, which was introduced into China in the first century and has since been firmly cemented into the Chinese intellectual tradition. Buddhist’s notion of co-dependent origination 缘起 (i.e., the Buddhist principle of cause and effect, referring to the multiplicity, mutual causality, superposition and inter-penetration of causes and effects) has profoundly shaped the East Asian thinking on the symbiotic and interrelated planetary existence. I will address them in turn in the sections below.

Influence of Native Chinese Philosophical Traditions

(a) *Unity-of-Tian-and-Man*: The word “*tian*” in Unity-of-Tian-and-Man occupies a central place in Chinese philosophy and popular cultural constructs since ancient times. Depending on the context, *tian* (which

has often been roughly translated as “heaven” or “heavens”) could mean the supreme sovereign of the cosmos, the natural and experiential environment in which humans flourish and perish, or the ultimate truth or laws of the cosmic order in a metaphysical sense.¹⁹ The thinking behind Unity-of-*Tian*-and-*Man*, centering around the relationship between *tian* and human beings, first appeared in the Spring Autumn Period (770–476 BCE), the most consequential historic period in the development of the native Chinese thought, and then entered the imperially sanctioned learning through the efforts of the then most influential Confucian scholar-official Dong Zhongshu 董仲舒 (179–104 BCE). The notion finally took shape in Song Dynasty (960–1279) thanks to the efforts of Neo-Confucian scholars, such as Zhang Zai 张载 (1020–1077), Cheng Yi 程颐 (1033–1107) and Cheng Hao 程颢 (1032–1085).²⁰ Interest in this notion continued to captivate the imagination of Chinese thinkers for many centuries since then. It is without doubt that the Unity-of-*Tian*-and-*Man* is one of the most foundational propositions of the native Chinese philosophical traditions,²¹ and it sets a basic tone for Chinese philosophy.²²

What does this thinking entail and in what way it can inspire and inform today’s notion of *gongsheng*? First of all, human beings are creations of *tian* and remain primordially related to *tian* even after their emergence. In the case of Daoism, *Dao* occupies an even higher ontological status than *tian*. Daoism postulates that *Dao* gives rise to *tian* and earth 天与地, and that human beings are also part of the creations. The ultimate creative force being *tian* or *Dao*, human beings are a mere one kind of many creations. If we take *tian* to mean nature or the cosmos circling us, we have been part of it *ab initio*. Human beings can only flourish if we follow the laws of the cosmos, and we should strive to attain

¹⁹ Zhang Dainian, “An Analysis on the Thinking of Unity-of-*Tian*-and-*Man* in Chinese Philosophy 中国哲学中的‘天人合一’思想的剖析,” *Peking University Journal—Edition on Philosophy and Social Sciences*, no. 1 (1985).

²⁰ Zhang Dainian (1985); Liu Zhen, “The Thinking of Unity-of-*Tian*-and-*Man* Revisited and Implications for Ecology 重思天人合一思想及其生态价值,” *Philosophy Studies* 哲学研究, no. 6 (2018).

²¹ Yueh-Lin Chin, “Chinese Philosophy,” *Social Sciences in China* 1, no. 1 (March 1980); Yu Ying-Shih, *Between Tian and Man—A Study on Origins of Ancient Chinese Thought* 论天人之际——中国古代思想起源试探 (Zhonghua Book Company, 2014), 152.

²² Yu Ying-Shih, *Between Tian and Man—A Study on Origins of Ancient Chinese Thought* 论天人之际——中国古代思想起源试探, 153.

proximity or complete (re)union with the cosmic order. Among the classical traditions, Confucianism is known for its humanistic concerns and places much more emphasis on human proactivity. Daoism also accords a special position to human beings for our ability to modify our actions to be in tune with the rhythms of the cosmic laws. But these traditions have premised such human proactivity on respect and awe for the laws of the cosmos rather than placing humans apart from, above, or in opposition to the rest of nature.

Secondly, although human beings are creations of *tian*, we don't become stand-alone or self-contained entities after the creation, but rather we remain a part of, and intricately entangled with, *tian*. In fact, there are no clear boundaries between all forms of beings and the fluidity is such that it would be hard to claim a self-contained and autonomous agency for any form of existence. Some theories on the relationship between *tian* and human beings have gone even further to postulate that human beings and *tian* are of the same structural construct and follow the same cosmic rules 人副天数.²³ Proponents of this line of thinking would argue that natural phenomena are also reflective of, and parallel to, human minds, and *tian* is able to award or punish humans by favorable climatic conditions or natural calamities as appropriate. Song Dynasty Neo-Confucianist scholar Cheng Yi 程颐 went even further by noting that *tian* and humans are of one in essence, therefore the narrative on the unity of the two is redundant (天人本无二, 不必言合).²⁴ So, at an ontological level, "*tian*" is not external to human beings, and they are of the same origin, the same make and structure, and the same essence.

While this theory of aligning human beings fully with the structures and vicissitudes of the natural phenomena has lost its intellectual appeal in modern times, it continues to be influential in popular Chinese thinking. To this day, when encountering unprecedented natural calamities, many people would regard these as manifestations of retributions for heinous misdeeds by unrepentant humans.

(b) *Oneness-of-All-Beings* (万物一体): Related to, and explicit in, the notion of Unity-of-*Tian*-and-Man is the discussion relating to oneness or the same ontology 一体 of all forms of beings, humans

²³ Zhang Dainian, "An Analysis on the Thinking of Unity-of-Tian-and-Man in Chinese Philosophy 中国哲学中的‘天人合一’思想的剖析。”

²⁴ Zhang Dainian, 5.

included. In his contribution to this book, contemporary Confucian philosopher Genyou Wu explained how the proposition of Oneness-of-Consummate-Persons-and-Things (仁者与物同体 *renzhe yu wu tongti*) or Benevolence-of-Oneness 一体之仁 (*yiti zhiren*), a core of the Song-Ming Neo-Confucianism contributed to the thinking of *gongsheng*. In Wu's analysis, Song Dynasty Neo-Confucian scholar Zhang Zai's theory of foundational *qi* 气本论 (*qiben lun*) and his idea of "universal camaraderie" of all beings 民胞物与 (*minbao wuyu*) were considered as a basis for the thinking of *gongsheng* and related ethical aspiration. Zhang Zai extended the Confucian doctrine of benevolence to the broader cosmic realm to include creatures and other forms of beings. He famously wrote that "[*tian*] is my father and the earth is my mother...that which fills up nature I regard as my body, and that which directs nature I consider as my capacity to resonate. All people are my brothers and sisters, and all things are my companions."²⁵ The metaphysical basis for this camaraderie thinking is the theory of *qi*, according to which, all things are made of, formed and animated by *qi*. According to Qian Mu, the late master of Chinese classics and history, *qi*, is the indivisible infinitesimal unit of matter, which is the common substance for all things in the universe. In addition, *qi* is always active and dynamic.²⁶

Song Dynasty Neo-Confucian scholars first used the notion of Benevolence-of-Oneness to emphasize the sense of oneness as the moral basis for social care and people's livelihood 博施济众.²⁷ Wang Yangming 王阳明 (1472–1529), a Ming Dynasty Neo-Confucian scholar-official, expounded the proposition further by introducing the more metaphysical notion of *liangzhi* 良知, translated as "innate knowing" or "innate knowledge," referring to the transcendental and naturally endowed essence of all forms of beings. In this context, Wang notes that human *liangzhi* are the same for creatures and other things and we were all originally of one.²⁸ While Wang, like all his predecessors in the Confucian school of

²⁵ Jung-Yeup Kim, *Zhang Zai's Philosophy of Qi: A Practical Understanding* (Maryland: Lexington Books, 2015), 52.

²⁶ Qian Mu, *Discourses on Chinese Thoughts* 中国思想通俗讲话 (Beijing: Jiuzhou Publishing House, 2011), 74.

²⁷ Chen Lai 陈来, "Oneness of All Things: Wang Yangming Thoughts in His Later Years 万物同体——王阳明思想的晚年发展," *Guangming Daily*, February 6, 2021.

²⁸ "The innate knowledge of man is the same as that of plants and trees, tiles and stones. Without the innate knowledge inherent in man, there cannot be plants and trees,

thought, emphasized the uniquely endowed human capability and thus moral obligation to bring about cosmic flourishing, the oneness notion nonetheless extends the care above and beyond human-centric concerns. After surveying classical texts of Confucianism, Daoism and Mohism, the late Princeton University historian Ying-shih Yu marveled at the amazing convergence on the ontological thinking of oneness of human beings, creatures and the rest of nature among these otherwise different schools of thoughts.²⁹ Reflecting a general scholarly consensus, Yu attributed this convergence in large part to the universal *qi*, from which human beings, creatures and the rest of nature emerged and such co-emergence manifests itself in the essential *Dao-qi* cosmic whole. In Yu's framework, the *Dao-qi* whole is the equivalent of *tian*.³⁰ Therefore, oneness also emphasizes the outlook of the whole, which consists of dynamically interactive, isomorphic, mutually embedded and co-becoming parts.³¹ Contemporary Confucian scholar Lai Chen noted that "oneness of all things in the universe" 万物一体 (*wanwu yiti*) is not only an ontological statement, but also an aspiring high-level realm of human accomplishment.³²

(c) *Shengsheng* (生生): The third notion from the native Chinese philosophical thinking which has shaped and informed the contemporary thinking of *gongsheng* is *shengsheng*. *Shengsheng*, invariably translated as birth, growth, creativity and vitality, was featured prominently in *Yi*

tiles and stones. This is not true of them only. Even Heaven [*tian*] and Earth cannot exist without the innate knowledge that is inherent in man. For at bottom, Heaven, Earth, the myriad things, and man form one body. The point at which this unity is manifested in its most refined and excellent form is the clear intelligence of the human mind. Wind, rain, dew, thunder, sun and moon, stars, animals and plants, mountains and rivers, earth and stones are essentially of one body with man. It is for this reason that such things as the grains and animals can nourish man and that such things as medicine and minerals can heal diseases. Since they share the same material force [*qi*], they enter into one another." See Wing-tsit Chan, translated with notes, *Instructions for Practical Living and Other Neo-Confucian Writings*, (Columbia University Press, 1963). (王阳明, 《传习录》, "人的良知, 就是草、木、瓦、石的良知。若草、木、瓦、石无人的良知, 不可以为草、木、瓦、石矣。岂惟草、木、瓦、石为然, 天地无人的良知, 亦不可为天地矣。盖天地万物与人原始一体, 其发窍之最精处, 是人心一点灵明, 风、雨、露、日、月、星、辰、禽、兽、草、木、山、川、土、石, 与人原只一体。故五谷禽兽之类皆可以养人, 药食之类皆可以疗疾。只为同此一气, 故能相通耳。)

²⁹ Yu Ying-Shih, *Between Tian and Man*, 36; Yu Ying-Shih, 166.

³⁰ Yu Ying-shih, 166.

³¹ Chen Lai 陈来, *Ontology of Ren 仁学本体论* (Sanlian Publishing House, 2014), 30.

³² "以天地万物为一体既是境界, 又是本体" in Chen Lai, *Ontology of Ren*, 33.

Jing, which is the intellectual foundation of native Chinese philosophies including Confucianism and Daoism. Ancient sages who contributed to *Yi Jing*, basing their observations on the ebb and flow of natural forces and the vicissitudes of human affairs, postulated that *shengsheng* is the universe's fundamental attribute and all things therein. The highest and greatest capacity of nature's vital force is *sheng*, i.e., the force of giving and maintaining of life.³³ In this spirit, some people would translate *shengsheng* as "live and let live." Contemporary Chinese philosopher, Thomé Fang 方东美 (1889–1977), translated *shengsheng* as "creative creativity." He explained that *shengsheng* signifies universal life forces, denoting cultivation, striving for success based on a thorough understanding of the laws of nature, ceaseless creation, coping with perpetual changes and finally accomplishing continuity and eternity.³⁴ Therefore, *shengsheng* is about universal life and creative force immanent throughout the universe and in all things therein, including humans, creatures and plants.

Savoring the vitality of life in the daily environment holds strong aesthetic and poetic appeal for the Chinese literati. An oft-told story concerning Zhou Dunyi 周敦颐 (1017–1073), one of the most celebrated Neo-Confucian scholars during Song Dynasty, is telling. Friends asked Zhou why he did not weed the grass outside his windows. He replied, "aren't they trying to grow and persist just like us (与自家意思一般)?" Zhou appreciated the tenaciousness of a humble life form, savoring his camaraderie with other life forms and reveling in their *joie de vivre* displayed by nature. This aesthetic and poetic sentiment toward other life forms and a desire to be at one with nature has found ample expression in paintings and poems throughout the Chinese intellectual history. These idiosyncratic literati sentiments remain highly valued by today's educated Chinese as they scramble to salvage moments of serenity and internal reflection in their otherwise demanding and hectic modern lives. So, in the minds of the Chinese philosophers, the commonality which brings together all forms of beings is this life force and quest for survival, continuity and thriving. All human values shall be framed with this fundamental notion of *shengsheng* in mind. As a corollary to this notion, life and all

³³ 天地之大德曰生 (The greatest attribute of *tian* and earth is giving and maintaining life), in *Yi Jing* 易经 (Book of Changes)-*Xi Ci II* (Great Treaties II). For a complete translation, see Richard Wilhelm, trans., *Book of Changes* (Penguin Books, 1989).

³⁴ Thomé Fang 方东美, *Sheng Sheng Zhi Mei* [The Virtue of *Sheng Sheng*] (reprinted by Peking University Press, 2019), 47; Fang, 128–30.

other living beings should be respected and cared for. Living, life-giving and life-maintaining are the highest form of virtue.

The idea of *shengsheng* is also manifested throughout classical Daoism, as contemporary philosopher Jun Gong points out in his essay on Daoism and *gongsheng* in this book. When Laozi talked about all things are co-created simultaneously 万物并作 (*wanwu bingzuo*), Jun Gong regards this as “a clear reference to the meaning of *gongsheng*.” Laozi’s notion of *gongsheng* not only speaks to the origin of the natural environment, but also highlights the all-pervasive phenomenon of co-creation and co-existence in social and political contexts. *Gongsheng* points to the common origin and mutual inclusiveness of all things, and it should be the foundation of political philosophy of “unconstrained (absolute) equity” (荡然公平 *dangran gongping*). Another ancient Daoist philosopher Zhuangzi (369–286 BCE), on the other hand, depicted, in one of his characteristically imaginative and poetic parables, an ideal world of the “age of perfect Virtuosity” (至德之世 *zhide zhishi*) where humans can take a stroll with beasts and climb up a tree to observe life within a bird’s nest without startling the creatures. This is a world where the spirit of “live and let live” prevails, dualities are extinguished, and humans and beasts are natural friends and peacefully co-exist. Similar to Buddhist teachings which will be discussed below, Jun Gong reminds us that in the thinking of both Laozi and Zhuangzi, the discussion of *gongsheng* is merely a means to the end, which is the ultimate comprehension of *Dao* 悟道 (*wudao*). As such, they were both highly skeptical of the utility of outward knowledge seeking and intellectual investigation in bringing people closer to *Dao*. Instead, they both preached searching inward to seek transcendent consciousness to be in union with *Dao*.

In sum, the propositions of the Unity-of-*Tian*-and-Man, Oneness-of-All-Beings and *shengsheng* are mutually embedded and inter-penetrating. While Unity-of-*Tian*-and-Man speaks to the shared and relational cosmos in which human beings, creatures and plants were co-created and subsequently co-habit and co-exist, the notion of oneness focuses more on the same origin and ontology of all beings. Finally, *shengsheng*, depicting the live energy of all living beings and the ethos of striving to be in harmony with nature, becomes a human ethical aspiration for all times.

Influence from Buddhist Teachings: Doctrine of Co-Dependent Origination

As noted earlier, *gongsheng* as a term appeared in many Buddhist writings in ancient times. It often appears in the context of discussing cause and effect and co-dependent origination. Japanese scholar Yoichi Kawada pointed out, “The wisdom contained within the concept of dependent origination is that all people and all living things are interconnected, and it is within this concept that we can begin to see how the Buddhist ideal of a symbiotic society can be made a reality.”³⁵ Contemporary philosopher Ishii, on the other hand, explained a different source of Buddhist influence on *gongsheng/kyōsei*. He noted that Benkyo Shiio, the influential Japanese Buddhist monk, educator and social reformer in the twentieth-century Japan, traced his *kyōsei/tomoiiki* thinking to Master Shan Dao 善导 (613–681), the founder of Pure Land Buddhism, which preached that all living creatures be reborn (together) in the Land of Pure Bliss (愿共诸众生, 往生安乐国).

The doctrine of co-dependent origination states that all forms arise in dependence upon others³⁶ and that such forms are constantly changing. Peter Harvey in his *An Introduction to Buddhism* explained that according to this doctrine, “all things, mental and physical, arise and exist due to the presence of certain conditions, and cease once their conditions are removed: nothing (except *nirvana*) is independent.”³⁷ Therefore, Jun Gong in his chapter on Buddhism and *gongsheng* declared that “co-dependent origination is simply *gongsheng*.” However, he reminded us that the discussion of co-dependent origination and thus *gongsheng* in the Buddhist teaching only speaks to the phenomenal world. Ultimately all forms we perceive and observe in the phenomenal world are “inextricably linked to the structure of consciousness and the mind,” which give rise to the phenomenal and mental worlds of all sentient beings. The fact that we have the perception of the ever-changing forms of the phenomenal world is because we are ignorant (*avidya* in Sanskrit and *wuming* 无明

³⁵ Yoichi Kawada, “Buddhist Thought on Symbiosis,” 92–93.

³⁶ 阿含经, “此有故彼有, 此生故彼生, 此无故彼无, 此灭故必灭。” “That being, this comes to be; from the arising of that, this arises; that being absent, this is not; from the cessation of that, this ceases,” in Peter Harvey, *An Introduction to Buddhism—Teachings, History and Practices*, 2nd ed. (Cambridge University Press, 2013), 65.

³⁷ Harvey, *An Introduction to Buddhism*, 65.

in Chinese), failing to understand the true nature of the universe, which is formless and has no beginning or end, no birth nor death. Therefore, “*gongsheng*” in Buddhist teachings is related to description and deconstruction of the phenomenal world. Its true intention is not to derive moral lessons or ethical rules for the human sphere. Instead, the core of Buddhist teaching is to guide all sentient beings to engage in internal practice and reach *nirvana*. As Jun Gong noted at the end of his essay, in order to be free from *gongsheng*, “we must withdraw consciousness from the external illusory world into our inner hearts” and through the process of transforming knowledge into transcendental wisdom, we can be free from the world of ceaseless *gongsheng*.

In conclusion, philosophical traditions of Confucianism, Daoism and Buddhism all contributed to the modern notion of *gongsheng*, which speaks to the conviction and the worldview of mutually embedded, co-existent and co-becoming entities. The notion of *gongsheng*, shaped by these traditions, behooves us to question the validity of the notion of an individual being a self-contained and autonomous entity and reminds us of mutually embedding, co-existent and entangling planetary relations. It also inspires within us reverence and care toward creatures, plants and other co-inhabitants and even inorganic things in the natural surroundings.

Differences, Competition and Collaboration: Integral Parts of Gongsheng/Kyōsei

However, a *gongsheng* or symbiotic way of living in harmony with each other does not mean living without frictions or competition. Nor does it call for uniformity of all beings. True to the original meaning of its biological equivalent, *gongsheng/kyōsei* by definition implies the living together of different yet connected beings. The underlying assumption of the word “*gong*” in *gongsheng* is about bringing together different things, and it has often been used in connection with co-creation, co-generation or co-living of myriad things 万物 (*wanwu*) in Chinese classical texts. According to Jun Gong, “Zhuangzi believes that *gongsheng* is all about respecting the very nature of a thing, its diversity, its otherness.”

In his exposition on *kyōsei*, contemporary Japanese philosopher Tatsuo Inoue also pointed out that:

The contemporary meaning of symbiosis does not include the desire for individuals to merge together around a single mindset, but rather, to aim for a mutually creative co-existence wherein individuals respect, but also maintain a certain distance from each other...a symbiosis is the co-existence of unlike components, and the right to be different is accepted by the members of its community, which is fundamentally different from assimilation into one like-minded entity.³⁸

Another contemporary Japanese philosopher Nakajima emphasized the importance of “mutual critique” 相互批判 in realizing the ideal of *kyōsei* in discourses of national and international politics.³⁹

While differences enrich and spur mutual learning, they may also lead to tension and competition. Contemporary Confucian philosopher Genyou Wu pointed out that the “symbiotic world of *qi* is not a realm of serenity and calm; it includes what is known as “attacking and seizing” (“攻”和“取”), i.e., the various struggles among people and animals in the world”. But then how should one deal with the tension and competition in a world of *gongsheng/kyōsei*? This is where the “harmonizing” process becomes critical. The term “harmony” 和谐 (*hexie*) has been much misused or abused in the realm of China-related political statements and commentaries. It is worth noting though, contrary to the usual understanding, heterogeneity and tension are inherent in the state of harmony. It involves an integration of different forces and is about coordination, transformation and growth. It also refers to a process where learning, absorbing, merging and transformation take place.⁴⁰ This is akin to the process of making delicious and efficacious *geng* (羹 thick soup in Chinese cuisine) or decoction as depicted in Lili Lai and Judith Farquhar’s chapter in this book. According to them, the medical cooking process is a process of combining different varieties of ingredients, which needs to be “slow cooked over a fire; the work of harmonizing involves not only flavors but the heat of fire and the moistening of water.” Therefore, being in symbiosis or *gongsheng* with each other would start with respecting and appreciating differences, followed by mutual learning and absorbing,

³⁸ Quoted in Yoichi Kawada, “Buddhist Thought on Symbiosis,” 94–95.

³⁹ Lai and McConaghy, “The Current World and Across Straits Tension in Urgent Need of the Philosophy of Gongsheng – In Conversation with Takahiro Nakajima 共生哲学对当前世界、两岸处境的迫切性: 与中岛隆博教授的对谈。”

⁴⁰ Li Chenyang, *The Confucian Philosophy of Harmony* (London: Routledge, 2014), 9.

reorienting, and adjusting each other and finally leading up to something which are mutually penetrating, mutually embedded and collectively transformed. This process is complex and involves give-and-take, sacrifice, self-restraint, learning and benefiting from others. In addition, the symbiotic harmonizing process is ceaseless, without a beginning or an end.

**GONGSHENG/KYŌSEI: A PROSAIC FACT, A COMPOSITE
PHILOSOPHICAL CONCEPT AND AN INSPIRATION
FOR ETHICAL LIVING BY HUMAN SPECIES**

Modern studies of symbiosis and microbiome have revealed to us a world of multi-organisms living in a superimposed manner—we are not just living side by side; we are mutually embedded and inter-penetrating. For scientific research purposes, scientists need to disentangle and isolate these intertwined organisms. But they increasingly recognize that the old method of reducing to the smallest “individual” unit—being it a cell or a gene for observation and analysis—skews the perception of reality because no “unit” exists, moves, changes, transforms in isolation. The artificial “individuality” may stunt or even obstruct the process of understanding the world. As a compromise, life scientists’ working assumption on the unit of analysis has changed to a “holobiont,” which in Shijian Yang’s words, is the “symbiotic complex formed by a multicellular animal/plant organism and the microbial community living inside its body.”

The strong indications of relationality among beings, the ever-changing nature of all living things and the holistic view of the living world embedded in the contemporary study of symbiosis and symbiogenesis struck a chord in the minds of East Asian thinkers, who quickly and effortlessly connected the biological symbiosis to the deep and long-standing intellectual traditions of holism, relationality and the common origin and equity of all things. These traditions found their strongest expression in notions of Oneness-of-All-Beings, Unity-of *Tian*-and-*Man* and *shengsheng*. In times of rapidly advancing science and technology, scientific findings come with prestige and a tremendous power of persuasion. The fact that East Asian philosophers and thinkers in the social and political spheres enthusiastically embraced the notion of biological symbiosis and started engaging productively in social and political analyses of *gongsheng/kyōsei* is most telling. Evocation of *gongsheng/kyōsei*

has become so common that the Japanese philosopher Kobayashi made plain that *kyōsei* is simply a “mundane, prosaic fact,” not a “mysterious, metaphysical ‘truth’” (cited in Ishii’s article in this book).

Gongsheng/kyōsei being so prosaic and commonsensical in both Japanese and Chinese societies, people rarely doubt its validity and positivity. Having gone through the philosophical origins of this contemporary notion above, let me briefly summarize below philosophical and ethical implications of *gongsheng/kyōsei*.

First, the notion of *gongsheng/kyōsei* challenges and enriches the hypothetical and classic view of individual being an autonomous and self-contained entity. Biological facts and life experiences reinforced by the East Asian philosophical traditions have shown that the self-contained and autonomous individual is a fiction, a point often forgotten by or lost on people. From the microbiome point of view, we are connected to our parents and people close to us from the day of our conception. This connectivity gets multiplied and superimposed with others and the natural surroundings after our birth. It is impossible for us to disentangle from this endless and ceaseless web. This led some biologists cry out that “we have never been individuals.”⁴¹

From a social relationship point of view, we were never independent either—we are born into an entangled family and social relationships from day one. All our actions and thinking have been shaped by or in response to others, who in turn, are being shaped by us in the process of interaction and communication. In this ceaseless process of interaction and communication, we learn, adapt, transform and collectively cement our mutual embeddedness and mutual inclusion. This thinking has been reinforced by the metaphysics of the common origin and the same ontology of all things in the three dominant East Asian philosophical traditions, namely Confucianism, Daoism and Buddhism. In a nutshell, **individuals have to be defined, conceived and treated in a web of relationships from day one. Relationality is the essence of humanity and human society.** Any philosophy, politics and policy conceived with particular individual person, individual group or individual nation alone should be viewed with suspicion. Instead, any philosophy, politics and policy should at all times consider their lateral impact on other connected persons or things including foreign nationals, neighboring communities, adjacent

⁴¹ Gilbert, Sapp, and Tauber, “A Symbiotic View of Life.”

groups, non-core persons, non-human species and the natural environment. This way of approaching the concept of human beings will surely come into tension with, and as a result, enrich, the mainstream definitions of the individual or personhood, and the general understanding of the supremacy of national interest. Then, how should one reframe tension and competition in a symbiotic world?

This leads to the second aspect of the notion of *gongsheng/kyōsei*, which speaks to differences throughout the symbiotic process. **We have never been lone individuals, but we each have individuality, which make us different from, but related to, each other.** Similar to the biological world, *gongsheng/kyōsei* won't exist if there are no differences among the beings. Differences bring friction, competition, confrontation and struggle. But they also spur learning, adaptation and transformation. In fact, these seemingly opposing reactions to differences are many sides of a prism. Differences should not be framed as irreconcilable and binary conflicts because, after all, we are all derived from the same source and are mutually embedded into each other. Just picture the *yin-yang* symbol in your mind—*yin* and *yang* have never been two starkly opposing forces. The seed of *yin* is embedded in *yang* and the seed of *yang* is embedded in *yin*; such seeds are agents for change and they fuel movement and mutual transformation. Ethical lessons to be drawn here are multiple. First, differences are to be appreciated and engaged with. They offer a source of learning and a point of reflection, and they provide a driving force for change and transformation. Second, in the grand scheme of things, there is no such thing as zero-sum game, and all forms of beings are derived from the same source and as planetary beings we are mutually embedded and in the same boat. In this spirit, competition in the human sphere needs to be conceptually reframed. Competition should be framed not as a zero-sum game, but a process of learning and adapting and collective transformation. Thirdly, in a competition informed and shaped by *gongsheng/kyōsei*, the maximization ethos of capitalism such as profit and value maximization will be moderated. Instead, we should practice the virtues of modesty, self-restraint, empathy and compassion.

The third aspect of *gongsheng/kyōsei* is the spirit of *shengsheng*, which is about growth, life generation and the ethos of “live and let live.” The process of *gongsheng* is not linear nor one-directional. It is not about achieving an ultimate end goal of a certain perfect state, but a constant process of life generation, growth, perishment, transformation and recreation. The highest form of virtue is to give life, enable growth and vitality,

and promote creativity and continuity. Universal camaraderie between all forms of beings advocated by Neo-Confucianism and Daoist notions of planetary wealth of focusing on biodiversity and abundance of living things are most instructive for the contemporaries.

The fourth and last point to note about the notion of *gongsheng* is that under all three dominant philosophical traditions, achieving a state of *gongsheng* doesn't represent the highest form of wisdom in the world. While *gongsheng* explains and describes the phenomenal world and human beings need to be reminded of the interdependence of all beings and strive in harmony with each other, in both Daoism and Buddhism, the *gongsheng* narrative is a mere means to the end, which is the ultimate comprehension of *Dao* or realization of enlightenment (*nirvana*).

GONGSHENG IN BROAD CONTEXTS

The notion of *gongsheng/kyōsei* has been broadly deployed in both Japanese and Chinese societies. As noted earlier, the notion of *kyōsei* was prominently featured in the Japanese public philosophy movement in the 1990s and was used to counter right-wing nationalism and imperialism and for advocating political and social diversity in the Japanese society. In contemporary China, the broader application of *gongsheng* concept presents a different landscape, with different emphases and orientations. I will name but a few below.

Ecological Anthropology—From De-Gongsheng to Re-Gongsheng

Ecological anthropologists Jun He and Weijia Zhou, in their contribution to this book, pointed out that “one of the core tasks of ecological anthropology is to observe and reveal how humans live in symbiosis (*gongsheng*) with nature.” They traced the history of intellectual traditions of distinguishing nature from culture, humans from natural environment in the twentieth century and noted that only in the recent two decades, ecological anthropologists have converged on the ideas of symbiotic (*gongsheng*) relationship between humans and nature and between ecological environment and human society. Thanks to time-honored practices informed by ancient philosophical and cultural traditions, He and Zhou noted that ecological anthropology in the Chinese scholarly context “has always discussed culture and environment, humanity and nature as a whole.” They cited several successful examples in China's southwest region where

biological and cultural diversity flourished symbiotically. Unfortunately, the general reality on symbiotic co-prosperity of human beings and other non-human species has been grim particularly in the recent decades, as the pursuit of economic growth has been at the commanding height and rapid industrialization and globalization occurred at a breakneck speed. These economic developments are often made at the cost of the symbiotic and ecological balance. He and Zhou characterized the process of environmentally destructive economic growth as “*de-gongsheng*” (de-symbiotization 去共生). Recalling the ideal of the symbiotic world, they are calling for a *re-gongsheng* (re-symbiotization 再共生) in our thinking and action and retune ourselves to the balance between growth and nature.

A Gongsheng-Inspired International Relations Theory?

International relations theorists in China found much inspiration in the notion of *gongsheng* and imagined an international order with *gongsheng* as its foundational concept. Contemporary international relations theorist Xiao Ren, in his contribution to this book, traced the history of the development of *gongsheng*-based international relations theory in China. Ren himself is a pioneer in this highly generative theoretical creation process. Having reviewed the long history of interactions between China and other smaller nations in the pre-modern East Asian region, Ren and his colleague Changhe Su noted that, in the long history of East Asia, while there was no equality of states of varying sizes in the modern sense of the term, there had been in general long periods of regional peace. Ren and Su recalibrated the “tributary system” as a *gongsheng* (symbiotic) system whereby there were “multiple centers and overlapping intersections that allow each country in a region to be secure in its position.” In this order, the smaller states accorded deference and respect to the large ones, and the latter in turn fostered and protected smaller states, with each performing their respective roles in the ritualistic order of *tianxia* 天下 (all under *tian*). Methods of exchanges among these states included tributary trade, voluntary migration and shared legitimacy. Drawing inspirations from this *gongsheng* system, Su and Ren identified “relationship” (*guanxi*) as the core notion for a symbiotic international relation. In mutually reliant relationships, Xiao Ren opined that the size of a country becomes secondary since large and small countries depend on each other for survival. Therefore, “relational and not causal power is the prime

factor at play.” They further argued that a sound international system should be about nurturing and protecting these relations and seeking harmony out of differences, and that the end goal is co-existence and co-growth, i.e., *gongsheng*, not confrontation, subjugation, or elimination. This is indeed a fascinating and innovative deployment of the concept of *gongsheng* in the field of international relations. But in what way this *gongsheng* thinking would influence the current Chinese foreign policy and how China would project its power in a symbiotic international relations would be some obvious questions needing further debate and discussion.

Gongsheng-Informed Healing Practices

The notion of “*gongsheng*” has been used by Lili Lai and Judith Farquhar to characterize the practice of harmonizing flavors in Chinese medicine, as in cooking, which “express a world of natural powers and expert embodiment that goes far beyond mere tastes.” As noted earlier in this Introduction, ancient medical texts were among the first to use *gongsheng* to describe medicinal use of the fusion of different food ingredients. The notion and practice of “food-and-medicine-have-the-same-source” date back to antiquity. The term “harmony” has often been used in connection with *gongsheng*, as “harmonizing” precisely refers to the process of *gongsheng* whereby different and often seemingly contradictory elements adjust, adapt to or merge into each other, thus producing a coherent and dynamic equilibrium. It is no exception in the context of the traditional medical and healing practices whereby the fusing of ingredients with different qualities and flavors to make decoctions is the key. As noted by Lai and Farquhar, the making of decoctions “needs to be slow cooked over a fire; the work of harmonizing involves not only flavors but the heat of fire and the moistening of water.” This vivid description of the “slow cook” process also applies to many of the social and political negotiations characterized by *gongsheng/kyōsei* in the East Asian context.

Interesting to note is that the entire healing process is also that of a *gongsheng* (symbiotic) process involving the bodies of doctors and patients, the quality of the plants and the skills and experiences of selecting and combining medicinal herbs. The less obvious point relates to the doctors’ bodies and ways in which they influence the entire healing process. In Lai and Farquhar’s words, “the quality and flavor of drugs are not self-evident. ‘Knowing’ them requires not only the doctors’ own bodily perceptions but also a considerable period of rather experimental

clinical application.” So interestingly the traditional medicinal and healing practices have intriguing personal and collective perspectives, operating in *gongsheng* (symbiosis) with each other. In Lai and Farquhar’s words, “By harmonizing the world’s myriad heterogeneities, it gives specific character to the Chinese experience of *gongsheng* (symbiosis) and coexistence.”

SHARED IDEAL AND COMMON ETHICAL ASPIRATION? CONVIVALISM AND THE NOTION OF *GONGSHENG/KYŌSEI*

In many of the *gongsheng/kyōsei* discussions in China and Japan, references have often been made to the intellectual movement of convivialism, which began in 2013. The term “convivialism” has been translated as *gongsheng* in China and *kyōsei* in Japan. Indeed, this is probably how the first connection between the notion of *gongsheng/kyōsei* and convivialism occurred. Alain Caillé, who coined the word “convivialism” and is also one of the founders and key spokesperson of the convivialism movement, expressed skepticism on the claimed parallels between the two notions because he fears that much would have been lost in the cross-disciplinary and cross-cultural translations.

Caillé considers convivialism first and foremost a political philosophy, which inherits and sublates (*aufheben*) modern political ideologies of liberalism, socialism, anarchism and communism. In addition, it is the result of decades of theoretical work within the framework of La Revue du MAUSS (Movement anti-utilitariste en science sociale) founded by Caillé and his friends. As explained by Caillé, convivialism is a “philosophy of the art of living together by cooperating or opposing without slaughtering each other,” and it encompasses six principles, namely, the interdependence of humanity and nature, common humanity, common sociality, legitimate individuation and finally creative opposition. Recognizing the multiplicity of environmental, moral, political and geopolitical crises besetting humanity and the human society, Caillé and his fellow convivialists also hoped to use these convivialist principles to counter the dominant ideologies of utilitarianism, neoliberalism, and the runaway rentier and speculative capitalism. Instead of these ideologies, convivialists affirm relationality and interdependence as the essence of human existence and refuse all *a priori* discrimination based on skin color, gender, religious affiliation or ethnicity. Further, they cherish human attentiveness and the sense of obligation toward others and champion the plurality of ideas and

the spirit of cooperation. Finally, they are against the *hubris* of unlimited economic and financial growth and advocate the virtue of self-restraint.

Another convivialist sociologist Frank Adloff, in his contribution to this book, explores the complex relationship of cross-pollination between life sciences and sociology in history and attempts to seek new directions of sociological studies by developing a generalized theory of gift and biological symbiosis-inspired cross-species cooperation. The gift theory, which was first developed by Marcel Mauss, the intellectual hero of the convivialist movement, and later expounded by the French MAUSS created by Caillé, postulates that “central dimensions of human action cannot be explained in either utilitarian or normative terms, but rather in terms of the gift.” Exchange of gifts represents a “surplus of spontaneity, unconditionality, freedom and commitment that cannot be attributed to self-interest or normative commitment.” Convivialists recognized that this idea of gift relationship does not comport with the liberal idea of the autonomous and self-contained individual. Rather, it manifests the complex and superimposed web of relationships of interdependence. It is precisely the strident individualism and associated capitalist ethos of seeking and maximizing wealth that the intellectual movement of convivialism seeks to deal a blow head-on.

When thinking about inspiration social scientists can draw from the contemporary study of biological symbiosis, Adloff seems to be particularly in favor of multispecies study in contemporary biology, which ascribes *a priori* meanings and significance to other forms of life. Convivialists have been calling for a “methodological animism,” which advocates treating non-human beings “as if they had subjectivity regardless of whether it can really be ‘proven’ scientifically.” This is when the theory of the gift comes in. Under the “methodological animism,” non-human beings can be recognized as gift givers. By establishing a gift relationship, Adloff argues, by paraphrasing biologist Andreas Weber, “material substances as well as meanings are exchanged, and in this exchange, subjectivities become intertwined and intermingled in the form of new alliances.” Adloff ends his analysis by “advocating looking animistically at nature from a sociological perspective” and proposes to use the “methodological animism” as a starting point to move away from dualistic ontology and for new sociological theory building.

When reviewing the principles of convivialism and convivialist ethical aspirations, one can’t help but notice the striking parallels between

convivialism and the notion of *gongsheng/kyōsei* although their differences are also obvious. Here is what I see as the parallels and differences between the two notions:

Classical Notion of an Individual Reconsidered

Caillé conceives convivialism first and foremost as a political philosophy intending to replace the current dominant ideology of neoliberalism. It does tackle the foundational notion of neoliberalism, i.e., the conception of an autonomous and self-contained individual, by affirming the profound interdependence of humans and between humans and nature. Convivialism proclaims that relationality and sociality are the essence of humanity and human society. Although coming from very different philosophical bases of Confucianism, Daoism and Buddhism, the notion of *gongsheng/kyōsei* is based on an ontological assumption of a primordial connectivity and oneness of all forms of beings. Confucian ethics has taken this primordial relationality into the social and political spheres using the clan structure and family relationships as the meta-prototype for social and political governance. While modernization and Westernization in the past 150 years have infused the narrative of liberal values of individualism, free choice and self-determination into the global public and political discourse, people in the East Asian societies continue to be deeply shaped by the time-honored values and practices in their personal, familial, social and even political lives. They have been constantly oscillating between the world of modernity and that of ancient cultures. When confronting with excesses of modernity and a world with increasing material wealth but steadily declining morality, it is only natural that people began to seek inspirations in their age-old notions and ways of living. What is most interesting here is that when East Asians look back to their millennia-old notions to seek inspiration to counter excesses of modernity, that is where they encounter like-minded European convivialists.

Acceptance of Ideological Diversity and Pluralism as Theoretical Foundation

Another characteristic of convivialism is what Caillé calls the “principled acceptance of theoretical and ideological pluralism.” Diversity and differences are also the underlying assumptions of *gongsheng/kyōsei*. As noted earlier, only where there are different forms and qualities of entities can

we talk about “*gong*,” i.e., togetherness, mutual complementariness and mutual embeddedness. Entities of the same qualities and forms lead to the thickening of the sameness that is not *gongsheng* or symbiotic with each other. In fact, differences and plurality are a source of vitality and creativity under both convivialism and *gongsheng/kyōsei*. In this sense, both convivialism and *gongsheng/kyōsei* recognize diversity and pluralism as the start and the end game—we do not seek uniformity or impose conversion. We savor, appreciate and learn from differences. A corollary of this profound ideological pluralism and diversity is the spirit of “live and let live,” which is crucial for a philosophy of living together.

Anthropocentrism Challenged

Concerning about destructive forces of climate change and environmental degradation, both convivialism and *gongsheng/kyōsei* advocate moving away from the dualistic thinking of nature versus culture, human versus animal spheres and share the strong tendency against the destructive anthropocentrism. The thinking of “universal camaraderie” between humans and other living things or even non-living things runs deep in all three traditions of Confucianism, Daoism and Buddhism. Animistic notions and practices continue to figure prominently in both Japanese and Chinese cultural psychological construct, albeit to varying degrees. That is why the convivialist proposal of “methodological animism” and what Adloff calls the “re-enchantment of the world” are particularly endearing. While the East Asian approach to non-human beings and even non-living things revolves around the common origin of all beings, thus the “universal camaraderie,” the convivialist approach is to endow or assume a certain degree of subjectivity to non-humans. Different approaches notwithstanding, the resultant ethical aspiration of promoting multispecies co-prosperity is the same.

Shared Sense of Care for Others, Ethos of Cooperation and Virtue of Self-Restraint

Caillé was rightly concerned about equating biological symbiosis to convivialism as the former merely speaks to the natural phenomenon of different organisms living and evolving naturally and spontaneously. While both convivialism and the notion of *gongsheng/kyōsei* are critical of the unbridled anthropocentric modernization and attempt to put humans

back to nature, so to speak, both would agree that human beings, being endowed with the most advanced level of consciousness as far as we can see, have the disproportionately destructive power to change the natural surroundings. As a result, human beings ought to be the guardian and protector of the planetary ecosystem. So, to reset our mindset and the ethical framework molded by centuries of human-centered development and growth strategy and the capitalist ethos of cut-throat competition, glorification of self-interest and maximizing material wealth, we clearly can't let human nature take its course. Instead, we should adopt, in Caillé's Kantian style words, "the categorical imperative of controlling *hubris*, whether in the economic domain, but also in the domain of power or of technoscience." Therefore, it is critical that we bring to light and celebrate communal spirit, universal camaraderie among all forms of beings, spontaneity, cooperation, care for others and the virtue of self-restraint. These are also an intrinsic part of humanity.

I hope I have sufficiently dispelled Caillé's skepticism on the parallels between convivialism and *gongsheng/kyōsei*. But there are indeed differences between the two. Apart from the differences in philosophical foundations noted above, three other points stand out. The first relates to convivialist principle of legitimate individuation, according to which each individual has been given the ability to develop their individuality to the fullest without harming that of others. Different from extractive individualism, Caillé noted that the principle of legitimate individuation only recognizes the value of individuals who affirm their singularity in respect for their interdependence with others and with nature. While the notion of *gongsheng/kyōsei* does recognize and celebrate differences, there is nonetheless a general shortage of intellectual resources for robust individuality or personal rights against the authorities, and thus there may be much to learn from this notion of legitimate individuation and related practices. Arguably, Daoism—and Zhuangzi in particular—offers the most valuable intellectual resources for individuality and spiritual freedom. But the notion of freedom (自由 *ziyou*) in Zhuangzi's thinking is transcendental. It is about rising above duality and all trappings of human or non-human worlds and about the absolute freedom of the heart-mind. It is not about personal rights or freedom vis-à-vis a particular social

or political structure.⁴² So when it comes to individuation in modern context, perhaps there is much for convivialism to offer to the East Asians. The other point of difference relates to convivialism's principle of creative opposition, which attempts to balance the confrontational and destructive politics often seen in today's democracies with other convivialist principles of common sociality, common naturality and cooperation, in a spirit characterized by Marcel Mauss as "opposing each other without slaughtering each other." As Caillé points out, open and blunt confrontation in the East Asian societies would be much frowned upon if not downright despicable. How opposing views, particularly against political authorities can be creatively expressed and engaged in political and social spheres, remains a big cultural or political challenge particularly in China. While the parallels between notions of convivialism and *gongsheng/kyōsei* form a basis for dialogue and mutual intellectual reinforcement, the differences will spur reflection, learning and adaptation. In this sense, a symbiotic interaction between the two notions will be productive and meaningful on the global stage.

It won't be complete if I don't point out the third and last point of difference between the two notions. It is that in the East Asian philosophical context, the narrative of *gongsheng* is a means to the end, which is the ultimate comprehension of *Dao* or realization of enlightenment. In all three traditions, personal self-reflection, self-rectification and constant searching inward have been featured prominently. The ultimate means of eliminating sufferings and struggles is to raise peoples' collective consciousness and be in union with the transcendental essence of all beings. Convivialism, on the other hand, is a political philosophy, as Caillé emphasizes. It has little or no discussion on metaphysical or transcendental pursuits.

To finally conclude, we live in a world with mounting risks of a planetary scale. It is time that East and West join hands in fleshing out a philosophy befitting our time and the planetary condition. The notions of *gongsheng/kyōsei* and convivialism are clearly a good starting point for this effort. It is a worthwhile cause which is long past due, even before we were told by scientists that we have always been living in a symbiotic world.

⁴² Meng Peiyuan 蒙培元, "Ziyou Jinjieshuo—Zhuangzi [Zhuangzi's Realm of Freedom] 自由境界说——庄子," in *Meng Peiyuan Quanjī [Complete Works of Meng Peiyuan]* 蒙培元全集 (Sichuan People's Press, 2021).

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CHAPTER 2

The Re-engineering of *Gongsheng*: On the Methodology of this Volume and Its Philosophical Implications

Yiwen Zhan

This chapter aims to offer a brief survey of the methodology of the current volume. The foremost issue that requires particular clarification is the terminology of *gongsheng*. The reader will notice that not all contributions of this volume are using the term “gongsheng” literally. In the first half of this chapter, I shall explain how we employ a systematic treatment of this terminological issue during the editing of this volume. Since the research topics of this volume are significantly diverse, an illustration of its layout and its overall research background is also in order. As this volume aims to explore the philosophical significance of the concept of *gongsheng*, I shall also elaborate on the philosophical implications of our methodology. This will be the task of the second half of the chapter: I will discuss some philosophical complexities concerning the topic (dis-)continuity of this volume and then briefly examine its metaphysical implications.

Y. Zhan (✉)

School of Philosophy, Beijing Normal University, Beijing, China

e-mail: y.zhan@bnu.edu.cn

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METHODOLOGICAL REMARKS

The approach to this volume essentially involves an interdisciplinary and intercultural attempt to explore and develop the philosophical foundations of the concept of *gongsheng* across contexts, which include not only a variety of philosophical traditions but also contemporary discussions in different fields. Chapter 1 of this volume, written by Bing Song, offers an overview of the landscape of discussions motivated by the concept of a philosophy of *gongsheng*.

The idea of *gongsheng* can be in part traced back to the concept of *symbiosis* in biology, the introduction of which is credited to microbiologist Anton de Bary who used the term to describe a system of mutual reciprocity and coexistence among living organisms. Contemporary life scientists and philosophers of biology have now come to realize that symbioses are widespread and play an important role in evolution.¹ Moreover, talks of various forms of “symbiosis”—if we understand the term more broadly—have become increasingly common not just in studies of microorganisms but also in the contexts of ecology, climate research, anthropology, sociology, technology, etc., in reference to the various patterns of mutual dependence. Strictly speaking, then, these broader patterns of symbiotic associations rather indicate a cluster of concepts, each of which corresponds to a different context of study. Nevertheless, this cluster of concepts seems to be unifiable under a cover term, i.e., “gongsheng,” which is also the Chinese translation of “symbiosis.” The current volume is hence an effort to show that the term “gongsheng” emerges as an apt candidate for expressing the generalized concept involving symbiotic mutualism in broader contexts. In this sense, “gongsheng” is not merely a cover term with multiple, disjunctive meanings. It rather expresses a “cover concept” that encodes a *focal meaning*.

To explicate the concept of *gongsheng*, however, it demands more systematic inquiries of its theoretical roles as well as the underlying philosophical foundations. We aim to show that explorations with this concept can indeed generate fruitful philosophical dialogues and discussions.

¹ See Suárez, Javier, The Importance of Symbiosis in Philosophy of Biology, *Symbiosis* 76 (2018) for a survey.

Terminological Issues

As noted, the term “gongsheng” is used to translate “symbiosis” into Chinese. The term is written in Chinese as “共生,” which is also the written translation of “symbiosis” in Japanese kanji, while the word is Latinized in Japanese as “kyōsei” instead.² Although both “gongsheng” and “kyōsei” are used to translate “symbiosis,” they are widely used in both Chinese and Japanese contexts in much broader senses that go beyond the core definition of “symbiosis” in biology. In other words, if we want to translate either “gongsheng” or “kyōsei” back into English, the word “symbiosis” captures only part of the word’s full meaning.

Admittedly, even in English, the meaning of the word “symbiosis” is also extended to cover non-biological uses, such that we get to speak of, say, the “symbiotic relationship” between the writer and the reader, and so on. But the focal meaning of “symbiosis” is arguably still biological. It is up to life scientists and philosophers of biology to determine what counts as a symbiosis *strictly speaking*, so the non-biological uses of the term are essentially merely analogical. However, the situation is different when we consider “gongsheng”/“kyōsei” in Chinese/Japanese, where the broader uses of the term are much more evident and dominant in both languages.

The literal translation of “gongsheng” or “kyōsei” would be something like “co-generate,” “co-live,” or “co-become.” The notion can be traced back to the long and profound history of contemplating the “symbiotic” state of being and becoming in the broadly Eastern philosophical traditions. Although diverse in meaning, it has been adapted in contemporary contexts—under the influence of the research on biological symbiosis—as a key term expressing ideas of “symbiosis” concerning natural protection as well as in art (e.g., cf. the renowned architect Kisho Kurokawa’s promotion of the philosophy of *kyōsei* in architecture), etc. Over the recent years, the word “gongsheng” or “kyōsei” is gaining more attention and popularity in China and in Japan. An internet search for “gongsheng” as a keyword or theme-word yields over 50,000 academic journal articles in Chinese, of which over 60% were published in recent ten years (and over 90% published in the past 20 years). The word is now actively used in public discourse, too, on issues ranging from environmental policies

² There is yet another way to write “kyōsei” in Japanese *kanji*, i.e., as “共棲”. For nuances between “共棲” and “共生”, see Chapter 7 of this volume.

to the common well-being of a society, etc., even appearing in slogans in politics every now and then.

In sum, while we can regard “symbiosis” in English as a homonym, whose focal meaning is anchored in biological contexts, the focal meaning of the term “gongsheng” (and “kyōsei”) involves a more general pattern, ranging from ideas in traditional Eastern philosophies to modern-day environmental philosophy and ecological ethics, from discussions of social cohesion to those of governance.³ It is admittedly hard to explicate what the focal meaning of “gongsheng” (and “kyōsei”) is exactly like. But this volume aspires to show that there *is* a focal meaning, a thorough revelation of which, however, demands cross-contextual and cross-disciplinary investigations as well as a more deliberate and systematic development of its underlying philosophy. In particular, the contributions of this volume show that the concept of *gongsheng* can find its conceptual root in a variety of historical philosophical traditions, discoverable in Confucianism, Daoism, and in Buddhism alike; yet on the other hand, it must be acknowledged that the contemporary emergence and proliferation of talks about *gongsheng* also has a clear causal path traceable to the translation of the modern biological terminology of “symbiosis.”

Rather than adopting an English translation of the word “gongsheng” in this volume, we decide to keep it untranslated instead. We hope the reader will understand that “gongsheng” is intended as a cover term for the varying concepts discussed in the contributions of the volume, through which it is hoped that the focal meaning of the term can be better manifested, which, in turn, will be able to serve as the unifier for many of the varying concepts throughout contexts, at least tentatively so. At the same time, we find “co-becoming” as the closest translation of “gongsheng.” The reader can consult Chapter 1 by Bing Song for more details on the considerations in translating the term.

To avoid unnecessary clutter, in the following chapters of this volume, we will also not stick to a meticulous distinction between uses and mentions, so that we will be moving back and forth between a term, say, “gongsheng,” and the concept of *gongsheng* that the term is intended

³ While we regard the contexts of uses of *gongsheng* and *kyōsei* to be largely overlapping here, see Tsuyoshi Ishii’s discussion in Chapter 7 for their differences.

Table 2.1 Mapping main concepts to the chapters of this volume

<i>Symbiosis (as a motivation)</i>	<i>Gongsheng</i>	<i>Kyōsei</i>	<i>Convivialism (qua resonance)</i>
Microbiome (Chapter 9), Philosophy of Biology (Chapter 8)	Confucianism (Chapter 3), Daoism (Chapters 4, 5), Buddhism (Chapter 6), Anthropology (Chapters 10, 11), International Relations (Chapter 12)	Survey of the concept in Japanese (Chapter 7)	The social movement and its philosophy (Chapters 13, 14)

to express.⁴ We assume that this is sound practice, insofar that the term has its intended, focal meaning at least within each of the contexts to be discussed.

Nevertheless, the reader will notice that not all contributions of this volume use the term “gongsheng” literally. Since biological symbiosis is the main topic of the contributions by Shijian Yang (Chapter 8) and Liping Zhao (Chapter 9), respectively, it is more natural to stick to the original term “symbiosis” in those chapters. Besides, the contribution by Tsuyoshi Ishii (Chapter 7) will be focusing on the Japanese term “kyōsei” instead. Finally, the topic of the contributions by Alain Caillé (Chapter 13) and Frank Adloff (Chapter 14) will be explicitly about *convivialism*, which we believe shares some similar vision about the fabric of human society with the philosophy of *gongsheng*. The main concept for each of the remaining chapters of this volume can thus be summarized as shown in Table 2.1, where the notions of *gongsheng* and *kyōsei* are the direct targets of research in this volume, with a variety of contexts ranging from Buddhism to international studies.⁵

Within each chapter, despite the main concept for that chapter, when the topic at a context is clearly about symbiosis in biology, the term “symbiosis” will still be used, even in chapters other than 8 and 9. Occasionally,

⁴ In the current chapter, we are more careful in this regard: We have been mentioning the term “gongsheng” as quoted, while speaking of the concept *gongsheng* that the term expresses by italicizing it.

⁵ Studies regarding the Japanese concept of *kyōsei*, though important, is relatively under-represented in the current volume. We acknowledge that this is a shortcoming of the current volume and intend to take effort to address the problem in another occasion.

concepts will be accompanied by paraphrases enclosed in parentheses. So, the reader may sometimes read “*gongsheng* (symbiosis, joint transformation, or co-creation),” etc. Sometimes, words like “symbiosis” or “symbiotic” are used in their extended or analogical meanings. These are occasionally added with quotation marks for emphasis. In general, we trust the readers will be able to disambiguate the different uses in different contexts.

Remarks on Research Backgrounds

This volume aims to inquire into the philosophy of *gongsheng*. Rather than offering research articles based on an extant, well-established framework of study, the task of this volume is largely tentative and exploratory. As noted, while we take the concept of *gongsheng* to be the target of study and the core concept of this volume, it actually corresponds to a cluster of ideas involving symbiotic mutualism and social cohesions, etc. These ideas, however, are commonly built on an assumed non-anthropocentric, multispecies, holistic view of beings, values, and changes—or more abstractly speaking, a co-becoming state of existence. We acknowledge that further research is needed in order to flesh out its philosophical implications, both metaphysically and epistemologically.

So far as the co-editors of this volume are aware, few attempts have been made to systematically explore the very philosophical foundation of the concept of *gongsheng* (*kyōsei*), despite its growing popularity in various contexts in the Chinese and the Japanese language. We thus see this volume as an early philosophical attempt in English literature to bring into discourse the rich collection of historical thoughts and ideas, discoverable in Daoism, Buddhism, and Confucianism alike—for which “gongsheng” serves as a cover term—but also to encompass interdisciplinary dialogues on the latest developments in microbiome research, ecological anthropology, etc., with the hope to eventually acquire a fused image of *gongsheng*.

An anonymous referee to this volume has pointed out that the idea of symbiosis (and that of a symbiotic ontology) has become an important ecological concept much discussed in continental philosophy and eco-feminism. In particular, the idea can be found in the works of evolutionary biologist Lynn Margulis, eco-feminist Donna Haraway, and philosopher Michel Serres, among others. It could hence seem that the current volume fails to address an important tradition of literatures in environmental

humanities. In defense, it is worth pointing out that the focus of this volume is *not* precisely on the development of a symbiosis-based philosophy of biology or environmentalism. The direct aim of this volume is to explore the philosophical foundations and implications of *gongsheng* as such. Although it shares many connections with the concept of symbiosis (which is why we included discussions concerning the latter particularly in Chapters 8 and 9), and the idea of *gongsheng* can be usually paraphrased as a form of “symbiotic” relation, we maintain that the focal meaning of “gongsheng” is *not* particularly about biological symbiosis, and hence, it is not a topic restricted to environmental humanities. This also explains why the term enjoys much more flexibility and popularity in various types of discourses in the Chinese and the Japanese language, ranging from social cohesion to the transformations of governance.⁶

PHILOSOPHICAL IMPLICATIONS

In the remaining part of this chapter, I will give some brief discussions on the philosophical implications of our approach to *gongsheng* in this volume. In particular, I will discuss how the above-mentioned methodological approach to the term “gongsheng” is related to conceptual engineering; and based on that, we will briefly consider its metaphysical implications.

⁶ On the other hand, although *gongsheng* has indeed been prominently used in Chinese contexts in recent years to refer to a harmonious mode of human–nature relations, there are other notions in Chinese that have been under similar explorations for the development of environmentalism, too. Examples include *ziran* (自然), *shanshui* (山水), or even *huanjing* (环境), etc. For discussions, see, e.g., Weller, Robert, *Discovering Nature: Globalization and Environmental Culture in China and Taiwan*. Cambridge University Press (2006), Chang, Chia-ju (Ed.), *Chinese Environmental Humanities: Practices of Envisioning at the Margins*, Palgrave Macmillan (2019), and Bruya, Brian, *Ziran: The Philosophy of Spontaneous Self-Causation*, SUNY Press (2022). While connected, these explorations essentially differ from our current volume. We thank the anonymous referee for the comments and suggestions.

Gongsheng and Conceptual Engineering

Conceptual engineering is a growing field of research that has gained much attention over the past few years.⁷ An act of conceptual engineering, roughly speaking, is an attempt to revise and improve an existing concept based on the assessment of its fitness in linguistic practice. Typical examples of conceptual engineering concern attempts at revisions of the intensions or extensions of concepts such as *women*, *marriage*, and *planet*, etc. But looking more closely, cases of conceptual engineering are arguably ubiquitous in almost all respects of our scientific and social practices. For instance, when we consider whether robots have consciousness, or whether animals have beliefs, what is at stake is not just the respective qualities of robots and animals as such; but it typically also involves the reevaluation of the very meanings of “consciousness” and “belief.” Suppose that we eventually accept that animals also have beliefs, an important consequence of such a revisionary move would be that the meaning of “belief” will no longer be the same as what the word used to mean (i.e., “belief” understood as a kind of propositional attitude that a human typically has). Therefore, a primary challenge for any conceptual engineer is to explain why her revisionary project is not merely a verbal dispute—in other words, she will need to account for the topic continuity between the pre-engineering concept and the post-engineering concept, such that the users of these two are not talking past to each other. To this end, a merely verbal continuity will not do.

At this point, some prominent scholars on conceptual engineering resort to a “revelation”-based view. For example, Sally Haslanger argued that, even for social categories like *women*, the project of conceptual engineering does not propose any new meaning, but only “reveal[s] an existing one.”⁸ Such a view can be labeled as “externalist.” An important reason for adopting an externalist view is the following: The conceptual engineer must acknowledge that, even before the engineering attempt,

⁷ See, e.g., Haslanger, Sally, “What Are We Talking About? The Semantics and Politics of Social Kinds,” *Hypatia* 20 (2005), Haslanger, Sally, “What Good Are Our Intuitions?,” *Aristotelian Society Supplementary* 80 (2006), Scharp, Kevin, *Replacing Truth*, Oxford University Press (2013), Cappelen, Herman, *Fixing Language*, Oxford University Press (2018), Burgess, Alexis, Herman Cappelen, and David Plunkett (Eds.) *Conceptual Engineering and Conceptual Ethics*, Oxford University Press (2020), just to name a few.

⁸ See Haslanger, Sally, “What Good Are Our Intuitions?,” *Aristotelian Society Supplementary* 80 (2006), p. 110.

the concept at stake has had perfectly functional discursive roles and hence a functional linguistic interpretation. Therefore, if one judges the pre-engineering concept to be defective according to a certain standard, that standard must *not* be based merely on a novel linguistic interpretation of the term. She must instead argue for the claim that the novel interpretation more accurately captures the term's "intended meaning," whatever that is. But at least, the justification of that claim must be independent from, and hence external to, the user's linguistic practice.⁹

Different theories have been proposed regarding what exactly may serve as the externalist standard for settling a concept's intended meaning. For instance, one might resort to the so-called referential magnetism,¹⁰ claiming that there are objective, mind-independent facts governing the reference of a term. Some philosophers propose that there are causal or biological mechanisms that determine the referents of the terms that we use.¹¹ Alternatively, we might have to compare the pertinent semantic theories' comparative theoretical virtues, such as charity and naturalness, to see which is more explanatory.¹² In addition, we might need to incorporate metaphysical considerations such as the "joint-carving ideology" about the metasemantic conditions for a determinate interpretation.¹³ By contrast, some other philosophers suggest that the topic continuity in a revelatory process of conceptual engineering derives from our pre-theoretic mental representations of the corresponding external type.¹⁴ Yet

⁹ This can be traced back to Putnam's semantic skepticism based on a descriptivist account of metasemantics. See, e.g., Putnam, Hilary, "Models and Reality," *Journal of Symbolic Logic* 45 (1980). Cf. David Lewis's discussion in idem, "Putnam's Paradox," *Australasian Journal of Philosophy* 62 (1984).

¹⁰ Cf. Lewis, David, New Work for a Theory of Universals, *Australasian Journal of Philosophy* 61 (1983).

¹¹ See, e.g., Millikan, Ruth Garret, Biosemantics, *Journal of Philosophy*, 86 (1989) and Fodor, Jerry, *Psychosemantics*, MIT Press (1987).

¹² See, e.g., Williams, J. Robert G. Eligibility and Inscrutability, *Philosophical Review*, 116 (2007).

¹³ See, e.g., Sider, Theodore, *Writing the Book of the World*, Oxford University Press (2011).

¹⁴ See, e.g., Sawyer, Sarah, Truth and Objectivity in Conceptual Engineering, *Inquiry* 63 (2020).

others claim that, when it comes to engineering social categories or artificial types, the types themselves are subject to the conceptual engineer's very activism seeking to change it.¹⁵

How are these related to our discussions about *gongsheng* here? First, as mentioned, the emergence of the use of the term of “gongsheng” (or “kyōsei”) in various contexts in the Chinese- and Japanese-speaking communities are often indeed revisionary. Although the concept is deemed as having its conceptual roots in a variety of historical philosophical traditions, there is nonetheless a causal path tracing back to the translation of the phenomenon of symbiosis in biology. Still, we have been witnessing ever more expansive uses of the term in areas far beyond biology, which are clearly revisionary. In fact, the attempt to explore the philosophy of *gongsheng* in the current volume can equally be seen as a case of conceptual re-engineering—it is an exploratory effort to explicate the meaning and significance of *gongsheng* not only in light of its historical resources but also constructively, in connection with the modern theories on biological symbiosis, environmentalism, social cohesion, and convivialism.

Secondly, given that we are attempting to re-engineer the concept of *gongsheng*, we are then equally obligated to respond to the primary challenge to conceptual engineering, namely, to explain why the attempt is not merely verbal, and why “gongsheng” does not just happen to be a homonym with no intended focal meaning independent from our differing linguistic choices.

Now, suppose we need to give an externalist account for the continuity problem in the case for “gongsheng,” what would the account be like? To begin with, there is obviously no continuity regarding the semantics of the term “gongsheng” per se—the term's meaning drifts from context to context. Thus, for a project of engineering *gongsheng*, we need to find a certain metasemantic mechanism that can “bundle” the various meanings together. Moreover, insofar that *gongsheng* is not (merely) a social category subject to our free invention, it seems problematic to claim that we can get to deliberately change or control the term's meaning at will (hence the “revelation”-based view, in the spirit of externalism). But the other options seem problematic, too. Since the term is generally used in

¹⁵ See, e.g., Podosky, Paul-Mikhail Catapang and Kai Tanter, Revision, Endorsement and the Analysis of Meaning, *Analysis* 80 (2020). Note that, due to space limitations, the summary of the various theoretical options here is largely simplified.

highly abstract senses, it is at least unclear how we are able to pin down a unique causal, biological, or representational mechanism for explaining the continuity of discourses on *gongsheng*. On the other hand, while there may be serious metaphysical considerations concerning the term's joint-carving ideology, it also remains a difficult and open question regarding (i) what its underlying metaphysics should really be like, and (ii) how it might affect our metametaphysical understandings (more on this later).

In the case of re-engineering *gongsheng*, the best and simplest account available for answering to the continuity problem, as far as I can see, is the claim that the entire re-engineering project is *goal-directed*. Under this approach, the justification for the novel interpretation of the term is based on the claim that the novel interpretation is epistemically “more natural” in serving its intended goal by using the term in discourse. One might wonder what exactly is the goal that our discursive use of “gongsheng” is intended to reach. Now, it can at least be said that the goal is neither a merely practical one, nor a psychological one such as the fulfillment of certain functions in cognition. Rather, the goal must be inherently epistemic: It is a goal related to the acquisition of a better theory of metaphysics that involves the co-becoming state of existence (and other theories based on that)—it is hoped that a theory of *gongsheng* gives us a better account about the nature of reality.

Understood in this way, the metasemantic criterion for engineering *gongsheng* will also be epistemic in nature. Although it is aimed at reaching a theory of metaphysics, we do not presume a God's eye view on the reality's joints as such: When a conceptual engineer proposes a new account of *gongsheng*, it suffices for her to make a case that her interpretation is epistemically more natural and hence better off in serving the aforementioned goal. Of course, she may equally endorse the claim that her interpretation best carves at the metaphysical joints of reality. But this latter claim carries no independent argumentative force when it comes to disputing against other versions of accounting for *gongsheng*.¹⁶ For the same reason, while a conceptual engineer of *gongsheng* is committed

¹⁶ Therefore, this departs from Sider's view in idem, *Writing the Book of the World*, Oxford University Press (2011). For related discussions, see Dorr, Cian, Reading 'Writing the Book of the World,' *Philosophy and Phenomenological Research* 87 (2013) and Warren, Jared, Sider on the Epistemology of Structure, *Philosophical Studies* 173 (2016). Cf. also Weatherston, Brian, “The Role of Naturalness in Lewis's Theory of Meaning,” *Journal for the History of Analytical Philosophy*, 1 (2013) for the distinction between metaphysical naturalness vs. epistemic naturalness.

to the term's having a certain metasemantic underpinning, that presumed underpinning remains largely underdetermined and hence open to further constructions.

Gongsheng and (Meta-)metaphysics

At this point, it is worth noting that this feature of interpretative underdetermination seems particularly common in the discourses of Chinese philosophy. Of course, it is common to all strains of philosophy that the semantics of a term in a context could be unstable or even largely malleable. But for contemporary Anglophone philosophy, especially under the analytic tradition, it is generally hoped that for a fruitful conversation, the procedures at stake for pinning down the term's semantics should be at least definitive, metasemantically speaking (e.g., either by virtue of stipulation, or real definition, or anything else). For instance, one may disagree with another about how we should interpret "planet"; but the very basis for asking the conceptual engineers in such a case for a topic continuity is precisely the hope that a certain interpretative criterion should at least be obtained in a conversation for pinning down the meaning of the term "planet" in one way or another. If even the interpretative criterion remains underdetermined, arguing about a term would seem hardly fruitful. However, the interpretative criterion we have found so far for the engineering of *gongsheng* is of the vaguest sort: i.e., it is to serve the goal for developing a certain theory of metaphysics. In fact, such a criterion is doubly underdetermined: On the one hand, it remains an open question what standards can be applied to determine which is the epistemically more natural interpretation to serve that goal; and on the other hand, the very goal itself remains underspecified. After all, at least from the perspective of contemporary analytic metaphysics, we are yet to gain sufficient understanding of what exactly does a metaphysical theory of *gongsheng*, or of co-becoming, seek to offer.

To be clear, I have no intention to naively claim that such interpretative underdetermination is a problem unique to Chinese philosophy. Complex cases involving conceptual engineering can often have both their semantic and the metasemantic issues intertwined. To engineer *marriage*, for instance, the contention involved might be not just about what would be the best definition for marriage but also about what we, in an effort to engineer the concept, are exactly seeking to reach in the first place.

Similarly, consider the skeptics of metaphysical grounding.¹⁷ Their questions are also directed at the very basis and motivation for one to develop a general theory of *grounding* in the first place. My claim is only that the phenomenon of interpretative underdetermination seems particularly common in discourses in Chinese philosophy.

In fact, I am not even able to offer a scholarly defense of this claim here. We have at least witnessed one example of it, namely the notion of *gongsheng*. The exact goal for a theory of *gongsheng* remains an open question and hence is topic-wise underdetermined. And this has not hindered theorists and philosophers from trying to actively engage in conversations involving it.¹⁸ In general, discourses in Chinese philosophy seem to be more tolerant of interpretative underdetermination. But why so? My hypothesis is that verbal associations play a more significant role in discourses in Chinese philosophy than that in Anglophone philosophy. Usually in Anglophone philosophy, verbal associations attached to a certain word (say, “ground”) play only limited if not insignificant roles in its interpretation. But consider words like “gongsheng” in Chinese. The word actually consists of two separate lexical morphemes, each of which was used as a free root in Old Chinese.¹⁹ The morphology of the word “gongsheng” is thus more like that of “common ground” in English than that of “anthropology.” Yet, in the word “gongsheng,” the roots “gong” and “sheng” have much less definitive readings in themselves than that of “common” and “ground” as in the phrase “common ground.” Therefore, in the context of Chinese philosophy that deals with words with ancient “roots” (pardon the pun), the space for interpretations is larger. Given a word’s interpretations being more plastic, it might then have created more tolerance to the underdetermination of the topic involved with that word.²⁰

¹⁷ For discussions, see Wilson, Jessica, No Work for a Theory of Grounding, *Inquiry* 57 (2014).

¹⁸ Similar things can be said about the notion of *ziran* (the Chinese word for translating “nature”), and so on.

¹⁹ See Packard, Jerome, *The Morphology of Chinese*, Cambridge University Press (2010) and Arcodia, Giorgio Francesco and Bianca Basciano, *Chinese Linguistics*, Oxford University Press (2021), Chapter 5. Similar morphological observations can be made regarding Japanese words like “kyōsei”.

²⁰ Recently, Roger Ames in idem, ‘Zoetology’: A New Name for an Old Way of Thinking, *Royal Institute of Philosophy Supplement* 93 (2023) also makes a case for the productive association among words, which could become the basic source of the meaning

This is not to say that any discourse based on underdetermined topics with verbal associations are automatically theoretically meaningful. Any such discourse can eventually be turned into a successful theoretical inquiry only if its discursive goal becomes substantially clarified and stabilized. Before that, we can retain a fair amount of skepticism just like what the skeptics of metaphysical grounding did. Nevertheless, even for the sake of skepticism, careful examinations on a case-by-case basis are still needed. Pronouncing in a “knee-jerk” manner any attempt of engineering a concept with underdetermined topics as doomed to be merely verbal would be too quick.

If I am correct in this, then topic underdetermination is less problematic than it might initially seem, especially when it comes to disputes in philosophy. For instance, it is open for one to maintain that typical ontological disputes—like that of whether ordinary objects exist or whether reality is essentially tenseless, etc.—are all subject to different interpretative criteria and hence are topic-wise underdetermined.²¹ For some, this might seem to lead to a metaphysical deflationism, because, under the influence of a standard reading of Carnap, the question of choosing between different interpretative criteria is essentially a merely pragmatic question—namely, it is a question of choosing between linguistic frameworks, just like choosing between languages you want to speak. If so, there will be nothing deep about metametaphysics, and ontological disputes are theoretically speaking merely verbal. However, I do not see why slipping into this form of deflationism is unavoidable. Although I cannot give a detailed discussion on this issue here, there is obvious theoretical space for us to do substantive metaphysics without having to choose between a Carnapian metaphysical deflationism and a (Quinean) holistic, “totalitarian” picture of metasemantics.

Granted that we do have such theoretical space, we will be able to have a more pluralistic ontology at least in an epistemic sense. Just like it remains an open question whether we should include ordinary

of those words. Cf. also Hall, David L. and Roger T. Ames, “Chinese philosophy,” in *The Routledge Encyclopedia of Philosophy*, Taylor and Francis (1998) on the so-called “*ars contextualis*,” which leads to a way of correlative thinking that is arguably dominant in Chinese philosophy. To me, this is a very interesting point, and obviously more research can be done in this regard. Special thanks to Kimberly Tan Min-En for helpful discussions.

²¹ For discussions, see, e.g., Fine, Kit, “The question of ontology,” in David Chalmers, David Manley & Ryan Wasserman (eds.), *Metametaphysics: New Essays on the Foundations of Ontology*, Oxford University Press (2009), pp. 157–177.

objects, and abstract objects, in our ontology, it remains an open question whether a theory of *gongsheng*, i.e., a theory of co-becoming state of existence, can generate a novel view on ontology. One major difficulty for incorporating interesting ideas from Chinese philosophy into the contexts of contemporary Anglophone philosophy is that the pertinent conceptual landscape usually has large areas of it submerged under the “water” of obscure language. The very question about *gongsheng* is of course less well-understood than, say, the ontological questions about ordinary objects. However, the rich philosophical traditions the former question is associated with suggest that we have much to learn. It is also hoped to bring stimulations for contemporary, Western philosophers to think harder about questions they are more familiar with, such as that about metaphysical emergence, the boundaries of individuals, and the metaphysics of change, among many other questions beyond ontology.

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PART II

Gongsheng/Kyōsei in Classical Philosophies



Introduction on the Ethical “Doctrine of *Gongsheng*” Based on Song-Ming Confucianism’s “Unity of Consummate Persons and Things”

Genyou Wu

There are both classical and modern forms of the doctrine of *gongsheng* 共生. In a modern context, European and American academics have created many theoretical forms and paradigms regarding *gongsheng*. We can see modern interpretations of *gongsheng* in Alain Caillé’s “Convivialist Manifesto,” in which he considers the numerous problems of coexistence, as well as in the core idea of *gongsheng* behind the Chinese government’s concept of a “community with a shared future for mankind” (人类命运共同体). Therefore, the discussion of *gongsheng* has its modern relevance. In recent times, due to the influence of “modern” concepts and systems, many societies have put more emphasis on values like personal freedom and rights, which on the one hand has caused modern societies to prosper, but on the other hand has also led to ecological damage.

G. Wu (✉)
School of Philosophy, Wuhan University, Wuhan, China
e-mail: gywu1963@163.com

Thus, our current society's emphasis on *gongsheng* demands a change in the re-prioritization of our values: When confronted with ecological and environmental problems, values like personal freedom and human rights should be regarded as secondary concerns. How humanity can "coexist" with others should become a first-order concern—a principal value—of modern humankind's entire value system and rules for survival. This is because without our planet and its layers of atmosphere that support us, there can be no civilization to speak of. In this sense, modern values must be appropriately adjusted to the doctrine of *gongsheng*, moving us away from the mainstream industrialized and capitalist ideology to accommodate the *gongsheng* needs of humanity.

Chinese civilization has a long cultural tradition of *gongsheng* thought. In particular, the doctrine of *gongsheng* seen in "the oneness of consummate conduct" (*yiti zhiren* 一体之仁) of Song-Ming Confucianism—which absorbed much of Buddhist and Daoist thought—can help us understand the values of *gongsheng* in a multidimensional, multilayered way. Neo-Confucianism of the Song and Ming eras established a new doctrine known as the "unity of consummate conduct (*ren* 仁) and things (*wu* 物)" (仁者与物同体) which expanded the fundamental humane-love (*ren ai* 仁爱) and filial piety of Confucianism to encompass not just one's blood relations but everything in the world, forming a new cosmic order for dealing with one's family, fellow humans, and the *wu* (myriad things or beings) that one shares the earth with. In this way, the doctrine surpasses the crude "interactions between heaven and mankind" (*tianren ganying* 天人感应) proposed by the Han dynasty Confucian scholar Dong Zhongshu 董仲舒 (179–104 BCE), creating something that we might call the "Song-Ming Neo-Confucian doctrine of *gongsheng*."

ZHANG ZAI'S "THEORY OF FOUNDATIONAL QI" AND THE GONGSHENG DOCTRINE

As a form of systematic thought or philosophical paradigm, the *gongsheng* doctrine is rich in content, which includes ethics and natural science. It comprises the perspectives of ecology, economics, and politics, as well as those of ethics and philosophy. In the context of Chinese traditional thought, the "theory of foundational *qi*" (*qiben lun* 气本论) and the idea of "universal camaraderie" (*minbao wuyu* 民胞物与) by the Song dynasty Neo-Confucianist Zhang Zai 张载 (1020–1077) can be considered as a type of philosophy and ethics of *gongsheng*. Zhang Zai expanded the

Confucian concept of love for one’s blood relations to a universal scale, describing the natural world as one’s parents:

The sky is my father and the earth is my mother. I minutely exist, intermingled in their midst. Thus, that which fills up nature I regard as my body, and that which directs nature I consider as my capacity to resonate. All people are my brothers and sisters, and all things are my companions.¹

This expresses the Song dynasty’s Neo-Confucian understanding of the *gongsheng* doctrine’s ideal.

This *gongsheng* ideal is philosophical, not religious. The metaphysical philosophy behind it is “the theory of foundational *qi*,” which in other words, serves as a basis for *gongsheng* doctrine concerning a philosophy for the natural world. In the text *Zheng Meng* (正蒙), Zhang Zai wrote: “The great void is formless. The essence of *qi* can congeal (*ju* 聚) and disperse (*san* 散), thus accounting for the way things appear to change.”²

In Zhang Zai’s view, things change through the power of *qi*, which, “though it is intangible, can condense to create images.” He claimed that “things in the world have antagonistic opposites but they will move in the opposite directions, and the antagonism will eventually be resolved by coming together responsively.”³

This ideal of a vast harmonization (*taihe* 太和) perfectly describes the world of *qi*. However, this symbiotic world composed of *qi* is not a realm of serenity and calm; it includes what is known as “attacking” (*gong* 攻) and “seizing” (*qu* 取)—the various struggles among people and animals in the world. But even these aggressive actions are a part of the natural order, as humankind forms its “ritual propriety” (*li* 礼) on the basis of this type of behavior, hence forming the order of human lives.

First of all, the natural transformation of *qi* expresses the *gongsheng* concept that “nothing exists in isolation” (物无孤立之理). Though there is antagonism between living creatures, none of them are alone. In the “Animals” chapter (*dongwu pian* 动物篇) of *Zheng Meng*, Zhang Zai wrote: “Nothing exists independently. The dualities of similarity and

¹ 乾称父，坤称母；予兹藐焉，乃浑然中处。故天地之塞，吾其体；天地之帅，吾其性。民，吾同胞；物，吾与也。 Jung-Yeup Kim, *Zhang Zai’s Philosophy of Qi: A Practical Understanding* (Maryland: Lexington Books, 2015), 52.

² Zhang Zai, *Zheng Meng* 正蒙 (Huangshan Book Company, 2021).

³ Zhang Zai, *Zhangzai ji* 张载集 (Zhonghua Book Company, 1978), 10.

dissimilarity, contraction and extension, and beginning and end, give rise to all things (*wu*).”

Zhang Zai saw the *gongsheng* among all things as the principle of their existence.⁴ The theory that “nothing exists in isolation” expresses the idea of ecological balance of nature, showing us how things multiply or decrease in response to one another. The discharge of one type of energy displaces another type, thus creating a new imbalance.

Furthermore, there is a “common origin of myriad things” (*wanwu yiyuan* 万物一元) character to the “naturally governed” (*tianxu* 天序) transformations of *qi*. The resulting principle, that “one cannot wantonly arrogate things for oneself” (非我之得而私焉) presents a problem for *gongsheng* ethics. Ethically, the doctrine of *gongsheng* advocates for anti-selfishness: Given that humanity and the world coexist in a state of *gongsheng*, one cannot possess everything privately. This idea is at odds with the modern emphasis on individual ownership of property rights. The ethics of *gongsheng* is contrary to the principles of individualism, human rights, and property ownership. Thus, it is critical that we find a way to use the ethics of *gongsheng* to modify or revise these modern views.

Finally, owing to the *gongsheng* ethical issues based on Zhang Zai’s theory of foundational *qi*, he was always wary of people’s “material desires” (*wu yu* 物欲). On the one hand, he said that our sensory desires are an expression of the aggressive “seizing” nature of *qi*. However, on the other hand, we must also ensure that these desires do not compromise our moral character. Many environmental problems that humans face are caused by the excessive pursuit of sensual desires facilitated by the capitalist system and culture. According to Zhang Zai, the influence of “*qi*’s substance” (*qizhi zhixing* 气质之性) often leads to moral biases; thus, the ethical wisdom of “the oneness of consummate conduct” must be used to guide our desires. We cannot forsake our moral adherence to unitary benevolence because of our personal desires. In his *gongsheng* ethics, Zhang Zai, based on his natural philosophical “theory of foundational *qi*,” demands that we overcome our selfishness and inflated material desires. This way of thinking is a deep ethical and survival attitude that must be promoted when speaking of the doctrine of *gongsheng*.

⁴ Zhang Zai, “Animals” in *Zheng Meng*.

THE “FOUNDATIONAL PATTERNING (*Li*) THEORY” OF THE CHENG BROTHERS AND GONGSHENG

The two Cheng brothers, Cheng Hao 程颢 (1032–1085) and his brother Cheng Yi 程颐 (1033–1107), were Neo-Confucian thinkers of the Song dynasty. They—and particularly Cheng Hao’s theory of “foundational patterning”⁵ (*liben lun* 理本论)—are a representative characteristic of the ethical dimensions of *gongsheng*. Cheng Hao believed that “a consummate person (*ren zhe* 仁者) strives to be one with myriad things.” The idea of “the oneness of consummate conduct” is, first of all, an epistemological issue. In the text *On Discerning Consummate Conduct* (*shiren pian* 识仁篇), Cheng Hao suggests that: “A scholar must first understand consummate conduct. One who is consummate completely unites with things.”⁶

Cheng Hao believed that one who wishes to embody the Chinese virtue of consummate conduct (*ren*) must first understand how they are interrelated with everything they share the world with. And, furthermore, one must keep this principle close to one’s heart, and practice it in one’s life. Thus, in Cheng Hao’s philosophy, understanding consummate conduct relates to morality, and morality is what connects people with the universe.

Concisely put, the “consummate conduct” spoken of by the Northern Song Neo-Confucianists is somewhat different from the idea of “consummate person loves others” (*renzhe airen* 仁者爱人) of pre-Qin Confucianism. The former’s conception of *ren*, which emphasizes the oneness of all things, is a result of absorbing Buddhist and Daoist philosophies. Neo-Confucianism thinkers like the Cheng brothers and Zhu Xi 朱熹 (1130–1200) borrowed from the ancient *Yi Jing* 易经 (Book of Changes). The “ceaseless generating and procreating, that is meant by ‘change’”⁷ (*shengsheng zhi wei yi* 生生之谓易) as described in the *Yi Jing* is an important element of the Cheng brothers’ concept of “the oneness of consummate conduct.” Based on this conception, the world of “oneness of consummate conduct” is one which is constantly changing and full

⁵ “*Li*” (理) is often translated as “principle” or “patterning.”

⁶ Cheng Hao and Cheng Yi, *Er Cheng Ji* 二程集 (Hubei People’s Publishing Company, 2017).

⁷ Roger Ames. *A Conceptual Lexicon for Classical Confucian Philosophy* (Beijing: The Commercial Press, 2022), 315–316.

of vitality. Cheng Hao thinks that “the ceaseless generating and procreating meant by ‘change’ is the *Dao* of *tian*⁸; the *Dao* of *tian* is based on procreating.”⁹

The *shengsheng* and “oneness of consummate conduct” concepts do not reflect ephemeral immediacy or instancy, but rather a continuous world linking “past, present, and future” timescales. It was the *shengsheng* concept that motivated Zhou Dunyi 周敦颐 (1017–1073) to respect the myriad living beings through his thinking and actions, and to refrain from cutting the grass before his window (不除窗前草), as it showed him that the grass is just as alive as we are. Similarly, it was said that after encountering hungry beggars, Zhang Zai thenceforth ate only meager meals himself, reasoning that he could not indulge while knowing that others were hungry. The ability to recognize “the life force of myriad things” is an important part of the Neo-Confucian *shengsheng* concept. *Gongsheng*’s emphasis that even the most microscopic creatures are brimming with life is the qualitative and vital requirement for the survival of living things.

Additionally, there is a moral sensibility to the Cheng brothers’ “oneness of consummate conduct” that emphasizes moral empathy, an idea that is markedly different from modern and contemporary Western thought—in particular, the ethics of Kant’s rationalism. From a Confucian perspective, it is bizarre that Kant’s ethics would place sympathy outside of morality, because the “oneness of consummate conduct” is a fundamental mark of human morality. According to the Cheng brothers, the unity and sensibility of morality is what characterizes the state of human consciousness. In traditional Chinese medicine, if a person’s limbs are paralyzed it means that the blood and meridians are obstructed (*bu tong* 不通), which means that the limbs are not consummate. Thus, the idea of consummate conduct and the health of one’s body are integrated—whether a person’s *qi* and blood are flowing or not. The evocative image of a paralyzed body is used to analogize the state of “in-consummate conduct” (*bu ren* 不仁) and promote the idea of the unity of myriad things, as well as the moral sympathy arising from the affection that is generated between people, providing an embodied intuitive perception of the abstract moral empathy. Thus, the Neo-Confucian doctrine of *gongsheng* is not just a theoretical or scientific description; it is more of a moral

⁸ See Introduction for use of the word *tian*

⁹ Cheng and Cheng, *Er Cheng Ji*.

affection and a moral self-awareness that demands us to regard dissimilar existents with moral sympathy. If we lack this moral awareness or sensibility, then the doctrine of *gongsheng* is stuck in the realm of rationality, and this, according to the Cheng brothers, is not ideal.

One of the unique aspects of the Cheng brothers’ philosophy is how they differentiate between two ways of looking at things: “looking at myriad things from the perspective of humanity” (从人观万物) and “looking at humanity from the perspective of myriad things” (从万物观人). Their idea of “oneness of consummate conduct” stresses the fact that nothing exists outside of the purview of *tian* and earth, and that humans exist in between *tian* and earth; thus, the position that humanity occupies is no superior to that of myriad things. Hence, we must go beyond the human perspective when thinking of how everything is interconnected, and we must instead see this from a supra-human viewpoint. In the *Dingxing Shu* (定性书), the Cheng brothers explain as follows:

The eternal [*Dao*] of *tian* and earth is to distribute their heart-mind (*xin*) among myriad things without having their own will; the eternal [*Dao*] of sages is to adjust their emotions to abide by myriad things without having one’s own feelings. Therefore, the noble person strives to be just and capaciously accepting, adapting to the changing world.¹⁰

The character of the sage is as expansive as the universe, and he does not change the way he regards things in the world depending on whether they are good or evil. Laozi also said that “everything is concealed in *Dao*; the virtuous man cherishes it, and the inept man is safeguarded by it.”¹¹

Thus, in this view, there must be two perspectives of the unity of people and everything in the world: the transcendental perspective of the sage and the perspective of *Dao* that Laozi speaks of. From the perspective of *tian*, humans, as a species in the world, flow from the same source as everything else in the world. *Tian* sees nothing special about humanity as such, and thus it is said that: “there is nothing inside nor beyond *tian* and Earth (天地无内外). Humanity is no different from everything else that exists.”

¹⁰ Cheng and Cheng, “Dingxing Shu” in *Er Cheng Ji*.

¹¹ “Chapter 62” in *Daodejing* 道德经, annotation by Zhang Jing and Zhang Songhui (Zhonghua Book Company, 2021).

But at the same time, the Cheng brothers stressed that “humans are the heart-mind of *tian* and earth,” that humans bear responsibility toward things in the world, as “there is nothing among the myriad things that do not exist in its proper (natural) place— this is *tian*’s patterning in equilibrium.” This is similar to what was stated in *Taiping Jing* (太平经), which says that “the Great Peace means all things are unharmed.”¹² In this sense, there is an inherent connection between the Cheng brothers’ philosophy and Daoism. This shows that the Neo-Confucian concept of “the benevolent unity of all things” contains elements of Buddhist and Daoist thought.

Although Zhang Zai and the Cheng brothers differed in their philosophical views on the fundamental substance of reality (Zhang believed it was *qi*; the Cheng brothers believed it was *li*), they converged in their views regarding *gongsheng* and the unity of all things. Regarding the *gongsheng* doctrine, the Cheng brothers claimed that:

Tian’s patterning is supreme; that nothing could arise with only *yin* nor *yang* exclusively; if it is crooked, one would end up as animals or barbarians, and that those who achieve a balance of *yin* and *yang* are humans (*ren*).¹³

This position belies a predilection for ethnic chauvinism, which shows that there are certain issues in classical Confucianism that we must be cautious and think critically about.

WANG YANGMING’S “ONENESS OF CONSUMMATE CONDUCT” AND THE GONGSHENG OF ALL MYRIAD THINGS

The theory of “oneness of consummate conduct” by Wang Yangming 王阳明 (1472–1529) is a classic example of the Confucian doctrine of *gongsheng* in the Ming era. This “oneness of consummate conduct” can be elucidated on three major levels. Firstly, from the perspective of microbiology and ecology, humans have a unitary relationship with everything in the world. Secondly, there is the ethical belief in Neo-Confucianism

¹² 无物有所伤害才是太平。 See Xia Chen’s chapter in this book.

¹³ Cheng and Cheng, *Er Cheng Ji*.

that all creatures are related as if they were “one family under *tian*” (*tiansxia yijia* 天下一家); and, from this, that all people should morally regard each other with affection and care. Scholars and the learned must especially cultivate their sympathy and capacity to love others. The third level is that of moral agents with subjective perception and self-awareness. Since the subject is a moral agent with innate knowing (*liangzhi* 良知)¹⁴ that can perceive and is self-aware, all things are illuminated by the light of civilization. Without the light of human morality, the *gongsheng* state of unity that exists in microbiological and ecological environments can only ever be a dim, uncivilized *gongsheng*, which, according to Wang Yangming’s thought, is meaningless. On this level, Wang’s philosophy of *gongsheng* warns us that our modern idea of symbiosis based on ecological technology should not make humans revert to our primitive beginnings in which our unity with nature was primitive. Rather, the light of human civilization should imbue it with the character of human civilization, creating a state of *gongsheng* characterized by the moral, subjective perception, and self-awareness of all people and things living in harmony. A thoroughly naturalistic view of ecology and *gongsheng* is actually undesirable and unattainable. From a Marxist perspective, this involves inherently unifying “naturalized personhood” and “personified nature.” Thus, Wang Yangming’s ideal of the “oneness of consummate conduct,” which is based on “innate knowing” and the doctrine of *gongsheng* that it reflects, can still prove spiritually enlightening for modern people today.

Let us analyze the third level of the “oneness of consummate conduct” mentioned above. First of all, looking at people and everything in the world from the level of *qi*, people and the world are joined by a primordial connection. Wang Yangming wrote about the connection between the appearance of the world and “innate knowing” as well as human perception, noting that:

As heaven [*tian*] and earth open up again, all the myriad things reveal themselves and grow. With man also, the ears and eyes now see and hear, and all apertures are open. This is the time when the wonderful functioning of innate knowledge starts. From this we can see that the human mind and

¹⁴ Wang Yangming used the term “innate knowing” (*liangzhi* 良知) to describe the innate ability to discern right and wrong, good and evil. Sometimes, *liangzhi* is also translated as “innate knowledge.”

[*tian*] and earth form one body. Therefore, “it forms the same current above and below with that of [*tian*] and earth.”¹⁵

This current is expressed as the communication through *qi*. Wang Yangming expanded on the idea of “innate knowing” so that myriad things possess it. The reason that people and things in the world can resonate with one another is that they both possess the spirit of *qi*. Regarding the ethical dimension of this unity, Wang Yangming wrote that:

Is there any suffering or bitterness of the great masses that is not disease or pain in my own body? Those who are not aware of the disease and pain in their own body are people without the sense of right and wrong.¹⁶

Thus, Wang Yangming’s “oneness of consummate conduct” is similar to that of Zhang Zai and the Cheng brothers on an ethical and moral basis. These thinkers differ in their conception of *gongsheng* in that Wang Yangming emphasizes the “spiritual acuity” (*lingming* 灵明) of the individual or subject. This acuity refers to the moral awareness of the original unity between everything in the world, an awareness that allows the wondrous aspects of supernatural beings to appear. The statement that “people are the heart-mind (*xin*) of the universe” (人是天地之心) means that the heart-mind of the universe is the human acuity. Without this acuity, everything exists in a state of dimness; without the human acuity shining its light on the flow of *qi*, there would be no meaning.

Wang Yangming believed that people are united with the world and everything in it. They are connected by *qi*, not by relationships of causality, and spiritual acuity is needed to illuminate the state of *gongsheng*. Without the light of moral civilization, the unitary *gongsheng* state is benighted and senseless. In Wang’s *Instructions for Practical Living* 传习录 (*Chuanxi Lu*), when replying to his friend’s skepticism over his proposition that “nothing exists outside the heart-mind,” there is a fantastic contemplative discourse whereby he gave this example:

¹⁵ 天地既开，庶物露生，人亦耳目有所睹闻，众窍俱辟，此即良知妙用发生时。可见人心与天地一体，故上下与天地同流。Chan, *Instructions for Practical Living, and Other Neo-Confucian Writing. Records of Civilization: Sources and Studies*, 219.

¹⁶ 生民之困苦荼毒，孰非疾痛之发于吾身者乎？不知吾身之疾痛，无是非之心者也。Chan, *Instructions for Practical Living, and Other Neo-Confucian Writing. Records of Civilization: Sources and Studies*, 167.

Before you look at these flowers, they and your mind are in the state of silent vacancy. As you come to look at them, their colors at once show up clearly. From this, you can know that these flowers are not external to your mind.¹⁷

But this relationship between the flower and the mind cannot be viewed through the lens of Western philosophy, with Descartes' and Engel's understanding of the relationship between existence and cognition. It must be viewed from the perspective of the *gongsheng* doctrine, which explains human civilization as a sort of “light” that illuminates nature and emphasizes human perception and self-awareness as moral agents. Using human civilization to illuminate the *gongsheng* status of humanity gives the symbiotic interconnectedness of all things the sense and significance of civilization. Thus, the doctrine of *gongsheng* does not mean simply returning to pure nature. In this sense, the ethical aspect of *gongsheng* in Wang's thought has something the Cheng brothers and Zhang Zai lack, but it is precisely this content relevant to the modern time that the doctrine of *gongsheng* must preserve and promote.

CONCLUSION

The *gongsheng* doctrine is something that we humans need in order to get along with one another as we enter a new phase of globalization. The “New *Tianxia* System” proposed by the contemporary Chinese philosopher Zhao Tingyang is also an attempt to revitalize ancient Chinese political philosophy concepts, in order to provide an answer from political science and sociology to the problem of human coexistence in a new phase of globalization. In recent years, the Chinese government has proposed the concept of a “community with a shared future for mankind.” In fact, this concept represents the *gongsheng* ideal proposed by modern Chinese politicians. How should we coexist? This is both a political issue for the international community, and an ecological issue that needs to be seriously regarded by all of humanity. This ecological issue both involves and transcends politics, and thus should concern everybody who calls the

¹⁷ 汝未看此花时，此花与汝同归于寂；汝来看此花时，则此花颜色一时明白起来，便知此花不在汝心外。Chan, *Instructions for Practical Living, and Other Neo-Confucian Writing. Records of Civilization: Sources and Studies*, 222.

earth their home. If we connect the *gongsheng* doctrine with the proposition of Gu Yanwu 顾炎武 (1613–1682) that “it is the ordinary people who are responsible for the rise and fall of nations” (天下兴亡，匹夫有责) we might say that even though each person’s power and abilities are limited, and the quality of the world and society is inextricably linked with every individual human. Thus, human beings need to exercise each person’s moral capacity and rational understanding as well as our practical skills, to make the *gongsheng* concept, which has been inspired by the “oneness of myriad things,” a reality, and strive to imbue the state of *gongsheng* with the light of spiritual acuity. This is perhaps the significance of the Chinese Song-Ming Neo-Confucian ethics of *gongsheng* for our current generation.

This article is translated by Thomas Garbarini and Jin Young Lim.

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The Concept of *Gongsheng* in Daoist Philosophy: Examples from Laozi and Zhuangzi

Jun Gong

The concept of *gongsheng* 共生 has been present since the earliest beginnings of Chinese philosophy and thought. However, this rich and multi-layered idea requires some explanation. Among China's three main schools of thought, Confucianism, Buddhism, and Daoism, the concept of *gongsheng* in Buddhism is often thought to be particularly rich and worthy of study. However, there is much still waiting to be unearthed from within Confucianism and Daoism, the two homegrown Chinese philosophical traditions. For example, there are quotes from the Confucian canon, which read, "How great is *Dao* of the Sage... it brings forth and nurtures the myriad things, and rises up to the height of *tian*," and "myriad things are nourished and cultivated together without

J. Gong (✉)
Department of Philosophy, Sun Yat-Sen University, Guangzhou, China
e-mail: gongj@scnu.edu.cn

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harming each other. *Dao* [and myriad things] walk side by side without contradicting one another.”¹

A profound understanding of the concept of *gongsheng* can also be found in early Daoist schools of thought. This article seeks to expound on this through using examples from the works of Laozi and Zhuangzi.

LAOZI: “ALL THINGS BEGIN TOGETHER” AND “SELF-CREATION”

Chapter 16 of the *Daodejing*² by Laozi contains quite a profound passage, which refers to the concept of *gongsheng*:

Extend your utmost emptiness as far as you can
And do your best to preserve your equilibrium (*jing*).
In the process of all things emerging together (*wanwu*),
We can witness their reversion.
Things proliferate,
And each again returns to its root.
Returning to the root is called equilibrium.
Now as for equilibrium—this is called returning to the propensity of things,
And returning to the propensity of things is common sense.
Using common sense is acuity,
While failing to use it is to lose control.
And to try to do anything while out of control is to court disaster.
Using common sense is to be accommodating,
Being accommodating is tolerance,
Being tolerant is kingliness,

¹ 大哉圣人之道……发育万物，峻极于天；万物并育而不相害，道并行而不相悖。Zhu Xi 朱熹，“Zhongyong Zhangju 中庸章句 [Doctrine of the Mean],” in *Sishu Zhangju Jizhu* 四书章句集注 [Four Books in Chapter and Verse with Collected Commentaries] (Zhonghua Book Company, 1983), 36–38.

² Laozi, the “Old Master,” is central to philosophical Daoism, traditionally believed to have lived in the sixth century B.C.E. as per Chinese accounts. The question of his historical existence is contentious among scholars, with a faction suggesting his status as purely legendary. Furthermore, the book attributed to him, known as the *Laozi* or *Daodejing*, is regarded by some scholars as a composite text, suggesting that it might have been the product of multiple authors and edited over time rather than the work of a single author. For simplification we will use *Laozi* interchangeably as the “author(s)” of the *Daodejing*, as well as the text itself.

Being kingly is *tian*-like,
 Being *tian*-like is to be way-making.³

Cheng Xuanying 成玄英 (631–655) interprets the phrase *wanwu bingzuo* 万物并作 (all things begin together) from this passage as *wanwu bingsheng* 万物并生 (simultaneous creation, or to be born or brought forth together), which is a clear reference to the meaning of *gongsheng*. This passage implies that the fundamental principles of existence are related to the process of *gongsheng* and *bingzuo* (mutual origination) among the myriad things. Only when the state of *gongsheng* is present can all things return to *Dao* (return to the root), thus enabling “inclusivity and acceptance of the myriad things”⁴ and creating an environment of common prosperity. Laozi states that the concept of *gongsheng* was not restricted to the origins of the world or the natural environment, but was “all-pervasive” (无所不周普), even penetrating how the social order is established and the fundamental operation of politics. *Gongsheng* and *xiangrong* 相容 (mutual inclusivity) between all things is both the law of nature and, at the same time, it is one of the basic principles of “unconstrained equity” (荡然公平) in human society and politics.⁵ The concept of *gongsheng* is one of the foundations of Daoist political philosophy, and understanding it is essential for those wanting to study the topic.

When analyzing the *Daodejing*, one can find a similar idea to *gongsheng* in the term *xuantong* 玄同 (metaphysical unity). In Chapter 56, it says, “soften your glare, unravel your tangled threads, be in harmony with the splendid, be in unity with the mundane. This is called the metaphysical unity.”⁶ Laozi was an advocate of eliminating disparity, being one with both the glorious and the mundane, and accepting differences. He believed that only then could we eliminate the distances between each other, the disparity between the advantaged and the disadvantaged, the

³ 致虚极，守静笃；万物并作，吾以观复。夫物芸芸，各复归其根。归根曰静，静曰复命。复命曰常，知常曰明。不知常，妄作凶。知常容，容乃公，公乃王，王乃天，天乃道，道乃久，没身不殆。See Roger T. Ames and David L. Hall, trans., *Daodejing: Making This Life Significant; A Philosophical Translation* (New York: Ballantine Books, 2004). For Chinese version, refer to Lou Yulie (annotation) and Wang Bi (commentary), *Laozi Daodejing zhujiaoshi [Commentary and Collated Annotation on Laozi's Daodejing]* (Zhonghua Book Company, 2008), 35–36.

⁴ 包通万物，无所不容。Lou, *Laozi Daodejing zhujiaoshi*, 35.

⁵ Lou, *Laozi Daodejing zhujiaoshi*, 36.

⁶ 挫其锐，解其纷，和其光，同其尘，是谓玄同。See Lou, *Laozi Daodejing zhujiaoshi*, 148.

rich and the poor, and bring forth a state of *xuantong*. This metaphysical unity is often interpreted as “the most precious thing in the world” (*wei tianxia gui* 为天下贵), as it advocates a state of consciousness that values coexistence and non-discrimination.⁷ This state of consciousness would engender a situation in which “there is no contention between things,” and “no aversion between things,” and thus could become a philosophical foundation for conflict resolution.⁸

Relative to the idea of *bingsheng* 共生 (simultaneous creation) is *zisheng* 自生 (self-creation). *Zisheng* was seen as the opposing force to *gongsheng*, and Laozi believed that the consequences of self-creation were, indeed, conflict and disharmony. Chapter 7 of *Laozi* states,

The reason the [*tian* and earth] is able to be lasting and enduring,
Is because it does not live for itself.
Thus it is able to be long-lived.⁹

The phrase *buzisheng* 不自生 (did not create themselves) in this sentence implies that a process of *gongsheng* took place. Within self-creation is the idea of domination over others and, in the context of Laozi’s writings, it also has the sense of exclusivity. It was, therefore, often seen as the root cause of conflict and destruction. As Wang Bi explains, “self-creation leads to conflict in the world, while not creating oneself allows all beings to be in their proper place.”¹⁰

It is worth pointing out that understanding the concept of *gongsheng* is not a simple epistemological issue or question of intellect. In Laozi’s system of thought, *gongsheng* was related to *wudao* 悟道 (the comprehension of *Dao*). Laozi asserts that one’s understanding of *gongsheng* was rooted in the operation of *Dao* in and of itself, and that knowledge analysis from a purely phenomenological standpoint would not get one far. He says that one must enter the highest realms of *wudao* in order to fully grasp *gongsheng*. Here, *gongsheng* and the word *tidao* 体道 (realization of *Dao*) are in essence, one concept. The conditions for *gongsheng* are just as Wang Bi describes: “with *tian* one can connect to the Power of

⁷ Lou, *Laozi Daodejing zhujiaoshi*, 148.

⁸ 物无所偏争; 物无所偏耻. Lou, *Laozi Daodejing zhujiaoshi*, 148.

⁹ 天地所以能长久者, 以其不自生, 故能长久. See Ames & Hall, trans., *Daodejing*, 86.

¹⁰ Lou, *Laozi Daodejing zhujiaoshi*, 19.

Dao, and realize *Dao*, connecting to Great *Dao*.”¹¹ According to Laozi, reason and intellect would actually negatively impact our ability to look at the very nature of a thing with a holistic and systematic understanding. Therefore, he stresses the need to seek a transcendent cognitive method.

When Laozi speaks of *wanwu bingzuo* (all things begin together), he emphasizes that only through successfully “extending utmost emptiness, and preserving equilibrium (*jing*)” (致虚极, 守静笃) can one completely understand the concept of *gongsheng*.¹² What he calls “extending utmost emptiness, and preserving equilibrium” refers to the process of attaining inner quietness through certain practices, and what he calls *zhichang* 知常 (understanding the way of nature) refers to *wudao* or comprehending the truth. Laozi says that only after achieving *wudao* can one be in a state of consciousness that allows for tolerance of all things and mutual creation and actualization. It is clear that to Laozi, understanding the doctrine of *Dao* is deeply related to the principles of *bingzuo* (mutual origination) and *gongsheng*. In fact, Laozi emphasizes the practice of *neiguan* 内观 (inner seeing or mindfulness) as a way to connect to the myriad things. Chapter 49 of the *Daodejing* states, “The common people all fixate on their eyes and ears; the sages close off their senses.”¹³ According to Heshang Gong 河上公 (c. 200CE), the word 注 *zhu* or “to focus” here means “to use,” while the character 孩 *hai* (children) was taken from the character 阂 *he*, which according to the *Shuowen Jiezi* 说文解字 means “to be closed to the outside.”¹⁴ Therefore, Laozi suggests that for a sage to achieve *wudao*, they must, to a certain degree, close off their sense organs to the outside world. They must prevent themselves from hearing or seeing and instead focus on the clarity of the internal, attaining sight through emptiness.

In Chapter 52, Laozi explains that in “practicing *Dao*,” one must “block up the openings (*se qi dui* 塞其兑), shut the gateways, and to the end of [the] days [one’s] energies will not be used up.”¹⁵ Yu Yue

¹¹ Lou, *Laozi Daodejing zhujiaoshi*, 36.

¹² Lou, *Laozi Daodejing zhujiaoshi*, 35–36. See Ames & Hall, trans., *Daodejing*, 99.

¹³ Lou, *Laozi Daodejing zhujiaoshi*, 36.

¹⁴ Zhu Qianzhi 朱谦之, *Laozi Jiaoshi* 老子校释 [*Laozi and Annotations*] (Zhonghua Book Company, 1984), 196–197.

¹⁵ Lou, *Laozi Daodejing zhujiaoshi*, 139–140. See Ames & Hall, trans., *Daodejing*, 158.

俞樾 (1821–1907) explains that here *dui* 兑 or “openings” represents *xue* 穴, which means the point at which one’s sensory organs connect to the outside.¹⁶ Ultimately, he is talking about one’s ears, eyes, nose, and mouth. Laozi also points out that if you spend all your time seeking knowledge in the external world, which is akin to “venting the openings and multiplying your responsibilities, [then] to the end of your days you will be incurable.”¹⁷ In short, one must first stop the external from interfering with one’s senses and enter an internal state of emptiness and stillness, and only then, can one come to understand the workings of *Dao*. The doctrine of *jigan* 寂感 (ontological feeling) has become an important source of epistemological discussion throughout ancient Chinese philosophy, which needs renewed attention and research. From the perspective of analyzing the history of thought and the history of philosophy, the difficulty here lies in how one can grasp *Dao* through *jigan*. This is not a purely theoretical issue; rather, it is more of a question of practice. In the context of Chinese philosophy, it is often referred to as the “theory of *gongfu*” (功夫论) which roughly carries this meaning.

ZHUANGZI¹⁸ ON “GONGSHENG” AND ITS PHILOSOPHY

In principle, Zhuangzi’s discussion of *gongsheng* follows that of Laozi; however, there are some differences. To Zhuangzi, *gongsheng* is an ideal state of being, and only his so-called age of perfect Virtuosity (*zhide zhishi* 至德之世) can create the conditions suitable for its existence. In the chapter of *Zhuangzi* titled “Horse Hooves,” he describes the “age of perfect Virtuosity” as a time when humans and beasts are natural friends and peacefully coexist. The passage states:

¹⁶ Zhu, *Laozi Jiaoshi*, 207.

¹⁷ 开其兑, 济其事, 终身不救. Ames & Hall, trans., *Daodejing*, 158.

¹⁸ Zhuangzi, also known as “Master Zhuang,” is also a pivotal figure in philosophical Daoism, traditionally believed to have lived in the fourth century B.C.E. according to Chinese accounts. His historical existence, much like Laozi’s, is a topic of debate among scholars, with some proposing that he may be more of a legendary figure than a historical individual. The text attributed to him, the *Zhuangzi*, is thought by some scholars to be a compilation of writings, suggesting that it might have been contributed to by multiple authors and edited over time, rather than solely penned by Zhuangzi himself. For the purpose of simplification, we will use *Zhuangzi* interchangeably to refer to the “author(s)” of the *Zhuangzi*, as well as the text itself.

Thus, in the age of perfect Virtuosity...all creatures lived together, merging their territories into one another. The birds and beasts clustered with each other, the grasses and trees grew unhampered, so one could tie a cord to a bird or beast and take a stroll with it or bend down a branch to peep into a bird's nest. Indeed, in those days of perfect Virtuosity, the people lived together with the birds and beasts, bunched together with all things. What did they know about "exemplary men" and "petty men"?¹⁹

The "age of perfect Virtuosity" is a representation of his ideal state, where there are no disparities, and where humans live in peaceful coexistence with animals and nature. In Zhuangzi's discussions of *gongsheng*, he starts from the basis that the fates of the natural environment, animals, and humans are intertwined. This Daoist take on *gongsheng* is similar to that of modern environmentalism. It is a holistic ideal that has at its heart principles of compassion and non-harmfulness. As Cheng Xuanying explains, "if man does not have the intention to harm living things, then living things will not be afraid of man. Therefore, birds and animals can be harnessed and travel together with humans. One can climb to gaze into a bird's nest."²⁰ Moreover, this perspective on *gongsheng* requires that we break the dominance of anthropocentric theories. In traditional Chinese thought, Confucianism also promotes peaceful coexistence between all living things; however, it was developed with humanity's dominance at its core. The situation is more complicated in Buddhism. Lambert Schmithausen, a modern German scholar famous for his study of Buddhism, explains that in the early forms of Buddhism that started in India, plants and animals were regarded as sentient beings.²¹ But that idea never gained traction in Chinese Buddhism. Although the Tiantai Sect had once put forward the idea that "all things have the nature of the Buddha," the Buddhism that was adopted by the Chinese mainstream focused on anthropocentric discussions of disposition and character, and dropped the idea of *gongsheng* with a sentient

¹⁹ 故至德之世，..... 万物群生，连属其乡。禽兽成群，草木遂长。是故禽兽可系羈而游，鸟雀之巢可攀援而窥。夫至德之世，同于禽兽居，族与万物并，恶知乎君子小人哉。 Translation from Brook Ziporyn, *Zhuangzi: The Complete Writings* (Cambridge: Hackett Publishing Company, Inc, 2020).

²⁰ Guo Xiang (commentary) and Cheng Xuanying (subcommentary), *Nanhua zhenjing zhushu* [Commentary on the Nanhua Scripture] (Zhonghua Book Company, 1998), 196.

²¹ Lambert Schmithausen. "Buddhism and the Ethics of Nature—Some Remarks." *The Eastern Buddhist* 32, no. 2 (2000): 26–78. <https://www.jstor.org/stable/44362258>.

natural world. In contrast, Zhuangzi has profound insights on this matter. While his “age of perfect Virtuosity” has some anthropocentric tendencies, he nevertheless advocates for equality and peaceful coexistence in a multi-species world.

This differs from *gongsheng* in Buddhism on a philosophical level. In Buddhism, *gongsheng* is either rooted in discussions of interdependence between all *dharmas*, or it is explained through the relationship between mind and matter. For example, in Mahayana Buddhism everything is mind-only or awareness-only. In other words, it is analyzed from the perspective of the relationship between the structure of consciousness and the myriad things. Classical Daoist philosophy in China tends towards a more phenomenological approach to the concept of *gongsheng* and equality between all things. Zhuangzi’s view on the philosophical foundations of *gongsheng* is found in the chapter titled “Equalizing Assessments of Things.” The “age of perfect Virtuosity,” where all creatures live together, is mainly to be found in “Horse Hooves,” one of the Outer Chapters. Cheng Xuanying explains that the Outer Chapters focus on achievements, leaving the Inner Chapters to stand as the works of reason. In “Equalizing Assessments of Things,” Zhuangzi explicitly refers to the concept of *gongsheng* in the statement, “[*Tian*] and earth are born together with me, and the ten thousand things and I are one.”²² According to Zhuangzi, one aspect of the word *bingsheng* 并生 (simultaneous creation, to be born or brought forth together) is that all the myriad things are brought forth as a result of mutual causation. This establishes a conditional relationship. It continues,

There is no [thing] that is not ‘that.’ There is no [thing] that is not ‘this.’ But one cannot be seeing these from the perspective of ‘that’: one knows them only from ‘this’ [i.e., from one’s own perspective]. Thus, we can say: ‘That’ emerges from ‘this,’ and ‘this’ follows from ‘that.’²³

This concept is closely related to early Buddhist ideas that talk about *gongsheng* from the perspective of dependent origination or conditioned

²² 天地与我并生，而万物与我为一。See Ziporyn, trans., *Zhuangzi*.

²³ 物无非彼，物无非是。自彼则不见，自知则知之。故曰彼出于是，是亦因彼。

Guo Qingfan (compiler), “Qi wu lun [Equalizing Assessments of Things],” in *Zhuangzi jishi* [*Zhuangzi Collected Commentaries*] (Zhonghua Book Company, 1961), 66. For English translation, refer to Ziporyn.

co-arising. Zhuangzi also applies a cyclical approach to the idea of coexistence between all things, pointing out that the principle within *gongsheng* that “all things are so, all things are allowable” is a natural phenomenon or “the Potter’s Wheel of the *tian*” (*tianjun* 天均).²⁴ This refers to the fact that even between different things there still exists the properties of mutual causation and conditioned co-arising. He believes that all things move in cycles, stating that “different forms yield to each other, beginning and ending like a circle.”²⁵ By this he suggests that there is a reason and necessity for every species to exist; moreover, there is a chain of dependent origination, joint transformation, and creation between the existence of different species. This is the natural law that governs the operation of all things. Zhuangzi did not give many theoretical explanations on the meaning of “the Potter’s Wheel of the *tian*”; he believed that as *gongsheng* was *Dao* of *tian*, it could not be explained using knowledge in the general sense. Joseph Needham, a sinologist and historian of science, also found that in Daoist natural philosophy, “the concept of mutual causation and contrastive correlation” (相因对待的观念) was obvious, but he did not find that Daoists discussed a set of laws of causality in the way that Western philosophers like Aristotle did.²⁶

From the perspective of the metaphysical Daoist philosophy (*xuanli zhexue* 玄理哲学), the concept that “myriad things are co-created” (万物共生) is like the principle of “walking two roads” (*liangxing* 两行). In the end, it is only through connecting with *Dao* of *tian* that one gains understanding. In other words, “*Dao* connects all as one” (道通为一). This is in the same vein as Laozi’s conception of understanding *gongsheng* through *wudao* (comprehension of the truth). Zhuangzi also puts forwards the idea that, if one wants to observe *gongsheng* and the logic pervading all things, one cannot start from narrow and parochial anthropocentric views. Instead, one must “bask in the broad daylight of *tian*” (*zhaozhi yutian* 照之于天) and observe it through the “axis of *Dao*” (*dao shu* 道枢). This meant that one should carefully observe and reflect on the relationships between humans, different species, and nature in the

²⁴ See Ziporyn, trans., *Zhuangzi*.

²⁵ Guo, “Yuyan,” in *Zhuangzi jishi*, 950.

²⁶ See Chen Lifu, trans., *Zhongguo gudai kexue sixiang shi* [Science and Civilisation in China] (Jiangxi People’s Press, 1990), 62.

holistic manner set forth by *Dao* of *tian*. Only then can “all things be of themselves” and coexist equally in the “metaphysical unity.”²⁷

Zhuangzi points out that “it is only someone who really gets all the way through them that can see how the two sides open into each other to form a oneness.”²⁸ Those who are not constrained by anthropocentrism and their own personal views—“such a person would not define rightness in any one particular way but would instead entrust it to the everyday function [of each being],”²⁹ enabling them to see how everything is connected. That is to say, one must understand the fullness of *Dao* of *tian* to be able to observe and reflect on myriad things, and only then can one understand that different species and life forms all “have some place from which it can be affirmed” (*guyou suoran* 固有所然) and “have some place from which it can be affirmed as acceptable” (*guyou suoke* 固有所可). This in turn allows one to understand that “no thing is not right, [and] no thing is not acceptable.”³⁰ For example, in the chapter titled “Correcting the Nature,” Zhuangzi talks about a state of “perfect unity” (*zhiyi* 至一), which again contains a reference to *gongsheng* in the statement: “The myriad things would receive no injury, or meet with a premature death.”³¹ In the chapter titled “Autumn Floods,” Zhuangzi also talks about looking “from the point of view of *Dao*” (*yidao guanzhi* 以道观之) and “describing the method by which the way all things fit together” (*lun wanwu zhili* 论万物之理). Thus, he aimed to promote equality through *gongsheng*, ensuring that “myriad things are equally regarded” (*wanwu yiqi* 万物一齐) and that people “hold myriad things in their love” (*jianhuai wanwu* 兼怀万物).³²

In Zhuangzi’s well-known discussion on *xinzhai* 心斋 (fasting of the mind) and *zuowang* 坐忘 (sitting and forgetting), he expands on the concept of *jigan*, which Laozi believes would enable one to achieve *wudao*. Zhuangzi suggests that the *gongsheng* principle of “walking two roads,” another way of signifying *Dao* of *tian*, absolutely could not be achieved successfully through knowledge in the general sense. He called

²⁷ Guo, “Qi wu lun [Assessment on the Equality of Things],” in *Zhuangzi jishi*, 66.

²⁸ 唯达者知通为一。Ziporyn, trans., *Zhuangzi*.

²⁹ 不用而寓诸庸。Ziporyn, trans., *Zhuangzi*.

³⁰ 无物不然，无物不可。See Guo, *Zhuangzi jishi*, 69–70 and Ziporyn, trans., *Zhuangzi*.

³¹ Guo, “Zai you [Being There and Giving Room],” in *Zhuangzi jishi*, 550.

³² Guo, *Zhuangzi jishi*, 584–585.

this “[laboring one’s] spirit trying to make all things one, without realizing that it is all the same.”³³ To fully comprehend *gongsheng* one must “immerse in stillness and emptiness, basking in the wisdom of nature.”³⁴ Cheng Xuanying renders this concept very precisely: “The wondrousness that is the unified *Dao*, is enduring and fathomless, one cannot understand its non-duality through intellectual pursuits.”³⁵ He also states that “only those who achieve *Dao*, and have a pure state of mind and metaphysical insight, can eliminate their bias for dualism and understand the unity of *Dao*.”³⁶ In his chapter titled “Letting Be, and Exercising Forbearance,” Zhuangzi goes so far as to advocate abandoning intellectual investigation altogether, stating, “if they knew it, they would be separated from it.”³⁷ He believed that if one used knowledge to explain the workings of Great *Dao* it would not be representative of the truth. In the chapter titled “The Great Source as Teacher,” Zhuangzi also puts forward his idea of *zuowang* 坐忘 (sitting and forgetting), which is based on “dismissing the clarity of the senses, leaving physical form and getting rid of acquired learning, until one is in union as the connected way.”³⁸ In classical Chinese philosophy, this discourse and the doctrine of *jigan* are seen as one and the same thing.

Zhuangzi also wants to widely apply the concept of *gongsheng*, in the sense of an ideal state of *Dao* to “the human world” (*renjianshi* 人间世). In Zhuangzi’s philosophy, “the human world” is an important concept, which is also used to refer to a state of suffering. In his chapter titled “The Human World,” Zhuangzi provides profound insights into and warnings about the deception and danger that exists in the human world. This is why he hoped to link the concept of *qiwu* 齐物 (equalizing assessments of things) from *gongsheng* to the treatment of social politics and ethics. He hoped to move from *gongsheng* as an ideal to the real application of it in broader society. It can be said that the idea of *tianxia* 天下 (all under *tian*) can also be more or less interpreted in connection to the discourse on *gongsheng*. In the chapter titled “*Tianxia*”

³³ 劳神明为一而不知其同也。See Ziporyn, trans., *Zhuangzi*.

³⁴ 直置虚凝，照以自然之智。Guo and Cheng, *Nanhua zhenjing zhushu*, 35.

³⁵ Guo and Cheng, *Nanhua zhenjing zhushu*, 35.

³⁶ Guo and Cheng, *Nanhua zhenjing zhushu*, 37, 38.

³⁷ Guo, “*Zai you* [Letting Be, and Exercising Forbearance],” in *Zhuangzi jishi*, 390.

³⁸ 黜聪明，离形去知，同于大通。Guo, *Zhuangzi jishi*, 284.

or “All Under Heaven,” Zhuangzi promulgates that if one can realize Great *Dao*, then one can “nourish the myriad things and bring the world into harmony.” This points to the concept of *gongyu* 共育 (joint nourishing) within *gongsheng* as the key to achieving peace in the world. To Zhuangzi, *Dao* of *tian*, which incorporates the meaning of *gongsheng*, is the only thing which can enable mankind to “carry and nourish all things, with its overflowing greatness!” and thus be able to “love the rest of mankind and bring benefit to other things,” “see commonalities where there are differences,” “conduct oneself without seeking to be distinguished above others,” “incorporate all the ten thousand differences,” and “show greatness of mind.”³⁹ His political philosophy favors coexistence between diverse groups, respecting differences, and the forming of a “metaphysical unity” between all parties. He hopes to achieve a state of global co-governance (*tianxia gongzhi* 天下共治) through the concept of *gongsheng*. Cheng Xuanying explains this idea as follows: “through not leading others to be the same as me, then vastness can be achieved.” He also elaborates, “by allowing numerous differences between things and accepting the differences of the common people, the true nature of the group will be achieved, and therefore the world will be rich.”⁴⁰

Zhuangzi believes that *gongsheng* is all about respecting the very nature of a thing, its diversity, its otherness. He warns against excessive interference from humans and advocated allowing all things to engage in the process of self-transformation. In that sense, to Zhuangzi, *gongsheng* 共生 and *zisheng* 自生 (self-creation) are one and the same, which is a massive departure from Laozi’s concept of self-creation. In the chapter “Letting Be, and Exercising Forbearance,” Zhuangzi talks about “[taking] the position of doing nothing, and things will of themselves become transformed.”⁴¹ Cheng Xuanying’s subcommentary explains these statements by saying “when allowed to transform on their own, all things are able to bring forth the natural order of things.”⁴² Here “self-creation” is absolutely not meant to supersede the process of *gongsheng*, which could result in all things encroaching on each other or losing their true

³⁹ 覆載萬物者也，洋洋乎大哉。Guo, “Tiandi [Heaven and Earth],” in *Zhuangzi jishi*, 404–407.

⁴⁰ Guo, “Tiandi [Heaven and Earth],” in *Zhuangzi jishi*, 404–407.

⁴¹ 徒处无为，而物自化。James Legge, trans., *Zhuangzi* (Createspace Independent Publishing Platform, 2018).

⁴² Guo, *Zhuangzi jishi*, 390–392.

nature. In fact, Zhuangzi believes that it was only under conditions of mutual respect for individuality that all things would be able to flourish. In Zhuangzi's version of *gongsheng*, the myriad things begin together in a state of abundance yet at the same time, each entity is free to be itself and have its own character. In "Horse Hooves," Zhuangzi directly criticizes humanity, despite its culture and civilization, for the destruction of species' innate nature. He points to the practices of "[mutilating] unhewn raw material to make valued vessels" and the "the destruction of the [*Dao*] and its Virtuosity to make Humanity and Responsibility"⁴³ and explains that these are examples of anthropocentrism driving excessive human activity, and destroying *Dao* of nature, or not allowing "nature to take its course."⁴⁴ It is clear that the concept of *gongsheng* in Zhuangzi's analysis developed out of the "self-transformation through non-doing" (*wuwei zisheng* 无为自生) Daoist system of thought. As he states in "Letting Be, and Exercising Forbearance," "stay in a state of non-doing and all things will transform themselves."⁴⁵

A COMPARATIVE STUDY ON HEIDEGGER'S "BEING-WITH" AND DAOISM'S GONGSHENG

According to scholarly research, from the 1920s onwards, Martin Heidegger (1889–1976) became intensely interested in Chinese Daoist thought. We do not have the capacity here to look into the specific question of whether or not Daoist concepts of *gongsheng* actually influenced Heidegger, but we can make a comparison between the relevant ideas in Heidegger's philosophical works such as "being-with" (*Mitsein*) with the Daoist concept of *gongsheng*. Heidegger's works discuss the concepts of "Dasein" and "being-in-the-world," (*In-der-Welt-sein*) part of which centers around how a "Dasein" (or "being") in the world "deals" with other entities. This is what is known as "being-with." Heidegger believed that beings are helplessly "thrown into the world." Because of this, their "being-with" other things becomes a fundamental characteristic of

⁴³ 残朴以为器；毁道德以为仁义。Ziporyn, trans., *Zhuangzi*.

⁴⁴ Guo, *Zhuangzi jishi*, 336.

⁴⁵ 徒处无为，而物自化。Guo, *Zhuangzi jishi*, 390.

Dasein. In his work *Being and Time*, he explains, “Being-in-the-world is a state of Dasein, being-in is being-with-others.”⁴⁶

Heidegger tries to elucidate his whole philosophy of being from the point of view of the existence of the self and “being-with.” “Being-with” primarily refers to the space within which the existence of the self, “others” and “things” relate to each other. The scope of this is certainly not as large as the scope referred to by the Daoist concept of *gongsheng*. However, Heidegger points out that to understand being, one must begin from the space within which being-with takes place. He assigns all “things” in the external world the term “equipment” (*Zeug*) and rejects the structure seen in traditional subject-object epistemological theories and metaphysics, which endeavor to explain the “I-thing” relationship. Instead, he points out that, in the traditional philosophical sense, things are not “present-at-hand” (*vorhanden*), put there to allow us to quietly watch them. In fact, things are “utensils,” which are there “ready-to-hand” (*zuhanden*) for the self to interact with and to work with. Therefore, the relationship between human beings and things is more primordial. It is a relationship between beings and equipment that is ready-to-hand, referred to as a relationship of “concern” (*Besorge*).

However, when he discusses the relationship between the self and others, others are seen as different from things. Unlike things, which are “equipment” for one’s self-realization, the being-with between the self and others constitutes a relationship of “solicitude” (*Fürsorge*). To Heidegger, the existence of the self is always a part of being-with things and others in the world. He believed in an ideal state of being-with, similar to Zhuangzi’s “age of perfect Virtuosity,” where different personalities would be tolerated, nurtured, and developed.⁴⁷

Heidegger, however, knew the reality of being-with was not like this, and in fact, he described being-with as a sign of “fallenness.” Heidegger said that in the real world the dealings between the self and equipment is directed by “concern,” while interactions with others are directed by “solicitude” (or “care”). Solicitude takes two forms: a dominating type of care that steps in to take over for others, and a giving type of care that

⁴⁶ Chen Jiaying, *Haidege'er zhaxue jialun* [An Introduction to Heidegger's Philosophy] (Sanlian Press, 1995), 80.

⁴⁷ Wang Qingjie, “On the Social Ontology in Heidegger's Philosophy—From The Concept of Being-with in the ‘Being-Who’ Analysis,” in *Hermeneutics, Heidegger, Confucianism and Daoism* (Renmin University Press, 2004), 106–126.

helps others to take responsibility and respond to situations. Heidegger believed that in being-with others one often loses one's authentic self. He believed that the existence of "I" would be subsumed into the world and would fall away "from the authentic potentiality for being its own self. It has fallen into the world. 'Falleness' into the world means an absorption in being-with-one-another, in so far as the latter is guided by idle talk, curiosity, and ambiguity." In other words, because the existence of "I" must always have dealings with the being of the world, "we have already been thrown into inauthenticity."⁴⁸ That is to say, the state of being-with—where "I" coexist with the world, other things, and other people—leads us to entrench ourselves in the commonplace and fall into inessential everydayness. In this sense, the self is completely controlled by the "publicness" of the "world" and the values found in everydayness. The control held by the "they" determines our understanding of the world and the self. All personality is noiselessly suppressed, and the self joins the "they" in their average everydayness. The true self has thus fallen into the rootless nothingness of inauthenticity.⁴⁹ His arguments are similar to Zhuangzi's criticisms of "the human world," in which people, for the most part, have no way to "self-create" (*zisheng* 自生) and therefore lose their true selves. Coexistence in the world as described by Heidegger is fraught with phenomena such as anxiety, fear, and death.

Heidegger's description of being-with is very similar to Zhuangzi's thoughts on *gongsheng*. Although Zhuangzi only goes into detail about the purpose of *gongsheng* in his ideal "age of perfect Virtuosity," however, when referring to being-within the context of relationships in the human world, Zhuangzi similarly provides a critical explanation, emphasizing the fallenness of human nature. In "Equalizing Assessments of Things," Zhuangzi gives particular instruction on humans having a lack of awareness in their dealings with other things and other people. He believes it would result in a miserable existence of unending fallenness, where people toiled for little benefit and "things lost their truth and people forgot their roots."⁵⁰ Here is a brief quote from one of his most descriptive passages:

⁴⁸ George Steiner, *Martin Heidegger* (The University of Chicago Press, 1978), 97–98.

⁴⁹ See Walter Biemel, *Martin Heidegger: An Illustrated Study* (Routledge, 1977).

⁵⁰ 物喪其真，人忘其本。Guo, *Zhuangzi jishi*, 56–59.

When we have received the bodily form complete, we keep it alive only by constantly anticipating its end. In conflict with things and in harmony with things, it pursues its course to the end, with the speed of a galloping horse which cannot be stopped, is that not sad? To be constantly toiling all one's lifetime, without seeing the fruit of one's labour, and to be weary and worn out with this labour, without knowing where one is going to, is that not sorrowful? Men may say, 'But it is not death', yet of what advantage is this? When the body is decomposed, the mind will go with it, can this be called anything but an enormous sorrow?⁵¹

As explained in ancient commentaries, Zhuangzi has some profound insights into humanity's blindness in being led on by changes in their external environments (*ruiqing zhujing* 锐情逐境), as well as the fact that humanity encounters deep sorrow and exhaustion in trying to make sense of—and labor too much over—external things (格量物理, 深可悲伤). In a person's dealings with things, this “sorrow” creates what Heidegger calls fundamental moods, i.e., anxiety, fear, and death. At the same time, in Zhuangzi's “Equalizing Assessments of Things,” he posits that because in humanity, “our intercourse with others then leads to various activity, and daily there is the striving of mind with mind,”⁵² this creates “small fears [that] leave us nervous and depleted; [and] large fears [that] leave us stunned and blank,” where “the mind is left on the verge of death, and nothing can restore its vitality.”⁵³ Or, as described in the commentaries, “one's mind turns according to the conditions of one's environment, meaning that the innate nature of reality has many peculiarities,” where ultimately, we fall into things and cannot return.⁵⁴

When looking at dealings with others, Zhuangzi delves even deeper into the unpredictability of the human mind. In his explanation of “The Human World,” Zhuangzi goes into a lot of detail about the fact that “conducting oneself in society and getting along with other people is very difficult.” In this chapter, he states that “it is easy to wipe away

⁵¹ 一受其形，不忘以待尽。与物相刃相靡，其行尽如驰，而莫能止，不亦悲乎。终生役役而不见其成功，忞然疲役而不知其所归，可不哀邪。人谓之不死，奚益。其形化，其心与之然，可不谓大哀乎。Guo, *Zhuangzi jishi*, 56–59. See Ziporyn, trans., *Zhuangzi*.

⁵² 与接 (物) 为构，日以心斗。See Legge, trans., *Zhuangzi*.

⁵³ 小恐惴惴 (忧伤义)，大恐纍纍 (沮丧义) ... 近死之心，莫使复阳。Guo, *Zhuangzi jishi*, 51. See Ziporyn, trans., *Zhuangzi*.

⁵⁴ Guo, *Zhuangzi jishi*, 52.

your footprints, but difficult to walk without touching the ground,”⁵⁵ which is to say, that it is easy for someone to withdraw from society and live in seclusion; however, interacting with others is much harder and fraught with difficulties. As he says, “in acting at the behest of others, it is easy to fall into deception or hypocrisy”⁵⁶ meaning that in one’s dealings with society often one needs to follow custom and convention, ultimately losing authenticity. The chapter is full of similar narratives, with statements such as “dealings between people are hard to manage due to their variety and chaotic nature. However, getting along with others brings benefits, even though managing it is not easy.”⁵⁷

At the same time, “fallenness” also has a positive connotation. Only in “falling” and losing one’s authenticity can the “I” seek to break through the fallenness of “being-with” in the world and return to the true and authentic self. Heidegger believed, however, that this so-called breaking through cannot be sought through traditional philosophical or metaphysical methods. Dealings between people and things is not a simple epistemological issue or question of intellect. It is also not something one can achieve through gaining experience of being-in-the-world or through having a good understanding of social etiquette. On the contrary, sometimes it is exactly our intellect or life experience that makes it easy for us to be dominated by others and to lose our self and individuality. Similarly, dealings in-the-world require that one has experience of thoroughly internalizing *Dao*. Merely encountering the world is not enough. Heidegger believed that the systematic, argument-proof methodologies found in particular, traditional philosophies were exactly what prevented us from pondering the question of being. Traditional Western philosophy emphasizes humans’ role as knower and user, which has caused humans also to take on the role of plunderer of the natural world. Conversely, Heidegger puts forward that humans and their self-consciousness should not become the assessor or center of being. Humans should only be a privileged “listener and respondent” to existence. The being-with relationship of humans to other things and other people cannot be as Descartes’ and other positivist rationalist philosophers have defined, which is one of

⁵⁵ 絕迹易, 无行地難. Ziporyn, trans., *Zhuangzi*.

⁵⁶ 為人使, 易以偽. Guo, *Zhuangzi jishi*, 150.

⁵⁷ Guo, *Zhuangzi jishi*, 166.

“grasping” and pragmatic use, but should become a “relation of audition,” where we return to the internal being and try to “listen to the voice of being.”⁵⁸ Heidegger points out that Descartes’ use of the *cogito* principle, namely that our existence is driven by our understanding of the external, is erroneous. He believed that we should instead replace this with internal listening and “care” for individual existence.

In fact, in the chapter “The Human World,” Zhuangzi discusses how to maintain one’s true self in “the human world, where there are many things to be concerned with” (*renjian shewu* 人间涉物) by “acting in accordance with one’s nature and relying on the truth” (*shuaixing renzhen* 率性任真). Among other similar issues, Zhuangzi clearly opposes the general epistemological route that proposed that knowledge of the external would ensure a return to self. Instead, he advocated for “[allowing] your ears and eyes to open inward and thereby [placing] yourself beyond your mind’s understanding consciousness.”⁵⁹ This cognitive method, which emphasizes “internal comprehension” (*neitong* 内通) or cutting oneself off from the outside, is the same as “being empty and waiting for things to come” (*xuer daiwu* 虚而待物) or perceiving through the fasting of the mind. Zhuangzi believes that only through achieving a state of non-doing and being still, but connected, can one coexist with all of the myriad things in mystical agreement. This is because “only *Dao* can gather this emptiness” (*weidao jixu* 唯道集虚), or in other words, *Dao* can only be freely accessed when in a state of “clarity through emptiness, reflection through silence” (*xuming jizha* 虚明寂照). If one’s ears and eyes are exhausted by the external world, then one “cannot perceive all things,” (*yuwu bu ming* 与物不冥) and one has no way to “be in harmony with the changes in the human world and respond to the turning of the ages.”⁶⁰ Ultimately, there is no way to find wisdom in coexistence. One could say that both Daoists and Heidegger were all striving to find a way to break through the worldly entanglement that is *gongsheng* and understand the true self.

In his later works, Heidegger shifted his focus towards a “fourfold” theory of things, in which he discussed the “dwelling” of mortals before the earth, sky, and divinities. Heidegger became more concerned with

⁵⁸ Steiner, *Martin Heidegger*, 31–32.

⁵⁹ 徇耳目内通而外于心知. Ziporyn, trans., *Zhuangzi*.

⁶⁰ Guo, *Zhuangzi jishi*, 147, 150.

the coexistence of humans and the rest of the myriad things, emphasizing that mortals should not be so arrogant as to believe themselves without limits or without physicality. On the contrary, he believed humans should become the “preservers” of all things, meant to “save the earth” rather than “master the earth” or “subjugate the earth.” His argument goes that “in saving the earth, in receiving the sky, in awaiting the divinities, in initiating mortals, dwelling occurs as the fourfold preservation of the fourfold.”⁶¹ As some scholars have pointed out, this can also be true of Laozi’s theory of natural things. Zhuangzi also clearly states in his works that the intention and attitude of domination behind anthropocentrism will lead humanity down the wrong path, ultimately threatening the survival of humans and other species. Humanity’s existence must move in tandem with the mysterious rhythms of the natural world. Humans must live on an equal footing with all things. From the above analysis, it is not difficult to realize that, in his later years, Heidegger sought to describe an ideal state of being based on the concept of *gongsheng*, in many ways similar to Zhuangzi’s naturalistic “age of perfect Virtuosity.”

This article is translated by Megan Copeland.

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⁶¹ Wang Qingjie, “The Dao as a Thing: Heidegger’s Five Theories on the Fourfold and Laozi’s Theory on Natural Things,” in *Hermeneutics, Heidegger, Confucianism and Daoism* (Renmin University Press, 2004), 164–204.

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“If Humans Are Free of Disease, Then *Tian* Is Free of Disease”: Ecological Civilization and the Daoist Concept of *Gongsheng*

Xia Chen

Ecology as a field of study was founded in 1886 by German biologist E. Haeckel. Initially, the study of ecology focused on the relationship between animals and their organic and inorganic environments. Modern ecology, however, has recognized that human activity is another variable that impacts the environment and, as a result, environmental and developmental concerns have been introduced from the natural world into human society. Geologists even advocate for setting the year 1945, when the first atomic bomb exploded, as the beginning of the “Anthropocene,” as this

X. Chen (✉)
Institute of Philosophy, Chinese Academy of Social Sciences, Beijing, China
e-mail: 1434356394@qq.com

marks the start of human activity's influence on the evolutionary direction of the earth.¹ The study of ecology is also increasingly concerned with religion as an important phenomenon in human society. The act of damaging the environment is related to, and even supported by, certain beliefs. Which actions people take toward the environment depends on their beliefs about the relationship between human beings and their environments. When it comes to nature, society, and the supernatural, cultural inertia—as culture is inherited from generation to generation—has led to certain predetermined ideas about the world and about humanity. These ideas are predominantly the result of religion and faith. If people want to change their behavior, they must first change their beliefs. Thus, we need to further our understanding not only of the earth but also of the systems of human knowledge. Unearthing an environmental outlook within religion requires a re-examination and re-interpretation of religious perspectives on the world, humanity, and nature. It also requires us to give free rein to the ability of religion to influence society, in order to guide human behavior toward a more symbiotic relationship with the environment. In the current trend toward “greening” religion, Daoism's position on the relationship between humans and nature has also received significant attention. I will try to explain that there are ideas worth exploring in traditional cultures, including Daoism, for the benefit of constructing ecological civilization and establishing environmental ethics.

The *Taiping Jing* is a classical Daoist text from the Han Dynasty (202 BCE-220 CE). It consists of ten parts, with each part totaling 70 chapters and titled with one of the Heavenly Stems: *Jia*, *Yi*, *Bing*, *Ding*, *Wu*, *Ji*, *Geng*, *Xin*, *Ren*, and *Gui*. According to the *Xiangkai Zhuan* 襄楷传 (“Commentaries of Xiangkai”), there were a total of 170 chapters.² The content of the *Taiping Jing* was numerous and disorderly, but it had a self-contained structure. Later Daoist teachings, no matter what sect, have all been influenced by this book. Thus, it is dubbed as “the first Daoist classic.” A significant amount of the original *Taiping*

¹ See Bing Song, ed., *Out of the Anthropocene: Philosophical Reflections on the Relationship Between Humanity and Nature* 走出人类世：人与自然和谐共处的哲思 (Beijing: CITIC Press, 2021). In this book, prompted by the global rampage of COVID-19, several philosophers revisited certain fundamental questions such as human nature, the relationship between humans and other beings, and the significance of advanced technology to humanity.

² The original version is estimated to have had 750,000 to 800,000 characters, which would make it the largest work produced in Han Dynasty.

Jing has been lost over the years; all that remains now are 57 volumes preserved in the *Zhengtong Daozang* 正统道藏 (Daoist Canon) as well as excerpts in the abridged *Taiping Jing Chao* 太平经钞 (Excerpts from the Scripture of Great Peace) compiled in the Tang Dynasty. Wang Ming 王明 (1911–1992) tried to restore the text to its original form through cross-checking the remaining volumes of the *Taiping Jing* against the *Taiping Jing Chao* and 27 other sources, as well as reconstructing and supplementing the text, among other methodologies. His efforts were published in 1960 by the Zhonghua Book Company under the title *Taiping Jing Hejiao* 太平经合校 (“Collated Teachings of the Scripture of Great Peace”). Wang’s dating of and research into the *Taiping Jing* is the most critical achievement in the study of the history of Daoism, and it provides an important historical basis for research into the history of Daoism and Daoist thought. His pioneering masterpiece is a hallmark achievement in the creation of modern Daoist studies. It also earned Wang the title of “pioneer in the field of Daoist cultural research” by compiling the *Taiping Jing*. This article explores the relationship between the traditional Daoist concept of *gongsheng* 共生 (symbiosis, joint transformation, or creation) and modern ecological civilization through the *Taiping Jing*. The quotes in this article are taken from Wang’s collated *Taiping Jing Hejiao*.

“ELIMINATING DISASTERS,” “CHENGFU” 承负
(INHERITANCE OR RECEPTION AND TRANSMISSION),
AND “GONGSHENG” IN THE *TAIPING JING*

The emergence of the *Taiping Jing* was a result of frequent disasters and hardship during the time of its compilation. The text describes the situation as follows:

Disasters and pestilence are spreading everywhere...there is war, epidemic, floods, and drought, alternately competing with each other to bring catastrophe...the seven planets have deviated from their normal orbit, and *tian*, earth, and man are acting strangely, bizarre and unfounded rumors are circulating all around. Celestial beings and ghosts are attacking each other, while man, beast, and plant are destitute and dying. Calamities come one after the other. If the common people don’t realize what is happening,

then they don't repent or mend their ways, and innumerable poisonous thoughts freely circulate, simply too many to count...There are four great evils: disasters of war, disease, flood, and drought...In the time of Yao, there was a great flood. From then until the time of Shang Tang, there was another serious drought, and after that there were local floods and droughts everywhere. This was still solely a result of the common people's serious crimes...Disease, like a poisonous gas, spread out before them [evil doers], and war and drought writhed under their feet, flood waters spread unchecked, flowing in all directions, and evil doers sunk one by one into its depths.³

These myriad disasters were not unexpected but were rather the result of an accumulation of various errors and misdeeds by generations of people. As described in Chapter 48, "An Explanation of the Reception and Transmission [of Evil] in Five Situations" of the *Taiping Jing*, "natural calamities and disasters occur by the ten thousand, impossible to record. Their causes have been added one to the other over a long time, again and again."⁴ In the *Taiping Jing*, this phenomenon of accumulation is called *chengfu* 承负 (reception and transmission). *Chengfu* is a unique concept in Daoist teachings. In the *Yi Jing* 易经 (Book of Changes), there is a notion that "the family that regularly performs good deeds will be rewarded, while calamity will befall a family that regularly performs evil deeds." The *Taiping Jing* developed this idea into the Daoist concept of *chengfu*, it states:

Cheng (reception or inheritance) refers to what comes before, and transmission refers to what comes afterwards. *Cheng* explains that the older generation originally inherited *tian*'s purpose and followed it in all they did, but they gradually deviated from *tian*'s original intentions without knowing it themselves. As time went on, the people went through a lot together. Now, later generations are innocently suffering from previous generations' errors and misdeeds. And they continue this cycle, having endured calamities brought upon them. Therefore, what happens before is the inheritance, and what happens afterwards is the transmission. Transmission refers to the disasters that have befallen the people but are not

³ Wang Ming, ed., *Taiping Jing Hejiao* [Collated Teachings of the Scripture of Great Peace] (Zhonghua Book Company, 1985 ed.), 3.

⁴ Barbara Hendrischke, *The Scripture on Great Peace: The Taiping Jing and the Beginnings of Daoism*. Daoist Classics Series 3 (Berkeley: University of California Press, 2006), 145.

caused by one person’s despotic rule. It is connected to unrest, which is passed back and forth between the generations, which is why it is called transmission. Transmission refers to the punishments and disasters left to later generations by their ancestors.⁵

The concept of *chengfu* describes how the errors and misdeeds of previous generations, when built up significantly over time, cause the suffering of later generations and how, conversely, later generations are protected by the good deeds of their ancestors. This is the meaning of *cheng*. Meanwhile, *fu* refers to the positive or negative impact that the accumulated good or bad deeds of one generation have on the next. The *Taiping Jing* talks about a ten-generation cycle of *chengfu*, meaning that an individual will inherit from the previous five generations and transmit to the next five generations, “because we repeat the past and pass it on to the next generation, that is inherited for five generations. One small cycle is ten generations, and then it becomes recursive.”⁶ That is to say, the behavior of one person, whether it be good or evil, not only affects the individual but is also passed on to future generations. One person’s behavior can, in fact, influence around ten generations. However, if a person’s behavior is exemplary, they will not be affected by the mistakes of their ancestors, and if a person has committed heinous crimes, these crimes cannot be offset by their ancestors’ merits and will be passed down to the next generations. In this case, the person cannot escape punishment by luck, “for example, if a mother and father completely lose their sense of morality and commit crimes in the neighborhood, any children or grandchildren that are then born will be targeted by the neighborhood. This explains how punishments are inherited and transmitted.”⁷ The standards of personal behavior put forward by the concept of inheritance and transmission are quite strict. Individuals must be highly responsible for their own behavior or risk impacting many generations to come.

The emergence of the *Taiping Jing* was a result of the brutal consequences of inheritance and transmission that humanity had to endure. This prompted *tian* to deliver the *Taiping Jing* to relieve mankind of the

⁵ Wang Ming, ed., *Taiping Jing Hejiao*, 70.

⁶ Wang Ming, ed., *Taiping Jing Hejiao*, 22.

⁷ Wang Ming, ed., *Taiping Jing Hejiao*, 54.

disasters brought about through inheritance and transmission. “Nowadays [*tian*] makes use of these writings in order to abolish natural calamities and other harmful events.”⁸ The purpose of the *Taiping Jing* is:

For *tian* to release the inheritance and transmission of hatred, to remove the misfortunes of august earth, to relieve the suffering of emperors and kings, to forgive the wrongdoings of common people, and to liberate the mistakes of twelve thousand things.⁹

Only when humanity can cast aside *chengfu* can great peace be realized upon the earth. The word *taiping* 太平 (great peace) from the title of the *Taiping Jing* has a particular meaning. The text explains it as follows:

Great peace means nothing is suffering, that is the *qi* of great peace that we speak of. Nothing in the myriad things is suffering harm or loss, everything has reached its own natural state of being, therefore there is peace. If a plant or animal is suffering, then that is not peace.¹⁰

Laozi once advocated, “Treat well those who are good, also treat well those who are not good,”¹¹ and,

...that the sages in being really good at turning others to account;
Have no need to reject anyone,
And in dealing with [things],
Have no need to reject anything.”¹²

Great peace can only be attained when no man or beast is suffering. The broad social concern inherent in the *Taiping Jing* has contemporary significance. In modern society, no man is an island but rather is part of a wider community. If one person is suffering, the wider community suffers.

⁸ Hendrichske, *The Scripture on Great Peace*, 157.

⁹ Wang Ming, ed., *Taiping Jing Hejiao*, 57.

¹⁰ Wang Ming, ed., *Taiping Jing Hejiao*, 98.

¹¹ Victor Mair, “Chapter 49,” in *Tao Te Ching* (New York: Bantam Books, 1990).

¹² Ames & Hall, “Chapter 27,” in *Dao De Jing* (New York: Ballantine Books, 2003), 119.

Only when *chengfu* is cast aside can humanity truly care for the natural world. On this front, the *Taiping Jing* provides a plethora of ideas, as well as concrete actions, including the notion of *gongsheng*. As an important concept in the *Taiping Jing*, the word *gongsheng* is mentioned more than 50 times, making it a so-called “high frequency word.” For example:

Now the body and the strength of this spirit-like man who bends *qi* are the same as that of primordial *qi*. In unison with the four seasons and five phases, he brings forth life (*gongsheng*).¹³

[When *gongsheng* leads to harmony] three beings in agreement stay with each other forever, combining their efforts and being of the same mind, they fulfill one joint task, achieving one common objective. It would be disastrous if one [of the three] were amiss.¹⁴

When the original *qi* and nature were joyful, they merged into one being and together co-create *tian* and earth. When *tian* and earth are full of joy, then *yin* and *yang* are harmonious and in accord with each other, and there is good weather for crops. When there is good weather for crops, then the twelve thousand plants and beings can be brought forth.¹⁵

The *gongsheng* mentioned in the *Taiping Jing* is not only used as a noun, for example in “when the process of *gongsheng* is in harmony, three beings often cooperate with each other,” but also as a verb, for example in “co-create *tian* and earth” and “co-create twelve thousand plants and beings.” The concept of *gongsheng* can provide an intellectual foundation for today’s initiative of constructing an ecological civilization. The rest of this paper analyses this proposal on four different levels.

“TO LOVE OTHERS, YOU MUST FIRST LOVE YOURSELF”---GONGSHENG WITHIN ONESELF

The concept of holism in ecology proposes that each level in a hierarchical system has certain emergent properties that are not present in the lower levels. These emergent properties are not a simple summation of the

¹³ Hendrichke, “Sect. 58, On the Four Ways of Conduct and on [the Relationship between] Root and Branches,” in *The Scripture on Great Peace*, 226.

¹⁴ Hendrichke, “Sect. 65, Threefold Cooperation and Interaction,” in *The Scripture on Great Peace*, 311.

¹⁵ Wang Ming, ed., *Taiping Jing Hejiao*, 647–648.

properties of the parts at the lower levels but appear when the parts of the lower levels are combined in a specific way. An ecosystem is a functional entity organized according to a defined structure composed of interconnected and interacting parts. Holism requires that when researching aspects at different levels, the objects of research must be treated as an ecological entity in themselves. The significance and value of an individual entity are evident, when it appears as part of a complete ecological community; an individual entity can only be said to exist in and of itself when it is acting as an integral part of the whole system. The crucial point here is that the emphasis is placed on the significance of the whole system. However, when it comes to environmental protection, if we only emphasize the whole and reduce the value and significance of the individual, the role of the individual is greatly reduced. Both the Daoist school of thoughts and the Daoist religion believe that there is a powerful and ubiquitous group consciousness that obstructs an individual's natural instincts. Excessive emphasis on this group consciousness, at the expense of the individual, will disconnect us from our natural instincts. This is one of the interpretations of the Daoist idea of *fanpu guizhen* 返璞归真 (returning to nature), that we need to keep trying to establish an independent, individual consciousness. The *Taiping Jing* states that:

A man can only nourish others when he can thoroughly nourish his own person. A man can only cherish others when he can truly cherish himself. If someone having a body were to neglect it, how should he, unable to nourish his own person, be capable of nourishing someone else well? If he were not able to keep his own body intact by truly cherishing it in order to carefully safeguard the ancestral line, how could he take care of others and keep them intact?¹⁶

One's own body and mind being in a state of *gongsheng* is the foundation for achieving this state in relation to others and to the natural world. When comparing fame, wealth, and the body, Laozi puts the body first. By pointing out, "Your fame or your person [body] – which is dearer to you? Your person [body] or your property – which is worth more?"¹⁷ Laozi emphasizes that the body is more important than "reputation" or "goods." He states: "Cultivate it in your person [body], and the character

¹⁶ Hendrichske, *The Scripture on Great Peace*, 138.

¹⁷ Ames & Hall, "Chapter 44," in *Dao De Jing*, 146.

you develop will be genuine.”¹⁸ “When a man puts more emphasis on caring for his body than on caring for all under Heaven [*tian*], then all under [*tian*] can be entrusted to him. When a man is sparing of his body in caring for all under [*tian*], then all under [*tian*] can be delivered to him.”¹⁹ According to Laozi, the most genuine and valuable way to live is to start from the body. Zhuangzi said that “your two arms are of more value to you than the whole kingdom.”²⁰ This is because the arm or the body is primordial, primary, natural. The body is based in reality and its authenticity is tangible. It needs no further proof; it is self-evident. Rights relating to the body are more important than other derived rights; they cannot be arbitrarily revoked. “Human existence means a life lived in the current moment, which is concrete and individual, and which it is impossible to conceptualize, rationalize, standardize, or objectify in a scientific way.”²¹

The physical training involved in the Daoist concept “returning to the source” is actually about moving to a higher plane of existence, and the essence of this pursuit is a type of transformation of one’s own personality. Psychoanalyst Karl Jung also pointed out that: “The secret of alchemy is to achieve the transformation of personality through the harmony and fusion of noble and base elements...through the fusion of consciousness and unconsciousness.”²² Throughout his life, Jung was constantly reminding humans—the only beings with consciousness—to remember their responsibility and moral obligation to self-transformation. No matter if you are talking about relations between individuals, within societies, or even globally, self-obsession is at the root of all conflict and war. Acts of kindness, compassion, and generosity toward others can lead to real and lasting happiness and fulfillment. The concept of *chengfu* in the *Taiping Jing* tells us how the accumulated mistakes of each individual can have a huge impact on the whole of society, as well as the era in which they

¹⁸ Ames & Hall, “Chapter 54,” in *Dao De Jing*, 161.

¹⁹ Victor Mair, “Chapter 13,” in *Tao Te Ching*.

²⁰ James Legge, “Kings Who Have Wished to Resign the Throne,” in *The Writings of Chuang Tzu* (Oxford University Press, 1891).

²¹ Tang Yi, *Lixing yu xinyang: xifang zhongshiji zhexue sixiang* [*Reason and Faith: Philosophy in the Western Medieval Era*] (Guilin: Guangxi Normal University Press, 2005), 11.

²² Karl Jung, *Two Essays on Analytical Psychology* (NJ: Princeton University Press, 1966), 220.

live. When people encounter setbacks, they don't fully consider their own shortcomings; instead, they blame *tian* for the injustice and others for their immorality. Conversely, this leads to further mistakes and increases the burden of *chengfu* on the whole of society:

It is not just the mistake of *tian*, earth, or the sovereign if the conduct of affairs is not well coordinated. Blame lies also with the common people, every person has committed errors, which are increasing as they are inherited and passed on. It all comes from not sticking to what is essential.²³

Environmental problems, such as ecological imbalance, climate change, soil erosion, air pollution, soil pollution, water pollution, and rapid species decline, are not the fault of *tian*, but the fault of every individual. Humans are currently over-consuming natural resources, and the world is being overwhelmed by non-degradable waste products. This is not just the case for the environment but is also the case for our minds and our internal worlds, which determine how happy we are. Correct action comes from correct thinking. The *Taiiping Jing* states that if you cannot create a state of *gongsheng* within yourself, if you do not start with self-healing and self-transformation, then you cannot achieve a state of *gongsheng* with the world. You cannot rehabilitate or change the world.

“WE SPEAK OF ‘RICH’ WHEN THERE IS SUFFICIENT SUPPLY”—GONGSHENG BETWEEN HUMANS AND THE MYRIAD THINGS

It is human nature to pursue wealth. Daoism is closely aligned with the hearts and minds of the people, and it respects this aspect of human nature. Within Daoist theogony, there are many gods of wealth blessing those in their pursuit of riches, this includes Zhao Gongming 赵公明, Bi Gan 比干, the *Wencai Shen* (Civil God of Wealth), Guan Yu 关羽, the *Wucai Shen* (Military God of Wealth), and the *Wulu caishen* 五路财神 (“Five Road” Gods of Wealth), to name but a few. There are also Daoist *fulu* 符箓 (talisman) used to “usher in wealth and prosperity,” as well as rites or rituals focused on “receiving the Gods of Wealth.” The Daoist

²³ Wang Ming, ed., *Taiiping Jing Hejiao*, 53.

Gods of Wealth are known for their fairness, justice, and integrity. Daoism encourages individuals to pursue and create wealth in a fair, lawful, and reasonable way.

Another Daoist perspective on wealth that is also worth mentioning here is the notion of *tian*-earth wealth. That is to say, Daoism uses species population as a differentiator between rich and poor, which is very significant for the field of ecology. The *Taiping Jing* says:

The ‘rich’ that can be spoken of is when there is sufficient supply. *Tian* provides enough wealth by making everything grow; therefore, when supreme majestic *qi* arises and all twelve thousand plants and beings are brought to life, this is called ‘enough wealth.’ Medium majestic *qi* cannot provide for all twelve thousand plants and beings and they become slightly deficient, which is small poverty. When under the influence of lower majestic *qi*, plants and beings are again fewer than under the influence of medium majestic *qi*, and this causes great poverty. When there are no auspicious portents [signifying the approach of majestic *qi*] at all, the crops won’t grow, which is extreme poverty...If one single item is lacking, [supplies] are incomplete.²⁴

According to Daoism, true wealth comes from a diversity and abundance of living and non-living things. It requires all of the myriad things to be complete. In Daoism, the loss or extinction of living things, especially the mass extinction of species, is regarded as poverty of *tian* and earth. The *Taiping Jing* states:

If one living thing is not born, then that is like the extinction of a whole species. If the population is large then many will become extinct, if their population is small then less will become extinct. One knows whether the system of *tian* has been harmed by the number of living things.²⁵

If one thing is not provided with enough supply, then the *Dao* of *tian* will be incomplete.²⁶

In other words, the extinction of a species is the extinction of a system, and the extinction of any species will damage the “system of *tian*” (*tiantong* 天统) meaning that the “*Dao* of *tian*” (*tiandao* 天道) will no

²⁴ Wang Ming, ed., *Taiping Jing Hejiao*, 30–33.

²⁵ Wang Ming, ed., *Taiping Jing Hejiao*, 219.

²⁶ Wang Ming, ed., *Taiping Jing Hejiao*, 462.

longer be perfect. The Daoist explanation for this is that if we intentionally harm living things, bringing them to the point of extinction, the whole of the myriad things will harbor a gross injustice. This pent-up resentment will block the flow of *qi* or “energy” in the universe, impacting all living things, including individuals, societies, and nations. From this we can see that Daoism, through the lens of theology, already brought an awareness of and attention to biodiversity and warned against the negative effects of species decline from early on. It is astonishing and commendable that Daoism reached such a level of understanding of the relationship between humanity and nature in ancient times.

“SHARING ONE’S WEALTH,” “PROVIDING EMERGENCY
RELIEF TO THE POOR,” “THE *DAO* OF *TIAN* IS
TO HELP THE WEAK”—*GONGSHENG* WITHIN SOCIETY

Sustainable development emphasizes fairness across generations as well as between people of the same generation. As a United Nation report printed out: “There would be something distinctly [absurd] if we were deeply concerned for the well-being of future—as yet unborn—generations while ignoring the plight of the poor today.”²⁷

Among the various development strategies that humanity has explored, the current strategy of sustainable development is the only one that appropriately takes into account both the relationship between development and environment and the relationship between development and social equity. In 1968, Aurelio Peccei founded the Club of Rome, which conducts pioneering research on global issues. The first research report published by the Club of Rome, called “The Limits to Growth,” pointed out that the earth’s generosity and tolerance have its limits and that the natural world already has numerous limits in place, which were designed to curb man’s ever-growing, heavy-handed exploitation. As a solution to the ecological damage caused by violent conflict between man and nature, the report put forward the concept of “zero growth.” However, the concept of “zero growth” proposes an end to development, which is unacceptable to most people, particularly people in developing countries, where continuous economic growth is the main means by which

²⁷ United Nations Development Programme, *Human Development Report 1994* (New York: Oxford University Press, 1994), 13.

people achieve prosperity. Sustainable development was then proposed as a way to not only realize economic growth, but also maintain ecological balance. It pays more attention to the fair distribution of the benefits of economic growth, as well as equal opportunity for the poor.

Addressing issues of social equity is an important component of social ecology. Poverty is the most significant issue facing environmental protection. In fact, poverty is the worst polluter of all. Klaus Topfer, Executive Director of the United Nations Environment Programme, once said, “the most toxic element in the world is poverty...Poverty has a disastrous impact on the environment, an impact which is continuously growing. On a global scale, the majority of people, whose deaths are caused by environmental pollution, are poor. They are by far the greatest victims of the degradation of the natural world.”²⁸ In poor countries and poor regions, people have no choice but to overconsume natural resources in order to survive, exerting even greater pressure on the environment. This causes further degradation of natural resources and the environment, which in turn pushes people deeper into poverty. As the global ecosystem is an interconnected, organic body, any degradation of resources or the environment in one location will impact other parts of the ecosystem, endangering development and the survival of the people living there.

Meeting the needs of the human race, especially the basic needs of the poor, is the fundamental purpose of sustainable development. The principles of fairness and commonality in the theory of sustainable development are also implied in Daoism’s concepts of “providing emergency relief to the poor,” and “sharing one’s wealth.” The *Taiping Jing* states that “the *Dao* of *tian* is to help the weak” because:

We apply *Dao* when it comes to things that are weak and things that are small in number are part of the outline of *Dao*...Therefore, noble people seek out weakness and not strength, they seek out the few in number and not the many.²⁹

All wealth (and raw materials) originates from the synergy and process of *tian*, earth and human beings, to provide, supply and benefit people...Those who are not willing to provide emergency relief to the

²⁸ Translated from the Chinese version of the article: “Huanjing wuran, qiongren shouhai [When There is Environmental Pollution, it’s the Poor who Suffer],” *Xin Zhengzhijia* [New Statesman], 16 October 1998.

²⁹ Wang Ming, ed., *Taiping Jing Hejiao*, 703.

poor, result in innumerable households living in poverty. If a person has nothing to plant in Spring and nothing to harvest in Autumn, then resentment will surely accumulate and grow strong until they raise their head and call to *tian*. *Tian* will react to this call, and the earth will be moved by the resentment. The noble person who doesn't provide relief to the poor is truly the least kind-hearted person between *tian* and earth.³⁰

The relationship between man and nature is a reflection of the relationship among human beings. Indeed, the cause of the conflict between man and nature can be found in the conflict among humans. The concepts of fairness in the *Taiping Jing*, including “sharing wealth,” “providing relief to those in need,” and “the *Dao* of *tian* helps the weak,” advocate *gongsheng* or “joint transformation and co-creation” with others, improving interpersonal relationships, realizing universal equity of development, and eradicating poverty.

“IF MAN IS FREE OF DISEASE, THEN *TIAN*
IS FREE FROM DISEASE”—*GONGSHENG*
BETWEEN HUMANS AND *TIAN*

The environmental crisis is closely related to the way we produce and consume. Many producers are only interested in profits and pursuing economic targets. As long as there is demand, supply will quickly follow, regardless of what is produced and whether the products are harmful to human health or the environment. Products are pushed to market as quickly as possible and media outlets treat ordinary people as objects to be influenced. Their primary purpose is to encourage and guide consumption, driving fashionable trends, all in order to fan the flames of consumption. This pathological production and consumption cycle destroys the natural world and is turning it into a rubbish tip, which is ultimately harmful to humans themselves. People's values are driving this production and consumption cycle. Right thoughts lead to right action. We cannot change and heal the world without first starting with self-transformation and self-healing. This is just as the *Taiping Jing* says:

³⁰ Wang Ming, ed., *Taiping Jing Hejiao*, 247.

Tian and earth took on imperfections, which meant the common people could contract disease. If man is free of disease, it means *tian* has no imperfections. If half the common people contract diseases, this means that half of the things in *tian* have imperfections. If all the common people, no matter how big or small, old or young, contract disease, that means *tian* is full of imperfections. Because *tian* allows the common people to contract disease, *tian* hopes that the people will undergo an awakening. If the people do not undergo an awakening, then countless people will die.³¹

People can only achieve a state of good health when they are free of disease and living naturally. If a person wants to achieve a natural state of good health, then they must first pursue good health among humans. Humans are directly responsible for the world's poverty and disease. Daoism warns us that:

So all ten thousand things, numerous as they may be, have a fate that is linked to [*tian*], and a root that lies in earth. It is up to human beings to handle them safely...and man as their king. We must examine in detail that human beings are to act as king and superior.³²

Those organisms that can crawl and wriggle, all of them are born from *tian*. If *tian* did not give birth to them, then they fundamentally wouldn't exist. Therefore, each thing has a divine master to command it, and their respective lives belong to their divine master. We can make a comparison with livestock and other domestic animals. Their lives belong to their human owner. Whether they live or die is wholly reliant on how humans take care of them. To domesticated animals, humans are the Master of Fate.³³

Tian and earth formed their own laws, but the flourishing or decline of all plants and beings actually depends on humanity.³⁴

Violent tectonic movements or major natural disasters, changes within the natural world itself, lead to potentially huge environmental change. However, what we are focusing on is the impact of human behavior on the environment. For example, humanity has now developed and produced

³¹ Wang Ming, ed., *Taiping Jing Hejiao*, 355.

³² Hendrischke, “Sect. 71: Advice on Animal-Based Medication,” in *Daoist Perspectives*, 83–84.

³³ Wang Ming, ed., *Taiping Jing Hejiao*, 383.

³⁴ Wang Ming, ed., *Taiping Jing Hejiao*, 232.

nuclear weapons, which can destroy the earth several times over, a result which far surpasses any impact the natural world can exert upon itself. The growth and decline of all living things, as well as the health of the earth, are in the hands of man. Compared to other species, humans have more agency within the biosphere, and therefore, their impact on the natural world is correspondingly greater. Man can destroy all living things, extinguishing life in the universe. However, man is also the most autonomous and purposeful of all living things and can transform natural life into advanced, conscious lifeforms. Man's unique ability to reason and reflect, to form cultures, and have moral restraint is unmatched by other species. To create, protect, and increase human wealth people turn to the Gods of Wealth, but people themselves are the Gods of Wealth and protectors of all things. Humanity has created wealth on the basis of myriad things, when in fact the prosperity of myriad things relies on protection afforded by human beings. When it comes to the role of man, the *Taiping Jing* states "man is the teacher of all things," "the king of all things," and "Master of Fate," elevating man to the status of "god" in charge of the fate of all things. This points to the sacred mission of the *Taiping Jing*, which is to urge human beings to act as the protector of other species and to use man's powers of reason and morality to broaden man's scope for care. The text asks humans to restrain those behaviors that violate the laws of nature and maintain ecological balance in the natural world, ultimately achieving a state of *gongsheng* in harmony with *tian*, earth, and all living things.

CONCLUSION

Protecting the ecosystem requires cultivating the habits and norms needed to exhibit this behavior. Daoism spans nearly two thousand years of history in China. Over its long course of development, the accessibility of *Dao* as a concept has meant it has been the source of new ideas and provided a way for people to adapt to new circumstances. Through creative interpretation, it will serve the same purpose today. The idea of *gongsheng* (symbiosis, joint transformation, or co-creation) in the *Taiping Jing* can be reinterpreted from the perspectives of contemporary ecology, philosophy, and religious studies. This shows the value of *gongsheng* to modern society and will enable more dialogue between these concepts and current global issues, as well as contemporary trends of thought. Promoting the modern transformation of traditional

culture gives national culture universal significance. Promoting *gongsheng* between man and the self, within society, and between humanity and the whole of myriad things would make a positive contribution to the construction of an ecological civilization.

This article is translated by Megan Copeland and Jin Young Lim.

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Co-dependent Origination and the Doctrine of *Gongsheng*: A Buddhist Perspective on the Harmony of Humanity, Nature, and Civilizations

Jun Gong

One of the most important concepts in Buddhism regarding the idea of *gongsheng* 共生 (symbiosis, co-creation) is “co-dependent origination” (*yuan qi* 缘起). Co-dependent origination is *gongsheng*; it is “mutual conditionality.” This concept implies that nothing exists independently; rather, everything exists on the condition that its existence relies on all other entities. It is a core concept of Buddhism; as such, one might also say that *gongsheng* is a core principle of Buddhist thought.

J. Gong (✉)
Department of Philosophy, Sun Yat-sen University, Guangzhou, China
e-mail: gongj@scnu.edu.cn

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BUDDHIST CO-DEPENDENT ORIGINATION AND THE DOCTRINE OF *GONGSHENG*

There is nothing transcendental or transmudane about Buddhist co-dependent origination. It applies to the phenomenal world. Thus, the principles and rules of co-dependent origination are limited to the actual world in Buddhist teachings, i.e., the world we can perceive and see. According to the Buddhist view, everything in this world arises co-dependently; in other words, all things naturally abide by the doctrine of *gongsheng*. The transcendental world—the immutable, unceasing world in Buddhist thought—is outside the purview of co-dependent origination. Thus, the concept of *gongsheng* is limited to the phenomenal world in Buddhism. In the Buddhist worldview, *gongsheng* only relates to the realm of worldly affairs. When it comes to discussing the transcendental subject, the Buddha advocated internal practices for tacit understanding.

When discussing the phenomenal world, early Buddhist scripture refers to the *dharma* of the phenomenal world as *sarvadharma* (all *dharma*). This includes the five aggregates (form, sensation, perception, formations, and consciousness), the twelve *ayatanas* (the six internal *ayatanas*: eye, ear, nose, tongue, body, and mind; and the six external *ayatanas*: visible objects, sound, odor, taste, touch, and mental objects), and the eighteen *dhatu* (the twelve *ayatanas* plus the six consciousnesses). The existence of these *dharma* depends on one another, and they are constantly changing. Different *dharma*, as well as different phenomena and existents, are all interrelated and interdependent. Each existence is constantly changing. There does not exist any fixed *dharma*. In this sense, the statement that “co-dependent origination is *gongsheng*” includes both the natural world and human activity. All *dharma* are only made possible by their “mutual conditionality.” In the *Abhidharma* texts of the early Buddhist schools, the mundane world (*loka*) is divided into the physical world, which is comprised of physical territories or inanimate world (*bhajana-loka*), and the world of sentient beings (*sattva-loka*) which includes animals and humans with mind and emotion as its center. The entities who inhabit these *loka* exist in a state of *gongsheng*, as do the *loka* themselves.

In Buddhism, however, regardless of the plane of existence, both the co-dependent origination *gongsheng* of the actual world or the existents of the phenomenal world are inextricably linked with human consciousness. The objects of co-dependent origination are connected to the structure of consciousness. The existence of all *dharma* hinges on this relationship;

there is no natural object that exists independently of human consciousness. Thus, consciousness and awareness play leading roles in the structure of humans and various *gongsheng* relations. This is a concept that runs through both Mahayana and Hinayana Buddhism.

Mahayana Buddhism is generally divided into three traditions: *Mulamadhyamakakarika*, *Vijnaptimatrasiddhi-sastra*, and the Buddha-nature Treatise (佛性论). The theories expounded upon within these traditions—particularly the ideas that everything is generated by the mind and that all *dharma* are nothing but consciousness—highlight the dominant position on mind and consciousness in Buddhism. The concept of “mind” in Buddhism (心, *xin*, also translated as heart) is comparable to the concept of “original nature” (*ben xing* 本性) in native Chinese philosophy. In Buddhism, some of the terms used to express “mind” include the “*Tathāgatagarbha*,” “Buddha nature,” and “true mind.” The *Vijnaptimatrasiddhi-sastra* tradition transmitted by the monk Xuanzang 玄奘 (602–664) states that all *dharma* are nothing but consciousness. The structure of consciousness is highly complex in Buddhism. The mental world that we are analyzing, which is comprised of things like ideas, rationality, and language concepts, mostly fit within the sixth category of consciousness. The consciousness of Mahayana Buddhism, however, has a deeper structure. Outside of the six consciousnesses, for example, there is the seventh consciousness, “defiled mental consciousness” (*kliṣṭamanovijñāna*). But there is still an eighth consciousness, the “all-ground consciousness” (*ālayavijñāna*), and it is this that the *Vijnaptimatrasiddhi-sastra* refers to in the statement that all *dharma* are nothing but consciousness. This tradition believes that the generation of our minds and bodies, as well as the generation of all external objects in the phenomenal world, are linked to the “all-ground consciousness” (hence the belief that all phenomena are nothing but consciousness). So, while it seems that Buddhist doctrine is discussing the interconnectedness of all things in the phenomenal world and the inter-conditionality of their ontological relationships, in the end the existence of these things is inextricably linked to the structure of consciousness and the mind. This is the foundation for understanding the concept of *gongsheng* within Buddhist thought. We cannot understand the *gongsheng* relationships between the world and *dharma* if we stray from this structure.

There are many variations of the Buddhist doctrine of co-dependent origination, such as the famous “12 Links of Co-dependent Origination” found in early Buddhism. From a *gongsheng* perspective, early Buddhism

primarily revolved around individual consciousness—the 12 links of co-dependent origination are not about humans and the natural world, but about the mind–body process. The Buddha in his earlier exposition of the co-dependent origination (or *gongsheng*) divided all the vital activities of an individual into many different categories, such as the sensory faculties and cognitive activities of the body, mouth, and mind; activities like perceiving, sensing, and desiring; and the process of birth, aging, sickness, and death. In other words, the 12 links of co-dependent origination of early Buddhism begins from *avidya*, or the idea that only the delusions of consciousness create the things that reoccur throughout life: *avidyā*; *samskāra* (also known as formations or fabrications—these consist of bodily fabrications, verbal fabrications, and mental fabrications); *viññāna* (the *Agama* sutras divide *viññāna* into three types of consciousnesses: entering the womb, being in the womb, and leaving the womb); *nāmarūpa* “forms” (referents of the thinking consciousness and the six objective fields of the senses); the *ṣaḍāyatana* (that form the capacity to perceive and understand, namely the six sense organs of the eyes, ears, nose, tongue, body, and mind); *sparsā* (the senses and understanding caused by the interaction of the six sense organs, the six consciousnesses, and a plane of existence); *vedanā* (feelings like suffering and happiness); *t’ṛṣṇā* (desire); *upādāna* (clinging, or actions caused by desire); *bhava* (existence in general; *bhava* mostly refers to the remnant habits and power generated by clinging, or the remaining habitual tendencies and karma of past behavior that also become causes limiting the future); *jāti* (the innate generation of karma; new experience produced by the deposition of a current life form); and *jarāmaraṇa* (aging and decay).

Focusing on the relationship between co-dependent origination and *gongsheng* from the perspective of Mahayana Buddhism is paramount to an analysis from the structure of consciousness. This can be divided into two ways of thinking: *ālaya-viññāna* co-dependent origination and *tathāgatagarbha* co-dependent origination. Regarding the concept of co-dependent origination, we can combine ideas from these two branches of the Mahayana tradition together. Using a classic work from Buddhist history, *Awakening of Faith in the Mahayana* (大乘起信论)¹ as an

¹ *Dacheng qixinlun* [*Awakening of Faith in the Mahayana*] 大乘起信论, annotation and translation by Gao Zhendian (Beijing: Zhonghua Book Company, 2000).

example, we can examine the principles and theory of *gongsheng*. In traditional Chinese Buddhism, *Awakening of Faith* is a comprehensive work about Mahayana Buddhism.

First of all, from the perspective of Buddhism, the world of co-dependent origination and *gongsheng* is the phenomenal world—the world in which we live. According to Mahayana Buddhism, co-dependent origination is the founding principle of the phenomenal world. The generation of the world of co-dependent origination is a process of degeneration and circulation; it is gradually created by the passage of high consciousness down to the perceptible world. *Awakening of Faith* details this process, which describes the relationships of mutual dependence among all *dharmas* in this circulating world. From this we can see its similarities with the 12 links of co-dependent origination. In the *tathāgatagarbha*, the production of the structure of consciousness begins from a state of ignorance, and the “one mind,” by integrating with *ālaya-vijñāna* (all-ground consciousness), creates the seventh consciousness, *kleṣṭamanovijñāna* (defiled mental consciousness), as well as the cognitive activities of the six consciousnesses (eyes, ears, nose, tongue, body, and mind), before pushing outward to the sensible objects that Buddhism speaks of, step by step passing down to the phenomenal world. The phenomenal world and the subjective world are mutually co-created and intertwined. They produce all sorts of psychological activities, attachments, and emotions. The co-development of all *dharmas* gradually forms the world in which we live.

Awakening of Faith does not just examine the problem of how *gongsheng* arises; it also reveals how to find ways to transcend the worldly realm, thereby escaping *gongsheng* within this world of coexistence. This is a process of awakening and revolution of the mind, a transmigratory return to *nirvana*—from “initial awareness” to “supreme enlightenment.” Each living creature, no matter what state it is in, has the innate capacity for enlightenment. The question is how to awaken this enlightenment, and, through guidance, thereby allow the being to remove itself from *gongsheng* and return to a world of self-sufficiency. This is the worldview proposed by a Buddhist understanding of *gongsheng*. The aim of Buddhism is to guide people out of the world of *gongsheng* so they can return to a state of perfect self-sufficiency.

HUAYAN BUDDHISM AND THE DOCTRINE OF GONGSHENG

In discussing *gongsheng*, the Huayan School of Buddhism, which was deeply influenced by *Awakening of Faith*, proposes the *Indrajāla* or “Indra’s Net” metaphor. This metaphor likens the world we live in to a giant net. Our lives, and then the environment in which our lives take place, unfold out of mind and cognition. Indra’s Net expands out of the interaction between the mind and cognition, and the environment. All phenomena and existing co-dependencies overlap to form a complex net structure. Indra’s Net illustrates how all relationships of phenomena in the world—between one and many, similar and different, big and small, pure and defiled, and so on—reflect one another, this reflection repeating infinitely so that any one thing “contains” within it every other thing. Indra’s Net helps us see that *gongsheng* does not just mean the inclusivity between two existents; it means that all phenomena, all things, intersect one another in a concurrent, interlocking, and inseparable fashion. Indra’s Net and the doctrine of *gongsheng* are intimately related.

At the same time, Huayan Buddhism also tells us that we must “differentiate-understand the intrinsic nature of all *dharmā*.” In other words, we must understand the *gongsheng* between different things. First, we must differentiate and understand the intrinsic nature of all *dharmā*, because only by understanding the true nature of everything can we see that things with different attributes include one another, blend with, and penetrate one another. If we fail to grasp the co-dependent *gongsheng* relationship governing all things and phenomena, then we do not yet understand the true nature of things and phenomena. In other words, *gongsheng* is the basic ontological state of phenomena. The tendency to individuate phenomena stems from a lack of correct understanding of the true nature of all *dharmā*. A complete *gongsheng* system requires first establishing a philosophical concept of *gongsheng* and an awareness of the oneness of all things. This is what is meant in Huayan Buddhism when it says that “everything—whether good or bad—is manifested by consciousness; there can be nothing² outside the mind, hence the discourse on consciousness or mind only.”²

² Shi Yanshou 釋延壽, *Zong Jinglu* 宗鏡錄, Book 29 (Chinese Buddhist Electronic Text Association [CBETA], T48, no. 2016, pp. 587b19–20).

How should we construct our understanding of *gongsheng*, then? According to Buddhism, our understanding must start from the philosophy of consciousness and the mind. If we can truly comprehend the intrinsic nature of all phenomena—whether good or bad, or any other state—by returning to the world of the mind, then we will see the co-dependent *gongsheng* relationship governing all phenomena. This is not a scientific or technical analysis, but a realization of *gongsheng* “Indra’s Net” from the perspective of Buddhist understanding.

Additionally, the *gongsheng* relationship of Indra’s Net is different from the doctrine of “the interactions between *tian* and mankind” (*tianren-ganying* 天人感应) of native Chinese philosophy. The latter doctrine has always been an important theory for describing humanity, nature, and even politics in Chinese culture. Master Wenzhong (584–617) proclaimed that *tian*, earth and mankind—“the three talents are inseparable (*sancaizhidao buxiangli* 三才之道不相离).” Shi Jie (1005–1045), a Song-era Confucian scholar, believed that:

The relationship between nature and man needs to be treated with great care. The ancient *junzi* (gentlemen) regarded this issue with great importance and took it to heart at all times. If we pay attention to the existence of human beings and neglect *tian* and nature; or if we pay attention to *tian* and nature but neglect the existence of human beings, both practices are only partial and are against the way of *tian* and humanity.³

Clearly, given that changes in the natural world are reflected in humans, human behavior must also be reflected in natural changes. That is why Confucianism consistently stressed that whatever humans do, it will be reconstituted and reflected back at them through the natural world. Thus, the emperor and his subjects had to show the utmost respect to *tian* and earth.

The people-oriented approach of Chinese governance can be extracted from the doctrine of “the interactions between *tian* and mankind.” But this doctrine emphasizes humans and their affairs. It is anthropocentric. Although Confucian scholars occasionally touched upon the natural world, such as the plant and animal kingdoms, they did not focus on it.

³ Huang Zongxi and Wu Guang, “Taishan Xue’an 泰山学案,” in Book 2 of *Song Yuan Xue’an* 宋元学案, vol. 3, *Huang Zongxi quanji* [Complete Works of Huang Zongxi] 黄宗羲全集 (Hangzhou: Zhejiang Ancient Books Press, 2012).

Conversely, the Buddhist *gongsheng* doctrine of co-dependent origination specially touches upon animals (vegetarianism) and plants, which gives it more modern, environmental value. For instance, traditional Indian Buddhism responds affirmatively to the question of whether or not plants are sentient beings deserving the same respect and protection as other sentient life forms. In *The Problem of the Sentience of Plants in Earliest Buddhism*,⁴ the renowned Buddhist historian Lambert Schmithausen (1991) explores whether plants were considered sentient in Indian Buddhism, as well as whether they have Buddha nature. He concludes that in the case of Indian Buddhism, plants indeed are considered sentient.

Interestingly, the Chinese Tiantai School of Buddhism holds the view that although plants are not sentient, they do possess Buddha nature. This view has been overlooked, however. The emphasis is still placed on humans and the relationship between mind-nature and the world. This is related to the humanist focus of Chinese Confucianism. As Indian (Mahayana) Buddhism spread in East Asia, it was sinicized by the influence of Confucianism and its anthropocentrism. The issue of the sentience of plants, however, was foregrounded in Japanese Buddhism. The design and ambience of Japanese monasteries reflect the importance of the relationship between humans and the natural world, and especially the harmonious *gongsheng* of humans and plants.

Regarding the differences among human beings, between mankind and nature, and between different civilizations and cultural traditions, Chinese Buddhism offers the concept and practice of “classification of Buddha’s teaching” (*pan jiao* 判教)—an extremely valuable idea. Strictly speaking, *pan jiao* was originally limited to Buddhism itself and was created as a way to handle the existence of different types of thought within Buddhism, from the shallow to the complete teachings. That is to say, different thought traditions of Buddhism occupied different levels; some were relatively shallow, while others were more comprehensive.

⁴ In *The Problem of the Sentience of Plants in Earliest Buddhism*, Schmithausen uses detailed textual sources to prove his argument that in early Buddhism plants could be considered living or conscious, or, at the very least, that they were not considered non-living or unconscious. See Lambert Schmithausen, *The Problem of the Sentience of Plants in Earliest Buddhism*. Studia Philologica Buddhica Monograph Series 6. Tokyo: International Institute for Buddhist Studies, 1991.

Later, Buddhism, and especially Chinese Buddhism, developed the classification system as a way to collate and interconnect different ideas within Buddhism, and to show that the Buddha's sayings could be seen in these different traditions, for only the forms of this truth vary—from shallower to more profound and complete forms—depending on the natural capacity of the person toward which it is directed. Thus, we cannot simply view different Buddhist traditions as in contradiction with one another; rather, we must use the classification method to dissolve their differences. This method could also act as a model for dealing with the differences between different cultures and civilizations. Chinese Tiantai and Huayan Buddhism each have their own matured classification systems.

After Buddhism was introduced to China, it faced the problem of having to coexist with the native intellectual traditions of Confucianism and Daoism. *Inquiry into the Origin of Humanity*, a treatise written by the renowned Tang-era Buddhist scholar Guifeng Zongmi (780–841), explores this problem. Using the *pan jiao* classification method to settle the relationship between Indian Buddhism and Chinese culture, Zongmi believed that the Hinayana School of Indian Buddhism operated above and beyond the relationship between humanity and *tian* found in Confucianism and Daoism, and that next was Mahayana Buddhism. Mahayana Buddhism was further divided into three levels: the “teaching of phenomenal appearances of the *dharma* within the great vehicle” (大乘法相教), the “teaching that refutes the phenomenal appearances in the great vehicle” (大乘破相教), and the “teaching of the one vehicle that reveals the nature” (一乘显性教). Zongmi noted that the differences between these intellectual traditions were merely different perspectives and degrees of understanding of the truth. They could thus coexist since they were only varying manifestations of the truth.

In modern China, when challenged by Western civilization in the discussion of various types of civilizations, scholars of New Confucianism have attempted to use the *pan jiao* classification method to create a new order to relate to Western civilization. The *pan jiao* model of coexistence between civilizations, which is centered on people, or *dharma*, can replace the old model of international relations based on territory, nationality, and ethnicity. It is an important lesson that Buddhism can teach us about how to achieve peaceful coexistence between different civilizations, and it deserves serious consideration.

THE DEGENERATION AND OVERCOMING OF GONGSHENG

From a Buddhist perspective, the process of *gongsheng* itself is that of a degeneration or sinking downward. Although co-dependent origination includes the existence of humans and all phenomena of the external world, Buddhism explores the various problems and vexations of the *gongsheng* world on an ontological level. At its core, it is because everything exists in a state of *gongsheng* if they exist at all; there is no fixed, immutable substantive existence. Humanity's attempts to cling to immutability in such a world of *gongsheng* are, in fact the cause of suffering. Any *dharma* of the five aggregates is impermanent and interdependent; this is the self-less state of "non-self" (*anatta*) (lacking substance), "suffering" (*dukkha*), and "emptiness" (*sunyata*).

Additionally, when discussing *gongsheng* and co-dependent origination within the Buddhist thought system, there are significant ethical and value considerations. According to Buddhism, *gongsheng* is the principle of this world, and yet, since we exist within this *gongsheng* world, *gongsheng* and co-dependent origination are produced in the process of degeneration, or transmigration. Living in this world of *gongsheng*, all creatures, including humans, will encounter various problems. Buddhism tells us that we experience vexation in our relationships of *gongsheng* because of our numerous clinging behaviors—our attachment to immutable things. However, the very rule of *gongsheng* is that it is constantly changing and producing constant interdependence. Thus, clinging to permanence is the cause of suffering in our world.

The Buddha does not attempt to resolve the confusion regarding the value of existence and life forms brought on by *gongsheng* from the level of the natural world or human science and technology. He believes that our consciousness, psychology, and mind are the root of *gongsheng*, and so if we wish to address *gongsheng*, we must do so at the mental level, proceeding from the structure of consciousness. In this regard, the spiritual traditions of East Asia civilizations—Confucianism, Buddhism, and Daoism—are in alignment.

According to Buddhism, *gongsheng* must eventually be overcome. From a material perspective, *gongsheng* is the world created by the circulation of co-dependent origination; that is, everything is caused by *gongsheng*, and abides by it as a principle. From a more spiritual or "*Dao*" perspective, however, the goal of Buddhism is liberation; that is, extrication from the cycle of *gongsheng*, to move from *gongsheng* to self-reliance.

The process of self-reliance in the moral world is at odds with *gongsheng* and co-dependent origination. It is a return to non-existence, a process of continual self-overcoming through consciousness training, a flight from the cycle of *gongsheng* to a state of complete independence.

This is the transcendence of *gongsheng*, what is known in Buddhism as the essential “emptiness of co-dependent origination” (*yuanyi xingkong* 缘起性空), an extremely important concept in Mahayana Buddhism. The *Mulamadhyamakakarika* says, “Whatever is dependently co-arisen That is explained to be emptiness. That, being a dependent designation Is itself the Middle Way.”⁵ The emptiness and illusory nature of co-dependent origination show that the *gongsheng* world is the (empty, illusory) appearance of the real world; it is an illusory world.

That is why Buddhism tells us that we must transcend the co-dependent world of *gongsheng*. As for how to realize this transcendence, Hinayana Buddhism proposes that, since the *gongsheng* world is full of vexation and suffering, liberation requires that we forsake this world. Mahayana Buddhism, however, opposes this view. According to Mahayana Buddhism, although the world of co-dependent origination is a world of superficial appearance and the world of *gongsheng* must be overcome, rather than fleeing from the world in search of self-reliance, we should seek transcendence among *gongsheng*, within the world of co-dependent origination itself. This is what is known as the “middle way.” In the *Zhaolun* 肇论, Sengzhao 僧肇 (378–413) espouses the principle that the true nature of reality can assert itself wherever one happens to be: “Is the Tao far away? The life of ours is Reality. Is the Sage far away? Recognize him as in truth he is and you are the Spirit.”⁶ In other words, we must elevate our consciousness within the world of *gongsheng*. It is up to the doer to undo the knot, so to speak. The wisdom of Mahayana Buddhism encourages us to return to the world of *gongsheng*, to face its problems, and to find the path to transcendence for all of humanity within it. Furthermore, the idealistic philosophy of Mahayana Buddhism believes that the world of *gongsheng* is the product of idealism, and thus to overcome the continuous cycles of *gongsheng*, we must withdraw consciousness from the external illusory world back into our inner hearts.

⁵ Garfield, “Dependent Arising and the Emptiness of Emptiness,” 232.

⁶ Walter Liebenthal, trans., *Chao Lun: The Treatises of Seng-Chao* (Hong Kong: Hong Kong University Press, 1968), 25.

Through the process of transforming knowledge into wisdom, we can transform the illusory notions—along with the obsession with those illusory ideas—into transcendental wisdom, and then we will be free from the world of *gongsheng*. The transformation of spirit and consciousness becomes the key to solving all difficulties.

This article is translated by Thomas Garbarini and Jin Young Lim.

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The Gap of *Wen* and the Edge of Chaos: From the Conundrum of *Kyōsei* to the “Cosmic Hope”

Tsuyoshi Ishii

THE IDEAL AND REALITY OF *KYŌSEI*: THE CONCEPT OF *KYŌSEI* IN JAPAN

The word “*kyōsei*” (共生) is very commonly used in Japan. The renowned architect Kishō Kurokawa (1934–2007) claimed to have pioneered the term’s use in Japan. According to Kurokawa, this word in Japan has two sources of origination. One is the term “symbiosis” from biology, which in Japanese is written as 共栖 (both 共生 and 共栖 can be pronounced as *kyōsei*). The other originates from Buddhism, namely the “*Tomoiki* Buddhist Association” (共生佛教会) movement promoted by Shiio Benkyō 椎尾弁匡 (1876–1971), a Pure Land Buddhist priest.¹ The Pure Land Buddhist sect in Japan was greatly influenced by the words of Shandao 善导 (613–681), the founder of Pure Land Buddhism in

¹ Kurokawa, *Shin Kyōsei no Sison* 新共生の思想 (*Philosophy of Symbiosis*), 24.

T. Ishii (✉)

Graduate School of Arts and Sciences, The University of Tokyo, Tokyo, Japan
e-mail: ishiitsu@ask.c.u-tokyo.ac.jp

China—"May all living creatures be reborn in the Land of Pure Bliss"—and developed its own unique idea of *kyōsei*. Thus, the concept of *kyōsei* in Japan has its roots in the religious worldview of Buddhism, which made it a long-standing part of Japan's cultural history. The kanji 共生 has had broader and more historical implications than its Western counterpart of "symbiosis." Therefore, in discussing this term, it would serve us well to position it in a wider intellectual, cultural, and historical context.

We seem to be able to conclude that the term *kyōsei* became a common part of modern Japanese vernacular after the 1980s.² This was a period when Japan had completed a period of high economic growth, had experienced a severe environmental crisis brought on by industrialization, and when the country's economic bubble formed and post-modern thought became popular. As the world's then second-largest economy, Japan's interactions with the international community were increasing by the day. As a result of friction from cultural differences, there was a natural increase in various types of conflict both inside and outside the country. It is not difficult to imagine that at a time like this, the use of the *kyōsei* concept proliferated as a response to the challenges posed by these new social conditions. In other words, *kyōsei*'s use in Japanese society emphasized the post-modern conditions facing humanity. Regardless of the differences that existed between oneself and others (differences of gender, body, nationality, culture, language, ethnicity, religion, political views, economic status, and so on), one still had to co-exist and grow with others. This necessity became a common ethical goal in Japan at that time. Additionally, faced with the constant escalation of global environmental crises, the idea of "living in harmony with nature" and the idea of viewing the natural world as "the other" in relation to humanity at large were also receiving widespread societal recognition.

THE PHILOSOPHY OF *KYŌSEI* IN PRACTICE

Faced with these conditions at the turn of the century, the University of Tokyo established the Center for Philosophy (UTCP), an international research institute with the goal of promoting "co-existence" (共生) in 2002. The UTCP defined humanity of the twenty-first century as the subject of *kyōsei* and claimed that it would strive to internationalize the

² Kurokawa, 700–710.

research of philosophy with *kyōsei* as a core concept. The UTCP was especially concerned with the methods of human survival under current circumstances. As an ethics, *kyōsei* should be a goal that we all strive for, but judging from the view of the entire global system, *kyōsei* is also the foundation that all life forms rely on for survival. In this sense, *kyōsei* is a plain fact that should be discussed pragmatically without the need to indulge in complex theorizing. But does that leave any room for philosophical reflection on *kyōsei*? Yasuo Kobayashi, the director of the UTCP, expressed his concern that philosophical discourse was powerless to contribute anything to the reality of the global climate crisis or the technology being developed to solve it:

On the material level of carbon dioxide, we are already *kyōsei*. We co-exist as ‘humankind,’ and as ‘humankind’ we also co-exist with other species. Not only that, but we also co-exist with the entirety of ‘humankind’ and other species that have not yet arrived. Rather than calling this a mysterious, metaphysical ‘truth,’ it would be better to call this a mundane, prosaic ‘fact.’³

Kobayashi’s intentional use of the term “humankind” stems from his idea that “human” and “humankind” are not equivalent ideas. His concept of humankind comes from the way he sees reality: humans are just one species among many within the natural world, and philosophy has yet to inquire into the significance of being human from this species perspective. The emission of CO₂ is a necessary precondition for all animals—including humans—to survive. Humankind has not yet found an ethical norm that balances the problem of carbon emission with our continued survival. Thus, according to Kobayashi, past humans have not developed into “humankind.” Kobayashi also points out that what we need is not just ethical reflection but to construct human subjectivity. Creating a new form of politics with this subject as its foundation is a much more pressing practical issue. The theme of *kyōsei* demands that we change the way we think about life and survival. It poses a significant challenge to the individual perspective of life, that is to say, the philosophical method that starts from “Dasein” (existence). In this context, the reason behind UTCP’s choice of translating *kyōsei* 共生 as “co-existence”

³ Kobayashi, “Atarashii Hito ni Mukatte 「新しい人」に向かって (Toward a “New Humanity”),” 20–21.

in their publications is quite clear. It signals that our singular existence is no longer predicated on the survival of the individual. Instead, we ought to define ourselves as a co-existential subject, along with others.

In 2019, the East Asian Academy for New Liberal Arts (EAA), an institute that grew out of the UTCP, proposed a new approach titled the “World Human Studies.” In December of that year, EEA held a conference for the “Declaration of World Human Studies,” where it was suggested that the concept of “human being” should be transformed into “human co-becoming.”⁴ The significance of the latter term is that it imagines humans as dynamic, communal existents that strive for betterment with their fellows. The Declaration of World Human Studies can be seen as a transitional breakthrough. This paper, in fact, is a product of my continued reflections and research after presenting my report at the conference for the Declaration. Proceeding from this foundation, I will avail of the discourse of traditional Chinese philosophy to explore the preferred direction for a new philosophy based on *kyōsei*.

THE TENSION BETWEEN SYMBIOSIS IN NATURE AND *KYŌSEI* IN HUMANITY

There are at least two levels of difficulty facing *kyōsei* among humans. (1) The human approach to ensuring the survival of its own species is at odds with the balanced symbiosis found in the natural world. (2) Conflict within human society is difficult to eliminate. Symbiosis is a type of relationship that all species in nature rely on. This balance, however, requires the sacrifice of individual lives at times. Not just the individual, but the extirpation of entire species, drastic changes in climate, and even planetary explosions—these are all phenomena that occur naturally. All species and individuals in nature face this reality with equanimity and let things take their course. All, that is, besides humans. Humans have an instinctual aversion to harm and seek to extend their lives by modifying and

⁴ See *Sekai Ningengaku Sengen* 世界人間学宣言 (Declaration of World Human Studies), 38. The one who suggested this concept at the conference was the cultural anthropologist and Indian studies expert Tanabe Akio. The first one to ever suggest this conceptual shift, however, was likely Nakajima Takahiro, an expert in Chinese philosophy who led UTCP with Yasuo Kobayashi. Nakajima is also the current director of EEA. For Nakajima’s paper, please see *Human Co-becoming: Redefining the Concept of Humanity for a Super-smart Society*: <https://www.hitachihyoron.com/jp/column/ei/vol07/index.html>.

exploiting the natural world. Symbiosis, then, is an essential barrier to the human desire for limitless growth and prosperity. Are we humans willing to sacrifice our interests for the benefit of symbiosis? In what sense, and to what extent, do we actually pursue symbiosis? Is there any way to resolve the conflict between the natural fact of symbiosis and the human desire (some would say the ethical imperative) to survive? If there is, how should we approach this resolution?

Aside from global ecological and climate disasters, humanity must also deal with the convoluted conflicts and contentions between the eight billion people that make up our society, as well as issues like injustice, unfairness, and inequality. Given these circumstances, the *kyōsei* symbiotic goal that humanity must strive to realize means finding a way to live harmoniously with the “other.” Communities must depend on the existence of the “other” for their own establishment. No human community has been able to avoid using the “other” to maintain its own internal cohesion. Human communities have had to create the role of an ostracized other—Homo Sacer, the “accursed man”—for the sake of ensuring the survival of its own members. Thus, no matter how appealing the ethical call to live harmoniously with other sounds, we may unwittingly create an “other” that is to be sacrificed for us, that is to be discarded and suppressed. Thus, from the point of view of human communities, symbiosis is also an established fact—but the “other” in relation to human symbiosis is an unwelcome, forsaken sacrifice.

Symbiosis as a “fact” deviates humanity’s universal ethical norm. Thus, we are forced to admit: there are serious contradictions between the reality of living in symbiosis with others and the humanistic ideal of societal improvement. Confucian morality demands that we practice *ren* 仁 (benevolence or humaneness). If there is one sentence that can best encapsulate this imperative, it is no doubt the prescription to “love one’s fellow man” (found in chapter 12 of *The Analects*). This should be the common moral standard for all humanity, our shared vision of kindness. And yet to actually work toward this goal is no simple task!

THE GAP OF WEN: FROM TAN SITONG BACK TO XUNZI

These are the considerable problems we are confronted with when we consider the topic of *kyōsei*. However, it seems like there is only one viable path forward: to re-align ourselves from the height of *ren*, to pursue not just “love for one’s fellow man” but “love for all things”

in order to adapt to the ethical requirements of the Anthropocene. To this end, we must change the way we understand the world, restore the possibility of shaping the world anew. Fortunately for us, there is a historical model available for reference in this regard. The late-Qing thinker Tan Sitong (1865–1898), in his book *Theory of Ren*, stated that “interconnectedness is the most righteous form of *ren*.”⁵ Tan advocated for the rejection of the confining Confucian ethical codes, the abolishment of traditional hierarchal relations (between the sovereign and his ministers, father and son, husband and wife, older and younger brother, etc.) so as to achieve a harmonious state of interconnectedness among all things. This radical idea, though seemingly replete with Utopian sentiment, conceals an important insight into the way humans interact with the world. In Tan’s view, the foundation of the feudal hierarchal system (then prevalent in the Qing dynasty and throughout China’s history) was an ossified name-actuality relationship (*mingshi guanxi* 名实关系). His admonition to “throw off the trammels” (*chongjue wangluo* 冲决网罗) meant renouncing the name-actuality relationships of linguistic symbology and creating and reorganizing new relationships, thereby changing the structure of how humans understood the world. This idea echoes Xunzi’s concept of *li* 理 (order):

Tian and earth give birth to the noblemen (*junzi* 君子) and the *junzi* brings order (*li* 理) to *tian* and earth. The *junzi* form a triadic partnership with *tian* and earth, a supervisor for the myriad things, and are mothers and fathers to the people. If there were no *junzi*, then *tian* and earth would not be properly ordered.⁶

In Yang Liang’s commentary to *Xunzi*, he notes that, “propriety (*li* 禮) and righteousness (*yi* 義) begin with the *junzi* 君子; *junzi* regard practice and learning as their foundation.”⁷ Thus, a *junzi* is an ideal person of learning who possesses both wisdom and morality. As humans, becoming *junzi* should be our goal. In this sense, *junzi* is an ordinary

⁵ Tan Sitong, *Renxue [Theory of Ren]* 仁学 (Zhongzhou Ancient Books Publishing Company, 1998).

⁶ Xunzi, “The Rule of a True King,” in *Xunzi: The Complete Text*, trans. Eric L. Hutton (Princeton University Press, 2014), 68–82.

⁷ Wang Xianqian, *Xunzi Jishi [Collected Explanations of the Xunzi]* (Beijing: Zhonghua Book Company, 1988), 193.

person, as everyone has the potential to become a *junzi*. According to Xunzi, *junzi* is a product of *tian* and earth, but *tian* and earth are “ordered” by the *junzi*. The Qing-era philosopher Dai Zhen (1724–1777), in the opening of his work *Evidential Commentary on the Meaning of the Words of Mencius*, said: “*li* (order) is the minute differences we observe and name. Thus, it is called *fen li* 分理 (differentiated order).”⁸ In other words, the *li* that Xunzi speaks of is the methodical order inherent in nature, that requires human intelligence to observe and distinguish to become clear. This is the mechanism by which the order of things is made manifest.

“If there were no *junzi*, then *tian* and earth would not be properly ordered.” In other words, human wisdom is needed to shape our understanding of the natural world. Our human understanding and grasp of the natural world have shifted as paradigms have changed. Each major scientific discovery drastically alters our knowledge of the world. The world always remains the same, but once our knowledge of it changes, so too does our relationship with the world, as does the appearance of the world as well. Modern biological discoveries concerning bacteria, for example, have utterly changed the way we prevent and treat diseases. This is the “ordering of the world by *junzi*”; a shift caused by our ability to “observe and distinguish minute differences in things.” The concept of *li*, then, represents the system of denotive symbols that humans rely on to understand the world. This is what Tan Sitong was expressing with his radical exhortation to “throw off the trammels.”

THE GAP OF WEN

Li is the effect of our subjective knowledge and the objective order that it distinguishes. Our language itself is a construct of *li*. We use language to describe the world. As languages differ, so too does the world these languages describe. Conversely, if we succeed in changing our language, the world that unfolds before our eyes will be different from before. This process is what has fueled the development of human history until today.

⁸ See Ewell, John. *Reinventing the Way: Dai Zhen’s Evidential Commentary on the Meanings of Terms in Mencius (1777)*. Dissertation, University of California Berkeley, 1990.

On the level of language, the structure of *li* 理 (order) is called *wen* 文. According to Xu Shen's explanation in the Chinese etymological dictionary *Shuowen Jiezi*, Fuxi 庖犧, a Chinese mythological hero, created the *bagua* 八卦 (eight divinatory trigrams) by observing the *wen* (here meaning distinctive tracks) of different creatures; and Cangjie 仓颉, a legendary scribe of the Yellow Emperor, created *wen* (here referring to Chinese characters), also by observing the distinctive tracks created by various animals. From this origin, *wen* later came to mean "writing" (*wen zhang* 文章) and "culture" (*wen hua* 文化). Thus, *wen* represents humans' unique ability to describe the natural world. Language is the most important manifestation of *wen*. And as Xunzi and other Chinese philosophers have pointed out, there will always be a disparity between *wen* and nature (reality). *Wen*, after all, is only a reflection of subjective human understanding, and in this way, it can never be equivalent to nature as such. But it is this that allows us to constantly modify language and thereby reshape the world, create civilizations, and develop culture. *Wen* is an unceasing movement; so long as there are humans, *wen* will be constantly changing. And the reason for this is none other than the "gap" that exists between *wen* and nature.

THE DEATH OF "CHAOS" (*HUNDUN* 浑沌)

The gap of *wen* is what allows us as humans to constantly change ourselves. It is the source of the indispensable vitality that fuels our efforts to become better. But the gap of *wen* is also a source of discomfort; it is always indelibly there, and yet we cannot access it. It strikes us as an ineffable abyss. The gap of *wen* is the world of chaos waiting to be differentiated.

Mentioning chaos, some might think of the story of Hundun found in the "Sovereign Responses for Ruling Powers" chapter of *Zhuangzi*:

The emperor of the southern sea was called Swoosh (*shu* 倏). The emperor of the northern sea was called Oblivion (*hu* 忽). The emperor of the middle was called Chaotic Blob (*hundun* 浑沌). Swoosh and Oblivion would sometimes meet in the territory of Chaotic Blob, who always waited on them quite well. They decided to repay Chaotic Blob for such bounteous virtue. 'All men have seven holes in them, by means of which they see, hear, eat, and breathe,' they said. 'But this one alone has none. Let's

drill him some.’ So, every day they drilled another hole. Seven days later, Chaotic Blob was dead.⁹

In this story, Shu and Hu are much like kindhearted humanity. It is natural for humans to want to repay kindness with a gift, and we all wish to lead stable, orderly lives. Hu and Shu represent this type of human nature. Hundun, the “Ruler of the Center,” whose pronunciation is identical to a noun meaning chaos, however, is different. He is a benefactor. It is because Shu and Hu were both recipients of Hundun’s benefaction that they were able to meet, get to know one another, and enjoy each other’s company. This relationship between the two parties reminds us of Xunzi’s relationship between nature and humans, that “*tian* and earth give birth to *junzi*.” Hundun is like *tian* and earth, and thanks to his benefaction, Shu and Hu get to enjoy their friendship. Shu and Hu thus see no reason not to “order *tian* and earth”—that is, repay Hundun’s kindness. To this end, they set about modifying Hundun’s appearance so as to give him differentiating features. Every day they chisel an orifice in him, eyes, ears, mouth, and nostrils, until on the seventh day Hundun dies. “*Junzi* bring order to *tian* and earth.” This is how the story of Hundun ends in destruction, or how the chaos dies.

This is a story about the limits of human intelligence. Intelligence, when employed to the fullest extent, will destroy the reciprocal relationship of benefaction and gratitude that exists between humans and nature. Humans attempt to differentiate objects and give them names, but this only rigidifies the name-actuality relationship. This rigidification is what Tan Sitong urged us to reject by “throwing off the trammels.” In other words, chaos is a necessary condition for human development, in much the same way that the gap of *wen* is needed for us to be able to change existing systems of linguistic symbols, see the world anew, and explain and shape the world.

CHAOS AND THE TRIPOLAR STRUCTURE: THE ALLURE OF CONTRASTIVE RELATIONSHIPS

The renowned Japanese historian of science Keiji Yamada once described the relationship between Shu, Hu, and Hundun as a tripolar structure:

⁹ Ziporyn, *Zhuangzi: The Complete Writings*, 72.

In the beginning, the world was a single space ruled by Hundun, what we would call a unipolar structure, signified by a circle. Next, the space of the world was sliced into three parts, in which Hundun ruled the center and the south and north were ruled by Shu (also known as Yuhao 禺号) and Hu (also known as Yuqiang 禺强) respectively. This is called a tripolar structure... Once the tripolar structure is established, conflict arises between the rulers and they start to struggle with each other. According to Zhuangzi, the primary conflict is between Hundun on one side and Shu and Hu on the other. In other words, a conflict between internal and external space. This struggle ends with the disappearance of internal space. With Hundun dead, the world is split in two, ruled by Shu (Yuhao) and Hu (Yuqiang) respectively.”¹⁰

In Fig. 7.1, circles a, b, and c represent unipolar, tripolar, and bipolar structures.¹¹ The appearance of Shu and Hu divides the original unipolar structure into internal and external space. The internal space is still ruled by Hundun, while each half of the external space is ruled by Shu and Hu, thus creating a tripolar structure. As we have already noted, Shu and Hu conduct themselves as humans. They were born into an undivided world with Hundun (chaos) as its unopposed ruler. The human nature of Shu and Hu inevitably creates conflict. Yamada views the gratitude of Shu and Hu as classical behavior informed by the lure of power and benefits, the inevitable consequence of which is the eruption of conflict. The death of Hundun creates a bipolar world. With *yin* and *yang* settled, the world becomes stable. Stability and order are maintained through a balance of the two poles' power.

In the Eastern tradition, the structure of the natural world is described using the two vital forces of *yin* and *yang*. This type of contrastive relationship is also manifested in traditional Confucian relations, such as those between the ruler and his ministers, or a father and his son. In this way, the binary structure of the natural world is transposed onto the social world of human relations. However, the binary structure does not allow for human subjectivity. If humans long for subjectivity and freedom, they must create a tripolar structure within the bipolar structure.

¹⁰ Keiji, *Konton no umi e chugoku teki shiko no kozo* 混沌の海へ中国的思考の構造 (*Toward the Sea of Chaos: The Structure of Chinese Thought*), 296.

¹¹ Keiji, 296.

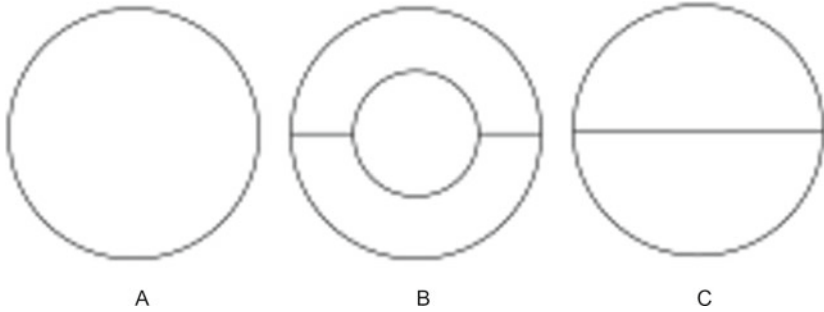


Fig. 7.1 The creation of a tripolar structure

THE EDGE OF CHAOS

Tan Sitong's Utopian vision wherein we "throw off our trammels" was actually mobilized by such subjectivity and freedom. After Tan Sitong, dismantling contrastive relations became a common theme of late-Qing critical philosophy. The project of this critical philosophy coincided with modern physics after the twentieth century and with the contemporary worldview provided more recently by the study of complex systems.

Stuart Kauffman, who established the theory of complex systems, said:

I suspect that the fate of all complex adapting systems in the biosphere—from single cells to economies—is to evolve to a natural state between order and chaos, a grand compromise between structure and surprise... We will find a place in the sun, poised on the edge of chaos, sustained for a time in that sun's radiance, but only for a moment before we slip from sight. Untold many actors come and go, each, as a fine playwright once said, strutting and fretting its hour upon the stage. A smiling irony is our fate.¹²

The "edge of chaos" is an indispensable evolutionary power source in the world of complex systems. It is not the rational order imagined by the modern Enlightenment, nor is it the primordial unipolar world of undifferentiated chaos. It is a certain "natural state between order and chaos," a state within which we may linger "but only for a moment." This frail,

¹² Kauffman, *At Home in the Universe: The Search for Laws of Self-Organization and Complexity*, 10.

nebulous state is nevertheless an inexhaustible source of vitality for evolution in the natural world. This description evocatively echoes Yamada's theory of the tripolar structure between Shu, Hu, and Hundun. Yamada believes that the tripolar structure contradicts the natural disposition of the world. In this sense, his theory does not seem to conform with the worldview expressed by complexity studies. But the statement that the establishment of a tripolar structure depends on humans' "free decisions and behavioral choices" should provide us with some insight. The "edge of chaos" rejects permanence, but it plays a decisive role in the operation of the natural world. Conversely, humans, in order to constantly change their understanding of the world and thereby change and reshape it, must also preserve space for the existence of this type of "edge of chaos." It is here that the irrefutable existence of the gap of *wen* becomes so crucial.

BETWEEN ORDER AND DISORDER: CO-EXISTING WITH THE "OTHER"

Perhaps the chaos that lies wedged between the gap of *wen* is our true "other." The "other" exists on the opposite side of understanding, delineating the scope of our own knowledge. The "other's" existence is disquieting, not just because we exclude the "other" as "Homo Sacer" but because the "other's" existence provides us with our foundation for being existent in this world. So, we should look at the problem using an inverted form of Agamben's theory of the "other."

That is to say, it is not that we establish a community that excludes the "other," but rather that the "other's" existence is what gives us, within a limited purview, the appearance of a stable, ordered world. The "other's" existence precedes our own. When a community appears internally stable and orderly, the "other" seems like a latent external disruptor, which the community aims its power at. But when the community loses stability, so too does the boundary between the self and the "other"; the two start to permeate one another, disturbing the pre-existing order and causing chaos to appear. The "other" is a source of vitality for reshaping the world and the fountainhead for constructing the world. The "other" compels change in the order of the world, and this transformative effect is actually another gift that the "other" gives us. Thus, as our world experiences renewal and change, the self-other relationship changes along with it.

We thought we were the subjects, but in this dynamic process we are in fact objects whose fates are steered by the "other."

THE DYNAMIC STRUCTURE OF PATTERNS ALL UNDER *TIAN*

Keiji Yamada's "pole structure theory," the core of which is the tripolar structure, actually arose out of the need for a set of interpretive theories for explaining the revolution and establishment of Chinese socialism. Beginning from the practical significance of the establishment of Chinese socialism, Yamada sought a structural mechanism that would make "value conversion" possible. According to him, the tripolar structure acts as a mechanism fueling social revolution, and when society becomes mature enough, it naturally converges into a bipolar structure. Society is only able to grow through this alternation of tripolar and bipolar structures. Yamada's creative theory demonstrates the structural character of the dynamic development of Chinese society, noting especially the theoretical value of the revolutionary base area strategy.

I further argue that the structural mechanisms that make the value conversion possible did not begin with the modern Chinese revolution. In actuality, the image of the cosmos as found in the traditional Chinese conception of *tianxia* 天下 (all under *tian*), such as it is described in the "Celestial Patterns" chapter of the *Huainanzi*—"The Way [*Dao*] of heaven [*tian*] is called the Round; the [*Dao*] of earth is called the Square"¹³—already contains a similar dynamic mechanism. This expression, of heaven, or *tian* being "round" and earth, or *di*, being "square," is how ancient Chinese people imagined the structure of the world. Interestingly, the formal differences between *tian* and earth in this view mean that there will always be a gap between them. Referring to Fig. 7.2, regardless of whether we imagine a circular heaven encompassing the entire earth (as on the left) or a square earth carving out space around a yurt-shaped *tian* (the right image), there will always be a portion left over that cannot be accommodated by either *tian* or earth.¹⁴ In his work on the *Tianxia* system, Zhao Tingyang has often stressed that there is "nothing outside *tianxia*." But if this is the case, should we then consider this surplus portion—the remainder left over from *tian* and earth—internal or external to *tianxia*? The horizon structure on the surface of the earth that radiates from the inside to the outside represents order among the

¹³ Liu and Major, *The Huainanzi*, 115.

¹⁴ Tsuyoshi, *Chugoku to Sekai* 中国と世界 (China and The World), 281.

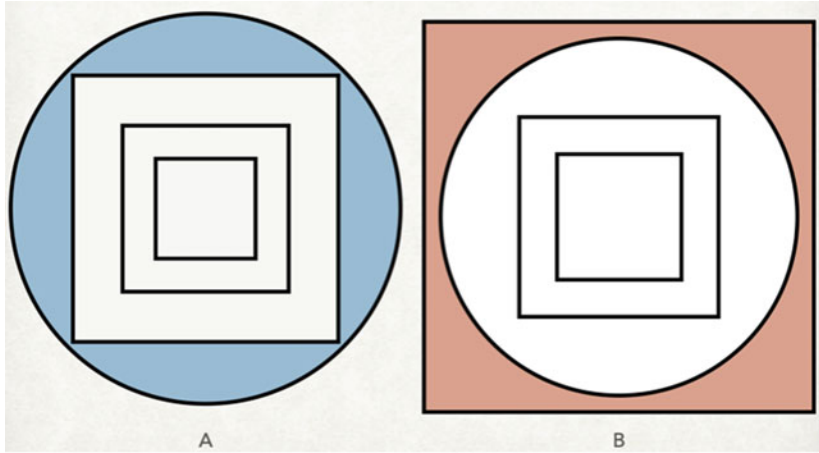


Fig. 7.2 The imagined structure of the world consisting of *Tian* and earth

internal and the external, among the Chinese and “barbarians” (*huayi* 华夷). It is equivalent to the bipolar structure composed of the Chinese on the one end and barbarians (cultural outsiders) on the “other.” We may then view this unaccommodated portion between *tian* and earth as a third pole, thus forming a tripolar structure “under *tian*.”

SUMMARY: THE IDEAL OF *KYŌSEI* AND “COSMIC HOPE”

This tripolar structure “under *tian*” and its underlying dynamics are an extremely thought-provoking worldview, and an intellectual resource that we can consult when discussing the topic of *kyōsei*. We live in this world, and this world is surrounded on all sides by chaos, that is the boundless the “other.” In the context of the universe at large, the world in which we exist can be compared to this type of the world of the “other”; it is negligibly small. In thinking about *kyōsei*, we must use our understanding of this smallness as a starting point. The ineffable “other” moves us to know the world, to describe and shape it, and to be “*ren* persons that love others” (*renzhe airen* 仁者爱人) and “*ren* persons that love all things” (*renzhe aiwu* 仁者爱物) as our lodestars, we are constantly modifying the way we view the world and life. To this end, we have to create a territory where these abovementioned efforts become possible

and design a system of arrangements that conforms to this requirement. This system should be based on the tripolar structure, since the tripolar structure contains a mechanism for constant self-transformation. Realizing it requires profound human wisdom, sustained effort, and a lofty awareness of the concepts of *ren* and righteousness. This should be the high ground that humankind, the subject of *kyōsei* in the twenty-first century, strives to attain.

What is profound about the *tianxia* worldview is that within it there exists an unresolvable domain of chaos—"the gap of *wen*," or "the edge of chaos." The goal of this paper has been to examine the characteristics described by this type of world structure to help us reshape our understanding of the following two points. (1) The world is not a fixed, quiet static existence. It is molded by human subjective understanding, and, as such, it can also be changed according to subjective judgment. (2) At the same time, our existence is controlled by the chaotic "other" (混沌的他者) in the gap of *wen*. Our subjectivity is just a response evoked by stimulus from the "other." Thus, people, or humans, are simply not their own masters.

The "other" is an ineffable abyss, but it is only because of the "other" that we can enjoy life in a limited world. The "other," then, is none other than our hope. Having come this far, if humanity wants to elevate itself to the subject of *kyōsei* in the twenty-first century—and to truly deserve this status—it must establish a worldview in which hope is placed in the "other." And perhaps this worldview will not be confined to our terrestrial purview alone. That is why I call this hope a "cosmic hope." This should be our goal for *kyōsei*.

This article is translated by Thomas Garbarini and Jin Young Lim.

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PART III

Gongsheng in Contemporary Contexts



How to Understand Symbiosis?: The Conflict and Integration of Two Pictures of Life

Shijian Yang

Cattle rely on anaerobic bacteria in the rumen to digest cellulose, and termites rely on bacteria and protozoa in the hindgut to digest lignin. It is estimated that the number of symbiotic microbial cells in the human body is ten times greater than that of human cells.¹ The symbiotic bacterial community living in the human gastrointestinal tract, which assists in digestion, has a total metabolic capacity comparable to that of the human liver.²

Biological symbiosis is a very common phenomenon in the living world, where mutualism and cooperation often exist between different plants and animals; at the same time, the survival of many plants and animals is also closely dependent on symbiotic microorganisms. The study

¹ Dwayne C. Savage, “Microbial Ecology of the Gastrointestinal Tract,” *Annual Review of Microbiology* 31 (1977):107–133.

² Savage, 107–133.

S. Yang (✉)

Department of Philosophy, Xiamen University, Xiamen, China

e-mail: yangsj@xmu.edu.cn

of “biological symbiosis” is almost as old as Darwin’s theory of natural selection.

According to the historian of science Jan Sapp, the definition of “symbiosis” in modern biology was first given by the German botanist Anton de Bary in 1878. He first used the term “symbiosis” in his study of lichens to denote the phenomenon of “the living together of unlike named organisms.”³ According to Lynn Margulis, an American biologist, a Russian school of biology in the early 20th century emphasized the role of symbiosis in evolution: Andrei Sergeivich Famintsyn tried to isolate chloroplasts from plants and make them grow; Konstantin Sergeivich Merezhkovsky developed the theory of “two-plasm,” which posited “intracellular cells,” claiming that chloroplasts originated from cyanobacteria. He also coined the term “syntrophogenesis,” arguing that “evolutionary novelty has its origin in symbiosis.” Boris Kozo-Polyansky, meanwhile, believed that cell motility has its origin in symbiosis.

However, these studies were almost “completely unknown” to early scientists in the English-speaking world. Until today, research related to microorganisms and biological symbiosis does not feature prominently in the mainstream science—and it has been especially slighted by English and American mainstream evolutionary biologists—for a long period of time. The relationship between symbiosis and evolution has yet to be seriously examined. The American anatomist Ivan Wallin emphasized the role of obligate microbial symbiosis in the origin of species, but was rejected and even ridiculed for his insights. The Frenchman Paul Portier, a contemporary of Wallin, also noted the importance of symbiosis to evolution and was similarly vilified.⁴ So, what are the factors that have led to “biological symbiosis” becoming an issue historically avoided by mainstream evolutionary biology in Europe and the United States? Are there deeper influences from different generative contexts, such as cultural environments, social patterns, and local values?

³ Jan Sapp, *Evolution by Association: a History of Symbiosis* (New York: Oxford University Press, 1994), 7.

⁴ Lynn Margulis and Dorion Sagan, *Slanted Truths: Essays on Gaia, Symbiosis, and Evolution* (Göttingen: Copernicus, 1997), 298.

TWO PICTURES OF LIFE

For quite a long period of time, there was, in fact, constant conflict between the competitive picture behind the classical natural selection paradigm and the cooperative picture presented by the biological symbiosis paradigm. We need not say more about the former owing to the popularity of Darwin's theory of evolution. As for the latter, however, we may divide biological symbiosis into three types of phenomena: first, symbiosis between microorganisms (including prokaryotes and lower eukaryotes); second, symbiosis between multicellular plants and animals, and microorganisms; and third, symbiosis between multicellular plants and animals. In the eyes of some scientists who support the idea of symbiotic evolution, the first two categories are the main sources of evolutionary novelty and constitute the basis for the origin and evolution of life on earth.

The inevitable barriers to communication between different views of nature and scientific traditions can be attributed to two reasons: on the one hand, the observed symbiosis occurs mostly between bacteria and multicellular plants or animals. These bacteria were once viewed by society and even by scientists as the enemy of plants and animals, a designation that seems at odds with the concept of symbiosis; on the other hand, Darwin's "survival of the fittest" competition model and symbiotic cooperation were in conflict. Because of these two reasons, mainstream scientists in Europe and America historically failed to seriously consider the relationship between symbiosis and evolution. This also, for a long time, caused the ostracization of those who researched symbiosis.

Additionally, aside from its use by biologists, the concept of "symbiosis" has spilled over into other fields like history, economics, education, and art. This has led, to a certain extent, to the lack of a consistent general definition of the concept of "symbiosis," which has long been in a state of ambiguity. Margulis makes it clear that a direct cause of this situation is also related to Petr Alekseevič Kropotkin. This famous Russian theorist published a series of articles in the journal *The Nineteenth Century* starting in 1890, which were collected in the famous book *Mutual Aid*. The book describes critically the Darwinian picture of the "struggle for existence," particularly in response to Thomas Huxley's extension of the "struggle for existence" paradigm from the natural world to human society. Although Kropotkin did not mention the term "symbiosis" in *Mutual Aid*, this picture of mutualism, with its strong moral

implications, has had a profound impact on later scholars—so much so that in the eyes of many scholars and the general public, symbiotic relationships are mutualism, which contradicts the idea of survival of the fittest.

As Margulis said, the work of Kropotkin and others “accentuated both the confounding of mutual aid with symbiosis and the imposition of human social analysis on descriptions of organismal interaction.”⁵ In her view, “human social concerns have inextricably permeated discussions regarding the participants in symbiosis.”⁶ Since most molecular, cellular, and evolutionary biologists saw “symbiosis” and “mutualism” as a political slogan, they avoided experiments and research related to symbiosis. This division between research fields exacerbated the biology community’s inability to come to a consensus regarding symbiosis. According to Margulis, “The lack of consensus about first principles of symbiosis and evolution has serious consequences for both the teaching and the practice of evolutionary biology.”⁷

CHALLENGING THE CLASSICAL NATURAL SELECTION PARADIGM

Starting from the 1960s with the proposal and verification of the theory of the symbiotic origin of eukaryotic cells, people’s understanding of symbiosis among microorganisms and organisms has increased, and symbiosis as a concept has grown in popularity. This led to a revolution in biology that has gone unnoticed for a long time, something that Jan Sapp has called the “quiet revolution.”⁸ In 1967, Lynn Margulis proposed Serial Endosymbiosis Theory (SET), which posits that eukaryotic cells evolved from a symbiosis between different types of primitive prokaryotic cells for the first time.⁹

⁵ Margulis and Sagan, *Slanted Truths*, 300.

⁶ Margulis and Sagan, *Slanted Truths*, 298.

⁷ Lynn Margulis, “Symbiogenesis and Symbioticism,” in *Symbiosis as a Source of Evolutionary Innovation: Speciation and Morphogenesis*, ed. Lynn Margulis and René Fester (Cambridge: The MIT Press, 1991), 3.

⁸ Sapp, *Evolution by Association*, xiii.

⁹ Lynn Sagan, “On the Origin of Mitosing Cells,” *Journal of Theoretical Biology* 14, no. 3 (1967): 255–274.

In *The Origin of Eukaryotic Cells*, published in 1970, Margulis formally declared that after aerobic bacteria were devoured by amoebic prokaryotes, they evolved through long-term symbiosis into mitochondria. After cyanobacteria were devoured, they evolved through symbiosis into chloroplasts. And after spirochaetes were devoured, they evolved through symbiosis into primitive flagella.¹⁰ At first, Margulis' theory was attacked. But the situation improved with the advancement of molecular biology and microbial genetics. After the DNA of mitochondria and chloroplasts was successfully extracted in the 1980s, it was revealed that their DNA was much different from the DNA of the nucleus but very similar to the DNA of bacteria and cyanobacteria. Not only could the rRNA of cyanobacteria be hybridized with the DNA of cyanobacteria itself, it could also be hybridized with the DNA of the chloroplast of *Euglena*. This indicates their homology, which verified Margulis' theory.

As the importance of biological symbiosis in the history of evolution was gradually being proved, biologists had to make a difficult decision. There was an unmitigable conflict between the competition paradigm of classical natural selection and the cooperation paradigm of biological symbiosis. Evolutionary biologists could choose to either continue as they had before and neglect the issue of biological symbiosis in their work, or they could use the concept of symbiosis to challenge the orthodoxy of Darwinian natural selection.

Margulis chose the latter path. Aided by ample research results in the fields of microbiology and symbiosis, she developed a theoretical framework with the aim of transforming the classical paradigm of the theory of natural selection. She believed that the prime source of evolutionary novelty was not random mutations and natural selection but symbiosis. Experimental evidence shows that mutations rarely produce heritable and favorable changes, nor does the accumulation of mutations cross species barrier to produce new species. Instead, organisms integrate foreign genomes through symbiosis, similar to corporate acquisitions and mergers that result in the acquisition of new skillful workers, allowing for the rapid acquisition of new, refined traits and the formation of novel evolutionary lineages.¹¹

¹⁰ Lynn Margulis, *The Origin of Eukaryotic Cells* (New Haven and London: Yale University Press, 1970).

¹¹ Lynn Margulis and Dorion Sagan, *Acquiring Genomes: A Theory of the Origins of Species* (New York: Basic Books, 2003) 72.

Describing the course of evolution, Margulis said, “Family trees usually are grown from the ground up: a single trunk branches off into many separate lineages, each branch diverging from common ancestors. But symbiosis shows us that such trees are idealized representations of the past... The tree of life is a twisted, tangled, pulsing entity with roots and branches meeting underground and in midair to form eccentric new fruits and hybrids.”¹² Margulis got the idea that symbiosis is the primary source of evolutionary novelty from Ivan Wallin. Wallin had earlier pointed out in his 1927 book *Symbioticism and the Origin of Species* that biological evolution consists of three features: the origin of new species, the retention or destruction of formed species, and the direction or progress of evolution, while natural selection can only explain the second feature and the other two aspects need to be explained by “other unknown factors,” of which symbiosis is the most important one.¹³

Margulis referred to the symbiotic whole of all life on Earth, together with its environment, as “Gaia,” an integrated living system.¹⁴ In *A New Bacteriology*, Sorin Sonea et al. conveyed a similar view, saying that all bacteria combined to form a global superorganism. In this model, different strains of bacteria act as differentiated cells of this superorganism, sharing the same gene pool via lateral gene transfer while at the same time possessing metabolic diversity. This research team likened the complicated functions of the bacterial superorganism servicing the ecosphere to a supercomputer, possessing massive data storage capacity and a well-developed internal communication network.¹⁵ The difference between Margulis’ Gaia and the bacterial superorganism of Sonea and his team is that the latter only includes bacteria, while Gaia includes all life forms. The holism expressed by both models, however, is the same. Margulis views multicellular plants and animals as the products of symbiotic evolution among prokaryotes; they can essentially still be viewed as the symbiotic community of a group of single-celled organisms. In this way, the relationship between cells in the bodies of plants and animals,

¹² Lynn Margulis, *Symbiotic Planet: A New Look at Evolution* (New York: Basic Books, 1999), 52.

¹³ Ivan Wallin, *Symbioticism and The Origin of Species* (Baltimore: Waverly Press, The Williams and Wilkins Company, 1927), 3–7.

¹⁴ Margulis and Sagan, *Acquiring Genomes*, 70.

¹⁵ Sorin Sonea, Maurice Panisset, *A New Bacteriology* (Boston: Jones & Bartlett, 1983), 85, 112–123.

between plants and animals and their symbiotic bacteria communities, between different prokaryotes, can all be considered symbiotic relationships. As a result, the boundaries between different biological individuals becomes blurred.

THE BATTLE FOR GAIA: DAWKINS VS. MARGULIS

The views of those like Margulis are difficult to accept for scientists who adhere to the classical model of natural selection. Richard Dawkins is one of the sternest critics of the Gaia Hypothesis.

The main reason Dawkins and others oppose the Gaia Hypothesis is that Gaia is posited as being a single entity that cannot reproduce to form a population; it thus fails to meet the criterion for being a life—the ability to reproduce.¹⁶ In their view, reproduction and natural selection are the most important properties of life. The Neo-Darwinist John Maynard Smith said, “the picture suffers from the drawback that is fatal to all holistic models of evolution, from the Gaia Hypothesis downwards, of losing all sight of the units of selection, and hence of lacking any model of the dynamics of evolutionary change.”¹⁷ This criticism has its validity because Margulis always stressed the symbiosis of different organisms but ignored the phenomenon of reproduction among the same species and, thus, the process of natural selection caused by reproduction and variation. In *The Selfish Gene*, Dawkins noted that biological symbiosis is always mutually beneficial behavior and that it can always be explained with the “selfish gene” strategy: individuals of different species carrying different genes cooperate through symbiotic behavior, thus making the whole system more adaptive; as a result, individuals that engage in altruistic behavior are in turn rewarded—their genes are preserved.¹⁸

In his writings, Margulis has made severe criticisms of the Neo-Darwinists represented by Dawkins. Margulis and Dawkins stand at the “opposite ends” of contemporary biological thought, with very different views on the object of biology, the unit of life, the nature of life, the

¹⁶ Lawrence E. Joseph, *Gaia: The Growth of an Idea* (New York: St. Martin’s Press, 1990), 56.

¹⁷ John Maynard Smith and Eörs Szathmáry, *The Major Transitions in Evolution* (New York: Oxford University Press, 1995), 189.

¹⁸ Richard Dawkins, *The Selfish Gene* (Oxford: Oxford University Press, 2006), 181–186.

origin of life, and research methods for life sciences. See Table 8.1 for a breakdown of their differences.

The difference in their ideology can be summed up as a difference in the understanding of biological individuality. In Margulis' view, the fundamental property of the biological individual is metabolic associations and cooperation. Cells are the most basic units of life. From cells to organisms, and then to the ecological system and even the whole Gaia, are all different levels of biological individuals with autonomy. In Dawkins' view, the fundamental property of the biological individual is self-replication and natural selection. Genes are the most basic units of life, while plant and animal organisms are merely survival machines for genes without autonomy. The views of Margulis and Dawkins represent

Table 8.1 Comparison of Margulis' and Dawkins' biological thought

	<i>Margulis' views</i>	<i>Dawkins' views</i>
The concept of the "self"	Autopoietic organisms at different levels may all become "self". The boundary of the self is variable.	Only the selfish gene has "selfness". The boundary of the self is rigid.
The role of cells and organisms	Cells are the most basic units of life. Autopoietic organisms at different levels, from bacteria to plants and animals and Gaia, all have autonomy.	They act as survival machines for genes. They derive from genes and serve genes. They lack autonomy.
The essence of life	Metabolism	Reproduction and natural selection
The origin of life	Life began from something like the cell membrane structure.	Life began from self-replicating macromolecules.
Scientific research methodology	Emphasizes experimental observations	Emphasizes mathematical and computational modeling
The relationship between symbiosis and natural selection	Symbiosis creates evolutionary novelty. Natural selection does not create novelty, but filters extant species.	Evolution is driven by selfish genes for the purpose of self-replication and self-preservation. Symbiosis is only a strategy on the level of the phenotype.

the two different understandings of the nature of life and the biological individual in contemporary biology.

Viewed in a larger context, the opposition of these two pictures reflects the contradiction between two scientific traditions (the mathematical-scientific tradition and the natural history tradition) and two views of nature (the mechanistic view of nature and the organismic view of nature) in the contemporary life sciences. Margulis points out that the Neo-Darwinists' ideas embody the mechanistic view currently prevalent in biology: they are all extremely envious of the mathematical-physical approach, "Computer jocks (former physicists, mathematicians, electrical engineers, and so forth), with no experience in field biology, have a large influence on the funds for research and training in 'evolutionary biology.'"¹⁹

In my view, the population reproduction model and the dynamics of natural selection are the theoretical basis for Neo-Darwinists' mathematical and computer modeling. This is perhaps why they insist on reproduction and natural selection as the most important criteria for judging life. On the other hand, Margulis strongly advocated a view of life based on the theory of Autopoiesis proposed by Humberto Maturana and others.²⁰ The nature of autopoietic entities is physiological in character, metabolic and diverse, relying on actual observation rather than mathematical and computational modeling for its research. This can be seen as a modern version of the organismic view of nature.

THE COLLABORATIVE FRAMEWORK: A NEW PARADIGM FOR LIFE

In recent years, John Dupré and others have proposed using the concept of collaboration to integrate different understandings of life—the picture of cooperation and the picture of competition.²¹

In the competitive picture proposed by scientists like Dawkins, genes are the most basic selfish individuals competing with each other. The

¹⁹ Margulis and Sagan, *Slanted Truths*, 266.

²⁰ Margulis and Sagan, *Slanted Truths*, 267.

²¹ John Dupré and Maureen A. O'Malley, "Varieties of Living Things: Life at the Intersection of Lineage and Metabolism," in *Processes of Life: Essays in the Philosophy of Biology*, ed. John Dupré (New York: Oxford University Press, 2012), 206–209.

“selfish gene” becomes the most basic explanatory model, and even the apparently cooperative behavior of biological symbiosis is interpreted as serving the respective interests of the “selfish gene.” Looking for compromise among disparate views, Dupré and others disagree with the idea that cooperative behaviors should be reduced into deeper-level of selfish behaviors. They instead suggest that selfishness and cooperation might better be understood within a framework of collaboration. They explain the concept of collaboration as “interaction between components of a system that lead to different degree of stability, maintenance, or transformation of that system.” Collaboration from this point of view covers a range of interactive processes that may include both cooperative and competitive activities. At one end of this continuum, the goal of participants may be completely aligned, while at the other end, relationships may be largely or wholly hostile.²²

The simplest collaborative phenomena are combinations of physical and chemical interactions, such as the chemical process in which atoms combine to produce molecules, which have properties that are not found in any of the atoms of which they are composed. But the combination of molecules and atoms alone is not enough to produce life; reproduction and metabolism are also required. Reproduction is emphasized in the competitive picture of life, while metabolism is emphasized in the cooperative picture of life. Dupré et al. emphasized a broader perspective of life as a collaborative enterprise and believed that reproduction and metabolism both should be seen as fundamental properties of life. They provided two kinds of symbiotic phenomena as examples of collaboration. One is intracellular symbiosis, such as that of aphids and the symbiotic bacteria *Buchnera* in their cells. Another is extracellular symbiosis, such as the massive reduction of the genomes of symbiotic bacteria during evolution.²³ Obviously, these two classes are far from encompassing all symbiotic relationships, but they show us the close connection between the collaborative framework and the concept of symbiosis.

²² Dupré and O'Malley, *Processes of Life*, 207–208.

²³ Dupré and O'Malley, *Processes of Life*, 216–220.

THE UNIT OF COLLABORATION: THE HOLOBIONT

In summary, it is clear that there is no single definition of biological symbiosis. Therefore, I will try to further clarify the concept of symbiosis in the framework of “collaboration”, and one of the core tasks is to re-define the concept of holobiont and prove that a holobiont is a unit of collaboration.

What is a holobiont? For a long time, this term was mostly used by biologists studying coral reefs. According to the U.S. National Oceanic and Atmospheric Administration (NOAA), holobiont is a collective term referring to the totality of a coral animal, its endosymbiotic zooxanthellae, and the associated community of microorganisms. Later, the meaning of this term was further extended. In describing hologenome theory, Ilana Zilber-Rosenberg et al. defined the holobiont as “the animal or plant with all of its associated microorganisms.”²⁴ In my opinion, this definition is still ambiguous. “All of its associated microorganisms” can refer to a wide-ranging plethora of microorganisms, from tightly bound endosymbionts, such as the intracellular symbiotic bacteria of aphids, to those microorganisms living on the skin of animals, and even to those living close to it in the surrounding environment. Would the latter still be considered part of the holobiont? A clearer spatial-temporal boundary is needed for further definition. Multicellular plant and animal organisms as hosts generally have a clear spatial-temporal boundary. Thus, a clearer definition of holobiont can be given by using this existing boundary. At the 2011 conference of the International Society for the History, Philosophy, and Social Studies of Biology (ISHPSSB), I proposed this definition: “The holobiont is the symbiotic complex formed by a multicellular animal/plant organism and the microbial community living inside its body.”

Additionally, we may look at the concept of immunological continuity, a new criterion for defining the organism proposed by Thomas Pradeu: “An organism is a functionally integrated whole, made up of heterogeneous constituents that are locally interconnected by strong biochemical interactions and controlled by systemic immune interactions that repeat

²⁴ Ilana Zilber-Rosenberg and Eugene Rosenberg, “Role of Microorganisms in the Evolution of Animals and Plants: The Hologenome Theory of Evolution,” *FEMS Microbiology Reviews* 32, no. 5 (2008): 723–735.

constantly at the same medium intensity.”²⁵ Applying this criterion to the complex formed by a mammal and the symbiotic microbes that live within it, Pradeu believed it can be considered an organism formed of heterogeneous constituents: “These bacteria have permanent and constitutive biochemical interactions with other parts of the host. There is no fundamental difference between interactions of the host’s immune receptors with these symbiotic bacteria, and interactions of the host’s immune receptors with endogenous constituents.” Then, he extended this conclusion to other complexes composed of plants and animals and their endosymbiotic microorganisms.²⁶

Using the holobiont concept, I propose the following revision to Pradeu’s above formulation: “A holobiont meets the criteria of immunological continuity between its components, thus satisfying the criteria for being judged as an organism.”

In the holobiont, since the two sides of the symbiosis are closely related for most of the life cycle, forming an integrated organism, it becomes obvious that this unit can be regarded as a unit of natural selection, i.e., a unit of “collaboration.” Thus, “cooperation” and “competition” actually constitute two different perspectives from which to examine and analyze the living world. They are not antithetical but complementary and interconnected.

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²⁵ Thomas Pradeu, “What is an Organism? An Immunological Answer,” *History and Philosophy of the Life Sciences* 32, no. 2/3 (2010): 258.

²⁶ Pradeu, ‘What Is an Organism?’ 247–268.

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The Microbiome Is Redefining What It Means to be Human

Liping Zhao

What is a human being? How should we define “human,” the word that describes the only truly intelligent species on our planet? This is both an extremely important and an extremely contentious topic. There is no lack of writing on how we should define humans, and this definition can shift from discipline to discipline. As a microbiologist—or, more precisely, a microbial ecologist—myself, I too would like to get in on the fun and make my own contribution to this discussion.

In some sense, any discipline that takes the human being as its object must define humans from its own perspective. In terms of human characteristics, we might divide them into natural and social attributes. Accordingly, the disciplines that define humans include both the natural sciences and humanities and social sciences. One might think that since the object of research in the natural sciences is more objective, there would be less controversy in defining humans in these fields. The field of human biology, for instance, takes the anatomical structure and physiological characteristics of the human body as the object of its study. This

L. Zhao (✉)
Rutgers University, New Brunswick, NJ, USA
e-mail: liping.zhao@rutgers.edu

field's definition of human should be the clearest in terms of both content and delineation and should therefore be the least controversial. Surprisingly, it is precisely the discipline of human biology that, in recent years, has posed the most severe challenge to the way it defines humans. This challenge, spurred on by the field of microbial ecology, was brought about by advancements in the understanding of the human body's symbiotic microbes.

THE CAUSAL RELATIONSHIP BETWEEN SYMBIOTIC MICROBES AND HUMAN DISEASES

The term "human symbiotic microbes" refers to the aggregate of all microbes residing in and on the human body, also known as the human microbiome. The main part of the human microbiome is located in the gut, and thus the term "gut microbiota" is also used. In 1670, the Dutch microscopist Antonie van Leeuwenhoek discovered "animalcules" swimming in his own dental plaque when he observed it under a rudimentary microscope of his own invention. This can be seen as humanity's first realization that there are large amounts of living creatures residing in our bodies. Later, Louis Pasteur, Robert Koch, and other pioneers of microbiology developed the germ theory of disease, showing that infectious disease is caused by microbes entering the body. This triggered revolutionary changes in infectious disease prevention and treatment that vastly improved humankind's ability to limit the harm done by infectious diseases, saving an untold number of lives as a result.

Of course, as a result of this research, most people, even today, have a fear of microbes because they believe them to be harmful, that they enter our bodies and threaten our lives by making us sick. They endeavor to avoid all microbes and try to destroy any microbes in their environment that they might come in contact with so as to avoid infection.

There was one pioneer in the field, however, the French-Russian scientist Elie Metchnikoff, who in 1908 became the first person to clearly propose that in and on the human body—and especially in the gut—there lives with us a large number of microbes. Most of these are harmless, and some are even helpful, playing crucial roles in maintaining our health. Of course, the gut also has some microbes that can produce toxic substances, and having too many of these can cause illness and accelerate aging. Metchnikoff was also the first to suggest that the secret to the long lifespan of Bulgarian farmers was their regular consumption of yogurt,

which contained microbes that suppressed the toxic microorganisms in their guts, thus reducing the production of toxins.

From Metchnikoff's theory to the early twenty-first century, related research and commercial development was carried out, but, owing to technological limitations, there was still not enough scientific evidence to demonstrate a direct causal relationship between gut microbiota and health. The mainstream medical community held out on offering widespread approval of the concept.

The twenty-first century saw major breakthroughs in demonstrating the causal relationship between gut microbiota and chronic illness, mostly thanks to the development of microbiota transplant technology. From 2004 to 2006, the lab of Jeffrey I. Gordon in the USA published a series of seminal papers using germ-free mice as a model.¹ They discovered that germ-free mice did not become obese from eating high-calorie feed. When the gut microbiota of regular mice was transplanted into germ-free mice, however, they started gaining large amounts of fat, eventually becoming obese on the same feed, despite taking fewer calories than when they were germ-free. In another experiment, they transplanted the microbiota of two identical twins—one overweight and one lean—into germ-free mice. There was a marked increase in the accumulation of fat in those mice receiving microbiota from the overweight donor. These experiments with mice verified the causal relationship between gut microbiota and obesity.

The publication of these research results was echoed by the formation and establishment of the International Human Microbiome Consortium (IHMC) from 2005 to 2008, creating a renewed wave of enthusiasm among scientists for researching gut microbiota.

In order to expand the results of the mice model to humans and thereby further demonstrate the role of human gut microbiota in causing obesity, Dutch scientists conducted a randomized double-blind microbiota transplantation experiment on obese patients in 2012. They divided the patients randomly into two groups. One group received the gut microbiota from the fecal material of a healthy, lean donor. The other

¹ Peter J. Turnbaugh et al., "An Obesity-Associated Gut Microbiome with Increased Capacity For Energy Harvest," *Nature* 444 (2006): 1027–1031; Fredrik Backhed et al., "The Gut Microbiota as an Environmental Factor that Regulates Fat Storage," *Proc Natl Acad Sci USA* 101(2004): 15,718–15,723; Ruth E. Ley et al., "Microbial Ecology: Human Gut Microbes Associated with Obesity," *Nature* 444 (2006): 1022–1023.

group received their own microbiota. There was a marked improvement in the insulin sensitivity of the patients who received the lean donors' microbiota.² Although there was no difference in the weights of the two groups, and although the improvements to insulin sensitivity disappeared after six weeks, this experiment showed the scientific community that human gut microbiota might be like that in those mice in the Gordon experiments—that it might be a factor in causing and aggravating chronic illnesses like obesity.

In 2015, our lab conducted an experiment in which we transplanted the gut microbiota of genetically obese children with Prader–Willi syndrome into germ-free mice. The recipient mice started gaining large amounts of fat; some even showed symptoms of fatty liver disease.³ In 2018, we transplanted the gut microbiota of donors with type 2 diabetes into gene-free mice. The results of this experiment showed that the recipient mice had elevated fasting blood sugar levels, and oral glucose tolerance tests showed they had developed insulin resistance.⁴ What is worth noting in these transplantation experiments is that the recipient mice had no genetic defects and were given normal feed. The recipient mice developed the same symptoms as the unhealthy human donors just from receiving their gut microbiota. These results provide convincing evidence that it only takes microbiota to trigger the symptoms of a chronic illness, and that the recipient organism's own genes and diet do not play a role.

In 2012, our lab isolated a strain of *Enterobacter cloacae* from a severely obese patient. By implanting this bacterium in the gut of germ-free mice, we were able to reproduce obesity, insulin resistance, and fatty liver disease—all symptoms of obesity from the donor—in the animal. This demonstrated that there are some specific bacteria in gut microbiota with the capacity to trigger obesity and diabetes the way other bacteria trigger infectious disease.⁵

² A.Vrieze et al., “Transfer of Intestinal Microbiota from Lean Donors Increases Insulin Sensitivity in Individuals with Metabolic Syndrome,” *Gastroenterology* 142 (2012).

³ Zhang Chenhong et al., “Dietary Modulation of Gut Microbiota Contributes to Alleviation of Both Genetic and Simple Obesity in Children,” *EB ioMedicine* (2015).

⁴ Zhao Liping et al., “Gut Bacteria Selectively Promoted by Dietary Fibers Alleviate Type 2 Diabetes,” *Science* 359 (2018): 968–984.

⁵ Fei Na and Zhao Liping, “An Opportunistic Pathogen Isolated from the Gut of an Obese Human Causes Obesity in Germfree Mice,” *ISME J* 7 (2013): 880–884.

Gut microbiota transplantation experiments carried out with many types of human diseases have shown that the microbiota of sick people possesses the ability to trigger corresponding symptoms in the body. Scientists have even discovered that microbiota can trigger neuropsychiatric and behavioral illnesses. For instance, in 2016, Peng Xie's Laboratory transplanted the gut microbiota of depressed patients into germ-free mice, which subsequently exhibited symptoms of depression.⁶ These results demonstrate that the relationship between gut microbiota—as a whole capable of triggering the symptoms of various illnesses in the human body—and disease is not just one of correlation but of causality.

In all of these experiments in which human microbiota was transplanted into germ-free animals, the microbiota of healthy control donors or of unhealthy donors after they underwent dietary intervention did not produce disease symptoms in germ-free mice. This shows that gut microbiota does not inherently make us sick. On the contrary, our gut microbiome is essential for keeping us healthy. It is only when its structure is, for any number of reasons, damaged that the presence of harmful microorganisms increases and they start to cause disease.

OUR GUT MICROBIOTA—A “FORGOTTEN ORGAN”

These experiments, which demonstrated the causal relationship between gut microbiota and disease, all used gut microbiota transplantation technology. When one hears the word “transplant,” one naturally thinks of “organ transplants.” And indeed, quite a few scholars have pointed out that gut microbiota should be considered a type of organ. Since the mainstream medical community has long overlooked the prominent role of gut microbiota in maintaining human health and inducing pathology, this has prompted some researchers to dub gut microbiota a “forgotten organ.”⁷

Could it be that human biology has advanced up to its present level while having failed to seriously discern, define, and research one of the

⁶ Zheng P et al., “Gut Microbiome Remodeling Induces Depressive-Like Behaviors Through a Pathway Mediated by the Host's Metabolism,” *Mol Psychiatry* 21 (2016): 786–796.

⁷ Ann O'Hara and F. Shanahan, “The Gut Flora as a Forgotten Organ,” *EMBO Reports* 7 (2006): 688–693.

body's organs? Of course, the question of whether or not gut microbiota should be considered an organ is a controversial one, the reason being that this "organ" is not made up of human cells but the cells of microorganisms. From the perspective of human anatomy, this disqualifies it from consideration as one of the body's organs. And yet more and more evidence is starting to show that even though our gut microbiota is not made up of human cells, it is no less important than the other known organs in terms of functionality and its role in human health.

Like our other organs, everybody has gut microbiota, and it is indispensable for maintaining the individual's health.

First of all, the gut microbiota is crucial for regulating our immune system and fighting illness. Germ-free animals are extremely susceptible to infectious disease due to a naïve immune system. A normal mouse, for example, needs to be inoculated with at least 100,000 germ cells of *Shigella*, a bacterium that causes intestinal infection, to produce disease. In a germ-free mouse, however, the introduction of only 10 *Shigella* germ cells is enough to cause death by infection.⁸ This is because the immune systems of germ-free mice are not fully developed. They have virtually no ability to identify and fight pathogenic bacteria. In normal mice, however, the bacteria residing in all of the ecological niches of their intestines outcompete the invading pathogenic bacteria via the competitive exclusion effect, thus helping the host ward off bacterial infection.⁹

Other research has shown that after antibiotics have cleared out intestinal microbiota, mice exhibit a compromised immune response against influenza and other viral respiratory tract infections, resulting in more severe illness and higher mortality. This shows the importance of normal gut microbiota in maintaining antiviral immunity.¹⁰ With the global spread of COVID-19, it is especially important to pay attention

⁸ My Young Yoon, Keehoon Lee, and Sang Sun Yoon, "Protective Role of Gut Commensal Microbes Against Intestinal Infections," *J Microbiol* 52, no. 12 (2014): 983–989.

⁹ Kamada Nobuhiko et al., "Control of Pathogens and Pathobionts by the Gut Microbiota," *Nat Immunol* 14 (201): 685–690.

¹⁰ Michael C. Abt et al., "Commensal Bacteria Calibrate the Activation Threshold of Innate Antiviral Immunity," *Immunity* 37 (2012): 158–170; Ichinohe Takeshi et al., "Microbiota Regulates Immune Defense Against Respiratory Tract Influenza A Virus Infection," *Proc Natl Acad Sci USA* 108 (2011): 5354–5359.

to the role a dysbiotic gut microbiota may play in the current and future pandemics.

Gut microbiota can “train” our immune system to identify threats, providing a level of immune tolerance to opportunistic pathogens and reducing harm done to our organs as a result of excessive immune response. For example, children who are not exposed to bacterial antigens produced by opportunistic pathogens in the gut microbiota at a young age due to excessive hygiene have a higher probability of developing type 1 diabetes and other autoimmune diseases later on.¹¹

Gut microbiota also influences the development of their host’s organs. Germ-free animals display incomplete development of the intestinal mucosal barrier and other organs. Their intestinal epithelial cells (especially the villus) only develop completely after they have normal microbiota.¹²

Gut microbiota can even affect the activity of the central nervous system and the host’s behavior.¹³ Intestinal bacteria can produce nearly all known human neurotransmitters, such as dopamine and serotonin.¹⁴ Thus, gut microbiota may play a role in regulating the excitation and inhibition of human nerves, thereby affecting our moods. Gut microbiota can also stimulate endocrine cells in the intestines to produce peptide hormones like peptide YY, which can regulate the brain’s appetite controls.¹⁵

In terms of nutrition and drug metabolism, it is already known that some members of the gut microbiota can produce different vitamins, and that others can influence the host’s nutrition and metabolism by competing with the host for dietary vitamins.¹⁶ Gut microbiota carries

¹¹ GA Rook, “Hygiene hypothesis and autoimmune diseases,” *Clin Rev Allergy Immunol* 42 (2012): 5–15.

¹² R Sharma et al., “Rat Intestinal Mucosal Responses to a Microbial Microbiota and Different Diets,” *Gut* 36 (1995): 209–214.

¹³ JF Cryan and TG Dinan, “Mind-Altering Microorganisms: The Impact of the Gut Microbiota on Brain and Behaviour,” *Nat Rev Neurosci* 13 (2012): 701–712.

¹⁴ P. Strandwitz, “Neurotransmitter Modulation by the Gut Microbiota,” *Brain Res* 1693 (Pt B) (2018): 128–33.

¹⁵ PD Cani and NM Delzenne, “The Role of the Gut Microbiota in Energy Metabolism and Metabolic Disease,” *Curr Pharm Des* 15 (2009): 1546–1558.

¹⁶ Jean Guy LeBlanc et al. “Bacteria as Vitamin Suppliers to Their Host: A Gut Microbiota Perspective,” *Current Opinion in Biotechnology* 24 (2013): 160–168.

with them large amounts of drug metabolism genes whose ability to affect drug metabolism is no weaker than the liver. Many of the personalized ways people react to drugs may not be due to genetic differences but to differences in the metabolic genes of their gut microbiota.¹⁷

Like the body's other organs, a variety of factors can result in damage to the structure of the gut microbiota, which will cause it to lose its ability to maintain health and possibly even lead to more severe illness. This point was already made clear in the above discussion regarding the causal relationship between gut microbiota and the development of chronic illness in humans. Just like transplantation with other organs, gut microbiota can be moved from person to person, which is known as microbiota transplantation. From the use of feces in traditional Chinese medicine in the ancient world to the treatment of *Clostridium difficile*-induced intractable diarrhea using fecal microbiota from healthy donors by Dutch scientists in 2012,¹⁸ we have been able to see the indispensable role that gut microbiota plays in maintaining proper bodily function. In this regard, it is no less important than the liver, heart, kidneys, or any of the other organs. It would not be undeserved to bestow our gut microbiota with the title of "organ."

GUT MICROBIOTA—CHALLENGING HOW WE DEFINE "ORGANS"

Gut microbiota also has new properties that our other organs do not. Unlike the transplantation of other organs, for example, the healthy donor's gut microbiota does not disappear after transplantation. This is because our gut microbiota is made up of microorganisms that are all capable of reproducing on their own. As long as an appropriate method is used, a good gut microbiota can be transplanted to patients in need of an unlimited number of times, without ever "running out."

Another way gut microbiota stands out from our other organs is that we do not genetically inherit it from our parents. We gain the microorganisms that make up our gut microbiota primarily from our parents

¹⁷ Peter Spanogiannopoulos et al., "The Microbial Pharmacists Within Us: A Metagenomic View Of Xenobiotic Metabolism," *Nature Reviews Microbiology* 14 (2016): 273–278.

¹⁸ Els van Nood et al., "Duodenal Infusion of Donor Feces for Recurrent *Clostridium Difficile*," *The New England Journal of Medicine* 368 (2013): 407–415.

during delivery and *after* we are born. The inside of a healthy fetus is essentially germ-free. At birth when passing through the birth canal and during breastfeeding, the baby's intestines are inoculated with important bacteria. Afterward, large amounts of microorganisms from the environment continue to enter the intestines. Once the immune system develops a tolerance to them, they become "permanent residents" and settle down in the intestines as our normal gut microbiota. Our gut microbiota becomes stable by around three years old, a time that can be considered developmental maturity for the gut microbiota as an organ.¹⁹

Since there is a level of randomness and chance to the introduction of microorganisms into the human body, no two people's gut microbiomes are the same. Even identical twins born only several minutes apart have different gut microbiota. As we grow, the people we come in contact with may transfer some of their gut microbes to us. Our father, for instance, may have transmitted his symbiotic bacteria to our mother during intimate activities, who in turn passed it to us. In China in the past, grandmothers would sometimes chew up food in their own mouths before giving it to their grandchildren, and this too would result in a transfer of symbiotic bacteria. When we talk, also, large amounts of microorganisms are transmitted through the tiny particles in the aerosol that come out of our mouths, creating a bacterial exchange between interlocutors. Thus, the people that a child comes in contact with in the child's early years may affect the development of the child's gut microbiota.

Clearly, by nature of the way our gut microbiota is formed, its boundary as an organ is not clearly delineated. We might even say that this organ extends out of our body and into the bodies of the people in the environment closest to us. This is another attribute that separates gut microbiota from other organs. Should our gut microbiota—this ecological system made up of microorganisms from the environment that reside in our bodies and drastically influence nearly all of our bodily functions—be considered an organ? This is a question that challenges our definition of the word "organ."

¹⁹ Yatsunenko Tanya et al., "Human Gut Microbiome Viewed Across Age and Geography," *Nature* 486 (2012): 222–227.

REDEFINING WHAT IT MEANS TO BE HUMAN

Not just the definition of “organ,” but the definition of the term “human”—or at least its biological definition—is being challenged as well. When we define humans, should symbiotic microbiota, as exemplified by our gut microbiome, be included in the normal anatomical structure of the body? This is a question science and medicine must answer.

We can imagine that, if gut microbiota is included as one of the human body’s organs in medical textbooks, students will be systematically introduced to the relationship between the body’s symbiotic microbiome structure and human health when they first start learning anatomy. When these students go on to become doctors, they will consider the role of gut microbiota in diagnosing, preventing, and treating illness. This will have profound effects on the landscape of human medicine.

If the field of human biology, one of the core components of which is anatomy, includes gut microbiota as one of the normal human organs, related research of human psychology, behavior, and social characteristics must consider the position and role of symbiotic microorganisms. It is clear that all sorts of social interactions between humans involve the exchange of microbiota. Behavior in the past that was explained with purely social factors may actually be based on the biological interactions of symbiotic microbes. There is thus great value in exploring how the relationship between humans’ social networks and microbial exchange network influences people’s behavior.²⁰

All of these changes will eventually be reflected in new ethical norms and the establishment of new laws, subsequently affecting everybody’s right to pursue health and happiness. If, for example, it is decided that the gut microbiota is an organ, its ownership rights should certainly belong to the individual to whom it belongs. Since this organ can reproduce, however, and since the primary microorganisms that make it up can be obtained from feces, how do we delineate everybody’s individual ownership rights as they pertain to this important organ? How do we protect them? These questions pose new ethical and legal challenges.

To offer another example, given that interpersonal contact is an important avenue for the development of microbiota in newborns, if we use preventative measures like mask-wearing, social distancing, and

²⁰ Ilana L Brito et al., “Transmission of Human-Associated Microbiota Along Family and Social Networks,” *Nature Microbiology* 4 (2019): 964–971.

disinfecting of the environment for long periods of time, will the post-COVID-19 generation exhibit stunted gut microbiota development? What major consequences could this have for their health? If an entire generation of people lacks important symbiotic bacteria in the gut, will this cause the extinction of these types of bacteria, an extirpation that could in turn cause irreversible ramifications for the health of future generations to come? When we change our definition of human to account for gut microbiota as an organ, these questions are not just scaremongering; they are topics that we must inevitably consider and explore.

If we stick to the view of the 1958 Nobel Prize winner Joshua Lederberg that humans are a “superorganism” composed of both human cells and the cells of symbiotic microorganisms in conjunction,²¹ not only will human biology—a foundation of medicine—experience massive change, but so too will practically all natural and social sciences that concern the study of humans. It is no exaggeration to say that we are on the precipice of an academic revolution, one that all disciplines that research humankind will have to seriously confront.

This article is translated by Thomas Garbarini.

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²¹ J. Lederberg, “Infectious history,” *Science* 288 (2000): 287–293.

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Gongsheng in Ecological Anthropology

Weijia Zhou and Jun He

ECOLOGICAL ANTHROPOLOGY AND GONGSHENG

Ecological anthropology is a science that uses the theories and methods of anthropology to study the relations between culture, society, and the environment. One of the core tasks of ecological anthropology is to observe and reveal how humans live in a state of *gongsheng* with nature. Its perspectives, theories, and methods have expanded along with the development of related fields. Environmental determinism, cultural ecology, and neofunctionalism reveal different views of *gongsheng*.

In the early twentieth century, it was believed that nature and humanity, environment, and culture were two separate systems. Environmental determinists believed that nature played a dominant role in shaping people, the environment in shaping culture; the only difference

W. Zhou · J. He (✉)

National Centre for Borderland Ethnic Studies in Southwest China, Yunnan University, Kunming, China

e-mail: jun.he@ynu.edu.cn

W. Zhou

e-mail: weijia_619@163.com

W. Zhou

Institute of Ethnic Culture, Dali University, Dali, China

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was that of degree. Some described a causal relationship between the environment and culture; some questioned the direct causal relationship between similar geographical environments and different cultural characteristics; some believed the environment was a limiting factor in the development of cultural traits.¹ In the sociocultural sphere, Evans-Pritchard incorporated the geographical environment and local factors into a complete, complex social relationship, describing a social formation in which lifestyle, livelihood, and structure were directly restricted by systems of the ecological environment.² Although their views differed in some respects, the commonality of the above research was the tendency to view nature and humanity, environment, and culture as two separate systems.

In the 1950s, this tendency changed. Julian Steward viewed the core of culture as the integration of the environment with technology and the ways it is used. He studied how special environments and special cultures influence each other's development. Clifford Geertz believed cultural ecology created a conceptual system with integrative qualities, i.e., an effective ecosystem. Cultural and environmental factors interact with each other in this system: from this point onward, the distinction between conducting analysis from a "human" perspective and from the perspective of "nature" disappeared because, in actuality, these two perspectives belonged to the overlapping and mutually transformative analytical methods of the same system.³ From the relational perspective, cultural ecology discusses nature and humanity, environment, and culture as an integrated whole.

In the 1960s, culture and humans were internalized as a part of the ecosystem. Neofunctionalism, including systems theory and cultural materialism, viewed people as a part of the ecosystem and revealed the functional relationships between people and other parts of the ecosystem.⁴ Roy A. Rappaport's *Pigs for the Ancestors: Ritual in the*

¹ Yi Luo, *The Theory and Methods of Ecological Anthropology* (Beijing: China Science Publishing & Media, 2021).

² E. E. Evans-Pritchard, *The Nuer: A Description of the Modes of Livelihood and Political Institutions of a Nilotic People* (Nabu Press, 2011).

³ Clifford Geertz, *Agricultural Involution: The Processes of Ecological Change in Indonesia* (Berkeley: Univ of California Press, 1969).

⁴ Emilio F. Moran, *Human Adaptability: An Introduction to Ecological Anthropology* (New York: Routledge, 2018).

Ecology of a New Guinea People is an exemplary work of this view that incorporates the environment with society and culture into one system and describes ritual—a perennial focus of anthropology—as key to regulating the relationship between people and the environment.⁵

Currently, the idea and paradigm that humans live in a state of *gongsheng* with nature and that human society and the environment influence each other to create complex systems is widely recognized by ecological anthropologists.⁶ In China, thanks to wise traditional practices and reliable field surveys conducted by local ecological anthropologists, endogenous ecological anthropology has always discussed culture and environment, humanity, and nature as a whole.⁷

GONGSHENG: LINKING CULTURAL DIVERSITY AND BIOLOGICAL DIVERSITY

How do humans and nature achieve a state of harmonious *gongsheng*? The key to understanding this question is the clear relationship between cultural diversity and biological diversity, as well as the interacting mechanisms of this relationship.

How are cultural diversity and biodiversity related? Research has clearly shown that places with a high diversity of languages, religions, ethnicities, and cultures are also places with a high diversity of plants, animals, and other organisms.⁸ Similarly, as biodiversity around the world has decreased, so too has linguistic and cultural diversity, showing that there is some type of functional connection between the two.⁹ Maintaining these two types of diversities requires a comprehensive strategy focusing

⁵ Roy A. Rappaport, *Pigs for the Ancestors: Ritual in the Ecology of a New Guinea People* (New Heaven: Yale University Press, 2016).

⁶ Gerald G. Marten, *Human Ecology: Basic Concepts for Sustainable Development* (London: Routledge, 2001).

⁷ Jun He, Zhimei Zhou, Huixian Yang, and Jianchu Xu, “Integrative Management of Commercialized Wild Mushroom: A Case Study of Thelephora Ganbajun in Yunnan, Southwest China.” *Environmental Management* 48, no. 1 (2011): 98–108.

⁸ Jonathan Loh, David Harmon. “A Global Index of Biocultural Diversity.” *Ecological indicators* 5, no. 3 (2005): 231–241.

⁹ L. J. Gorenflo, Suzanne Romaine, Russell A. Mittermeier, and Kristen Walker-Painemilla, “Co-Occurrence of Linguistic and Biological Diversity in Biodiversity Hotspots and High Biodiversity Wilderness Areas.” *Proceedings of the National Academy of Sciences* 109, no. 21 (2012): 8032–8037.

on special regions. Southwestern China is a region high in cultural and biological diversity, where there are numerous precedents for the coexistence and coordination between cultural and biological diversity at different levels and scales.¹⁰ People of different ethnic groups, each of which has different faiths, traditional knowledge, and social formations, living in different natural terrains, topologies, elevations, and climates interact with biological diversity at different genetic, landscape, and ecosystem scales, making southwest China one of the most biologically and culturally diverse regions on the planet. The belief in sacred mountains and forest conservationism of the Tibetan people, as well as the herbal medicine knowledge and species conservationism of the Yao people, are textbook examples of how cultural diversity and biological diversity interact with and reinforce one another.

What mechanisms actuate this relationship? The natural environment and biological diversity serve, limit, and harm human society; humans, meanwhile, study, change, and use the environment and distribute the benefits obtained from it. The services of the natural environment and biological diversity include supportive service, supply service, regulative service, and cultural service.¹¹ Cultural service refers to the intangible benefits humans derive from the ecosystem, including spirituality, religion, diversion, ecotourism, beauty, a sense of place, and cultural heritage. Cultural service and other services, as well as limits and harm that come from the natural ecosystem, affect cultural diversity together.

Humans, meanwhile, react back to nature and biological diversity on three levels: epistemology, technological implementation, and social organization. Epistemology and cosmology refer to how humans understand nature, how we understand the relationship between humanity and nature, and how we explain natural phenomena, social phenomena, and the phenomena of interaction between humanity and nature using our understanding. Technological implementation refers to how we organically integrate agriculture with forestry; how we organically integrate human behavior with natural succession; and how we diversify agricultural, arboricultural, and nomadic activities under the constraints of

¹⁰ Jianchu Xu, Erzi T. Ma, Duoje Tashi, Yongshou Fu, Zhi Lu, and David Melick, "Integrating Sacred Knowledge for Conservation: Cultures and Landscapes in Southwest China." *Ecology and Society* 10, no. 2 (2005): 7.

¹¹ Millennium Ecosystem Assessment, *Ecosystems and Human Well-Being: Synthesis* (Washington, DC: Island Press, 2005.).

currently available resources. Organizational mechanisms refer to how we regulate the relationships between people, between people and society (the collective), and between societies using traditional, indigenous methods.¹²

Based on the above, cultural diversity and biological diversity become interlinked, which has an impact on biodiversity. Diverse ethnic and local cultures affect the richness of biodiversity in important ways. In terms of traditional knowledge, the widespread participation of traditional knowledge and local farmers in resource management and conservation of biodiversity can have immeasurable positive economic and ecological effects.¹³ In terms of technological implementation, research has proven that the much-criticized method of slash-and-burn agriculture, a local practice that appears to destroy forests and damage vegetation, is not as negative as one might assume. Rotating crops every couple of years allows for the restoration of vegetation and the ecological function of land through natural succession.¹⁴ In-depth research on slash-and-burn agriculture by the Chinese ecological anthropologist Yin Shaoting has shown that the slash-and-burn method is not the main culprit of vegetation damage; on the contrary, it is a wise practice that locals use to exploit and protect the resources and environment of specific habitats.¹⁵ On the level of local systems, while the impact of China's national forestation policies and ownership reforms on forest increase cannot be denied, local processes like livelihood changes and local systems are crucial to advancing and shaping the transformation of forests.¹⁶

¹² Jun He, *Current Ecological Anthropology in China*. Beijing: Social Sciences Literature Press, 2018.

¹³ Jun He, Zhimei Zhou, Horst Weyerhaeuser, and Jianchu Xu, "Participatory Technology Development for Incorporating Non-Timber Forest Products into Forest Restoration in Yunnan, Southwest China." *Forest Ecology and Management* 257, no.10 (2009): 2010–2016; He et al., "Integrative Management of Commercialized Wild Mushroom."

¹⁴ Shengji Pei, The Dynamics and Prospects of the Disciplinary Development of Ethnic Botany. *Acta Botanica Yunnanica* 云南植物研究, 25 (S) (2003): 1–10.

¹⁵ Shaoting Yin, *The Mountain Fire Faded Away: Swidden Agriculture in Anthropological Perspective* 远去的山火——人类学视野中的刀耕火种 Kunming: Yunnan People's Publishing House, 2008.

¹⁶ Jun He, Rong Lang, and Jianchu Xu, "Local Dynamics Driving Forests Transition: Insights from Upland Villages in Southwest China." *Forests* 5, no.2 (2014): 214–233.

DE-GONGSHENG: ANTHROPOCENE, CAPITALOCENE, AND GLOBALIZATION

Even though local practice and scientific research have verified the constructive interplay between cultural and biological diversity, the effects of the Anthropocene, the “Capitalocene,” and globalization have led to “*de-gongsheng*,” which has, in turn, caused a series of complex ramifications.

In the 1980s, Eugene Stoermer, an ecologist at the University of Michigan, introduced the concept of the Anthropocene, which he described as a new era in which human behavior was now the driving force in changing the planet.¹⁷ This narrative views humans as the primary cause of global warming and species extinction, a view that describes and encapsulates the violence and rapacity with which humans have exploited and changed the natural world in recent history. After the founding of the People’s Republic of China in 1949, the Chinese government launched the Four Pests campaign in an attempt to increase food production. The motto behind this movement, “humanity can prevail over nature,” suggested that humans existed outside of nature, and that humans were above nature. The polderization (the reclaiming of land from the sea or in wet zones by building levees, filling, and draining) of Dianchi Lake in Yunnan also showed how humans placed their own short-term interests above the natural order.¹⁸

In relation to the Anthropocene, in 2009 some Marxist ecologists and environmentalists proposed the “Capitalocene,” the concept that nature was being organized into the ecosystem of capitalism,¹⁹ highlighting the problem of the capitalization and commodification of nature. Since 2007, the sharp increase in the leasing and selling of land on a global scale, along with the upsurge in demand for food, biofuel, and cash crops, has intensified the capitalization and commodification of nature. To provide one example of this phenomenon, rubber tree plantations in Xishuangbanna, Yunnan grew from 87,226 hectares in 1992 to 336,434 hectares

¹⁷ Paul J Crutzen and Eugene F. Stoermer. “The Anthropocene.” *Global Change Newsletter* 41 (2000): 17–18.

¹⁸ Tania Murray Li, *The Will to Improve: Governmentality, Development, and the Practice of Politics*. Durham: Duke University Press, 2007.

¹⁹ Jason W. Moor, *Anthropocene or Capitalocene? Nature, History, and the Crisis of Capitalism*. Oakland: PM Press/Kairos, 2016.

in 2010,²⁰ a 3.85-fold increase. Some scholars believe China's special land ownership arrangements, internal financing, and utilization of local diversity have allowed China's land transactions and crop planting to have a positive impact on the economy, ecology, and society.²¹ Unlike China, however, the capital for most land transactions and crop planting around the world flows from developed countries to developing countries, while the opposite is true of the flow of land and labor, which has complicated social, ecological, and economic effects. Research has shown that most of the time, the sale of land not only does not benefit the economy, but it can widen the wealth gap and gender disparity of a region. Most land sales damage soil, forests, and the ecosystem and can cause water pollution and other negative ecological effects. At the same time, while the planting of some biofuels can improve a portion of the land where the energy crops are planted, they nevertheless pollute the cropland, resulting in a sort of "pollution transfer." The changes brought about by land transactions often result in changes to traditional land ownership, livelihoods, cultural practices, and social governance structures. They can also lead to issues such as forced relocation, loss of land rights, exploitation by elites, and gender and wealth disparities.²²

More universally noticed than either the Anthropocene or the Capitalocene is globalization, which has impacted cultural and biological diversity more directly. Globalization refers to the large-scale, high-speed movement of people, goods, capital, technology, information, symbols, and ideas around the world, creating close connections and frequent interaction between different societies and cultures.²³ The onslaught of globalization has often put cultural diversity in dire straits. Research has shown that the younger generation is far less knowledgeable about traditional culture, such as the idea of sacred mountains, than the older

²⁰ Jianchu Xu, Philip Beckschäfer, and R. Edward Grumbine. "Landscape Transformation through the Use of Ecological and Socioeconomic Indicators in Xishuangbanna, Southwest China, Mekong Region." *Ecological Indicators* 36 (2014): 749–756.

²¹ Xiaobo Hua, Yasuyuki Kono, and Le Zhang. "Excavating Agrarian Transformation Under 'Secure' Crop Booms: Insights from the China-Myanmar Borderland." *The Journal of Peasant Studies* (2021): 339–368.

²² Bin Yang, Jun He, "Global Land Grabbing: A Critical Review of Case Studies across the World." *Land* 10, no. 3 (2021): 324.

²³ Ming He, "The Topic of Globalization and its Anthropological Issues 全球化及其人类学论题." *Thinking 思想战线* 42, no. 4 (2016): 1–12.

generation.²⁴ The loss of elements of cultural diversity, such as language, has been threatened more than the loss of species diversity.²⁵ In response to these trends, some anthropologists have worked hard to establish ethnic culture villages and museums as spaces free from the influence of the outside world, where they can be restored and preserved. The issue of how to keep static culture “fresh,” however, is one that deserves attention.

RE-INTRODUCING GONGSHENG: INDIGENOUS KNOWLEDGE, ENVIRONMENTAL JUSTICE, AND MULTISPECIES ETHNOGRAPHY

As the process of *de-gongsheng* continues to intensify, the *gongsheng* of ecological anthropology and its values require greater commitment and development. A return to *gongsheng* is both academically and practically needed. There are three routes to consider for re-introducing *gongsheng* that apply to both academic research and the practice of protecting cultural and biological diversity:

- (1) Integrating indigenous knowledge and traditional culture with protection and development practices,
- (2) Coordinating relationships between people and integrating environmental justice to promote cultural and biological diversity,
- (3) Embracing multispecies ethnography to discover possibilities that link biological diversity with cultural diversity.

The Reorganization, Rediscovery, and Reuse of Indigenous Knowledge and Traditional Culture

Indigenous populations with a history of continuous utilization of local resources often possess extensive knowledge of the complex behavior of the ecological systems in their area. This knowledge, obtained by diachronic observation, can supplement scientific knowledge based on

²⁴ Teri. D. Allendorf, Jodi S. Brandt, and Jian M. Yang, “Local Perceptions of Tibetan Village Sacred Forests in Northwest Yunnan. Biological Conservation.” *Biological Conservation* 169 (2014): 303–310.

²⁵ William. J. Sutherland, “Parallel Extinction risk and Global Distribution of Languages and Species.” *Nature* 423, no. 6937 (May 2003): 276–279.

synchronic observation. Indigenous populations who have relied on the environment to provide them with resources for long periods of time have made singular contributions to the protection and strengthening of biodiversity.²⁶ During the construction of Potatso National Park in the Tibetan region of southwestern China, local nomadic and religious culture were purposefully preserved and worked into the design of the landscape, thus achieving coordination between cultural and biological diversity. Recognizing local cultural practices, considering local cultural requirements, and adopting an inclusive approach to conservation projects are effective means of advancing cultural and biological diversity.²⁷ The Honghe Hani Rice Terraces, a UNESCO Intangible Cultural Heritage site, is a world-class example of coordination between cultural and biological diversity. In this system, the diverse cultures of different ethnic groups are coordinated, building organizational mechanisms to organically integrate different natural and human elements such as forests, villages, terraced fields, and drainage systems. This ensures the effective operation of the structure and functionality of cultural ecology.²⁸

The Coordination of Relationships Between People and the Integration of Environmental Justice

On some level, the relationship between humanity and nature is essentially the relationship among people themselves. Not considering the concerns of the local community or protecting their rightful interests can lead to the marginalization of certain groups and can even lead to varying forms of revolt.²⁹ A case study of communal forestry in a densely populated,

²⁶ M. Gadgil, Fikret Berkes, and Carl Folke, "Indigenous Knowledge for Biodiversity Conservation." *Biodiversity: Ecology, Ecology, Economics, Policy* (1993): 151–156.

²⁷ He Jun, and Na Guo. "Culture and Parks: Incorporating Cultural Ecosystem Services into Conservation in the Tibetan Region of Southwest China." *Ecology and Society* 26(3),2021, <http://dx.doi.org/10.5751/ES-12572-260312>.

²⁸ Dan Luo. *Beneficial Water Resources and Harmonious Relationship: Irrigation Order and Ethnic Resilience in the Hani Rice Terraces* 水善利与人相和: 哈尼梯田灌溉社会中的族群与秩序. Beijing: Social Sciences Literature Press 2022.

²⁹ Sayuni B. Mariki, Hanne Svarstad, Tor A. Benjaminsen, "Elephants over the Cliff: Explaining Wildlife Killings in Tanzania." *Land Use Policy* 44 (2015): 19–30.

culturally heterogeneous village in China's southwest proved that environmental justice at the levels of distribution, process, and acknowledgment is an important condition for managing local forestry in an effective and lasting way, effectively promoting biodiversity conservation.³⁰

Embracing Multispecies Ethnography

The emergence of multispecies ethnography runs parallel with the ontological shift of anthropology, recreating a state of *gongsheng* that crosses the boundary between humanity and other species with distinct character. The three notable characteristics of multispecies ethnography are a network-style arrangement, situated linking, and the simultaneous development of openness and hope.³¹ In *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*, Anna Tsing tells a story of unstable livelihoods and the environment by tracking groups of people and commercial trade related to the matsutake mushroom, as well as its multispecies and ecological connections, revealing cracks in the global political economy. Tsing looks for opportunities for coexistence in destabilized environments, describing the possibility for life among multiple species that do not contend with one another despite not living in harmony.³² The book *Becoming Salmon: Aquaculture and the Domestication of a Fish* describes the weak and unpredictable relational practices of the salmon farming industry, as well as the various methods of “becoming salmon” that it induces, showing how the intersection of humanity and nature is constantly taking shape in the journey of salmon and how the two shape each other's landscapes.³³ Multispecies ethnography is a powerful tool for discovering the possibilities of connecting biodiversity and cultural diversity on multiple levels.

³⁰ Jun He, Adrian Martin, Rong Lang, and Nicole Gross-Camp, “Explaining Success on Community Forestry Through a Lens of Environmental Justice: Local Justice Norms and Practices in China.” *World Development* 142, (2021), 105,450.

³¹ Jianfeng Zhu, “Crossing Boundaries and Symbiosis: An Anthropological Response to a Global Ecological Crisis 跨界与共生: 全球生态危机时代下的人类学回应.” *Journal of Sun Yat-sen University (Social Science Edition)* 中山大学学报社会科学版, no. 4 (2019).

³² Anna Lowenhaupt Tsing, *The Mushroom at the End of the World. In The Mushroom at the End of the World*. Princeton: Princeton University Press, 2015.

³³ Marianne Elisabeth Lien, *Becoming Salmon: Aquaculture and the Domestication of a Fish*. Berkeley: Univ of California Press, 2015.

Gongsheng, *de-gongsheng*, and re-introduction of *gongsheng* among nature, humans, the environment, and culture is a core concern of ecological anthropologists. The concordance of cultural diversity and biodiversity is an incontestable fact. *De-gongsheng* is a one-sided delusion and desire of humanity that has created a host of social, economic, and ecological problems. Re-introducing *gongsheng* is a positive response to the needs of theory and reality. Measures such as reaffirming indigenous knowledge and traditional practices, integrating environmental justice to coordinate human relations, and encouraging a move toward multi-species ethnography are effective ways of promoting the revitalization of *gongsheng*.

This article is translated by Thomas Garbarini.

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Yaoshi Tongyuan: The Symbiotic Practice in Traditional Medicines

Lili Lai and Judith Farquhar

“The beauty of a flavorful stew lies in the combining of differences, while the benefit of above and below is in their being able to cross each other.”¹ This ancient maxim suggests that the key to making a beautiful stew is the proper mixing of diversities and the masterful management of water (above) and fire (below). The term *he geng* 和羹, which we translate as “flavorful stew,” is even older than the *Three Kingdoms* (220–280 CE); it was first seen in the *Shangshu* 尚书 (Book of Documents) where the

¹ From the “Biography of Xiahou Xuan,” Records of the Three Kingdoms, Western Jin, c. 280 CE

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L. Lai (✉)
School of Health Humanities, Peking University, Beijing, China
e-mail: lililai@pku.edu.cn

king of Shang praised his prime minister: “You are like the salt and the plums for my making of a flavorful stew” (若作和羹 尔惟盐梅).² The salt and plums that provide salty and tart tastes are compared to the prime minister’s personal virtues, revealed in his service to his lord. The social and political importance of flavors is made explicit in these Chinese classics. Intrigued by the proverbial Chinese view that “food and medicine have the same source,” i.e., *yaoshi tongyuan* 药食同源, this paper traces the eventfulness and powers at play in healing and eating when they are seen as closely related forms of life. Ancient and modern traditional Chinese medicine (TCM) understandings of *flavor* are here shown to be a common basis for the healing and harming powers of both food and medicine. The term *wu wei* 五味, or five flavors (sour, bitter, sweet, pungent, and salty), is explored in two senses: experiences of eating and cooking, and patterns of *qi* movement that animate and invigorate the body. Drawing on the concept of symbiosis, we argue that practices of harmonizing (*he* 和 or *tiaohe* 调和) flavors in Chinese medicine, as in cooking, express a world of natural powers and expert embodiment that goes far beyond mere taste.

FLAVORFUL SOUP IN BOTH CULINARY AND MEDICAL PRACTICES

Let’s look more closely at the operative terms in the epigraph above, the relationships emphasized there are still important in some culinary and medical domains of practice. The word for stew (or thick soup) is *geng* 羹, a character that combines *gao* 羔 for lamb with *mei* 美 for beauty. Roel Sterckx, in his work on food, politics, and sacrifice in Chinese antiquity, asserts that “the prime dish was the stew, or *geng*, a soup consisting of meat, vegetables or cereals, or a mixture of these. The stew was known

J. Farquhar

Department of Anthropology, The University of Chicago, Chicago, Illinois,
USA

e-mail: farquhar@uchicago.edu

² It was believed that the *Book of Documents* was written between the mid-Shang period and western Zhou dynasty, that is, around 1000 BCE. The quote is from the chapter “Shangshu Charge to Yue III” (商书说命下).

throughout Chinese antiquity where it also served as an important sacrificial offering.”³ Most obviously *geng* is a water-based mixture of diverse foods, but not only that. One dictionary we consulted first defined *geng* as “a thick soup with the five flavors harmonized” (五味调和的浓汤),⁴ following this definition with the *Shangshu* sentence quoted above. It seems *geng* itself is always already flavor-full. Furthermore, to cook up a *he*-flavorful *geng*, the key is to harmonize the five flavors. These flavors are more than the sensations registered in our mouths, as we will discuss shortly. For now, let’s keep in mind that all foods can be classified by the five-flavor system, though this system has a far-from simple relationship with the sensible flavors of plants and meats. As the epigraph states eloquently, a simple combining of different varieties of things (*heyi* 合异) is not yet harmonizing (*he* 和). The soup needs to be slow cooked over a fire; the work of harmonizing involves not only flavors but the heat of fire and the moistening of water. Thought of in *yinyang* terms, *yin* water flows down while *yang* fire rises upward. The *yin*-downward water and *yang*-upward fire, above and below, “cross each other”: this is exactly the image depicted in the No. 63 hexagram *Ji Ji* 既济⁵ of *Yi Jing*. A *he geng* 和羹, after “water and fire have crossed” (*shuibuo jiji* 水火既济), and “*yin* and *yang* have corresponded” (*yinyang xianghe* 阴阳相和), is the outcome of this dynamic transforming process. Thus, a *geng* being *he*-flavorful means much more than just tasty. By harmonizing the world’s myriad heterogeneities, it gives specific character to the Chinese experience of *gongsheng* and coexistence.

The “above and below” that “cross” in the opening epigraph certainly refers to the *yin yang* interaction of Heaven and Earth. The downward and upward flow of heating and cooling *qi* could be understood both in the body and in the kitchen. Consider the language of a classic exchange on the middle burner (*zhongjiao* 中焦):

³ Roel Sterckx, “Food and Philosophy in Early China,” in *Of Tripod and Palate: Food Politics and Religion in Traditional China*, ed. Roel Sterckx (London, 2005), 34–61.

⁴ Please refer to *geng* 羹 (broth) in *Hanyu Da Cidian*, 12711.

⁵ Edward L. Shaughnessy, *Unearthing the Changes: Recently Discovered Manuscripts of the Yi Jing (I Ching) and Related Texts* (New York: Columbia University Press, 2014), 137.

Huang Di said, ‘I want to hear about what comes from the middle burner.’ Qi Bo replied, “The *qi* of the middle burner emerges from the stomach... The *qi* received there is secreted [downward] as the dregs of wine and grains, steamed [upward] as the various body fluids, and transformed into essential nutrients, which pour upward to the lung system [the upper burner] where they are transformed into blood, which in turn provides life to the body. What could be more precious!⁶

All these terms that refer to cooking are echoed in the language of traditional Chinese medicine, perhaps most markedly when they are speaking of the “hot and moist kitchen” of the “middle burner.” The relations of corresponding and harmonizing found both in the natural world and in *qi*-transforming physiology govern the making of Chinese medical decoctions. The herbal “soup” combines differently-flavored herbs and requires cooking, which is to say, proper control of water and fire. Both stew (*geng* 羹) and decoction (*tangyao* 汤药) are orally consumed and interact with processes underway in bodies. Even the word in modern Chinese for the soups that are food (*tang* 汤) and the decoctions that are medicine (*tang* 汤) is the same.

In this discussion, the proverbial Chinese view that “food and medicine have the same source” (*yaoshi tongyuan* 药食同源) is invoked to resonate with the contemporary discussion of *gongsheng* and coexistence. We focus on the qualities and efficacies of nutritional and medicinal plants by tracing the eventfulness and powers at play in healing, especially when medicines are thought of as deeply akin to cooking and eating food. We note various food and medicine mixtures, as we have encountered them in research in the worlds of mainstream traditional Chinese medicine and in some minority nationality medical practices. Here we report from the practice of healers who harmonize different flavors and transform patients or diners’ bodies and experiences through the mediation of medical cooking.

⁶ 黄帝曰：愿闻中焦之所出。岐伯答曰：中焦亦并胃中 ... 此所受气者，泌糟粕，蒸津液，化其精微，上注于肺脉，乃化而为血，以奉生身，莫贵于此。 See “Chapter 18”, *Huang Di Nei Jing Lingshu: The Ancient Classic on Needle Therapy*. Translation modifies that of Paul U. Unschuld.

THE WAY OF FLAVOR (味道)

Yiyin 伊尹, a legendary cook of the early Shang (1649–1550 BCE), is said to have cooked food to cure diseases, and he is considered to be the inventor of medicinal soup (*tang* 汤) for curing diseases. The *Zhou Li* 周礼 (*Rites of Zhou*, 2nd C. BCE) records one kind of heavenly official (*tian guan* 天官) specifically in charge of “food medicine” (*shi yi* 食医). The same book states, “the five flavors, five grains and five medicines should be used for nurturing the sick,” already juxtaposing food and medicine. The term *wu wei* found in the even earlier text *Zuozhuan* already speaks of the five flavors’ power to stimulate and influence the movement of *qi* that animated and invigorated the body.⁷ Further, as part of the *wuxing* 五行 (five phases) system of cosmic correspondences, the five flavors were each associated with an organ system: the lungs, spleen, kidneys, liver, and heart. These correspondences are outlined in the medical classic *Huangdi Neijing Suwen* 《黄帝内经·素问》.

It is foundational to the logic of Chinese herbal medicine, which still draws on these early classics, that natural medicines have properties and characters, and that they have affinities with particular organ systems of function (*zangfu* 脏腑) and circulation tracks (*jingluo* 经络).⁸ Along with the classic notion of four qualities (*si qi* 四气, heating, warming, cooling, chilling), the five flavors remain central concepts in popular and technical medical discourses on health and well-being. Check any TCM *materia medica* text, every drug listed or explained has a known flavor, sometimes two.⁹ Indeed, understanding the “five flavors” in Chinese medicine requires seeing them as both classificatory rubrics (gathering, distinguishing, and comparing diverse things with diverse properties, or *heyi* 合异) and as direct efficacies in themselves. Correlated with the five visceral systems of the body and classified with the micro- and macro-cosmic five phases, the five flavors have powers that a healer or cook can

⁷ Lo also indicates that medical historians prefer to translate *wei* as “savors” to emphasize the medical rather than culinary denotations of the term (2005: 164). For the purpose of this paper, we use “flavors” to emphasize the blurred boundaries between food and medicine in Chinese cosmology. See Lo, V. Pleasure, Prohibition, and Pain: Food and Medicine in Traditional China. In R. Sterckx, ed. *Of Tripod and Palate: Food Politics and Religion in Traditional China* (London: Palgrave, 2005), 163–185.

⁸ Editor’s note: Sometimes, *jingluo* is also translated as meridian.

⁹ See also Sivin, who translates *wei* as savors in order to mark the technical sense of the term *wu wei*.

work with: Like the five phases, there are relations of generation and overcome (*sheng ke* 生克) between things of differing flavors. Sour constricts, bitter dries, sweet replenishes, pungent disseminates, and salt softens.¹⁰

It goes without saying that food also has the four qualities *si qi*, and the five flavors, and thus has healing or harming powers. When we learn the physiological powers of the different flavors of things—for example that “pungent spreads and disseminates, moves *qi* and blood” (辛散走窜能理气血)—and when we learn how to combine the flavors of drugs and foods for efficacy—then flavors become “potent” and the skills of the good doctor indistinguishable from those of the good cook.

Flavors in European usage, by contrast, are confined mainly to the realm of cooking and eating food; they are weak and epiphenomenal to the nutritional factors that we learn from reading package labels.¹¹ The biomedical magic bullet, moreover, like an antibiotic, is a flavorless pill. Its powers engage pathology outside of our experience. All it has in common with medicinal soups is that it is swallowed.

FIVE PHASES: THE BOUNDARIES OF GONGSHENG AND COEXISTENCE

As stated above, the five flavors system is key to understanding *yaoshi tongyuan*, not only due to their shared properties of nature (*xing* 性) and flavor (*wei* 味), but also the shared guiding principle for combining, cooking, and eating foods and medicines. All are expressed in the shared perceptions of the body and the cosmos, as shown in the chart above. More importantly, each of the five phases is considered to act either as an adversary overcoming another phase or as a promoter generating a third one. The five phases, mutually generating and overcoming, their cycling interconnectedness and inter-transformations could further help us understand the boundaries of *gongsheng* and coexistence and the ethics and politics of eating.

¹⁰ Judith Farquhar has discussed the flavor terms extensively in an earlier publication, see “Medicinal Meals” in *Appetites: food and sex in postsocialist China* (Duke University Press, 2002), especially the section of “Flavor Language, Flavor Experience”, 62–66.

¹¹ One need only look at Europe’s foundational text of gastronomy, Jean Anthelme Brillat-Savarin’s *The Physiology of Taste*, and his translator M. F. K. Fischer’s worshipful extensions of his insights, to see the fundamental dualisms of nutrition vs. flavor, substance vs. appearance, which underpin the modern European experience of flavor.

Derrida, in an interview about “eating well,” once asked, “since *one must* eat in any case and since it is and tastes good to eat, and since there’s no other definition of the good, *how* for goodness sake should one *eat well*? And what does this imply? What is eating?”¹² The issues taken up by Derrida is a good call to be cautious of romanticizing the idea of *gongsheng* and coexistence, especially when it comes to the practice of eating (no matter food or medicine). To put it in other words, symbiotic boundaries are essential for any serious undertaking of living together. As Derrida has perceived, eating is fundamentally political: who eats whom; how shall the eating self and the eaten other be understood, and how shall their relations be regulated? Can a broader and more ethical *gongsheng* be achieved, and on the basis of what experience should ethical discriminations be made?

The practical logic of Chinese medicine, especially the five-phase principle, might offer some fruitful responses. Putting Tables 11.1 and 11.2 two together, they have shown that the affinities of the five phases to organ systems could further serve as a theoretical and practical ground for treatments. The visceral systems continually transmit while transforming, the human body is also seen as a contingent site in an active network. In practice, considerable technical expertise is required to determine where there is blood or *qi* that should be set in motion by pungent drugs, what subtle hungers can be reached by sweet drugs, and which inner “swamps” can be safely “drained” by bitter drugs, etc. In Chinese medicine human body operates in accordance with the fine balance between the sequences of mutual generation and overcoming of the five-phases system. Eating can never be immoderate, what to eat is never at will.

Chinese medical practices not only involve the patient’s body, but also intimately involve the doctor’s body. As introduced above, pharmaceutical classification is presented as reflecting the actual tastes of substances in the *materia medica corpus*. That these tastes are then correlated with particular efficacies is a fact that requires no explanation in Chinese discourses beyond the usual reference to accumulated historical experience. The technical complexities of the TCM specialty of the formulary are well known: there is both an archive of classic formulas which are analyzed

¹² Jacques Derrida, “‘Eating Well’ or the Calculation of the Subject: An Interview with Jacques Derrida,” in *Who Comes After the Subject?* trans. Peter Connor and Avital Ronell, ed. Eduardo Cadava, Peter Connor, and Jean-Luc Nancy, New York: Routledge, 1991. Emphases are original.

Table 11.1 Correspondence between five phases and phenomena in *Suwen*

<i>Five phases</i>	<i>Direction</i>	<i>Quality</i>	<i>Flavor</i>	<i>Viscera</i>	<i>Body part</i>
Wood	East	Wind	Sourness	Liver	Sinews
Fire	South	Heat	Bitterness	Heart	Blood
Earth	Centre	Dampness	Sweetness	Spleen	Fleshes
Metal	West	Dryness	Pungency	Lung	Skin and hair
Water	North	Coldness	Salty	Kidney	Bone marrow

Table 11.2 Mutual generation or overcoming among Five Phases in *Suwen*

Sequence of Generation	Wood (generates)→Fire→Earth→Metal→Water→Wood
Sequence of Overcoming	Earth (overcomes)→Water→Fire→Metal→Wood→Earth

and understood partly with reference to the matched flavors they include, and there is a logic and techniques for designing tailor-made formulas in ways that can maximize the efficacies of flavors and characters while avoiding clashes and cross-purposes. This is a kind of harmonizing, translated into present-day practice as the Chinese medical sub-discipline of the formulary.

Further, in the research we have been doing on ethnic medicines in China's southwest, there are a great many local herbs in use that have not made it into the national or even regional *materia medica* handbooks. The local gatherers and users of natural medicines have involved their very own bodies to determine the flavor classification of the previously unknown things they use in their medical practices. As we sought out mountain herbalists, we often thought of the legendary sage *Shen Nong* 神农, who—prior to all disciplines—is said to have “tasted the 100 herbs.” We asked many healers in southern China whether they personally tasted the herbs they gathered and used. Most said they did, some of them emphasizing that this personal testing of unknown substances with their own bodies was the experiential foundation of their knowledge and practice. Moreover, everyone knows that it takes an informed palate to classify the taste of a natural substance for medical use: that is, it may be easy to say whether a leaf or root has sweet or astringent qualities, but this unknown plant also has a number of other flavors that may or may

not be medically powerful. Thus, the immediate taste in the mouth of a relatively unfamiliar plant collected in the forest is only the first step in understanding how a type of flavor might translate into a predictable therapeutic effect. Some “clinical” experimentation, beginning with the vulnerable body of the healer, is required to characterize local and novel drugs in a way that can lead to more effective (and safe, and harmonious) combinations.

Indeed, many of those we have talked to in the south tell us that one key difference between a mere “folk” herbalist and a genuine practitioner of a local system of medicine is the latter’s ability to efficaciously combine herbs.¹³ Healers have special skills both to know medicines with a special sensitivity—an informed sense of taste gained from their time spent gathering and sampling medicines in the mountains—and to know how to combine their finds—how to cook flavor-full soups—for reliably good results.¹⁴

Doctors of ethnic medicines know their plants’ efficacies, even as they continue to experiment with them. So do practitioners of traditional Chinese medicine.¹⁵ The five flavors in TCM are first identified by taste, that is, by human sensory organs’ reaction to contact with drugs. Then they are abstractly summarized as “the five flavors”, classificatory rubrics that guide practitioners as they combine different plants according to the five-phase system. Experts work with principles such as “sour constricts, bitter firms, sweet replenishes, pungent disperses, salty softens.” These functions make reference to processes of *qi* transformation. When it comes to making out prescriptions, further, the doctors’ bodily practices of collecting, tasting, processing, and combining medicines, are to go

¹³ Other kinds of combining expertise are also valued, such as the coordination of needling and massage techniques, or rituals and herbals, achieved by healers with excellent reputations. But for this paper we will explore only the herbal medicine versions of the combining of flavors.

¹⁴ The skill of combining drugs is not just acquired from experience of “gathering medicines in the mountains.” These abilities tend to be developed over years, through apprenticeship relations with mentors and through personal experimentation with healers’ own bodies and with the stubborn illnesses that seek out a “folk healer.”

¹⁵ We recognize that the world of TCM offers many opportunities to doctors both young and old to learn from experience; there are probably very few practitioners above a certain age who operate a “textbook” TCM practice, and every respected doctor we know in TCM clinics, hospitals, and classrooms is explicit about being on a path of lifelong learning from their many encounters with illnesses and patients, drugs and food.

along with what they learn from both their successes and their failures with patients over past experiences.

That is to say, the quality and flavor of drugs are not self-evident. “Knowing” them requires not only the doctors’ own bodily perceptions but also a considerable period of rather experimental clinical application. To a great degree, the skills in tasting the flavors of plants require more than just sensory perceptions; rather, their knowledge is cultivated through long-term (and not just individual) experiences of gathering, tasting, mixing, and putting drugs to use. Even the “traditional” knowledge that is passed down from seniors to disciples is more experiential in this sense than it is formal or systematic. To the doctors who are known as “herbal kings” and “miracle doctors,” the efficacy of their healing strategies is not only related to their skills in combining drugs but also dependent on the quality of the plants (the potency of their flavor) and the qualities inhering in bodies (those of both doctors and patients).

All these discussions point to the central point that traditional medicine doctors’ practices always maneuver within all kinds of limits, from the qualities of herbs, the doctors and patients’ bodies, their historical experiences, to the geographical locations and climate conditions, etc. It works as a powerful response to the questions of eating raised by Derrida as the traditional medicine doctors’ practices to a great degree extend the ethical and political concerns of eating to questions of the *gongsheng* boundaries. As we shall show in the following two ethnographical cases, both doctors treat their clinical encounters as an ethical, political, ecological, and very practical problem. They understand perfectly that medical practice is also a long-term process of working with the ethics and politics of life forms.

CASE ONE: MASTER LI’S HEALING MAGIC

An embodied knowledge of how to combine herbs and how to make a flavorful therapeutic soup is not only a feature of “ethnic” or “folk” medicines. All medicines in China, including Han TCM, are committed to the principle of treating “in accordance with specificities of time, place, and person” (因人因时因地制宜). Even if the technicalities of flavor classification in Chinese medicine are not much emphasized among southern healers, their expert work can still be seen as quite similar to great cooking: Master Li, who, when we met him, was running a clinic of Qiang ethnic medicine, said as much while we watched him assemble an herbal prescription from his personal pharmacy (without the benefit of written

prescription or balance scales). “This is just like cooking,” he said; “You can feel it in your hands.”

After the catastrophic 2008 earthquake in Sichuan, when the mountainside where his family home had perched was destroyed by landslides, Li Senior was invited by the health department to open a clinic in the county hospital. This is where we first met him. But he regularly goes farther up into the mountains in search of wild herbs. He has transplanted and cultivated about 20 different kinds of herbs in the hillside ruins of his large Qiang-style stone house. Along with his transplanted varieties, he finds many different kinds of wild herbs in the partly re-forested slopes around and above his mountain home.

Local people in this earthquake-stricken county refer to Master Li as a “divine healer” (*shenyi* 神医), an appellation that refers mostly to the unusual effectiveness of his therapies. Residents of a village near the county town all know how he brought a pancreatitis patient back from the edge of death with his amazingly effective treatments. Li Junior drove us to this patient’s house for a visit, so we could better perceive the quality of Master Li’s healing powers.

This village-dwelling mother and grandmother had stayed for 70 days in the tertiary-care provincial hospital, where her condition had been treated in many very expensive ways. Eventually, however, she was discharged by her doctors, who had decided there was little hope of a cure. Taken home by way of the county hospital, severe vomiting of blood induced circulatory shock. Everyone thought she was dying; her children bought her coffin and made funeral preparations. They brought her home, but three days later, she was still struggling tenaciously at the edge of death. Master Li, the divine healer, was fetched by the families to make a last try at treating her illness.

It is worth noting that “pancreatitis” (*yixianyan* 胰腺炎) could have meant little or nothing to Li Senior. Even in mainstream TCM theory, the pancreas barely exists, and such internal organs are not usually thought of as the sole cause of symptoms. The illness that was presented to Li Senior by these Qiang villagers was not a diseased anatomical site, rather it was a pattern of severe symptoms involving the whole body, which needed to be engaged and nudged into more wholesome ways. Li Junior, introducing us to this complex case and the patient, explained a bit of his father’s thinking: “when we first arrived at her bedside, her feet were swollen, and her abdomen also looked very swollen. On top of this, the most urgent situation was her constant hematemesis, so the pressing matter of

the moment was to stop this vomiting of blood. Otherwise, no medicine would work. If we succeeded, we could hope to carry on [and treat the more fundamental disorders].”

On that first visit, Master Li only gave the patient an herbal paste, administered externally, to stop bleeding and told her family members, if there was any improvement, to come to his clinic the following morning for custom-made medicines. Leaving the patient in the early evening, Li Senior and his son went directly to their clinic, where they spent three hours—working among their own herbal medicines—discussing how to assemble a proper formula: what drugs to choose and how the combination would take effect on what symptoms. The most challenging issue was the combination of swelling and bleeding, which demanded contradictory operations: to relieve swelling (a form of stasis in the digestive and circulatory system), one needs to promote *qi* movement. But to stop bleeding, it is better for the *qi* movement to be moderated. Second, given the patient’s long-standing and excessive loss of blood, there was also a pressing need to replenish blood. Third, the relief of abdominal swelling, and the restoration of a proper downward flow of food and nutrients,¹⁶ requires rather potent medicines, but the patient was too weak to survive any strong intervention. “These were all extremely delicate issues, we were wracking our brains,” Li Junior told us.

Luckily the patient’s vomiting slowed after the herbal plaster was applied. Her family came the next morning for the first formula. Li Junior told us that, in such a severe illness, the first eight formulas are essential. Usually, in Li Senior’s practice, patients eat one formula of medicine for 7–10 days, but in this case, each formula was used only for three days. Each successive formula was revised after the doctors’ close observation of how the patient’s body was responding. Li Junior told us in detail, for example, of another “delicate” moment:

After taking the third formula [successfully] for three days, the patient’s condition suddenly became aggravated. She had begun to vomit blood-streaked black-watery stuff, which was a very bad sign. If she suffered this

¹⁶ For Chinese medicine physiology, food (*yinsbi* 飲食) is not nutrients (*jingwei* 精微) until it is transformed by the digestive system ruled by the spleen/stomach system and other middle burner (*sanjiao* 三焦) processes. This transformation impresses us as a further cooking process that extends the work that is done in kitchens and pharmacies to produce flavorful soups.

kind of bloody vomiting again, my father would not be able to bring her back to life again. We rushed to her house immediately, inquiring about what she had eaten. The families finally admitted that, in addition to her medicine, she had eaten four fermented soybeans.

Li Senior revised the third formula, focusing on stopping bleeding and suppressing coughing while addressing pain, dysuria, weak heartbeat, and respiratory problems—all signs, we note, of disorder in the regular downward flow and upward transformation of *qi*, blood and nutrients. Li Junior lamented how hard it had been “to combine and mobilize all the drugs in the formulas to work on those intertwined situations.”

This “intertwining” took place as the patient slowly recovered and while Master Li and his son monitored interactions between the body, medicine, and food. She confessed to them that she had felt so much better after the first two formulas that, by the time of the third dose, she had really wanted to eat some food with flavor. But just four fermented soybeans, with their complex flavors, triggered a serious bodily reaction. Apparently, the efficacies of food and medicine really can be thought about in the same way, they “have the same source” (同源). One principle that governs the intertwining of symptoms and of drug powers is “flavor” (味道).

CASE TWO: DOCTOR HUANG ASKS, “DO YOU BELIEVE IN FATE?”

In the course of anthropological field research in southern China, we met Dr. Huang, a senior practitioner in a Yao nationality medicine hospital. Having been introduced by Yang Jian, our research associate who was interning with Dr. Huang, we followed him one morning as he began his rounds in the inpatient ward of this 40-bed hospital. He went first to see a 50-year-old patient diagnosed with lymphoma. He told us she had been through six rounds of chemotherapy over the past six years. Her current main complaint was a terrible ulcer near her left popliteal lymph node. Dr. Huang examined the open sore closely, then he left. Yang Jian told us that he was going downstairs to prepare a very special herbal plaster. She had already said that Dr. Huang had been trying to find a certain special herb for this patient for a long time. He had asked almost every herb collector in town, even eventually riding on a motorcycle with one

of them so they could go together deep into the mountains, where he himself dug up the precious root.

Very curious, Lili went with Dr. Huang to see this special drug. He went into his clinic and took out a large tuber that looked rather like a bamboo shoot. Yang Jian told us later it is the tuber of *qiyeyizhibhua* 七叶一枝花 (seven leaves per flowering stem, or *paris polyphylla*). We were impressed—this is a famously rare herbal drug. After peeling the tuber, Dr. Huang told Lili that no metal should be in contact with the tuber as it was prepared, so he put down the knife and picked up a big rock. “Step back a bit further,” he warned her, “the herb is poisonous.” Then he put on gloves and safety glasses, and started to carefully smash and grind the tuber with the big rock. He was trying to make the paste as fine as he could, so it took quite a while.

“Will this freshly-made paste, put into a plaster, work for the patient?” Lili asked him. He first explained that the ulcer looked like what is called in Yao medicine a “grievous toxic sore” (*da du chuang* 大毒疮), and the “seven leaves stem” paste was known to be specific for this kind of ulcer. He also noted that he had already tried many different therapies on the patient to see which might work better. Then he smiled and asked Lili: “Do you believe in fate?” Sometimes the method that works on one patient will not work on other patients. You have to believe in fate and ride the waves of personal destiny.

Dr. Huang is a widely respected expert in the herbal medicine practiced by Yao nationality doctors in the Great Yao Mountains of northern Guangxi. He is one of the founders of a modern hospital of Yao medicine, he supervises junior residents and interns, and sufferers come from far and wide to receive his treatments. As is evident in the episode described here, he knew the natural medical resources of his home region better than almost any of his colleagues, and he was known for the many years of clinical experience that informed his therapeutic strategies.¹⁷ He knew the unnamed and trackless places in the great forests near the hospital where ‘seven leaves stem’ might be found growing. He knew his lymphoma

¹⁷ Dr. Huang had embarked on his career as an herbalist after only a middle school education, many years before. But his family was known for its several generations of local healers, and as a young man he was selected also to receive about three years of medical training in Guangxi’s capital Nanning. He had been grandfathered in to his white-coated, certified, hospital practice as part of the minority medicine movement that began in the early 1980s.

patient's sad history. He knew what the visible characteristics of her skin ulcer could tell him about the state of a disease process. He knew how this kind of "grievous toxic sore" had been understood and managed by Yao practitioners in the past. He knew how to protect himself, his patient, and bystanders from the toxic fumes of the pounded root. And he worked hard to put his skills and understanding into service as good medicine or healing.¹⁸

But he did not know what would happen in the future. Lili's question, "Will this plaster help?" asked for a prognosis or a prediction and implied that there might be a knowable cause and effect chain linking natural drug, bodily lesion, and the progress of the lymphoma. But to answer such a question Dr. Huang had to turn interrogative himself, and invoke not knowledge but belief: "Do you believe in fate?"

The word he used for fate or destiny was *mingyun* (命运), which literally means the (particular) flow of a (particular) life and death.¹⁹ Though it is usually humans who have a *ming*, in this instance in which Dr. Huang was putting several agents into a close relationship with each other—the forest plant, the mashed root fibers, the gauze-wrapped plaster, and his own hard labor and devoted time—the fated particularity seems to be the relationship among these players, and their convergence upon a clinical problem. A therapeutic grouping has been conscientiously gathered. Perhaps as it nears the patient's body, it will join with her particular destiny and help to re-direct the flow of her life so far.

But *mingyun* cannot be known definitively even by skilled diviners (and it's possible that Dr. Huang was such a diviner in his spare time). If anything, the practical divide between what can and cannot be known reminds us how many mundane practices of medicine are referred to in the paragraphs above. Expertise like Dr. Huang's, relating to the forest and its natural agents (both toxic and healing), is far from universal among the residents of villages and towns near his Yao medicine hospital, so locally, he is a rather unique expert knower. And even health policy-makers in Beijing hesitate to dismiss his medical expertise as mere belief,

¹⁸ In other cases, we observed in Goldstamp Huang's practice, it was clear that he also knew how to use Daoist ritual to therapeutically manage bodily space and bodily disposition.

¹⁹ See the discussion of words for life, including *shengming* (生命), in Judith Farquhar and Qicheng Zhang, (2012). Fate is a topic for a different discussion, but here it can be seen that in China fate is closely allied to ways of knowing anything.

superstition, or folklore. Committed as the modern world may be to knowing trans-local information, when faced with a knowing practice that heals in place, the limits of knowledge must be respected.

THE GONGSHENG PRACTICE IN TRADITIONAL MEDICINES

Flavor, as Vivienne Lo points out, has been associated with potencies from a very early time in China. The manipulation of flavors links to a history of nourishment ideas that echoes today through everyday life across the country.²⁰ The shared sources of food and medicine invite practitioners to cook with flavor to achieve an inspired mixture, a wise and skilled “combination” (*pei* 配), and “harmonization” (*he* 和). Both healer and cook are able to combine flavors to directly address and, through the human faculty of taste, share our hungry or uncomfortable embodiment. Further, the five flavors are not a mere sensation confined to the mouth. They are forces that bring about physiological results. Flavor both expresses the healer’s hard-won experience and wisdom and addresses the patient’s particular needs and situation. And it is not the flavor of each drug itself that really counts but the mixing of several that is truly, brilliantly efficacious. A miraculously effective drug formula developed by a local healer, once cooked up in a soup at home, reaches the patient’s whole body of intertwined flows with its care.

The five-flavor principle and “food and medicine have the same source” approach are not only suggested guides that can inform practitioners’ efforts to combine drugs in accord with organ systems correlations and all manner of other (fivefold) expressions of organic process. They also refer to the interaction and mutual transformation between herbs, food, and the human body, directly speaking to the idea of *gongsheng* and coexistence in traditional medicine practices. More, they always involve further questions of the ethics and politics of eating: what ought to be eaten, what ought not; what is good to eat, and what is not. To take a step even further, the *yaoshi tongyuan* “food and medicine have the same source” approach embodies the always entangling and entangled forms of life on the planet.

This also reminds us that to talk about symbiosis, *gongsheng* or living together, the ethics of politics of life shall not escape from our attention,

²⁰ Lo, Vivienne, *Potent Flavors: a history of nutrition in China*, London: Reaktion Press, 2011.

as they concern precisely the symbiotic boundaries. Maybe the core question for *gongsheng* or symbiosis is to reconsider questions of body and life or embodied lives: after all, what is body, and how to live (well)?

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The *Gongsheng* School of International Relations: China's Experience

Xiao Ren

Much lively discussion has been had about the concept of “*gongsheng*” and related theories in the Chinese international relations community in the last ten years, so much so that it has become a school of thought. Looking at the facts of the matter, the *gongsheng* school of Chinese International Relations is still growing and taking shape.

Exploration of this topic began with the research community in Shanghai. The field of sociology played an important role in this regard, particularly the sociologist Shoujun Hu of Fudan University. There is, of course, a reason for this. According to Professor Hu, he was initially inspired to imagine *gongsheng* as a sociological concept by the research of

X. Ren (✉)

Institute of International Studies (IIS), Fudan University, Shanghai, China
e-mail: renxiao2006@fudan.edu.cn

biological *gongsheng* (symbiosis).¹ Professor Hu pioneered these views in 1998. He wrote:

What is social symbiosis? The prerequisite for social *gongsheng* is equality among all people. People are inherently equal. Regardless of any biological and social differences, such as those of religion, class, gender, occupation, or age, as long as you respect others' civil rights, you possess the equivalent civil rights. There are differences of interest among people and among classes. There is of course conflict and competition, but this does not mean one wishes to destroy the other party; rather, this is the precondition for *gongsheng*. This is social *gongsheng*.²

The following year, Hu wrote the paper "A Theory of Social Symbiosis," in which he introduced the basic principles of social *gongsheng*:

1. Interpersonal relations are both mutually exclusive and complementary.
2. Equality is a prerequisite for *gongsheng*.
3. The method of *gongsheng* is the interplay between struggle and compromise.
4. Law sets the parameters for the process of *gongsheng*.
5. Social development is the improvement of symbiotic relations.
6. *Gongsheng* and competition work together.³

After introducing and developing this academic theory, it was crystallized into the 2006 book, *A Theory of Social Symbiosis* [*gongsheng*],⁴ which may be considered the first systematic study of the theory of social *gongsheng*. Around this time, Hu established the Institute of Social *Gongsheng* at Fudan University, which organized research activities.

¹ The theory of symbiosis first appeared more than one century ago as a biological concept. In "The History, Current State, and Outlook of the Concept of Symbiosis" (4th issue of *Chinese Journal of Microecology*, 1996), Fudan University professor Hong Limin sketched a concise outline of the history of the theory. See Hu Shoujun's *Toward Symbiosis*, Shanghai: Shanghai Culture Publishing House, 2002, 31–33.

² Hu, *Toward Symbiosis*, 22.

³ Hu, Shoujun, "A Theory of Social Symbiosis," *Hubei Social Sciences* 3 (2000).

⁴ Hu, Shoujun, *A Theory of Social Symbiosis*, Shanghai: Fudan University Publishing House, 1st edition: 2006; 2nd edition: 2012.

Afterward, the work and publications of the Shanghai-based sociologists attracted the attention of the international relations community. Yingzhong Jin, secretary-general of the Shanghai Society of International Relations, was one of the earliest to notice the significance of social *gongsheng* theory on international relations research and published papers related to this topic in the Shanghai-based journals *Social Sciences*, *International Outlook*, and *International Observer*.⁵ Jin believed that “*gongsheng*” reflected the reality in the international society and was a basic path to the development of the international society. It was precisely the countless effects of symbiotic relationships—production, expansion, extension, and development—that spurred the growth, formation, and strengthening of *gongsheng* in the international society that brought the need for development and transformation to international society. *Gongsheng* in the international community was realized through the process of nations and other actors seeking self-actualization, which introduced the issue of how to reconcile the notions of subjectivity with *gongsheng*. According to the view that differences are equal to contradictions, it is impossible to avoid there being contradictions between nations and other actors in the process of building *gongsheng*. Respecting the equal rights of sovereign nations is respecting subjectivity of sovereign nations. Essentially this means respecting subjectivity of a nation’s people, of their right to protect and develop themselves, and pursue self-actualization. The equal rights of sovereign nations are realized through the process of international social *gongsheng*.

Due to various historical and realistic reasons, there is a contradiction between theoretical equality and the actual inequality of the equal rights of sovereign nations, a contradiction that can only be changed by a country consistently displaying its ability to self-actualize in the process of international social *gongsheng*. As the trend toward economic globalization grew, there appeared in the international community a global system with economic globalization as its driving force, thereby forming a state of coexistence and interactive connection between the international

⁵ Jin, Yingzhong, “Symbiosis in the International Community—International Relations Theory in an Age of Peaceful Development,” *Social Sciences* 10 (2011); Jin Yingzhong, “Why We Should Study ‘The Symbiosis of the International Community’—International Relations Theory in an Age of Peaceful Development,” *International Outlook* 5 (2011); Jin Yingzhong, “A Symbiotic International Community and China’s Peaceful Development,” *International Observer* 4 (2012).

system and the global system. In other words, this is the state in which the network of international social *gongsheng* exists, and the fundamental course of its development is achieved through the transformation and development of the international and global systems. Both the international system and the global system are part of the *gongsheng* networks, and both are realized through the process of *gongsheng*.⁶

In July 2012, the Shanghai Society of International Relations celebrated the 25th anniversary of China's first international relations theory symposium by holding another symposium called "Academic Symposium on the Creation of China's International Relations Theory System." Some scholars from disciplines outside of international relations, such as Shoujun Hu, were invited to attend the symposium, a move which reflected the event organizers' vision, showing the positive, liberated ideas that could be generated when boundaries between disciplines were crossed. In a report he delivered at the symposium, the president of the Shanghai Society of International Relations, Jiemian Yang, noted that the first symposium on international relations theory in China was held when China was beginning its reform and opening up period and connecting with the international community in 1987. The main focus then had been on incorporating knowledge from the international community. The current symposium, however, was being held at a time when China had deepened its reform and was opening up and interacting with the international community. The focus of the theoretical structure construction was on internally generated or collectively co-generated international relations theories, aimed at analyzing principles and trends of activities guiding China and the rest of the international community. Yang added that Shanghai was the center of creation for international relations theories in China and that the development of a "Shanghai school" of international relations was presently underway.⁷ Yang did not elaborate what exactly he meant by using the word "presently," but it was a fitting usage when applied to the rise of the "*gongsheng*" school of international relations.

In 2013, two scholars from Fudan University, Xiao Ren and Changhe Su, published two papers—"On the Principles of the *Gongsheng* System of

⁶ Jin, Yingzhong, "Symbiosis in the International Community—International Relations Theory in an Age of Peaceful Development," *Social Sciences* 10 (2011).

⁷ Yang, Jiemian, "China's International Relations Theory Preparation for Becoming a Global Power and a Strong Country," *World Economics and Politics* 8 (2012).

East Asia” and “The Possibility of a *Gongsheng* International System”—respectively in the seventh and ninth issues of the influential academic journal *World Economics and Politics*. These papers received lots of attention. Xiao Ren’s paper studied the traditional endogenic order of East Asia. The characteristics of this order are that each country, big or small, had its own place; smaller countries respect larger countries, and larger countries abided over smaller countries; and politics and economics work together to sustain a peaceful regional order. On the surface, this type of order appears to lack equality, but at its essence, it allows for harmonious coexistence. Each agent defines itself and mediates its relations with other countries based on its status, creating a “*gongsheng* system.” The framework of the East Asian endogenous system and the many factors behind the operation of its endogenous order primarily include different methods of interaction, such as tributary trade, voluntary exchange, peaceful coexistence, and shared legitimacy. Each factor is rich with content, and together they form the principles that create and sustain this *gongsheng* system.⁸

Changhe Su’s paper took a critical view of the international relations theory of the West, and of Anglo-American theory in particular, drawing attention to the *gongsheng* phenomena that had appeared in current international relations. On the basis of drawing on China’s experience participating in the international system and probing the patterns behind the development of international relations, the paper explored the significance of the *gongsheng* proposition in constructing a new model of relations between large countries, new types of international relations, changes in the international system, and improvements to global governance in an increasingly generative multipolar world. In recent years, some Chinese scholars have started thinking about the possibility of a symbiotic international system from the perspective of *gongsheng*. In Su’s view, “the logic of *gongsheng*” as a starting point can provide us with an alternative for thinking about the development of international relations. As a mixture, the modern world contains both a parasitic international system⁹ and the opportunity and possibility to develop a symbiotic international system. Su believes the change of current material power and

⁸ Ren, Xiao, “On the Principles of the *Gongsheng* System of East Asia—Research on the Ideas and Systems of Foreign Relations,” *World Economics and Politics* 7 (2013).

⁹ I.e., one characterized by the relationships of “center and peripheral” and of “deprivation and dependency” (中心和外围、剥夺和依附的寄生体系).

some consensus in the realm of ideas are amassing favorable factors for the generation of a mutualistic symbiotic international system.¹⁰

Two young Beijing scholars, Lili Xiong (University of International Business and Economics) and Xuefei Chen (China Foreign Affairs University), wrote articles expressing different views from the above two papers. Both of their respective articles were published in the fourth 2014 edition of *Exploration and Free Views*, published by the Shanghai Federation of Social Science Associations. In his article, Xiong wrote that existing interpretations of the “*gongsheng*” theory emphasize the principle of national sovereignty as a basic condition for the realization of *gongsheng* in the international system. Furthermore, the principle of national sovereignty reflects a high amount of respect for and protection of each country’s individual interests. If, as existing arguments about *gongsheng* international systems have stated, the *gongsheng* nature of domestic society can be inferred from people’s social attributes, and the *gongsheng* nature of the international system can be inferred from the *gongsheng* nature of domestic society, then, likewise, the competitiveness of domestic society can also be inferred from people’s individual attributes and, following this, the competitiveness of the international system can be inferred from the competitiveness of the domestic society. If people’s social and individual attributes cannot be fully eliminated, and if neither one of them is able to claim dominance over the other, this implies that domestic society is, on a certain moral and legal basis, a type of society that combines competition and cooperation; and that the international system is, based on certain principles of international law, a system that combines competition and cooperation.¹¹

In Chen’s article, she wrote that the theory of a *gongsheng* international system was constructed by comparing China and the West. This construction depends on shifting toward a more empathetic way of thinking, but the Chinese and Western experiences on which this shift is based might not be balanced. Although the “theory of the East Asian *gongsheng* system” is conceptually reconstructed based on the historical

¹⁰ Su, Changhe, “The Possibility of a *Gongsheng* International System—How to Create a New Type of Relationship Between Large Countries in a Multipolar World,” *World Economics and Politics* 9 (2013).

¹¹ Xiong, Lili, “The *Gongsheng*-Type International System is a Competition-Cooperation International System—The History and Reality of the International System of the Asia-Pacific Region,” *Exploration and Free Views* 4 (2014).

comparison, it ignores the genesis of the East Asian *gongsheng* system, largely turning the exercise of tradition reconstruction into that of a tradition deconstruction.¹² These views and criticisms involve some serious issues. There is much to discuss, for example, regarding how to balance the Chinese and Western experiences on which the new theory is based. In speaking of the “genesis” of the East Asian *gongsheng* system, Chen refers to the period from the Han to the Tang dynasties in Chinese history, of which there is obviously a lot to discuss as well. But there seem to be some significant misunderstandings in Chen’s text. She writes, for example, “the problematic thinking, core concepts, and basic assumptions of Su’s and Ren’s papers reveal a serious bias in favor of notions of power, national strength, and exchange.”¹³ This is a misreading and miscomprehension which does not conform to the facts.

Professors Ren and Su wrote their own separate papers addressing the issues brought up by Xiong and Chen—one titled “The Existence and Longevity of the *Gongsheng* System—A Response to Lili Xiong and Xuefei Chen”¹⁴ and another titled “Constructing a World Order with Neo-Universalism—More Thoughts on the Problems of *Gongsheng*”¹⁵—both of which were published in the eleventh 2014 edition of *Exploration and Free Views*. These articles further expounded on relevant historical and theoretical issues. Ren wrote that the theory of *gongsheng* did not negate the existence of individual interests. On the contrary, the *gongsheng* system is built upon a recognition of individual interests. Ren raised two more important points in his paper. Firstly, the theory of *gongsheng* recognizes the diversity of things and believes that diversity is the fundamental or perhaps even essential form of things. This is a crucial starting point for the *gongsheng* theory. Even more important is the idea that similar pluralities (multitudes of things which are alike, homogeneous) can live in a state of *gongsheng*; dissimilar pluralities can also live in a state of *gongsheng*; and, furthermore, they *should* live in a state of *gongsheng*.

¹² Chen, Xuefei, “China Should Establish a Civilization-Oriented View of World Order—Discussing the Ideas of Changhe Su and Xiao Ren,” *Exploration and Free Views* 4 (2014).

¹³ Chen, “China Should Establish a Civilization-Oriented View of World Order.”

¹⁴ Ren, Xiao, “The Existence and Longevity of the *Gongsheng* System—A Response to Lili Xiong and Xuefei Chen,” *Exploration and Free Views* 11 (2014).

¹⁵ Su, Changhe, “Constructing a World Order with Neo-Universalism—More Thoughts on the Problems of *Gongsheng*,” *Exploration and Free Views* 11 (2014).

We should advocate for open *gongsheng* among heterogeneous parties. We should tolerate and coexist with types of people and things that are different from us. We should appreciate their characteristics and aptitudes and even strive to learn from and absorb them ourselves. This is a higher, more advanced form of *gongsheng*.

Next, *gongsheng* is different from and advances further the concept of “coexistence.” The concept of *gongsheng* includes two levels of meaning: surviving together and growing together. Surviving together is basic. It is not an “every person for themselves” state. Surviving together is peace. It means living one’s own life and allowing others to live theirs. But growing together (*gongsheng*) is a higher-level state that exceeds the above. The concept of *gongsheng* rises above the concept of coexistence because it emphasizes the fact that actors are not independent but connected. There exist many different interactive relationships among the actors. Each actor is an energetic “life,” and their actions incite growth in one another. The essence of *gongsheng* is not in striving for similarity, nor is it in tolerating the existence of alterity; it is striving for constructive growth in interaction and complementarity under the premise of diversity. The universal existence of the *gongsheng* phenomenon and the characteristics of the survival and growth of things illuminate how we should develop the international community.¹⁶

In his paper, Changhe Su pointed out that *gongsheng* does not mean the absence of conflict. The factors causing conflict and contradiction will always exist. This is simply the way things work. The world is full of contradictions and could not be otherwise. Furthermore, the theory of *gongsheng* states that things support one another. It rejects binary opposition and does not advocate for conflict among diverse actors. One of the primary concepts of the *gongsheng* theory is *guanxi* 关系 (relationship). In *gongsheng*, as in *guanxi*, power based on force and ability does not necessarily bestow a dominant position to those who wield it. In a *gongsheng* system, each actor is related to others in a mutually reliant state of *guanxi*. This can explain why, in a *gongsheng* system, the difference between large and small (actors) often loses its significance because they are all mutually reliant. Thus, it cannot be said that a larger actor will necessarily dominate a smaller actor, nor can it be said that a smaller actor must capitulate to a larger one. In the context of the international

¹⁶ Ren, “The Existence and Longevity of the *Gongsheng* System.”

system, this means that large and small countries depend on each other for survival. Since relational and not causal power is the prime factor at play, large and small countries can accept coexisting in a state of *gongsheng*.

The greatest wisdom of the philosophy of *gongsheng* lies not in opposition and antagonism, but in seeking unity through complementary symmetry and equality in opposition. Remembering this is crucial to understanding the theory of *gongsheng*. Binary opposition and confrontation are in the “genes” of monotheistic civilizations. In Chinese civilization, however, the notion of harmony means seeking unity among dualistic and diverse dynamics. In Changhe Su’s view, a major problem of Western political thought is the question of how to treat others. Although the West itself has engaged in introspection about its historical expansionism, invasions, massacres, and racial genocides, it still cannot provide a way out of the dualistic and confrontational thinking. In recent international politics, this expansionism can be seen in the barbaric Western interventions in West Asia and North Africa. “In light of this, I place my hopes for international politics on Chinese international political thought and not Western international political thought, despite the latter having no shortage of its own ideals for the international order.”¹⁷ These views undoubtedly entail rich connotations.

In March 2015, Xuefei Chen’s article, “Is an All-New *Gongsheng* System Possible?” was published on the news site *Guanchazhewang* 观察者网.¹⁸ In this article, Chen wrote that in the current rapidly-changing state of the world, when taking a long-term view, China’s conceptual view of the world order should combine the notions “deconstruction” and “reconstruction.” That is to say, it cannot only choose to dismantle the current conceptual framework of the world order without making creative space for the establishment of a new one. In this sense, the “*gongsheng* system” discussed in Changhe Su’s article “The Possibility of a *Gongsheng* International System” and Xiao Ren’s article “On the Principles of the *Gongsheng* System of East Asia” is an academic concept well worth exploring deeply. Su believes that the “Fei Xiaotong rule”¹⁹ of the diverse *gongsheng* and interaction among civilizations is

¹⁷ Su, “Constructing a World Order with Neo-universalism.”

¹⁸ Xuefei Chen, “Bo’ao shijian, quanxin gongsheng tixi shi kenengdema 博鳌时间,全新共生体系是可能的吗?,” *Xinhua Yuebao [Xinhua Monthly]* 新华月报 8 (2015): 76–81.

¹⁹ Fei Xiaotong’s rule refers to a well-known saying from the contemporary Chinese sociologist Fei Xiaotong, “One should value not only one’s own (cultural) beauty, but

the intrinsic value of the “*gongsheng*-type international system.” By using short-term strategies like inclusive progress, collaborative trust, and cooperative international administration, China might be able to avoid the outmoded Western approach where rising and entrenched powers are pitted against one another. This is the Chinese way of “approaching the problems of international politics and solving them, as well as the future direction for international relations.”²⁰ Establishing the studies of the world order from a Chinese perspective and a local starting point, Ren’s article pointed out the inherent defects of concepts such as the “Chinese World Order,” the “imperial Chinese order,” and the “imperial tribute system,” proposing instead the much more persuasive “East Asian *gongsheng* system.” The East Asian *gongsheng* system has an inherent logic in its long-term existence and continuation in East Asia, as well as unique characteristics, such as multiple interactive methods, tributary trades, voluntary exchanges, peaceful coexistence, and shared legitimacy. Furthermore, this order is endogenous, not exogenous. Thus, we should consider replacing the term “tributary system” with “*gongsheng* system” or “*gongsheng* order” because it is a system with multiple centers and overlapping intersections that allow each country in a region to be secure in its position.

On June 7, 2014, the Shanghai Philosophical Association, the Shanghai Sociological Society, the Shanghai International Relations Society, the Eastern Youth Society, and the Fudan University Institute of Social *Gongsheng* Research held a symposium called “Interdisciplinary Symposium on the Theory of Social *Gongsheng*,” for which philosophers, sociologists, and international relations scholars contributed papers and speeches, and where they met to discuss problems related to *gongsheng* theory. This type of symposium was rarely seen, reflecting the shared research interests and the similar ambition to develop *gongsheng* theory of Shanghai’s sociologists, philosophers, and international relations scholars. At the symposium, sociologists discussed the establishment of *gongsheng* relations between people, between people and things, and between countries, noting that while sometimes these relations do require

also the beauty of others, and this will contribute to the flourishing of all beauty, thus achieving great unity (*datong*) all under *tian*” (各美其美, 美人之美, 美美与共, 天下大同).

²⁰ Ren, “On the Principles of the *Gongsheng* System of East Asia.”

conflict, conflict itself is not the goal but a means to protect one's reasonable rights. At other times, actors are required to compromise and learn how to compromise. Compromise, however, is also not a goal in itself but a means of reasonably conceding to others' interests. Conflict and compromise are carried out for the sake of *gongsheng*. Mutual *gongsheng* (mutualism) is a major trend of the *gongsheng* phenomenon in nature and human society. Philosophers attending the 2014 symposium expressed their wish that through discussion and research *gongsheng* could be seen as not merely an individual lifestyle for helping a person adapt to the world but as a way for a nation and its entire people to interact with other nations in the contemporary world.

The abovementioned academic events and the results they have accomplished reveal the growth of an academic school of thought. This growing school and its members possess the following traits:

Firstly, they have a shared core concept, which is *gongsheng*. They engage in academic research and theoretical elaboration concerning this concept and maintain a certain level of academic contact with each other. It is a relaxed type of contact that preserves the spirit of discussion without getting caught up in formalities. They are joined by a shared theoretical interest and similar or adjacent academic views.

Secondly, they possess shared academic goals, namely, developing the methods of different disciplines and the theoretical discourses of different fields from the starting point of the basic thought and concept of *gongsheng*. They motivate and encourage each other academically to pursue these goals both independently and jointly. They undertake separate research and gain insight from the results of each other's academic work and research, from which they devise further research work.

Third, most of them live and work in Shanghai. Though some work outside of Shanghai, they obtained most of their academic training within Shanghai, which makes them part of the same ideological and academic tradition. As a result, they have all been influenced by Shanghai culture and history to some degree, which gives them a similar style. Shanghai is a city of migrants that is known for its mixing of Chinese and international cultures, its inclusion of northern and southern Chinese customs, and its welcoming atmosphere. Over the years it has cultivated a diverse, inclusive, and open

culture, which is reflected in the academic theories that come out of the city. Living in Shanghai also makes it convenient for the scholars to stay in touch.

On the basis of the above academic explorations, Xiao Ren collated the main discussion articles into a book, *Gongsheng: Rise of the Shanghai School*, which was published by Shanghai Translation Publishing House in 2015. This book is a collection of the main essays written about *gongsheng* theory by scholars of the *gongsheng* school. The book's goal was to act as a summary of their work up to now, as well as lay out the group's intentions for future work. It showed the possibilities of further development of *gongsheng* theory, in the hopes of encouraging more progress on the basis of the most recent stage of research in China, growing the *gongsheng* school, promoting the development of academic theory, and allowing Chinese discourse and theories to influence the international community.

In the international relations community, this academic theoretical research, initiated by Shanghai scholars and contributed to by Beijing scholars, garnered the attention of international relations scholars in other parts of China, including the “*gongsheng* security” concept developed by Xuelian Liu and Lu Yao of Jilin University, whereas Shanghai scholars further developed the “*gongsheng* peace” concept.

On the basis of his earlier research, the Shanghai scholar Xiao Ren further explored the “*gongsheng* peace” concept. In his view, a transcendent method that humans have been considering for many years is establishing a supranational organization to eliminate war and realize long-lasting peace. The world government that people hope for, however, has not appeared and may never will. Global organizations like the UN have not achieved the hoped-for objective of creating a better world order. Unlike the idea of a world government, *gongsheng* does not need a supreme authority to maintain peace and order; rather, it suggests that peace can be achieved through *gongsheng* methods. What this essentially means is that international actors will not strive for uniformity; they will maintain contact with one another and exist together in a state of

gongsheng. If this norm can be established, it will herald a new era of international relations.²¹

The *gongsheng* concept and *gongsheng* theory have also been put into practice and have therefore been popularized to an extent, according to some scholars.²² Some young scholars have pointed out that as the *gongsheng* concept has been incorporated into research of international relations and international politics; the principles of *gongsheng* have been gradually improved upon and an increasing number of scholars have been using *gongsheng* theory to study real international problems. First of all, as pertains to relations between large countries and to regional order, *gongsheng* theory has been widely applied to specific issues like China's Belt and Road Initiative, China-USA relations, and the Central Asia order. Additionally, as pertains to more macroscopic topics, *gongsheng* theory has also been incorporated into research of fields like international security, international systems, and global governance. The development of empirical research is both an affirmation of the construction of *gongsheng* theory and provides a good opportunity for the revision and development of the existing theory.

In a nutshell, this article has been a summary of the use of the *gongsheng* concept in China's international relations community and the progress of *gongsheng* theory in the past ten years. This academic history shows that *gongsheng* studies is an academic exploration and pursuit with vigor and vitality. An academic theoretical school whose core concept is *gongsheng* has already taken its initial shape in China's international relations community, and it will continue to grow.

This article is translated by Thomas Garbarini.

²¹ Ren, Xiao, "From World Government to 'Gongsheng Peace'," *International Observer* 1 (2019): 36–49.

²² Cheng, Ming, and Xuelian Liu, "Gongsheng Security: A New Concept Provided by the Public Product of International Security," *Northeast Asian Forum* 2 (2020); He Jinke, "Constructing Security Cooperation and a Community of Mutual Benefit in Central Asia: Research Based on the Gongsheng Theory," *Journal of International Relations* 6 (2020); Li Boyi, "The China School of International Relations Theory: Generating Methods and Developing Prospects," *Forward Position* 3 (2021).

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PART IV

Resonance



Origins and Theoretical Foundations of Convivialism

Alain Caillé

One can only congratulate and thank Ms. Bing Song for opening here a field of discussion between Eastern and Western thought. The task is more than urgent and necessary as the risks of misunderstandings between these two mental universes are great, whereas, obviously, we will not be able to independently, and certainly not antagonistically, confront the multiple perils that threaten our planet. Starting from the notions of *gongsheng* or *kyōsei* (in Chinese or Japanese), translated as symbiosis, is a good exercise because they immediately pose a problem. Ms. Bing Song thinks that there is a strong proximity between these notions and convivialism. She is probably right, but it is necessary to point out at the outset that this is by no means obvious at first. First of all, convivialism is a political philosophy, whereas the notion of symbiosis has its origins in biology and life sciences. From one field to the other, the transposition is not as easy as one might think.

But it is from one culture to another that the translation is the most difficult. Here, for example, is how my friend Marc Humbert,

A. Caillé (✉)
Paris-Ouest-Nanterre University, Nanterre, France
e-mail: alaincaille90@gmail.com

professor of political economy and former director of the French House in Japan, explains the difficulties he had in having the first *Convivialist Manifesto* translated and published in Japanese. Our friend Zhe Ji, a sociologist and professor of Chinese civilization at National Institute of Oriental Languages and Civilizations in Paris (INALCO) had translated an *Abstract of the First Convivialist Manifesto* into Chinese under the title *Manifesto of the Principle of Symbiosis* 共生主义宣言, *kyōsei* in Japanese, *gòngshēng* in Chinese. The Japanese translation was done by Hiroko Humbert and revised by editors Nishikawa and Ôe. The title finally chosen was 共生主義宣言-経済成長なき時代をどう生きるか, *Manifesto [of the Symbiosis Principle] Convivialist—How to Live in an Age Deprived of Economic Growth?*¹

Marc Humbert writes me that he and his wife Hiroko would have preferred to use convivialism in *katakana* rather than symbiosis. He explains:

What posed a problem for our Japanese friends (as well as for some Chinese) is that they like spontaneous harmony and do not appreciate the principle of accepting conflicts and opposing each other (even if it is “without slaughtering each other”), in short, democracy as we want it. It was also very difficult to translate the principle of creative opposition. With pressure to mitigate as much as possible the recognition of the possibility that there may even be conflicts to be resolved. When the seminar for the presentation of the book took place in 2014, I had to work hard to make people understand that convivialism was quite different from symbiosis, which has a natural and spontaneous side.

For his part, Augustin Berque, director of research at the École des Hautes Études en Sciences Sociales in Paris (and also a convivialist), a great connoisseur of Chinese and Japanese (not to mention a number of other languages), wrote to me:

The problem is that both the Japanese *kyōsei* 共生 (“symbiosis”, often written as 共棲 in biology) and the Chinese *tianxia* 天下 (“all under *tian*”) could be understood in meanings far removed from what we mean by

¹ Les Convivialistes, Trans. Humbert (Ed.). Nishikawa and Ôe, *Kyōsei shugi sengen: Keizai seichō naki jidai o dō ikiru ka (Manifesto [of the Symbiosis Principle] Convivialist—How to Live in an Age Deprived of Economic Growth?)* (Tokyo: Commons Publishing, 2017).

conviviality. For example, the architect Kurokawa Kishô 黒川紀章 (1934–2007), who was a champion of “*kyôsei* thinking” (*kyôsei no shisô* 共生の思想), was able to present as such a delirious redevelopment project for Tokyo from an ecological point of view (proposing in particular to fill in the bay which is in fact the lung of the giant city), not to mention the landscape. As for *tiansxia*, it is “all under *tian*” (which has always connoted: “under the boot (of the Chinese empire”).

As we can see, the agreement between oriental thoughts of symbiosis and convivialism is not necessarily self-evident. Perhaps it was the translation of the *Convivialist Manifesto* into Chinese and Japanese as *Manifesto of the Symbiosis Principle* that gave Ms. Bing Song the idea that the translation from one to the other was natural. However, according to what she writes in “Symbiosis and Planetary Philosophy,” (in the Berggruen Institute’s *10-Year Anniversary* report), it is rather the idea of interdependence in the subtitle of the first *Convivialist Manifesto: A Declaration of Interdependence* (2013), that caught her attention.² I like, at least, her attempt to relate symbiosis to what she calls the “philosophy of codependency and mutual embeddedness.” And I fully agree with her statement that the international signatories of the two convivialist manifestos:

...called for a recognition that relationality and interdependence are the essence of human existence and our relationship with the environment. They advocated a new civic and political philosophy of convivialism and promoted the art of living together. Convivialism and the notion of *gong-sheng* or *kyosei* may not share the same philosophical roots, but their ethical and policy aspirations are much the same.

Are our ethical and policy aspirations much the same? I hope so. But we have to show it by comparing our respective philosophical roots. For my part, I will try to describe some of the roots of convivialism as I see them, knowing that other convivialists would certainly see others, since one of the central characteristics of convivialism is precisely its principled acceptance of theoretical and ideological pluralism. Convivialism can be arrived at from very different theoretical or religious foundations. Before I ask about some of the philosophical roots of convivialism, let us try to see quickly what it is all about.

² See Berggruen Institute’s *10-Year Anniversary: 2010–2020*, <https://www.berggruen.org/ten-year/>.

A FEW WORDS ABOUT CONVIVALISM

If we were to present it in the shortest possible terms, we could say that convivialism is a philosophy of the art of living together by cooperating or opposing without slaughtering each other. This philosophy has developed through two manifestos. The first, published in 2013, was signed by more than sixty intellectuals, academics, and activists, mainly French-speaking.³ The second, subtitled “For a Post-Neoliberal World” and published in 2019, was co-signed by nearly 300 personalities from 35 different countries.⁴ But what is most notable is that they come from very diverse ideological backgrounds, ranging from, say, the left of the left to the center-right. What has brought them together is a sense of absolute urgency in the face of all the dramatic crises that threaten us: the climatic and environmental crises, the economic and financial crises, the social crises, the geostrategic conflicts and wars, the moral crises, etc. Through all these crises, the very survival of humanity, moral or physical, is more and more clearly at stake.

The second certainty they share is that it will be impossible to avert all these threats without breaking free from the domination exercised on a global scale by a capitalism that has become rentier and speculative over the last fifty years. To put it another way, and in the words of the American economist Kenneth Boulding, humanity cannot survive by aiming for ever more infinite economic growth in a finite world.⁵

The third certainty they have in common is that it is impossible to escape the reign of rentier and speculative capitalism without opposing it with a political philosophy more powerful and relevant than the neoliberalism that constitutes its specific ideology. The modern political ideologies of which we are all, in various ways, the heirs, liberalism, socialism, anarchism, or communism, are not dead, but, for various reasons, they are

³ Les Convivialistes, *Convivialist Manifesto: A Declaration of Interdependence* (Ed.). Frank Adloff and Claus Leggewie (Duisburg: Käte Hamburger Kolleg / Centre for Global Cooperation Research., 2014).

⁴ Each has been translated, in whole or in part, into a dozen languages. Les Convivialistes, “The Second Convivialist Manifesto: Towards a Post-Neoliberal World,” *Civic Sociology* 1, no. 1 (16 June 2020).

⁵ Adam Posen, “SLOWER GROWTH—DISASTER OR BLESSING?” *The Economist*, 1 July 2015, <https://worldif.economist.com/article/12121/debate>. Or, more recently, by economist Tim Jackson. Kenneth Boulding wrote that anyone who believes that there can be infinite growth in a finite world is either a fool or an economist.

no longer up to the task of our time. Convivialism can be seen as an attempt to go beyond them, to *aufheben* them as Hegel used to say, *i.e.*, to preserve them (to keep what must be saved) while going beyond.

Hegel's statement lays the groundwork for identifying the initial philosophical foundations of convivialism. It positions convivialism as the successor, and potentially the inheritor for all, of the various doctrines that have shaped modernity, which has sought to encapsulate the very essence of the democratic ideal. But the relationship of convivialism to its predecessors will be better understood if we state the principles (four in the first manifesto, five plus one in the second) on which the co-signatories agreed beyond their diversity by trying to reach a common axiological denominator.

In the *Second Convivialist Manifesto*, *the principle of common naturalness* appears first, affirming the interdependence of humanity and nature. It is perhaps the one that comes closest to the symbiotic vision of *gongsheng* or *kyōsei*.

The second principle is *the principle of common humanity*, which refuses all a priori discrimination based on skin color or religious affiliation.

The principle of common sociality affirms that for humans, the greatest wealth is that of the ties they form with each other. It is radically relationalist in inspiration.

The principle of legitimate individuation posits that it is legitimate for each human subject to seek recognition of his or her singularity.

The problem is that if each person fights to be recognized as having (at least) as much value as all the others, the result may be a war of all against all and a general tipping into what the ancient Greeks called *hubris*, the absence of limits and the desire for omnipotence. Contemporary rentier and speculative capitalism can be seen as the most paroxysmal manifestation of *hubris* ever known. Hence the necessity of the fifth principle, *the principle of creative opposition*. Opposition between humans, which is inevitable (and which it is dangerous to deny), is only legitimate and desirable as long as it is a factor of creativity. As long, in other words, as it contributes to the development of science, arts, and culture (including sports). Or as long as it contributes to the preservation of nature, in the sense of common humanity and common sociality. As the anthropologist-sociologist Marcel Mauss (1872–1950) wrote (to which I will return),

“men must learn to oppose each other without slaughtering each other and to give themselves without sacrificing themselves.”⁶

Since, among other things, we cannot pursue infinite growth in a finite world, and these five principles are subordinated to a transversal categorical imperative, *the categorical imperative of controlling hubris*, whether in the economic domain (the most visible today), but also in the domain of power or of technosciences.

If we think about it carefully, we realize that each of the convivialist principles, with the exception of the first one, more or less faithfully takes up what is at the heart of each of the great political ideologies of modernity. The principle of common humanity is at the heart of communism, the principle of common sociality is that which inspires socialism, the principle of legitimate individuation anarchism, and the principle of creative opposition liberalism. Each of these principles, pursued for its own sake, in ignorance or contempt of the others, self-destructs or corrupts. Love of others turns into sacrificialism and dictatorship. Socialism becomes bureaucratic and statist; anarchism turns into chaos, and liberalism becomes rentier and speculative capitalism. Convivialism seeks the right balance between these four principles while respecting the common naturalness and avoiding the unleashing of *hubris*.

FIRST REMARKS ON THE ORIGINS AND THEORETICAL FOUNDATIONS OF CONVIVIALISM

These brief indications already give a first idea of the intellectual sources of convivialism. As we can see, they are multiple. It would be possible to summon here all the thinkers who have contributed to the formation of the political philosophies of modernity, and even beyond. Marx (and many others), of course, for communism and the principle of common humanity. But also, long before him, one of the founder of Christianity, Saint Paul, when he proclaimed: “There is neither Jew nor Greek, there is neither slave nor free, there is neither male nor female; for you are all one in Christ Jesus” (Galatians 3:28). Proudhon or Kropotkin⁷ for anarchism;

⁶ Marcel Mauss, *The Gift: Form and Reason for Exchange in Archaic Societies*, trans. W.D. Halls (New York: W.W. Norton & Company, 1990), 82.

⁷ The book by Pablo Servigne and Gauthier Chapelle (both “collapsologists”), *L'entraide. L'autre loi de la jungle*, Les Liens qui libèrent, Arles, 2017 (preface by A. Caillé), develops a symbiotic approach explicitly inspired by Kropotkin.

Pierre Leroux and Jaurès for socialism; Hobbes, Spinoza, Rousseau or Tocqueville for liberalism, and so on.⁸

In the same way, one will have felt the harmonies that exist between certain convivialist principles and symbiotic approaches. The principle of common naturalness forbids to consider nature as a simple set of inert material resources to be exploited. Between nature and humanity there is a *mutual embeddedness*. The principle of common humanity emphasizes the interdependence of all humans. More precisely, the central idea of convivialism is that we will only be able to overcome the climatic, economic, geostrategic, or moral challenges that lie ahead of us if all humans manage to agree clearly on some basic principles. Universalizable principles, even if their interpretation or application will necessarily be local.

And More Specifically... The Anti-Utilitarianism of MAUSS

I first proposed the word convivialism on the occasion of a colloquium organized in 2010 in Tokyo by Marc Humbert on the theme “Is a convivial society possible?” This title and the expectations of the conference clearly referred to the work of Ivan Illich. Among others, Serge Latouche,⁹ considered as the world pope of degrowth, and Patrick Viveret, known in France as the philosopher of what he proposes to call the *civic society*, participated in this meeting. I had a certain number of disagreements with both of them, but we quickly agreed that in view of the global emergencies it was necessary to insist more on our convergences than on our divergences. The word convivialism allowed us to put forward these convergences. And, little by little, these convergences extended to hundreds of intellectual or activist personalities.

For my part, I consider convivialism to be the political philosophy that is largely the result of the theoretical work carried out for more than forty years within the framework of *La Revue du MAUSS (Mouvement anti-utilitariste en science sociale, Anti-Utilitarian Movement in Social Science)* that I founded in 1981–82 with some friends. It is impossible, of course, to summarize here this work, which has been pursued through nearly

⁸ I have, of course, indicated here my favorite authors.

⁹ Even if he writes less now, Serge Latouche has long been one of the pillars of *La Revue du MAUSS*. The same is true of Christian Laval who, with his friend Pierre Dardot, now appears as one of the main theorists of the common.

two to three thousand often rather long articles (not to mention as many book reviews) and more than fifty books. I will retain here only a few points that seem to me particularly relevant in relation to convivialism, organizing them according to the two meanings (in French) of MAUSS: *Mouvement anti-utilitariste (en science sociale)*, on the one hand, and an homage paid to Marcel Mauss, immortal author of the *Essai sur le don (Essay on the Gift, 1925)*, on the other.¹⁰

ON ANTI-UTILITARIANISM

In the canonical history of philosophical ideas, utilitarianism is the doctrine of Jeremy Bentham, so called by his disciple John Stuart Mill. It consists of two propositions that seem to pull in quite radically opposite directions. The first one states that the only motive of human actions is the search for personal interest (or happiness, or utility)¹¹ that allows maximizing pleasures while minimizing pains. The second asserts that the only admissible criterion of justice is the search for the greatest happiness of the greatest number, which, it is easy to see, can, and even must, lead to sacrificing the interests of the few. The first criterion seems to value an absolute egoism and the second a radical (and sacrificial) altruism. Bentham himself explains that the tension between these two principles can only be resolved by a rational legislator, who knows perfectly well how to calculate pleasures and punishments and how to handle rewards

¹⁰ The approach I present here is obviously very selective and debatable. One could just as well present convivialism as one of the logical results of the whole sociological tradition. The French sociological school of Emile Durkheim sees itself as the heir of Auguste Comte, inventor of the word sociology but also defender of a “religion of humanity.” Convivialism could be seen as an avatar of this religion of humanity, a secular religion. Sociology as a whole is largely relationalist and interdependentist. Cf. for example the notion of *Wechselwirkung* of Georg Simmel, and the whole tradition of American symbolic interactionism. This interdependence approach is at the heart of the work of Edgar Morin, thinker of complexity and hyper-complexity, and co-signer of the two convivialist manifestos. To learn more about the work of MAUSS, one can read A. Caillé’s little book, *The Gift Paradigm. A Short Introduction to the Anti-Utilitarian Movement in the Social Sciences*, Prickly Paradigm Pres (a collection founded by the anthropologist Marshall Sahlins), Chicago, 2020. There is now also a MAUSS publication in English, *MAUSS International*, linked to the *MAUSS Review* but quite distinct. <https://www.maussinternational.org>.

¹¹ Bentham uses these three notions interchangeably.

and punishments in order to ensure that the interest of each individual is to contribute to the greatest happiness of the greatest number.

Let us put it more simply and call utilitarian the doctrines that postulate that the only motive of individuals is to calculate their individual interest (or their utility, or their happiness) and that the motive of the rational legislator is to calculate the happiness of the greatest number. Or again, utilitarianism is an axiomatic of individual and collective interest that is supposedly calculable.¹² Thus understood, utilitarianism is infinitely older and more general than Bentham's doctrine alone. I have, for my part, tried to show that Plato's philosophy, at least in its exoteric dimension, represents a form of utilitarianism. In a great history of moral and Western philosophy, my colleagues Christian Lazzeri, Michel Senellart and I have convened about twenty specialists to show how all the debates in political philosophy since antiquity are organized around an opposition between utilitarian and anti-utilitarian propositions.¹³ But this central debate does not only concern the West. As far as I am allowed to judge, the School of Legalism in China, which includes thinkers like Han Feizi, and the Mohist school developed by Mozi, for example, are typically utilitarian. It is on this basis that they oppose, for example, Confucius or Mencius.

What is wrong with utilitarianism? Three things, mainly. First of all, it is false that men always seek their own happiness (or else they do it very badly) and, just as false, that they only seek to satisfy their individual interest. Second, it is wrong to postulate that this happiness, individual or collective, is intrinsically calculable. The more one tries to calculate it, to organize it in the form of calculability, the more likely it is to go amiss or be destroyed. At last, the sacrificial dimension of utilitarianism (sacrificing the happiness of the few to that of the many) easily leads to the

¹² The philosopher Hannah Arendt presents utilitarianism as this doctrine that reduces all the only questions to a unique question: "What is it for?" One could perhaps say more precisely: "What's in it for me?"

¹³ Alain Caillé, Christian Lazzeri and Michel Senellart (Eds.). *Histoire raisonnée de la philosophie morale et politique. Le bonheur et l'utile* (Paris: La Découverte, 2001).

justification of all massacres.¹⁴ If utilitarian approaches prove to be erroneous, what theoretical resources can we rely on? The theoretical bet that animates the *Revue du MAUSS* since its debates is that it is necessary to revisit political philosophy and social sciences starting from the discoveries of Marcel Mauss in the *Essay on the Gift*.¹⁵

SOME DISCOVERIES OF MAUSS AND OF MAUSS

Marcel Mauss is both very and too little known, an illustrious unknown in a way. He is perhaps the most quoted author in anthropology, but he is very little quoted in sociology and even less in moral and political philosophy. However, in the *Essay on the Gift* (1925), he gathers a considerable ethnological material, which concerns a great number of cultures, whose philosophical, moral, and political implications are quite essential according to the readers and friends of the *MAUSS Review*. Let us recall in a few words that Mauss is the nephew and intellectual heir of his uncle Emile Durkheim, the great name of classical sociology with Max Weber. On Mauss, who read and who knew so many languages, his students said: “Mauss knows everything.” In the *Essay*, he gathers and synthesizes all the ethnological literature of his time to show that social relations in archaic societies were not based on the market, barter, or contract (which invalidates the philosophies of the social contract) but on what he calls “the triple obligation to give, receive and return.” In a word, on the gift. Let us understand that this is not altruism and charity. The gift that he describes such as the paroxysmal example of potlatch practiced by the Indians of the North-West of America, is an *agonistic* gift, a form of war for generosity. The lessons that can be drawn from this abundant text are

¹⁴ John Rawls, in his *Theory of Justice* (1971) tries to build a theory of justice that escapes this sacrificial dimension of utilitarianism. But he fails to do so by basing his theoretical edifice on the postulate that individuals must be considered as “ordinary economic men.” In other words, he takes up the first postulate of utilitarianism. One can only agree with the criticisms that Amartya Sen makes of him in *The Idea of Justice*, (London: Allen Lane & Penguin Books, 2011). More generally, it is not certain that there can be a theory of justice that escapes utilitarianism; rather than trying to build a just society, should we not rather aim for a decent society, as the Israeli philosopher Avishai Margalit advocates in *La société décente*, (Paris: Flammarion, 2006).

¹⁵ Not to replace other approaches but to show what they lack.

multiple, almost inexhaustible. I can only retain three of them here, three plus one.¹⁶

The first, and here I quote Mauss, is that “man has not always been an economic animal coupled with a calculating machine. It is only a short time ago that he became one.”¹⁷ Or again: “Economic man is not behind us, but in front of us.”¹⁸ Let us translate: the utilitarian man is neither natural nor universal.

The second is that the gift constitutes the political operator par excellence. It is the gift that, by showing the value of both the giver and the receiver, makes it possible to transform enemies into friends, or at least into allies. It testifies to a desire for alliance and friendship.

Mauss does not explicitly draw out the third lesson himself, but he strongly suggests it. And, here again, it goes completely against utilitarian doctrines. It is that humans, of course, pursue individual interests, starting with the concern for their own preservation. But from the first days of their lives, they are also attentive to others, open to otherness, and ready to cooperate. I propose to say that humans are driven by both self-interest and interest in others (which I also call lovingness, *aimance*). But there is also a whole set of things that we do out of social obligation and a sense of duty. Symmetrically, we aspire to create, to act freely, to play. I propose to speak of “libercreativity.” Instead of the utilitarians’ single motive, individual interest, we have four motives organized in two pairs of opposites: interest for oneself and interest for others, obligation and libercreativity. One of Mauss’s lessons is that these four motives must always be roughly balanced. I would be tempted to think that *hubris*, excess, results from the hypertrophy of one of these motives when it overrides all the others.

But, since we are talking about *hubris*, let us develop the implications of the agonistic dimension of the gift highlighted by Mauss. The gift makes it possible to affirm both the value of the giver and the value he recognizes in the receiver. I said earlier that the gift is the political operator par excellence. But we could just as well say that it is the recognition operator par excellence.

¹⁶ For more details I refer Chinese readers to the preface I wrote for the new Chinese translation of the *Essay on the Gift*.

¹⁷ Mauss, *The Gift*.

¹⁸ Mauss, *The Gift*.

Here we touch on another philosophical (and sociological) continent, the one that is organized around the theme of the struggle for recognition. This expression refers to the book of the German philosopher and sociologist Axel Honneth, *The Struggle for Recognition*.¹⁹ In this book, Honneth revives Hegel's analyses, but, strangely enough, leaves aside almost completely Hegel's most important work, *The Phenomenology of Spirit*, and its central chapter, the one on the dialectic of master and slave (or master and servant). In France, before the Second World War, on the contrary, a philosopher of Russian origin, Alexandre Kojève, was going to seduce, and even to subjugate all the French intelligentsia, by insisting on the central role that occupies human affairs i.e., "the struggle to death for recognition."²⁰ Let us go to the most essential and to the shortest, by drawing from the lessons of Hegel, Mauss and Kojève at the same time: humans want to be recognized as having value. I would add that they want to be recognized as having value as donors, for their generosity, or for their creativity (their libercreativity).

CONCLUSION

This brings me to my conclusion. The most obvious problem we face today is global warming. A good part of the world's youth rightly says they suffer from eco-anxiety. A small part of them, symbolized by Greta Thunberg, is mobilizing to put pressure on states and on the big companies. They are right, because it is indeed imperative to reconsider our relationship with nature and the environment, for example, in a perspective inspired by the thought of symbiosis (in other words, *gongsheng* or *kyōsei*). I have not said anything here about how the paradigm of the gift developed in the MAUSS Review can help here, because Frank Adloff does it excellently in this same volume. But I fear that these actions will prove largely insufficient because they do not address the ideology that has ruled the world for half a century, i.e., neoliberalism. This term, neoliberalism, is of course open to discussion. I propose to characterize it by the belief in the following six propositions²¹:

¹⁹ Axel Honneth, *Kampf um Anerkennung*, (Frankfurt am Main: Suhrkamp, 2010).

²⁰ Alexandre Kojève, *Introduction à la lecture de Hegel* (Gallimard, 1947).

²¹ I take up here the ideal-typical characterization of neoliberalism presented in the *Second Convivialist Manifesto*.

1. Greed, the thirst for profit, is good. Greed is good.
2. There is no such thing as society, only individuals.
3. The richer they get, the better, because everyone will benefit from the trickle-down effect.
4. The only desirable mode of coordination between human subjects is the free and unfettered market, and this market (including the financial market) regulates itself for the greater good of all.
5. There are no limits. More is always better.
6. There is no alternative.

In fact, all these propositions follow logically from the first one (“greed is good”), which in turn stems logically from utilitarianism, or from what I have called the axiomatics of interest. From the certainty that humans are nothing but *homo economicus* who aim to satisfy their needs more and more in order to escape scarcity. Now, if this were the case, if indeed conflicts between humans arise from material scarcity and the difficulty of satisfying all needs, then nothing could save us from ecological catastrophe, since we should be unable to produce more and more, ad infinitum, in a finite world.

Fortunately, anti-utilitarianism shows that this vision of human nature is largely false. Humans are just as likely to act out of interest in others, out of a sense of duty, or out of a taste for creativity, as out of material interest alone. They are governed less by need than by the desire to be recognized as having value. But this, unfortunately, does not simplify things. As we have seen, if this desire to be recognized is not channeled, then it very easily tips over into *hubris*. I was saying just now that the most obvious problem facing humanity is global warming. But it will be impossible to deal with it if we are unable to respond to the *hubris* of the desire for recognition that is now exploding on a global scale. From morning to night, young people are socially obliged to display their value on social networks. The dominated religions, the former colonized countries, the still-forbidden sexualities, the women so long assigned to an inferior status, all want to reach at least the same value as the former dominants. The old empires defeated and dismantled by the West want their revenge. And the West, on the other hand, intends to continue to present itself as the very embodiment of the valuable.

The global hegemony exercised by speculative capitalism and neoliberalism generates what we could call (echoing Judith Butler’s *Gender Trouble*) a recognition trouble. It creates a type of society in which all

collective references are shattered, leaving only individual consumers as legitimate subjects. From then on, no one knows who recognizes whom, in what capacity and in what terms. There is a generalized identity panic in the world, which leaves only the accession to the summit of wealth, prestige, and power as a model of success. It is therefore up to us to draw as quickly as possible the features of a type of society in which one will be recognized for one's contribution to art, culture, science, sports, sociability, cuisine, the good life and, of course, the fight against environmental degradation, more than by money and power. A convivialist society, then. Or, if you prefer, a symbiotic society. The advent of such a society, consciously anti-hubristic, supposes that extreme poverty, misery, and extreme wealth are declared outlawed. Perhaps the best way to achieve this will be to finally fight effectively against tax havens. In any case, this would be the surest way to fight against corruption and organized crime, which are flourishing at a rapid pace.

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Ontology, Conviviality and Symbiosis Or: Are There Gifts of Nature?

Frank Adloff

INTRODUCTION

Sociology faces particular challenges arising from the current prominence of the concept of symbiosis in biology and the life sciences. Throughout its history, sociology has often borrowed from the terminology of biology and, for example, conceived social differentiation as the division of labor between organs within an organism¹ or transferred the concept of autopoiesis to communication and social systems.² What

¹ Emile Durkheim, *The Division of Labor in Society*, trans. George Simpson (New York: The Free Press, 1947).

² Niklas Luhmann, *Ecological Communication* (Opladen: Westdeutscher Verlag, 1989).

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F. Adloff (✉)

Department of Socioeconomics, University of Hamburg, Hamburg, Germany
e-mail: Frank.Adloff@uni-hamburg.de

changes will be necessary in sociological theory if biology increasingly places cross-species cooperation and the transcendence of the concept of competing individuals at the center of its analyses?

Furthermore, with anthropogenic global warming, the radical loss of biodiversity and the discussion about the concept of the Anthropocene, we are experiencing how heavily society depends on non-human factors such as the Earth system with its animal and plant world, so that it has become problematic for sociology to focus solely on human societies. In the following, I will develop a generalized theory of the gift, concepts of conviviality as well as cross-species cooperation (symbiosis), in order both to respond to these diagnoses of crisis and to make it possible to take sociology in new directions.

The Anthropocene is considered a new geochronological terrestrial epoch in which humans have become one of the most important factors influencing biological, geological and atmospheric processes on Earth.³ Harsh interventions into the natural world can be traced back to the Neolithic Age, but it is only with the establishment of capitalism and modern technology around 200 years ago that the emission of large amounts of CO₂ and thus the take-off to the Anthropocene begins. An accelerated release of greenhouse gases and dramatic increases in energy, water and fertilizer consumption have been observed since the second half of the twentieth century, and thus, the year 1950 is also considered by many observers to be the beginning of the Anthropocene.⁴ Furthermore, the Earth is currently losing around 100 species per day, and if the extinction of plants and animals is not halted, the Anthropocene will destroy around fifty percent of all existing species.⁵ There is currently talk of a sixth mass extinction.⁶

The social sciences have so far mostly contributed to these debates from a perspective critical of capitalism, emphasizing that it is not

³ Dipesh Chakrabarty, 'The Climate of History: Four Theses', *Critical Inquiry* 35, no. 2 (January 2009): 197–222, <https://doi.org/10.1086/596640>.

⁴ Jan Zalasiewicz et al., 'When Did the Anthropocene Begin? A Mid-Twentieth Century Boundary Level Is Stratigraphically Optimal', *Quaternary International* 383 (October 2015): 196–203, <https://doi.org/10.1016/j.quaint.2014.11.045>.

⁵ Ashley Dawson, *Extinction: A Radical History* (New York London: OR Books, 2016).

⁶ Elizabeth Kolbert, *The Sixth Extinction: An Unnatural History*, First edition (New York: Picador, 2014); Matthias Glaubrecht, *Das Ende Der Evolution: Der Mensch Und Die Vernichtung Der Arten*, 2. Auflage (München: C. Bertelsmann, 2019).

humanity as a whole, but mainly the West with its capitalist economic system that is responsible for reaching or exceeding planetary boundaries.⁷ This argument will not be pursued further here. Rather, what is decisive is what the Anthropocene debate can mean for the social and cultural sciences at the level of social theory. In the meantime, more and more voices are urging us to rethink the world and to re-figure many outdated categories.⁸ Thus, not only are the natural sciences currently becoming political, we are also observing how the social and cultural sciences are increasingly beginning to address the material foundations of society.⁹ In doing so, the challenge is a significant one. For example, Dipesh Chakrabarty has defended the view that the distinction between natural and human history has in fact collapsed.¹⁰ Humanity finds itself in a new time order in which everything that is “natural” is shaped by humans and yet lies beyond human experience and memory; the respective time horizons with regard to the past and the future are too great. The consequences of both global warming and the loss of species are in no way predictable in terms of time; they will span tens of thousands of years and go beyond our previous understanding of human historicity.¹¹

Sociology’s understanding of nature, on the other hand, is based on the idea of a stable nature constituting a background against which human activities take place. This is no longer the case in the Anthropocene; the background becomes a volatile foreground with the currently observable consequence that nature is changing faster than societies in some respects. Clive Hamilton emphasizes that humans, as a geological force,

⁷ See Christophe Bonneuil and Jean-Baptiste Fressoz, *The Shock of the Anthropocene: The Earth, History, and Us* (London: Verso, 2017).

⁸ See Eva Horn and Hannes Bergthaller, *The Anthropocene: Key Issues for the Humanities*, First Edition, Key Issues in Environment and Sustainability (London: Routledge, 2020), 8ff.

⁹ Markus Schroer, *Geozologie: Die Erde Als Raum Des Lebens*, Erste Auflage, Originalausgabe, Suhrkamp Taschenbuch Wissenschaft 2324 (Berlin: Suhrkamp, 2022); Nigel Clark and Yasmin Gunaratnam, ‘Earthing the *Anthropos* ? From “Socializing the Anthropocene” to Geologizing the Social’, *European Journal of Social Theory* 20, no. 1 (February 2017): 146–163, <https://doi.org/10.1177/1368431016661337>.

¹⁰ Chakrabarty, ‘The Climate of History’, 201.

¹¹ Dipesh Chakrabarty, ‘Anthropocene Time’, *History and Theory* 57, no. 1 (March 2018): 5–32, <https://doi.org/10.1111/hith.12044>.

have injected will into nature.¹² Therefore, the classical sociological view of human societies and cultures alone is insufficient: “any social scientist who analyses ‘human systems’ isolated from Earth system processes is stuck in a world of modernity, the world of epistemological break, that is no longer consistent with scientific understanding.”¹³ The social and cultural sciences have not yet risen to these challenges and are far from correctly assessing the scope of the Anthropocene for coexistence on Earth. Sheila Jasanoff summarizes these developments with regard to human societies as follows: “These are radical shifts, and we should not be surprised if it takes decades, even centuries, to accommodate to such a revolutionary reframing of human-nature relationships.”¹⁴

The challenge also touches on ontological questions about the subject matter of sociology. Until now, culturalist or social constructivist perspectives have dominated and a subject-object dichotomy has led sociology to a large extent, which cannot ask and answer important questions. Put another way: the typical view of sociology is that people have different ideas about the reality of nature, but the “actual reality” of nature is left to the natural sciences. An alternative position to this (as found so far mainly in the field of Science and Technology Studies (STS)) is that different realities are enacted through different practices. In the first case, typical of sociology as a discipline, one asks epistemological questions and assumes that there is one nature but many cultures, i.e., perspectives on nature. This is the model of modern Western naturalism.¹⁵ If one follows the second, more radical approach, one deals with ontological questions and there is then not only one world, but several enacted worlds.¹⁶

¹² Clive Hamilton, ‘Human Destiny in the Anthropocene’, in *The Anthropocene and the Global Environmental Crisis: Rethinking Modernity in a New Epoch*, ed. Clive Hamilton, Christophe Bonneuil, and François Gemenne (London: Routledge, n.d.), 32–43.

¹³ Hamilton, 36.

¹⁴ Sheila Jasanoff, ‘A New Climate for Society’, *Theory, Culture & Society* 27, no. 2–3 (March 2010): 237, <https://doi.org/10.1177/0263276409361497>.

¹⁵ Philippe Descola, Geneviève Godbout, and Benjamin P. Luley, *The Ecology of Others*, Paradigm 42 (Chicago: Prickly Paradigm Press, 2013).

¹⁶ John Law, ‘What’s Wrong with a One-World World?’ *Distinktion: Journal of Social Theory* 16, no. 1 (2 January 2015): 126–39, <https://doi.org/10.1080/1600910X.2015.1020066>; Annemarie Mol, *The Body Multiple: Ontology in Medical Practice*, Science and Cultural Theory (Durham: Duke University Press, 2002).

THE NATURE-CULTURE DIVIDE

In his influential analysis of naturalism, Philippe Descola assumes a stable ontological difference between subject and object, culture and nature, which has existed in the West for a long time.¹⁷ In doing so, he highlights that the West is profoundly shaped by the controversy between materialism and mentalism. On the one hand, one tries to show that everything can be traced back naturalistically to material processes (this is the view of the natural sciences, parts of psychology and philosophy). On the other hand, one advocates a sign-theoretical idealism, which assumes that we can only access the world through signs and language. Thus, constructivist approaches emphasize that nature only becomes recognizable when it is interpreted culturally.

The idea of a mechanical nature was already emerging in the seventeenth century. But nature as an autonomous ontological realm to be researched by science and available for exploitation did not yet have a collective counterpart as that time.¹⁸ It was not until the end of the nineteenth century that the idea emerged that human collectives differ from one another through customs, languages, religions and mentalities, that is, through what we have since called “culture”. At the time of the founding of the subject of sociology, an awareness of the great multiplicity and variability of cultural traditions and cultural patterns emerged.¹⁹ From now on, “culture” no longer occurs only in the singular. Through this separation of humans and non-humans, Western naturalism constituted nature as a space that, on the one hand, is regarded as a technical field of experimentation and an inexhaustible deposit of resources and, on the other hand, fell to a large extent outside the subject area of cultural and social sciences.

Years ago, the anthropologist Tim Ingold excellently described and analyzed the standard ontological model of cultural and social sciences based on naturalism.²⁰ The Cree, indigenous hunters in north-eastern

¹⁷ Descola, Godbout, and Luley, *The Ecology of Others*.

¹⁸ Descola, Godbout, and Luley.

¹⁹ See Frank Adloff et al., eds., *Kultursoziologie: klassische Texte - aktuelle Debatten: ein Reader*, Campus Reader (Frankfurt am Main New York: Campus Verlag, 2014).

²⁰ Tim Ingold, *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill* (London: Routledge, 2011), 13ff.

Canada, say that caribou are easy to hunt because they present themselves to them. If you spot a caribou, it looks at the hunter and hesitates for a moment until it takes flight. The moment of hesitation is the ideal moment for a shot. So, in their understanding, the Cree do not take caribou, they preserve them. Ethologically and sociologically trained observers would respond to this by saying that, on the one hand, the Cree blame the caribou themselves for their deaths and thereby exonerate themselves morally. On the other hand, they argue that the behavior of the caribou can be explained by evolutionary biology. They claim that the hesitation in the face of an enemy arose evolutionary-biologically from the interaction with the wolf as a hunter and in this context also makes sense. Natural science and cultural studies perspectives complement each other here. Natural science is able to indicate how the behavior of animals is to be interpreted, while cultural studies explain how cultures view natural phenomena differently. Firstly, a distinction is made between culture and (natural) nature, whereby nature and culture are ultimately held together by universal and abstract reason (following Kant and Hegel). In the second step, a distinction is again made in the field of culture between, on the one hand, different cultures and, on the other (“modern” vs. “traditional”), socially constructed, diverse conceptions of nature, which, insofar as they do not follow the scientific concept of nature, can be rationally reconstructed but are epistemologically false. In this way, the descriptions of animistic or other “traditionalist” forms of life cannot compete at all with Western ontology, since the latter always already assigns the appropriate place to “cultures” and their “socially constructed natures.” (Fig. 14.1).

Ingold counters this naturalistic model of Western science with an ecological approach that does not start from the model of the non-involved observer, but from a strong connection between organism and environment. In such a model, one cannot see the organism independently of an environment, but only as a common totality. In this totality, the Cree hunter in interaction with the caribou is affected by it in a certain way, which cannot be caught up by a naturalistic worldview. It is not a matter of competing worldviews, but rather, “apprehending the world is not a matter of construction but of engagement, not of building but of

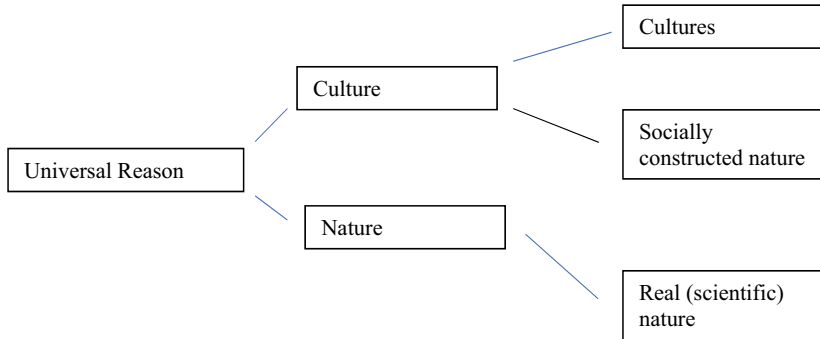


Fig. 14.1 Based on Ingold (2011): 15, 41

dwelling, not of making view of the world but of taking up a view in it.”²¹

AGAINST MONO-NATURALISM

Sociology has largely followed the standard ontological model explained above. Admittedly, there have been some significant contributions in the history of sociology on the question of how societal relations of nature should be reflected sociologically; one need only think of Marx,²² Beck²³ and Luhmann.²⁴ But most influential grand theories—such as those of Weber, Durkheim, Habermas, Bourdieu or Foucault—have not placed any particular emphasis on the mediation of society and nature.²⁵ They analyze human societies that are clearly set apart from the stable background of nature.

²¹ Ingold, 42.

²² Karl Marx, *Capital*, 1990 ed., vol. 1, V. 1: Penguin Classics (London: Penguin, 1864). See also Jason W. Moore, *Capitalism in the Web of Life: Ecology and the Accumulation of Capital* (London: Verso, 2015).

²³ Ulrich Beck, *Risk Society: Towards a New Modernity*, Theory, Culture & Society (Thousand Oaks: Sage Publications, 1992).

²⁴ Luhmann, *Ecological Communication*.

²⁵ Markudcs Schroer (2022) shows, in contrast, that there are also forgotten traditions in sociology that have not lost sight of and addressed the relationship between society and nature.

Science and Technology Studies and especially the work of Bruno Latour are an exception. As is well known, he advocates the thesis of a modern purification work that led to a strict separation between objects of nature and the world of the social on the level of scientific discourse, but these worlds are factually and practically intimately interwoven.²⁶ According to this view, the separation of nature and society, as it exists in the self-image of modernity, never took place in this way. For Latour, our reality is only constituted through the coupling of people with natural and, above all, technical things. All hybrid beings have a certain agency and are based on the intermingling of culture and nature. For Latour, moderns do not do what they say and do not say what they do. Through the prevailing mindset of separating nature and culture, moderns cannot see how every change in nature changes the social order as well. He states that for every state of nature there is a corresponding state of society. In fact, we have been living in a post-nature age for a long time, even if we rarely acknowledge this in our worldview.²⁷

Politically, Latour draws some far-reaching conclusions from this. In his book *Facing Gaia* (2017), he argues that defending Gaia requires alliances with aspects of the Earth: the rainforests, the oceans, biodiversity in biodiversity hotspots, soils, etc.²⁸ Populations that depend on these components of Gaia should ally with them and defend—via establishing new geo-social classes²⁹—their livelihoods against the disruptive and placeless forces of global capitalism. Since the non-humans cannot speak for themselves in the same way as humans, the non-human living beings and ecosystems would need to be represented politically. The forests, the air and the oceans would therefore need spokespersons.

In terms of social theory, Latour does not pre-decide which classes of actors exist. There is no separation per se between human actors and non-human passive means or objects as in other social theories. Only in the

²⁶ Bruno Latour, *We Have Never Been Modern* (Cambridge, Mass: Harvard University Press, 1993).

²⁷ See Hartmut Böhme, *Aussichten Der Natur: Naturästhetik in Wechselwirkung von Natur Und Kultur*, Erste Auflage, Fröhliche Wissenschaft 096 (Berlin: Matthes & Seitz Berlin, 2017).

²⁸ Bruno Latour, *Facing Gaia: Eight Lectures on the New Climatic Regime* (Cambridge: Polity, 2017).

²⁹ Bruno Latour and Nikolaj Schultz, *Mémo sur la nouvelle classe écologique*, Les empêcheurs de penser en rond (Paris: les Empêcheurs de penser en rond, 2022).

linking of principally equivalent actants to form actor networks do actions emerge. No distinction is made between object and subject or actor, and everything can be an actor according to Latour. This has clear advantages, which Graham Harman points out: “The flat ontology of ANT allows it to avoid the modern dualist ontology in which all finite beings are implausibly divided between (a) people and (b) everything else.”³⁰

Nevertheless, one must be able to distinguish between different entities: “any theory worth its salt needs to shed light on the difference between humans, nonhumans, natural entities, cultural entities, technologies, flowers, mammals, and so forth.”³¹ Latour has introduced the distinction between lines of force and lines of descent in his book *An Inquiry into Modes of Existence* (2018), which roughly corresponds to the distinction between inanimate entities and living beings.³² But this distinction is not yet sufficiently precise for the purposes pursued here. Latour’s relational ontology shows a proximity to posthumanist positions that largely level the differences between matter, life and conscious life. Karen Barad, for example, has also attributed agency to inanimate matter.³³ However, such positions can overlook relevant differences and lead to theoretical dead ends. For abiotic entities have no capacities for subjectivity, intentions, feelings or sign-like communication. Hornborg therefore sensibly proposes to distinguish between living and non-living actants with the means of semiotics.³⁴ Only in this way can normative questions about responsibility toward other living beings or their moral

³⁰ Graham Harman, *Immaterialism: Objects and Social Theory* (Cambridge: Polity, 2016), 97.

³¹ Harman, 106.

³² Bruno Latour. *An Inquiry into Modes of Existence: An Anthropology of the Moderns* (Cambridge, Massachusetts: Harvard University Press, 2018).

³³ Karen Michelle Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham: Duke University Press, 2007).

³⁴ Alf Hornborg, ‘Artifacts Have Consequences, Not Agency: Toward a Critical Theory of Global Environmental History’, *European Journal of Social Theory* 20, no. 1 (February 2017): 95–110, <https://doi.org/10.1177/1368431016640536>. See also Eduardo Kohn, ‘How Dogs Dream: Amazonian Natures and the Politics of Transspecies Engagement’, *American Ethnologist* 34, no. 1 (February 2007): 3–24, <https://doi.org/10.1525/ac.2007.34.1.3>.

intrinsic value be addressed.³⁵ Moreover, this makes it understandable how solidarity can arise across the boundaries of species.

People are familiar with this experiential dimension of life from many different contexts, including in their dealings with nature. In everyday life, nature is not only experienced as a resource, a thing or a mechanism. Nature is experienced and felt holistically, and the experience of nature as a counterpart has accompanied Western modernity from the beginning. It is most pronounced in romantic movements.³⁶ Only this form of experience has not entered the mainstream of scientific experience and description of the world. In contrast, we find this strand in everyday perception, in aesthetic experiences, in art theory, in nature aesthetics or in variants of ecological thinking.³⁷

Thus, moderns live in two worlds: on the one hand, people fall back on formal, scientifically gained knowledge; on the other hand, people constantly have practical experiences that are by no means always congruent with scientific knowledge.³⁸ Of course, scientific knowledge has also changed everyday experiences: knowledge about photosynthesis changes our view of plants; astronomical knowledge changes our view of the stars; we only know about dinosaurs or climate change because of scientific knowledge. Experiences from the life worlds that are not congruent with scientific knowledge, however, lead an epistemic shadowy existence in the modern age. Since they resemble the world perception of non-moderns, these experiences remain marginal and precarious in official discourses. Scientific methods have largely excluded the immediate holistic experience of everyday life, rejecting and epistemically marginalizing it for its ostensible subjectivity, romanticism and backwardness.³⁹

³⁵ See Arianne Françoise Conty, 'The Politics of Nature: New Materialist Responses to the Anthropocene', *Theory, Culture & Society* 35, no. 7–8 (December 2018): 73–96, <https://doi.org/10.1177/0263276418802891>.

³⁶ See Hartmut Rosa, *Resonance: A Sociology of the Relationship to the World* (Cambridge: Polity Press, 2021).

³⁷ See Aurélie Choné and Isabelle Hajek, eds., *Rethinking Nature: Challenging Disciplinary Boundaries*, 1 [edition], Philippe (London: New York: Routledge, 2017).

³⁸ See Andrew Feenberg, 'L'anthropologie et la question de la Nature. Réflexions sur L'Écologie des autres, de Philippe Descola', *Revue du MAUSS* 42, no. 2 (2013): 85–98, <https://doi.org/10.3917/rdm.042.0105>.

³⁹ See Boaventura de Sousa Santos, *Epistemologies of the South: Justice against Epistemicide* (London: Routledge, 2014).

Nevertheless, this dimension cannot be erased from the history of Western cosmology—people feel connected not only to each other, but also to nature, in a holistic sense. Science can also contribute to this understanding of connectedness⁴⁰: knowledge of the complexity of ecological interconnectedness, for example of the mutual dependencies of living beings within an ecosystem, can lead in everyday life to leave naturalistic ontology behind for good reasons and to assume a practical connectedness of human and non-human beings. Science and technology in particular are currently providing more and more evidence for the interconnectedness of all beings on this planet.

ANIMAL AGENCY AND SYMBIOSES

Modernity is initially characterized by a reduction of animal life to the instinctively mechanical; for many decades, animals were denied any agency. In global capitalism, animals are also systematically exploited. They serve as mere material—as food, suppliers of raw materials for the cosmetics and pharmaceutical industries, for scientific experiments. The factory farming of the twentieth century did its part to passivize animals, modern ethology became a complexity-reducing laboratory science, and behaviorism was only interested in the simplest stimulus–response schemes and conditioning. Intentionality, subjectivity, freedom of action, sophistication, culture, morality and resistance were all relegated to the realm of anecdotes of animal lovers, breeders, farmers and trainers.⁴¹ It is only in recent years that counter-movements have been found—including in the realm of science itself. Human-Animal Studies have contributed significantly to the revision of this image in the social sciences. Here, animal agency has been examined more closely and, above all, the relationships of animals have been examined, from which agency can arise on the one hand, or in which the animals are passivated in animal husbandry and experimentation.⁴² Thus, both cooperative behavior and

⁴⁰ See Raymond D. Boisvert, ‘Convivialism: A Philosophical Manifesto’, *The Pluralist* 5, no. 2 (1 July 2010): 57–68, <https://doi.org/10.5406/pluralist.5.2.0057>.

⁴¹ Vinciane Despret, *What Would Animals Say If We Asked the Right Questions?*, *Posthumanities* 38 (Minneapolis: University of Minnesota Press, 2016).

⁴² Sven Wirth et al., eds. *Das Handeln Der Tiere: Tierliche Agency Im Fokus Der Human-Animal Studies*, *Human-Animal Studies* (Bielefeld: Transcript, 2016).

resistant behavior can be observed in domestic and farm animals, and studies also show autonomous actions.⁴³

This view is now supported by large parts of biology. It is becoming increasingly clear that traditional biology has moved too far down a technician and reductionist path that overlooks or even negates the liveliness, meaningfulness and subjectivity of nature. The behavioral biologist Norbert Sachser speaks of a revolution in the image of animals during recent years.⁴⁴ Emotions, communication, learning, intelligence and individuality of animals are assessed quite differently today than they were a few decades ago, and Sachser emphasizes that two dogmas of behavioral biology have had to be shelved, namely that animals cannot think and that nothing can be known about their emotions.

In the meantime, the literature on the revision of our scientific view of nature is almost impossible to survey. The biologist and philosopher Andreas Weber, for example, pursues an alternative ecology and biopoetics and believes that matter itself is creative, and that it follows a principle of abundance and produces subjectivity from itself.⁴⁵ Weber also draws on Lynn Margulis and the symbiosis concept, among others. The concept of autopoiesis introduced by the biologists Francisco Varela and Humberto Maturana also already refers to similar processes of autonomous self-organization. Living beings are not machines, but produce themselves, develop a form of autonomy and build their identity themselves. It has even been shown that plants exhibit intelligent behavior.⁴⁶

⁴³ Animals have always been the subject of regulation under law, whether as food, production factor, source of income, disease vector or pest (Peters/Stucki 2016). Increasingly, however, animals are viewed from the perspective of protection. The legal equation of animal and thing has been abolished, and animal protection is found as a state objective in German Basic Law (Art 20a). Furthermore, it also seems to be possible in principle in the German legal system (and not only in Ecuador, for example) to recognise entities of nature (such as regional ecosystems) as legal persons (Fischer-Lescano 2018; Kersten 2022).

⁴⁴ Norbert Sachser, *Der Mensch im Tier: warum Tiere uns im Denken, Fühlen und Verhalten oft so ähnlich sind*, rororo 62,944 (Reinbek: Rowohlt, 2018).

⁴⁵ Andreas Weber, *Biology of Wonder: Aliveness, Feeling, and the Metamorphosis of Science* (Gabriola Island: New Society Publishers, 2016). The New Materialism argues similarly, cf. for example the positions of Rosi Braidotti (2013), Karen Barad (2007) or Jane Bennett (2009).

⁴⁶ Paco Calvo et al., 'Plants Are Intelligent, Here's How', *Annals of Botany* 125, no. 1 (8 January 2020): 11–28, <https://doi.org/10.1093/aob/mcz155>.

Furthermore, the research of biosemiotics could be mentioned here. This theory of the meaning-making of nature is interested in the semiotic processes within and between living beings. This breaks with simple cause-effect considerations and interprets life as a semiotic process. Following Charles Sanders Peirce, one can say that all forms of life are based on semiotic processes.⁴⁷ While human communication makes extensive use of symbolic signs, plant and animal exchange takes place more on the levels of iconic and indexical sign relations.⁴⁸ On these levels, it is then also possible in principle to enter into a sign-like exchange with plants and animals. Multi-species relations as well as a sociology of shared life would have the following basis: “it is appropriate to consider nonhuman organisms as selves and biotic life as a sign process, albeit one that is often highly embodied and nonsymbolic.”⁴⁹

In biology, a new perspective or even caesura has prevailed in recent years: symbiosis, cross-species cooperation, no longer appears as an exception but as the rule.⁵⁰ Both microbial organisms and ecosystem networks seem to be structured as symbiotic collectives. Research can be based on the groundbreaking work of the biologist Lynn Margulis, who found out many years ago that in the course of evolution, higher cells did not arise through competition, but through the symbiosis of simpler proto-forms. While Margulis was initially considered an outsider, research on symbioses among plants and animals is now booming. Today, it is common knowledge: no forest exists without the symbiosis of tree roots and fungi.⁵¹ But zoology has also shown that “animals are composites of many species living, developing and evolving together.”⁵² Gilbert, Sapp

⁴⁷ Charles S. Peirce, *Peirce on Signs: Writings on Semiotic*, ed. James Hoopes (Chapel Hill: University of North Carolina Press, 1991).

⁴⁸ Kohn, ‘How Dogs Dream’.

⁴⁹ Kohn, 6.

⁵⁰ Andreas Folkers and Sven Opitz, ‘Symbiose Als Begriff Und Gegenstand Der Soziologie. Für Eine Analyse von Biosozialität Im Zeitalter Des Mikrobioms’, in *Komplexe Dynamiken Globaler Und Lokaler Entwicklungen. Verhandlungen Des 39.*, ed. Burzan Nicole, Verhandlungen 49 (Kongresses der DGS: Gottingen, 2018), https://publikationen.sozioologie.de/index.php/kongressband_2018/article/view/1119.

⁵¹ See also Emanuele Coccia, *The Life of Plants: A Metaphysics of Mixture* (Cambridge: Polity, 2019).

⁵² Scott F. Gilbert, Jan Sapp, and Alfred I. Tauber, ‘A Symbiotic View of Life: We Have Never Been Individuals’, *The Quarterly Review of Biology* 87, no. 4 (December 2012): 326, <https://doi.org/10.1086/668166>.

and Tauber go so far as to question older ideas of biological individuality with the concept of symbiosis. This also puts the evolutionary concept of individual selection in crisis. For if there is little anatomical, embryological, physiological, immunological, genetic and evolutionary support for a post-Darwinian concept of individuality, one can also no longer assume the selection of entities that exist independently of each other. They therefore conclude: “For animals, as well as plants, there have never been individuals. This new paradigm for biology [...] seeks new relationships among the different living entities on Earth. We are all lichens.”⁵³

Historically, however, there is disagreement in biology about what exactly is meant by symbiosis. Originally (in the late nineteenth century), the term was used to describe a continuum from mutualism (all partners benefit from the symbiosis), through commensalism (one partner benefits without harming the other), to parasitism (one benefits, the other is harmed).⁵⁴ In the course of the twentieth century, the definition in biology narrowed and only mutualism was referred to as symbiosis. Currently, there is an increasing plea for a broader understanding in order to take a closer look at the diverse exchange processes in their directions and with their possible unequal effects for the symbionts involved. In this article, however, we will follow the more everyday way of speaking, which largely equates symbiosis with mutualism. A distinction must then be made between commensalism and parasitism.

Andreas Weber concludes that every exchange between living beings (whether between cells or between bird parents and chicks) involves three aspects: first, material substances are transferred; second, meanings are exchanged in the process; and third, subjectivities become intertwined in the exchange.⁵⁵ Life does not simply take place, it is also experienced and felt. A living being makes primary experiences of good and bad. Living beings are evaluative systems in this sense: they distinguish between what is and what should be. In doing so, they form worlds: “It’s not about knowing that there is a world. It’s about getting on with

⁵³ Gilbert, Sapp, and Tauber, 336.

⁵⁴ Laura Tipton, John L. Darcy, and Nicole A. Hynson, ‘A Developing Symbiosis: Enabling Cross-Talk Between Ecologists and Microbiome Scientists’, *Frontiers in Microbiology* 10, no. 292 (20 February 2019): 1–10, <https://doi.org/10.3389/fmicb.2019.00292>.

⁵⁵ Andreas Weber, *Enlivenment: Toward a Poetics for the Anthropocene*, *Untimely Meditations* 16 (Cambridge, Massachusetts: MIT Press, 2019).

stuff, going about your doggy, or spidery, or whaley business.”⁵⁶ World-making is part of life, animals are not “world-poor” (as Heidegger states), but all organisms shape their ecological living environment. Organisms change the world of other organisms, e.g., bacteria produced Earth’s oxygen atmosphere and plants contribute to its preservation. Such world-creating endeavors can overlap and provide space for more than one species. Humans, too, are involved in these cross-species world-making processes, notes anthropologist Anna Lowenhaupt Tsing.⁵⁷ Worlds form intersections, overlap or overlap, and are partially shared. The fundamental impossibility of an understanding between very different ways of life based on different practices is too quickly asserted because no effort is made to build common practices.

This is also the focus of the new research area of multi-species studies.⁵⁸ This involves ethnographic immersion in the life worlds of alien species—be they frogs, fungi, microorganisms or farm animals. In these studies, researchers not only try to “objectively” reconstruct the exchange processes between different living beings, but also try to understand the associated interests, meanings and affects, at least to some extent, and to write dense descriptions of them—in the first person, as it were. What experiences do other living beings have, what is significant for them? Of course, it is clear that one can never feel like a tree. But the accusation of anthropocentrism is not appropriate toward these studies. For the alternative would be a kind of mechano-centrism, namely the assumption that other living beings do not live in a world of meaning and signification.

Weber interprets these cross-border processes of life as the flowing back and forth of gifts. Living systems are usually in a state of dynamic equilibrium, which can also be seen as a state of reciprocity, based on the triad of giving, taking and reciprocating. The objection that one is engaging in an inappropriate anthropocentrism here is obvious. But in my opinion, anthropocentrism is instead overcome in favor of a continuity of human and non-human life. What is to be criticized is a widespread mechano-centrism that is based on an ontological dualism and follows

⁵⁶ Timothy Morton, *Humankind: Solidarity with Nonhuman People* (London; New York: Verso, 2017), 92.

⁵⁷ Anna Lowenhaupt Tsing, *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins* (Princeton: Princeton University Press, 2018).

⁵⁸ Thom van Dooren, Eben Kirksey, and Ursula Münster, ‘Multispecies Studies. Cultivating Arts of Attentiveness’, *Environmental Humanities* 8, no. 1 (2016): 1–23.

the assumption that other living beings are, as it were, silent and do not live in a world of meaning and signification. Like Sachser,⁵⁹ Danowski and Viveiros de Castro therefore argue for the anthropomorphic principle that animals are like us: a kind of pan-psychic generalization is the basic operation here to align the world with human beings.⁶⁰

Donna Haraway also criticizes the biological conception that there are individuals and their contexts. Instead, she speaks of collective processes of “sympoiesis” (“going along with”), which she also takes as a critique of the concept of autopoiesis since nothing is truly and merely self-organizing.⁶¹ She also turns sensitivity to other forms of life into the ethical. Haraway calls for us to rethink our kinship relations. A multi-species ethic calls not only for behaving morally toward alien humans, but also toward non-human species. Not only are humans on the run worldwide, but many other non-human living beings are also displaced or wiped out. She argues for new associations of living beings that transcend conventional biological, cultural and political boundaries. At the same time, however, Haraway makes clear that any affirmative reference to life can also entail destruction and death. Saving the lives of certain species is sometimes only possible if other species are pushed back. Killing, however, should then not be generally understood as ontological fate, but in the course of a bio- and thanato-politics it is about developing a greater sensitivity focusing on intolerable forms of destruction and killing.⁶²

THEORY OF THE GIFT OR TAKING CARE

It has now become clear that there is no longer any nature outside of human influence and access. The separation of culture and nature—if it ever made sense—must now be finally abandoned. Nature must be understood sociologically differently, but human societies must also be viewed

⁵⁹ Sachser, *Der Mensch im Tier*.

⁶⁰ Déborah Danowski and Eduardo Batalha Viveiros de Castro, *The Ends of the World* (Malden, MA: Polity, 2017).

⁶¹ Donna Jeanne Haraway, *Staying with the Trouble: Making Kin in the Chthulucene*, *Experimental Futures: Technological Lives, Scientific Arts, Anthropological Voices* (Durham: Duke University Press, 2016).

⁶² Folkers and Opitz, ‘Symbiose Als Begriff Und Gegenstand Der Soziologie. Für Eine Analyse von Biosozialität Im Zeitalter Des Mikrobioms’.

differently. I would now like to link the above with a theory of the gift,⁶³ which is intended to link the previous considerations with a different model of action and order and to transcend the previous boundaries of sociology.

Following Marcel Mauss' central text on the gift and the French MAUSS ("Mouvement Anti-Utilitariste dans les Sciences Sociales"), we will now consider an interactionist theory of the gift that conceives of human relations and relations between humans and non-human actors differently from most sociological theory. Alain Caillé has worked out that central dimensions of human action cannot be explained in either utilitarian or normative terms, but rather in terms of the theory of the gift.⁶⁴ Thus, the gift is neither based on mere self-interest, nor can it be reduced to people doing what norms demand of them. In gifts, there is a surplus of spontaneity, unconditionality, freedom and commitment that cannot be attributed to self-interest or normative commitment. Gifts that show a moment of voluntariness and unconditionality do not have to be as closely linked to reciprocity as sociological theory generally assumes.⁶⁵ Wherever there is no record of the exchange that has taken place, we are dealing with forms of giving, trust, public spirit, devotion and love that can be decoupled in specific ways from specific expectations of reciprocity and, above all, from exchange. It is not the liberal ideal of the autonomous individual free from interdependence that underlies gift relationships, but a web of relationships of interdependence that leads to giving and taking as needs and abilities suggest. Gifts thus contain moments of surplus and unconditionality, which are constitutive for the production of sociality. Thus, beneath the social lie non-equivalences and asymmetries. For giving is not traceable to the exchange of equivalent values.

⁶³ See Frank Adloff, *Politics of the Gift: Towards a Convivial Society*, Alternatives to Capitalism in the 21st Century (Bristol: Bristol University Press, 2022).

⁶⁴ Alain Caillé, *Anthropologie der Gabe*, Theorie und Gesellschaft 65 (Frankfurt/New York: Campus-Verl, 2008); Alain Caillé, *Anti-utilitarisme et paradigme du don: pour quoi ?* La bibliothèque du MAUSS (Lormont: le Bord de l'eau, 2014); Alain Caillé, *Extensions Du Domaine Du Don: Demander, Donner, Recevoir, Rendre: Essai*, Questions de Société (Arles: Actes Sud, 2019).

⁶⁵ See also Frank Adloff and Steffen Mau, *Vom Geben und Nehmen: zur Soziologie der Reziprozität*, Theorie und Gesellschaft, Band 55 (Frankfurt: Campus Verl, 2005); Frank Adloff, *Gifts of Cooperation, Mauss and Pragmatism*, First issued in paperback, Routledge Global Cooperation Series (London New York: Routledge, Taylor & Francis Group, 2017).

All previous cultures—with the exception of modernity—have understood their relationship to non-human nature as a gift relationship: one takes from lakes, mountains, forests, farm animals and wild animals, and one also gives something back to them. How can such a gift relationship be re-established under modern conditions? For the maxim of modernity, as is well known, is: “thou shalt not regress.”⁶⁶ Very quickly, one is accused of being romantic and pre- or anti-modern. The moderns certainly cannot and do not want to enter into a pre-modern world of imagination. But without a certain re-enchantment of the world, a common life will not be won. Moreover, it is true that the modern life-world is by no means as disenchanting as has been assumed in the social sciences since Max Weber.⁶⁷

Caillé, Chaniel and Flipo point out that a partnership with nature would require that we (re)attribute subjectivity to it.⁶⁸ Now, as we saw above, contemporary biology is doing just that. So, based on scientific knowledge, one can try to revive or recreate an enlightened animism. Caillé, Chaniel and Flipo call this project a methodological animism. For we do not first have to ascribe consciousness, subjectivity, intentionality and a will to cooperate to all living beings in a scientifically proven and validated way. It is enough to consider the non-human beings methodologically as quasi-subjects. That is, we treat the other living beings as if they had subjectivity—regardless of whether it can really be “proven” scientifically. This leads us to recognize non-human beings as givers, to connect with them ontologically in a completely different way and, as it were, to enchant them again. It is not just about other perspectives, but other realities that are practically anchored. To enter into gift relationships in this context means to form an alliance, to establish the alliance between human and non-human beings anew again and again. In Andreas Weber’s words, material substances as well as meanings are exchanged, and in this

⁶⁶ Isabelle Stengers, ‘The Challenge of Ontological Politics’, in *A World of Many Worlds*, ed. Marisol De La Cadena and Mario Blaser (Duke University Press, 2018), 99, <https://doi.org/10.1215/9781478004318-004>.

⁶⁷ Jane Bennett and Gulshan Khan, ‘Agency, Nature and Emergent Properties: An Interview with Jane Bennett’, *Contemporary Political Theory* 8, no. 1 (February 2009): 90–105, <https://doi.org/10.1057/cpt.2008.43>.

⁶⁸ Alain Caillé, Philippe Chaniel, and Fabrice Flipo, ‘Que donne la nature ? l’écologie par le don’, *Revue du MAUSS*, 2013, 5–23.

exchange, subjectivities become intertwined and intermingled in the form of new alliances.

This alliance has an agonistic side, just like the gift relationship between people. Gifts are able to create alliances, but they always contain moments of conflict and opposition. The gift relationship with nature is never purely harmonious; nature can also refuse, take relentlessly or give bad things. Viewing nature in terms of a gift relationship therefore in no way implies a purely conflict-free or romantically transfigured understanding of the relationship. And of course, it is not a matter of giving back the equivalent of what nature has given. What should this consist of? Rather, it is about recognizing the intrinsic value of non-human living beings and ecological processes, and renewing the covenant through the act of reciprocation. In the act of reciprocation, nature is recognized as a partner and no longer just a passive source of resources.

I therefore advocate looking animistically at nature from a sociological perspective (and not just from an everyday world perspective), thus opening up sociology to important phenomena and in this way also contributing to making existing multi-species interactions⁶⁹ and the associated loyalties and sympathies visible. Sociology is not bound to follow the standard ontological model (see above) and to cultivate a traditional scientific view of nature. In my opinion, the methodological animism toward animate nature that is anchored in the lifeworld is an adequate non-dualistic ontology that can also serve as a starting point for sociological theory building.

In symbiosis with non-human creatures, new interspecies life forms emerge. Farmers who have not completely surrendered to factory farming with its passivation and ontological reduction of animals describe their relationship with cows and pigs as characterized by reciprocity⁷⁰—reciprocity in the give and take of care, labor and emotions. Porcher emphasizes that societies consist *de facto* of humans and domesticated

⁶⁹ Taking a detailed look at such interactions requires a more precise qualification of the understanding of interaction in future research. In his study on interaction partners with dementia, Meyer (2014), for example, fanned out the concept of interaction into four dimensions. On the ecological potentials of looking animistically at the world, see also Sprenger (2021).

⁷⁰ Vinciane Despret and Jocelyne Porcher, *Être bête* (Arles: Actes sud, 2007).

animals.⁷¹ Since the Neolithic Age, it has been true that animals perform work for humans and that animals maintain a special relationship with farmers (and vice versa): they live in the mode of “becoming with,” and they cannot be described as stand-alone entities that only relate to each other in a second step. Their symbiotic cooperations change them mutually. And this presupposes trust and a willingness to cooperate on the part of the animals as well: “An animal that does not want to cooperate cannot be constrained to do so.”⁷²

Not all close symbioses between humans and their symbionts are noticed. Ecological awareness begins with an awareness of this gap and attempts to overcome it by noticing and acknowledging the interdependencies between life forms. As early as 1939, Robert Park noted that the interdependence between different forms of life has steadily increased as society has developed, and has never been greater than it is today.⁷³ Perceiving interdependencies is not just about having a different cognitive view of the world, it is about interacting and relating with other life—for example, in the mode of gift and care as “matters of care.”⁷⁴

⁷¹ Jocelyne Porcher, ‘The Work of Animals: A Challenge for Social Sciences’, *Humanimalia: A Journal of Human/Animal Interface Studies* 6, no. 1 (2014): 1–9.

⁷² Porcher, 6.

⁷³ Robert E. Park, ‘Symbiosis and Socialization: A Frame of Reference for the Study of Society’, *American Journal of Sociology* 45, no. 1 (July 1939): 15, <https://doi.org/10.1086/218206>.

⁷⁴ Maria Puig de la Bellacasa, ‘Matters of Care in Technoscience: Assembling Neglected Things’, *Social Studies of Science* 41, no. 1 (2011): 85–106. Vinciane Despret (2019: 109ff.), for example, argues for a different approach to death. Instead of measuring the number of farm animals eaten each year in kilograms, it would be closer to an appreciation of the dead animals if one were to speak of a number of deceased. Being able to mourn animal deaths privately and publicly is also the starting point for the political action of the social movement Extinction Rebellion, which comes from the UK.

CONCLUSION: CONVIVIALITY AND SYMBIOSIS

The theory of the gift has been transformed into a normative theory of successful coexistence in French convivialism.⁷⁵ The concept of conviviality indicates that people are above all social beings who are interdependent.⁷⁶ In this context, social relationships are seen not only as a means to an end, but above all as an end in themselves. Convivialism is a decidedly anti-utilitarian intellectual current that sees human beings as characterized less in their desire to take, but in their ability and need to give to others (quite agonistically) and to connect with each other.⁷⁷

Empirically, conviviality is currently being studied above all in the field of the everyday multiculturalism of non-elites. The available studies are interested in how people, for example in multi-ethnic neighborhoods, shape and organize their everyday life together.⁷⁸ It turns out that there are diverse practices of respectful interaction that originate in dispositions to give: "Conviviality is established in different routine practices of giving and taking, talking and sharing, exchanging news and goods

⁷⁵ Les Convivialistes, *Convivialist Manifesto: A Declaration of Interdependence*, ed. Frank Adloff and Claus Leggewie (Duisburg: Käte Hamburger Kolleg / Centre for Global Cooperation Research., 2014); Les Convivialistes, 'THE SECOND CONVIVIALIST MANIFESTO: Towards a Post-Neoliberal World', *Civic Sociology* 1, no. 1 (16 June 2020): 12,721, <https://doi.org/10.1525/001c.12721>.

⁷⁶ It is no coincidence that the French subtitle of the convivialist manifesto, which turns gift theory into politics, is "Déclaration d'interdépendance" (Les convivialistes 2014). Interdependence and conviviality as normative concepts aim at a solidary balance that also includes non-human beings. In the meantime, a second convivialist manifesto has appeared, which introduces the principle of the shared naturalness of humans and nature. Humans do not live outside nature, they are not its rulers and owners, but have an ethical obligation to care for nature (Les convivialistes 2020).

⁷⁷ See also the following articles: Caillé, *Anti-utilitarisme et paradigme du don*; Alain Caillé, *Le convivialisme en dix questions suivi de Il sera une fois le désir convivial: un nouvel imaginaire politique*, La bibliothèque du Mauss (Lormont: le Bord de l'eau, 2015); Frank Adloff, 'Experimental Conviviality: Exploring Convivial and Sustainable Practices', *Open Cultural Studies* 4, no. 1 (31 December 2020): 112–21, <https://doi.org/10.1515/culture-2020-0011>; Adloff, *Politics of the Gift*.

⁷⁸ For example, Susanne Wessendorf, 'Being Open, but Sometimes Closed: Conviviality in a Super-Diverse London Neighbourhood', *European Journal of Cultural Studies* 17, no. 4 (2014): 392–405.

and so on [...]. The banal interactions across social and ethnic boundaries give a sense of togetherness.”⁷⁹ Conviviality can be defined as a minimal form of successful coexistence based on routine practices of give and take. Everyday interactions across ethnic boundaries, for example, create a sense of commonality and togetherness. Tensions and conflicts are not excluded here, on the contrary: they take place permanently and have to be negotiated and translated. Conviviality in this sense represents a form of minimal sociality and a minimal consensus, a competence of cross-cultural, everyday negotiation and cooperation.⁸⁰

Symbiosis in a sociological sense should now mean cooperative coexistence in a cross-species sense. Symbiosis is thus a subcategory of conviviality, which in turn is based on gift relationships. Conviviality thus also includes symbiotic relationships between humans and non-human living beings and is incorporated into a concept of a general ecology. Tim Ingold puts it this way: “Therefore relations among humans, which we are accustomed to calling ‘social’, are but a sub-set of ecological relations.”⁸¹

In the history of sociological thought, there are certainly isolated references to the idea of symbiosis. However, either the concept of symbiosis is restricted to coexistence within human societies,⁸² or the concept of symbiosis is used in a metaphorical sense. Wagner, for example, introduced the concept of symbiosis as an opening figure within the framework of Luhmann’s systems and differentiation theory.⁸³ Clearly, however, his focus remains limited to (human) social systems. In this article, however, the concept of symbiosis is not limited to only human societies, but also includes biosocial collectives of human and non-human actors. In

⁷⁹ Magdalena Nowicka and Steven Vertovec, ‘Comparing Convivialities: Dreams and Realities of Living-with-Difference’, *European Journal of Cultural Studies* 17, no. 4 (August 2014): 346, <https://doi.org/10.1177/1367549413510414>.

⁸⁰ Timann Heil, ‘Conviviality. (Re)Negotiating Minimal Consensus’, in *Routledge International Handbook of Diversity Studies*, ed. Steven Vertovec, Routledge International Handbooks (London: Routledge, 2015), 317–324.

⁸¹ Ingold, *The Perception of the Environment*, 5.

⁸² Park, ‘Symbiosis and Socialization’.

⁸³ Gerhard Wagner, ‘Differentiation as Absolute Concept? Toward the Revision of a Sociological Category’, *International Journal of Politics, Culture, and Society* 11, no. 3 (1998): 451–474.

such symbioses, at least one of the subjects in relation to each other is fundamentally changed.⁸⁴

In this sense, farmers and their livestock are in symbiosis, or bees and beekeepers. Symbiosis as a sociological conception of interspecies gift relations refers to a cooperative relationship between animals and humans. In animal studies, a political turn can currently be identified that aims at the membership of animals in the political community, i.e., the citizenship status of animals.⁸⁵ According to Peter Niesen, all living beings that contribute to the flourishing of a society are entitled to this status. This is based on a simple normative principle: “those who contribute permanently should not go empty-handed.”⁸⁶ Here, Niesen emphasizes a principle of reciprocity that understands animal labor and products as contributions to the social cooperation context. Cooperation is formally determined by him, independent of the question of whether “a distinction can be made between intentional and unintentional, voluntary and forced contributions.”⁸⁷ Thus, above all, the exploitation of farm animals for food production also generates reciprocity obligations toward them. Niesen wants to grant the resulting citizenship status mainly to farm animals and domestic animals, since cultural successors and wild animals do not permanently and systematically cooperate with human society.⁸⁸

⁸⁴ See Harman, *Immaterialism*.

⁸⁵ Peter Niesen, ‘Kooperation Und Unterwerfung. Vorüberlegungen Zur Politischen Theorie Des Mensch/Nutztier-Verhältnisses’, *Mittelweg* 36, no. 23 (2014): 45–58.

⁸⁶ Niesen, 54.

⁸⁷ Niesen, ‘Kooperation Und Unterwerfung. Vorüberlegungen Zur Politischen Theorie Des Mensch/Nutztier-Verhältnisses’.

⁸⁸ The distinction between domestic and farm animals, cultural successors and wild animals is made by Donaldson and Kymlicka (2011). As a political strategy, there may be good reasons for excluding cultural successors and wild animals from citizen status for the time being, but sociologically and ecologically this seems to make less sense if one only thinks of how all animal or plant species are part of broader ecosystems and these in turn make contributions to functional biodiversity that are still largely misunderstood. The rapid and massive loss of species then also poses serious problems for humanity (Glaubrecht 2019: 739ff). Cf. also van Dooren’s (2010) study on the indirect cooperation between vultures and humans on the Indian subcontinent. Vultures traditionally consume the carcasses of sacred cattle and are thus part of Indian burial and hygiene culture. However, the symbiotic exchange is currently coming to a halt as cattle are increasingly being medicated with diclofenac and residues of the drug in the cattle carcasses are killing the vultures. For the concept of convivial conservation, which tries to overcome older

The questions of political theory cannot be pursued further here. However, in terms of a general sociology and ecology of such a cooperative context, it must be stated: viewed as a whole, it can be said that humanity is dependent on life (of plants and animals) and on planet Earth, that most animals and plants in the Anthropocene are also dependent on humans, but that at the same time the Earth as a whole is not dependent on us, but rather in the Anthropocene we can be regarded as the Earth's parasite.⁸⁹ We only take without giving nature enough in return.

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concepts of nature conservation that separate rather than connect people and nature, see Büscher/Fletcher (2020).

⁸⁹ See also Michel Serres, *The Natural Contract*, Studies in Literature and Science (Ann Arbor: University of Michigan Press, 1995).

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