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Paul B. Thompson · Kirill O. Thompson
Editors

Agricultural Ethics in East Asian Perspective

A Transpacific Dialogue

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The ethics of food and agriculture is confronted with enormous challenges. Scientific developments in the food sciences promise to be dramatic; the concept of life sciences, that comprises the integral connection between the biological sciences, the medical sciences and the agricultural sciences, got a broad start with the genetic revolution. In the mean time, society, i.e., consumers, producers, farmers, policymakers, etc, raised lots of intriguing questions about the implications and presuppositions of this revolution, taking into account not only scientific developments, but societal as well. If so many things with respect to food and our food diet will change, will our food still be safe? Will it be produced under animal friendly conditions of husbandry and what will our definition of animal welfare be under these conditions? Will food production be sustainable and environmentally healthy? Will production consider the interest of the worst off and the small farmers? How will globalisation and liberalization of markets influence local and regional food production and consumption patterns? How will all these developments influence the rural areas and what values and policies are ethically sound? All these questions raise fundamental and broad ethical issues and require enormous ethical theorizing to be approached fruitfully. Ethical reflection on criteria of animal welfare, sustainability, liveability of the rural areas, biotechnology, policies and all the interconnections is inevitable.

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Paul B. Thompson is the W.K. Kellogg Professor of Agricultural, Food and Community Ethics at Michigan State University. His career work has integrated the philosophy of technology with environmental ethics through focusing on the role of agriculture and food systems in cultural and normative practices. He served terms as President of the Society for Philosophy of Technology and the Agriculture, Food and Human Values Society. *From Field to Fork: Food Ethics for Everyone* (Oxford) was the North American Society for Social Philosophy 2015 Book of the Year. *The Spirit of the Soil: Agriculture and Environmental Ethics* (Routledge) was released in a 2nd edition in 2017.

John A. Tucker is a Professor of history and Director of the Asian Studies Program at East Carolina University. He has translated several important Japanese Confucian texts including Itō Jinsai's Gomō jigi and Ogyu Sorai's Bendō and Benmei. Tucker is also the author of "Dreams, Nightmares, and Green Reflections on Kurosawa and Confucian Humanism," in the University of Tokyo Center for Philosophy-Uehiro Booklet 3 (2013), entitled Philosophizing in Asia, edited by Tsuyoshi Ishii and Wing-keung Lam. Another of his essays, in Japanese, "Jinsai no kotoba to sekairon: ūchū to tendō o chūshin ni" (Jinsai's Discussion of Language and the World: The Cosmos and the Way of Heaven), was published in Kataoka Ryu and Kim Tae-chung (eds.) Itō Jinsai: tenka kōkyō no michi o kōkyushita bunjingakusha, (Tokyo: Tokyo University Press, 2011). Tucker is currently working on a translation-study of Kumazawa Banzan's Governing the Realm and Bringing Peace to All-below-Heaven for the Cambridge Texts in the History of Political Thought Series.

Huaike Xu Ph.D., is a researcher in Social Ecology at Anhui University of Technology. His recent publications include: *Agricultural Ethics in Environmental Philosophy* (an encyclopedia, published in 2017); Study on Industrialization of Traditional Folk Agro-processing Technologies (a project of 9.3 Society Committee of Anhui Province, third prize in Maanshan city in 2016); Study on Technological Justice and Its Relationship with Capital, Economical Environment and Culture (published in 2013); Research on Modern Strategic Values of Traditional Agricultural Technology (conference proceeding, published in 2012); "Analysis of the Features of Modern Artificial Biological Nature and its Conditional Harmony with Real Nature" (an article, published in 2009); Study on the Establishment of Vegetable Production Base in Maanshan City (a draft resolution for Maanshan City in 2007); and "Strategic Research on Setting up Hi-biotechnological Agricultural Zone in China" (an article, published in 2003).

Tomosaburô Yamauchi is an Emeritus Professor at Osaka University of Education. Honorary Research Fellow, Monash University, Australia, 1993–1997. Sometimes he taught at Kyoto University, Osaka University, and others. His main publication is The Moral Philosophy of R.M. Hare. He translated many books by Callicott, Hare, Singer, and others into Japanese. His articles are "Wang Yangming" in A.J. Palmer

& P.B. Corcaran (eds.), Fifty Key Thinkers on the Environment, 2002, Routledge, "The Confucian Environmental Ethics of Ogyu Sorai" in J.B.Callicott and J.Macrae (eds.), Environmental Philosophy in the Asian Traditions of Thought, 2014, SUNY, and "Is Hare's Fanatic Possible?," Bulletin of The Japan Society of the UK, No. 9, 1986, and many others.

Agricultural, Environmental, and Food Ethics in East Asian Perspective: Introduction

Abstract A 2012 workshop intended to create a new dialog between Eastern and Western environmental ethics provided the occasion for this collection of papers. This introductory chapter provides a précis for each chapter and situates the entire effort within the context of growing international conversations on environment, conservation, and sustainability.

Keywords Environmental ethics · Agriculture · Asian philosophy

This collection of papers had its origins in a workshop on environmental ethics sponsored by the Institute for Advanced Studies (IHS) at National Taiwan University and the W. K. Kellogg Chair in Agricultural, Food and Community Ethics at Michigan State University. The original workshop, held in 2012, was envisioned as an exchange of views on newly emergent approaches in environmental philosophy. "Western" perspectives (in the case of this workshop all coming from the United States) would be placed into dialog with "Eastern" perspectives (at the workshop coming from Japanese and Chinese philosophical traditions). The event was a stimulating occasion for the small cadre of scholars who were able to participate. By the time that the group was nearing the end of educational visits to NTU's duck and tea research centers, people were beginning to talk about sharing the results with a wider scholarly community.

Other events elsewhere were also opening up dialog among Eastern and Western scholars on environmental topics. About a year before the NTU workshop, the Cary Institute of Ecosystem Studies located in Millbrook, New York, was also hosting a workshop that brought philosophers from many nationalities together. The primary intercultural engagement at the Cary Institute was between North and South America, though Chinese and Japanese perspectives were included, as well. More significantly, this event was intended to further dialog between philosophers and ecologists. Organized with leadership from J. Baird Callicott, a leading environmental philosopher, and Steward T. A. Pickett, a leading ecologist, the Cary Institute

workshop also resulted in stimulating conversation. It did much to advance the longstanding interest that North American environmental philosophers have taken in conservation biology. That event has resulted in the publication of an important volume, *Earth Stewardship: Linking Ecology and Ethics in Theory and Practice* (Rozzi and coauthors, 2015).

In 2013, the inaugural meeting of the Asia-Pacific Society for Agriculture and Food Ethics (APSAFE) was held at Chulalongkorn University in Bangkok. Organized with sponsorship from the European Society for Agriculture and Food Ethics (EURSAFE), this event brought together over one hundred researchers from many different Asian and Pacific countries including Thailand, China, Korea, Japan, Indonesia, Australia, India, and New Zealand. Also in attendance was a healthy representation of Europeans, reflecting the emergence of new research partnerships that had been forged by European Framework funding that had encouraged work on the ethical quandaries of food systems and agricultural development. The second meeting of APSAFE was held at Taipei in 2018, demonstrating a continuing growth in awareness of environmental philosophy on a pan-Asian basis, and giving scholars from Asian universities a self-understanding of their common project.

Although the idea of a volume based on the 2012 workshop in Taipei was hatched even as its participants were departing, it is an idea that needed time to gestate. Several papers presented at the workshop dealt with issues that were arising in the wake of the Tōhoku-chihō earthquake and tsunami on March 11, 2011. There were in excess of fifteen thousand confirmed deaths in connection with the earthquake and tsunami, but its environmental impact was tied to the accident at the Fukushima Daiichi nuclear power generating station. The tsunami caused multiple failures in the plant's operations, leading to a loss-of-coolant event and meltdown of three reactor cores. This was followed by a significant release of radioactive material and an enormous clean-up and monitoring effort that not only continues to this day, but that will very probably continue at some level for many generations to come. The Japanese research relating to the Fukushima Daiichi incident could not wait, and its problem focus was also a poor fit with the more contemplative and theoretically oriented papers that comprised the bulk of the work presented at the 2012 workshop.

With that turn of events, Kirill Thompson and Paul Thompson (not related, by the way) began to expand the scope of the volume and to invite additional contributions. The growth of interest in agricultural and food ethics that was occurring elsewhere created opportunities for the original intent of the 2012 workshop to be extended along the theoretical and conceptual lines that it had been originally been conceptualized. The result is broader and better rounded volume that still reflects the two original goals to create a conversation between Eastern and Western perspectives in environmental philosophy, and to emphasize themes that would expand our conceptions of environmental philosophy well beyond the focus on conservation biology that had been the impetus for the Cary Institute conference in 2011.

The Contents of the Volume

The volume opens with a revised and expanded version of the paper that Paul B. Thompson read to open the workshop in 2012. "Agrarian Environmental Philosophy in an Inter-Cultural Context" provides a succinct statement of agrarianism and supplies examples of how agrarian views were reflected in nature philosophies from Europe and North America long before Aldo Leopold's *Sand County Almanac* became the inspiration for a new cohort of environmental ethicists beginning in the 1970s. Thompson emphasizes the role of the household economy in forming the basis for a model polis as articulated in the writings of Aristotle and Xenophon. He draws a contrast between this way of characterizing environmental philosophy as a discussion of the way that nature shapes human morality and institutions, on the one hand, with that of mainstream North American environmental ethics, which seeks arguments that could form the basis for protecting ecosystems from the impacts of human civilization, on the other.

Chapter 2, "Agrarian Tradition and Chinese Culture: An Interpretive Overview," by Chun-chieh Huang discusses how farming practices and the agricultural household are implicit elements in many lifeways that are thought to be emblematic of Chinese culture. Dean Huang discusses the importance of an aphorism referring to planting practice and the observation seasonal changes and shows how the widely noted Chinese conception of cyclical temporality derives from agrarian lifestyles. He notes the convergence of Chinese respect for nature with political forms that reconcile a form of profit-seeking self-interest with a strong sense of social solidarity and loyalty to centralized decision-making structures. Huang also takes the opportunity to rebut key elements of Wittfogel's "oriental despotism" thesis, arguing that the conservatism sometimes associated with Chinese cultural life is more properly interpreted as an expression of the Chinese people's continuing respect for the rhythms and patterns of an agrarian lifestyle.

The next four chapters continue to explore the linkage between agrarian themes and the East Asian approach to environmental valuation and responsibility. Tomosaburo Yamauchi's contribution, "The Agricultural Ethics of Ninomiya Sontoku," is reprinted from the *Taiwan Journal of East Asian Studies*, Vol. 12, No. 2 (Issue 24), Dec. 2015. It provides a broad exploration of agrarian themes in Japanese philosophy of nature with a primary focus on the thought and influence of Sontoku, also known as Kinjiro, the "farmer sage" of Japan's Edo period. Kinjiro's teaching stress classic agrarian values: harmony with nature, frugal living, and the quotidian rhythms of daily life. Professor Yamauchi explores the influence that earlier sages Kaibara Ekken and Ogyū Sorai on the formation of Kinjiro's thought, providing a rich account of the way that agrarian themes, are imbricated within Japanese wisdom literature. He then contrasts this with the current crisis in Japanese environmental thought, as Japanese citizens and philosophers alike try to conceptualize an environmental ethic within a post-Fukushima world.

In Chap. 4, John A. Tucker also provides an in-depth study of agrarian themes in the work of a classical Japanese thinker, Andō Shōeki. Writing during the first half of the eighteenth century, Shōeki opposed early Japanese moves toward modernization and urban living, advocating that everyone must be a direct tiller of the soil. Professor Tucker argues that despite the obvious historical ineffectiveness of Shōeki's program, he has had a profound impact on Japanese culture and that his ideas continue to be an important source of insight into Japanese attitudes toward environmental problems. Tucker also explores sources for Shōeki's philosophy in Chinese philosophy, specifically Zhuangzi, Mozi, and Mencius. Tucker includes discussion of Shōeki's continuing influence and his impact on the way that his Chinese sources are also read, thus providing another comprehensive introduction to an agrarian form of environmental philosophy, rendered through an East Asian perspective.

Kirill Thompson's contribution is Chap. 5, "Agricultural Ethics in Early Chinese Perspective," explores the question, What concepts do East Asian philosophical traditions offer in response to ethical issues in agriculture? In responding to this question, he considers how East Asian traditions would understand a set of specific agricultural ethics issues revolving around a rural creek and land use. Thompson examines how early East Asian thinkers grappled with parallel issues. For example, Confucius sought to remind people of their relational character, obligations, and practices. Regarding the creek and land issues, Confucius would have focused on the farmers' neighborly relationships, obligations, and shared interests as caretakers of the land. Thompson then notes that the Daoists Laozi and Zhuangzi went further in teaching an earth-centered ethic by conceiving human relationality as extending to the natural and ontological spheres. Viewing sustainability as related to the integrity of ecosystems and the flourishing of life forms, Laozi and Zhuangzi both would encourage living in attunement with the ecosystems such that human conduct would resonate with the environment, making life there not only sustainable but resilient.

Rounding out this section of the book, Huake Xu also explores Chinese sources for developing an environmental ethic in Chap. 6. "Analysis of the Relationship Between Eco-humanity in Ancient China and Its Agriculture" discusses how figures such as Zhu-xi, Yilong Ma, and Xun-tse (among others) conceptualized a unity that encompasses human beings and their moral practices within a broader ecology that is structured by agricultural practices. This approach in traditional Chinese philosophy grounds notions such as love and use within a common set of practice-grounded understandings that avoids the tension between intrinsic and instrumental values that is so characteristic of North American environmental ethics.

The next set of papers takes the discussion more firmly into contemporary issues. First, Raymond Anthony's chapter discusses the concept of food ethics, arguably a new theme in environmental philosophy and one that is not represented among North American theorists who emphasize conservationist and preservationist themes. Dr. Anthony notes that there has been a philosophical literature on food for several decades, going back at least to Peter Singer's important 1972 paper "Famine, Affluence and Morality." Yet this literature is rather narrowly focused on food security or human access to safe, affordable, and nutritious diets. It does not extend its

conception of the food system into the environmental impacts of food production and distribution, including crucial questions such as the role of animal production in processes of global climate change. Chapter 7, "Food Ethics as More than Food Security," emphasizes the role of Asian economies in achieving a globally sustainable food system.

Next, Ronald Sandler and Lisa Heldke offer philosophical interpretations of the alternative food movement in Chaps. 8 and 9, respectively. Professor Sandler's "An Ethical Theory Analysis of Food System Discourse" argues that actors within the mainstream industrial food system tend to see their approach as justified by conventional utilitarian forms of optimization: industrial food systems achieve "the greatest good for the greatest number." Critics of this approach tend to stress how powerful actors within the industrial food economy run rampant over the rights of poor or otherwise marginalized individuals, including both small-scale food producers (especially in less industrially developed countries) and resource-challenged consumers who must draw upon highly processed manufactured foods at the same time that the structure the industrial food system often leaves them in the position of paying higher prices than those in more affluent neighborhoods.

In Chap. 9, "Theorizing Alternative Agriculture and Food Movements: The Obstacle of Dichotomous Thinking," Lisa Heldke focuses on the problems associated with Western philosophy's propensity to dichotomize, a propensity that can tend to shape everything in its path, including food production and consumption. In challenging this obsession with dichotomy, she discusses an example of how it might be challenged, but she goes on to admit that it might feel like a ridiculous luxury to add "challenge dichotomous thinking" to the list of tasks that we should add to our work in alternative agriculture and food theory and practice. She concludes that keeping one eye trained upon this set of dichotomies can enable our resultant theoretical and practical work to be all the more effective. Failing to take dichotomization into account will hobble our efforts to create alternative food and agriculture movements that meet the expectations of the land and of the people who dwell and eat in it.

In Chap. 10, "Zhuangzi and Agricultural Ethics," Kai-Yuan Cheng places the thought of Daoist philosopher Zhuangzi into a dialog with recent work on agrarianism by Paul Thompson. The aim of this chapter is twofold. First, Cheng points out some of the potential weakness in Thompson's agrarianism, in particular some of its theoretical inadequacies when seeking inspiration from Greek philosophies and cultural heritage. Second, he aims to show how those shortcomings may be overcome by exploiting some of the insights that form Zhuangzi's philosophy. The novelty of Cheng's attempt lies in his extension of the no-self thesis, which is central in Zhuangzi's philosophy to illuminate a man-nature relationship that is needed to suitably constrain Thompson's virtue-based agrarianism. Cheng's purpose is not to reject Thompson's view but rather to fully realize its merits and potential in its attempt to tackle contemporary worries about sustainability.

In Chap. 11 "Food Ethics: Based on Three-Level Eco-Holism," Tomosaburo Yamauchi seeks a way past the moral clash between traditional Western modernism and the new approach of environmental ethics, including agricultural ethics and

sustainability. Informed by traditional Japanese thought, Yamauchi's solution to the deep moral conflict is to distinguish separate levels of ethical thinking on the basis of a broad eco-holistic (or eco-humanist) level that incorporates both humanism and eco-centrism. When conflicts occur between human concerns and environmental concerns, he suggests moving the argument to the eco-holist level and making a balanced decision from among alternative courses of ethical thought and action. He stresses that while one can separate humans and nature, partly and for short periods of time, in the long run, human welfare and Earth wellness cannot be separated at the global eco-holistic level, because if the natural environment decays, humanity cannot survive. Thus, he concludes, our ultimate criterion must not be either in human-centrism or in eco-holism as exclusive alternatives but in the welfare of the Earth.

In Chap. 12, "What does 'soil is valuable' mean? : Institutional design and ethics for sustainable use of soil resources," authors OTA Kazuhiko, MURATA Tomoyoshi, OHKURA Toshiaki, and HAMADA Ryunosuke aim to bridge environmental thought with soil conservation activities. First, they report on their attempt to organize a framework of soil conservation on a global scale. In this effort, they find that the principles of soil conservation at the present time to be quite different from those employed in periods when the food supply was an urgent issue. Moreover, they find that comparisons of Japanese and American institutions show that soil management systems reflect national and regional geopolitical concepts and not just local soil characteristics. Consequently, the general value of the soil tends to be a product of several factors, e.g., the amount and price of crops, water purification function, storage function for chemical substances, support of buildings, and the like. And, these evaluating factors presuppose certain soil use methods. They caution that if methods of soil use are simplified soil management becomes easier, but the specific significance that soil holds in each region is prone to be overlooked. They conclude with the proposition that not until we accept that soil is a multi-functional and yet an underdetermined entity that needs to be re-evaluated in each region will we truly be able to say that "soil is valuable." They urge that countries pass a Basic Act to facilitate "wise use" of soil, place by place by promoting human resource development for soil data collection and soil information systems. Even though soil is such an important yet finite natural resource, we still do not pay adequate attention to it.

Finally, in Chap. 13, Soraj Hongladacom tackles the recognition that, like it or not, technology is now integral to every process of farming and food production in Southeast Asia as well as East Asia and elsewhere. He examines the growing tension between our expectation of "natural foods" and the reality of the intervention of technology, not to mention the magic of chemistry in food processing. In this light, he reflects on the intimate connection between food and traditional identity and how technology comes to play a role in changing a local sense of identity with respect to food. He concludes on the positive note that technology need not supplant traditional food identity but rather can be used to enhance local identity, while admitting that many conditions would have to be met for that to become a reality.

While each of the contributors to this volume is articulating a distinct philosophy for agriculture and food systems, all are working within the larger context of envi-

ronmental ethics. To varying degrees, each author sees attention to the production and consumption of food as an important and neglected framing for larger questions about humanity's relationship to the natural environment. As in the original 2012 workshop, each chapter has been composed in the spirit of broadening a global perspective by speaking from the place that they occupy in a geographical, cultural, and spiritual sense. We hope that readers will engage with these perspectives in a similar spirit.

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Chapter 1
Agrarian Environmental Philosophy in an Inter-cultural Context

Paul B. Thompson

Abstract Environmental philosophers in Europe and North America have gravitated toward an approach that emphasizes the scarcity of resources and the encroachment of civilization on spectacular natural landscapes. As a result, they have neglected philosophical sources within the European tradition that would start with agriculture as a locus for building conceptualizations of humanity's proper relationship to the natural world. Some of these sources are reviewed briefly, and they are put forward as a possible bridge for creating new conversations among philosophers representing Western and East Asian philosophical traditions.

Keywords Environmental ethics · Farming · Ancient Greek philosophy

While philosophers from every cultural tradition have always engaged in reflection about nature, environmental philosophy has emerged as something unique to the present age over the last half century. Industrial pollution, resource scarcity and human encroachment on the habitat of other living creatures have shocked sensibilities. The inquiries and reflections that comprise environmental philosophy represent an enormous variety of responses to the sudden recognition that nature and the human condition were in the process of undergoing significant transformation. The fact that scholars differ over the scope and primary subject matter of environmental philosophy will not be surprising to very many people. To this point, however, the questions that have stimulated philosophical reflection have reflected somewhat balkanized and regionally specific interests. Undertaking environmental philosophy within an inter-cultural context is made difficult by the way that recent work is embedded within national cultures, but the doctrinal and methodological diversity that derives from the cultural embeddedness of philosophical reflection on the challenge to nature can also become a source for new insight and enriched conversation.

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Below I will argue that Western environmental philosophy (and especially the form of it that has emerged in the United States) is narrow in a dual respect. Not only has it neglected sources of philosophical creativity in Asian and subaltern traditions of thought—a habit of longstanding among philosophers working in the European tradition—it has also ignored an important strand of thought that can be traced *within* its own history of ideas. I will provide a sketch of this alternative philosophical approach to creating self-understanding of one's place in the natural environment, and to regulating, constraining or rationalizing human conduct. I will argue that it has potential significance for the continued functioning of ecosystem processes. The agrarian approach to environmental thinking may be widely shared among non-academics in the present day, or it may not. Whether or not this is true today, agrarian thinking clearly has been widespread and influential at other times and places in human history. As such I will argue that it *should be* recognized as one of the ways in which human cultures have expressed their implicit understanding of the natural environment and fabricated norms to constrain and authorize human conduct in and interaction with the non-human world.

Throughout this volume, the word 'agrarianism' indicates this philosophical approach in very general terms. The label of agrarian philosophy may neither do justice to the concepts and claims I associate with this philosophical tradition, though most of our Asian contributors have been comfortable with it. More significantly, the term "agrarianism" may not be congenial to some people who do in fact deploy the approach in their own thinking. Suggestions for better terminology are thus welcome, but one has to start somewhere. My interest in offering this approach at the 2012 workshop in Taiwan was to open up new conversations in environmental ethics. If I am right in my characterization of this alternative, some of the most frequently utilized ways of characterizing what is ethically important about the environment distort and modify the main force of agrarian claims. In particular, if agrarian modes of thinking *are* congenial to people non-Western intellectual traditions, we in the West would do well to open up our global dialog on the environment to be inclusive of the way that this approach understands the importance of nature and of human practice within it. In short, agrarian environmental philosophy might provide an avenue for developing an inter-cultural approach to the challenges of environmental change.

1.1 Western Environmental Philosophy in Recent Decades

From the perspective of scholars writing in English, environmental ethics was at first the product of Australian and North American philosophers who began to raise questions about the rationale for protecting charismatic species and large tracts of relatively undeveloped land from the impacts of industrial civilization. Along with Norway's Arne Naess, this group configured environmental ethics in terms of the need for convincing rationales to forego extractive use of untrammeled areas and harmful impacts on what would later come to be known as biodiversity. The story of

this turn in the history of ideas has been told many times (Nash 1973; Oelschlaeger 1991; Norton 1991). Although there is an endless variety of permutations in the story of environmental philosophy's beginnings, crucial episodes and the primary cast of characters, by the 1990s a cadre of academic philosophers were publishing on both theoretical and applied themes on a regular basis. At the level of theory, debates over the source and character of "environmental values" (or, alternatively, "values in nature") was a predominant theme. While areas of application were considerably more diverse, the rationale for and problems within conservation biology or restoration ecology were certainly among the most frequent topics. This strand of environmental philosophy only became more compelling as scientists began to document the pervasive environmental impacts of global climate change. Bill McKibben sounded this alarm (McKibben 1989), and many others have followed him in reconfiguring environmental ethics as a response to the way that climate change threatens to bring about "the end of nature," (Gardner 2011; Klein 2014). Of course, there are always counter-movements: Steven Vogel has recently called many of the metaphysical assumptions of environmental philosophers' views on nature into question, (Vogel 2015).

On the European continent (including Great Britain) environmental philosophy has seen significantly more engagement with questions of social justice and political philosophy. Europe did not have the vast tracts of undeveloped lands that could be found on the Australian and North American continents, and their populations of wildlife had been sharply reduced for more than a century prior to the first Earth Day in 1970. European interest in animals was more likely to be directed toward livestock than wildlife (see Harrison 1964). In part reflecting European's deep entanglements with the history of colonialism, European interest in conservation of natural resources was more closely tied to the issues raised by the World Commission on Environment and Development (also known as the Brundtland Commission) in 1987 (WCED 1987). However, like the Austro-North American variant, the recognition of widespread impacts of climate change only made the already existing themes in this more justice-focused type of environmental philosophy seem more urgent.

Studies in environmental ethics that began to emerge from the rest of the world often contested the dominance of Western philosophical traditions. The Australian/North American interest in preservation of ecosystems and endangered species was singled out as a key target by Ramachandra Guha (1989) and Miguel Altieri (1988). While there was some consonance with the European emphasis on social justice, these critiques also expressed considerable distrust in the European concept of development. Hence these voices from beyond the strongholds of Western philosophical culture called for an alternative approach to the framing of an agenda for environmental philosophy. While the exigencies of climate change have convinced many of the need for a more global (and hence inter-cultural) way of doing environmental philosophy, the intellectual contours of this sought for alternative are still quite unclear. Arguably, the agrarian tradition could provide such an approach, though Western philosophers' lack of engagement with agrarian thinking presents a significant barrier. Yet ironically, the sources for agrarian thinking were widely available within the European tradition of philosophy.

1.2 Agrarianism

The term "agrarian philosophy" has been used to indicate a cluster of traditions and theories that emphasize the relationship between subsistence production practices and processes of cultural formation, governance and development of moral character. As described by James Montmarquet, agrarianism accords special moral and political significance to farming practice and to its attendant household management activities. Advocates of agrarianism argue that farming or fishing households make a unique and vital contribution to the development of national identities by establishing patterns of conduct and social interaction that become emblematic of a given people. These patterns typically play a crucial role in creating a sense of common destiny and community identity, and they may also make unique contributions to the establishment of institutions that regulate both social relations and the utilization of natural resources (Montmarquet 1989).

There are numerous examples of agrarian philosophies. Each is as different from the other as agricultural practices themselves differ from one time and place to another. Montmarquet places emphasis on the emergence of agrarian ideas in the history of European political economy. In this context, property rights take on a number of different configurations that reflect agricultural practices. For example, strip farming and pasturing of livestock allocate alternating rights of use and access to peasant farmers, while landed aristocracy retain nominal title and the right to collect rents. A smallholder might have had a lifelong entitlement to farm specific plots that was *not* subject to the whim of his Lord. Yet this right was also subject to allowing common access to animals during fallow periods. Montmarquet describes changes in farming practice and land tenure that lead to complex debates over governance in England from roughly 1500 through the nineteenth century. He argues that one cannot fully appreciate movements such as the Diggers or Levelers absent this agricultural background. Since these social movements to reform English property law were the backdrop for John Locke's *2nd Treatise of Government,* one might argue that contemporary political theorists who do not understand agrarianism do not understand Locke, either, (see also Macpherson 1962).

Montmarquet also argues that American transcendentalists such as Ralph Waldo Emerson and Henry David Thoreau draw upon agrarian ideas in developing ethical and aesthetic ideals that then lay the ground work for American pragmatism. Both saw the emerging life of the urban middle class (even within villages like Concord) as increasingly forcing people into patterns of conduct, thought and conversation that were leading toward alienation and existential distress—lives of "quiet desperation" as Thoreau put it. Life in nature, whether it was the farmer or fisherman, as celebrated by Emerson, or the therapy of walking as indicated by Thoreau, was more conducive to the cultivation of authentic experience. The rhythms of commercial culture were inculcating a divided self among urbanites, who were increasingly coming to see themselves as disembodied spectators of their own lives. Later pragmatists such as William James and John Dewey would draw upon the transcendentalists' notion of experience as an ongoing process, a stream, and would also

formulate the existential predicament as one of combating defunct habits and institutional momentum in order live in the moment. In contrast, such presence of being might have come naturally for the farmer engaged deeply with work patterns enforced by the seasons and the expectations of the land (Montmarquet 1989).

G.W. F. Hegel draws upon these agrarian ideas in developing an argument to show why Greek society was unique in the ancient world in terms of its innovation in political forms (including democracy) and in producing a political consciousness organized around the idea of citizenship. According to his *Philosophy of History,* the agricultural systems of Egypt and the Fertile Crescent depended on centrally managed large scale irrigation works. The slaves who built and maintained these systems neither understood their function, nor did they recognize any personal interest in maintaining them. In Greece, the household farms surrounding city states gave rise to citizenry composed of people who recognized a common interest in protecting their lands from invaders, and who were willing to form citizen armies and participate in collective governance. Their political consciousness integrated personal with civic virtues, but this integration was impossible in societies where agriculture was centrally managed by elites (Hegel 1956; see also Thompson 2015).

Hegel's references to ancient Greece are corroborated to a certain degree by the work of contemporary classical historian Victor Davis Hanson. He notes that the philosophers of ancient Greece recognized agriculture's special contribution to the creation and maintenance of public virtues. Aristotle's *Politics* describes the household as a social unit having distinct functions integrated into a unit capable of surviving and reproducing itself over time. Aristotle goes on to argue that household production units constitute the material building blocks for a larger social whole. In addition, the household unit supplies the metaphor for a well-functioning society, in which performance of specialized roles and tasks complement one another to create a sustainable whole. But these households are the farms maintained by the *hoi mesoi*, farms that supply both food and fiber goods, and also the bulk of the citizens for the Greek *polis* (Hanson 1995).

Hanson has argued that the intense solidarity of the *hoi mesoi* accounts for the singular effectiveness of the phalanx. This tactical form, in which soldiers would fight in tight formation, protecting one another with their shields, required that each soldier have absolute confidence in the loyalty of his comrades. Such loyalty and mutual reliance was uncommon among mercenary or slave armies. Yet because the soldiers in armies raised by Greek city states were made up of citizen-farmers who had a common interest in protecting their farms, their common bond extended well beyond the spoils to be gained by victory on any single battlefield. Hanson goes on to note that because Greek farms included tree and vine crops that took generations to develop to their full potential, as distinct from grain agricultures that could be replanted every year, the commitment to community solidarity gained a temporal aspect that was also more robust in Greece than in other civilizations of the ancient world Hanson (1999).

Agrarian views might equally emphasize fishing, hunting and herding in addition to farming. Nevertheless, they characteristically distinguish the contributions that these subsistence occupations make to community solidarity and to the reproduction

of characteristic social forms from that of trades and manufacturing. They also regard patterns of agriculture (including subsistence fishing) and household living as more fundamental to community life than the role that civil authorities (such as politicians or the military) might play, however fundamental the latter might be. The particular claims of agrarian views are as diverse as the particulars of habituated daily practice in diverse ecological and cultural settings. Yet in contrast to the universalizing claims of enlightenment era philosophies, they share the view that making a life at a particular place reinforces habits or dispositions that are the foundations of sociality and moral character.

1.3 Agrarianism and Environmental Thought

Agrarian philosophies stress the way that quotidian patterns of daily life structure a largely implicit and pre-reflective set of normative commitments. These norms may emerge in experience as patterns that just "feel right," leaving a person who is possessed by them without words to articulate or easily defend them. The embodied, pre-theoretical aspect this way that daily life equips us with value-orientations and moral commitments was a key insight for the pragmatists, as Montmarquet notes, yet it was largely unnoticed by the generation of American philosophers educated after World War II. Pierre Bourdieu's notion of "*habitus*" (Bourdieu 1984) allowed a new generation of thinkers access to the general orientation of habituated normativity, and it has been influential in recent feminist philosophy. The links between *habitus,* feminist thought and agrarianism are thus suggestive, but cannot be explored fully within the context of this chapter.

In the present context it is useful to notice how the Western agrarian philosophies discussed above emphasize political life. Similar arguments about the way that subsistence practice gives rise to patterns of perception and usage can be found in recent studies of common-pool resource management. Contrary to the 'tragedy of the commons' idea promoted by ecologist Garrett Hardin in the 1960s, recent scholarship has found that in agrarian societies, robust practices of community governance prevent exhaustion of fisheries, forests and other resource pools. This suggests that in addition to the more politically oriented forms of agrarianism that can be identified in the history of Western philosophy, agrarian ideals have also played a crucial role in helping social groups regulate their own tendency to destroy the environment. Recent work on common pool resource management shows that local moral economies include norms and means of enforcement that are interwoven with place-based ethical worldviews Ostrom 1990).

Like the habituated and largely unwritten institutions of common-pool resource management, agrarian philosophies articulate an ethos or morality that emerges from cultural adaptations of daily practice that have been shaped by constant interaction with soil and water resources, as well as sunshine and other energy sources. In short, agrarianism *is* an environmental philosophy in its emphasis on the role that ecosystem processes play in reinforcing the formation of norms, habits and farming

practice. In the case of ancient Greece, it is the mountainous terrain, the soil quality and the climate that create a biophysical context ideally suited to the household-scale farming systems of the Greek city-states. Not only do the valleys create micro-environments suited to the combination of grain crops, tree and vine crops and livestock, the mountains frustrate attempts to create extensive plantation style farming systems or irrigation works that would be managed by a central elite. The patterns of daily farming practice create a natural system of punishment and reward. They incline everyone in the household to industriousness and organization and make farming into a focal practice. In Xenophon's words:

> I think that just because she conceals nothing from our knowledge and understanding, the land is the surest tester of good and bad men. For the slothful cannot plead ignorance, as in other arts: land, as all men know, responds to good treatment. Husbandry is the clear accuser of the recreant soul, (Xenophon, p. 515).

So according to agrarian views, farming allows us to recognize virtue, and as such gives us a visible indicator for good moral character. It relies on the environment itself to determine what counts as virtue and vice. Classical agrarian philosophies are mistrustful of success when it is not achieved through the reinforcing rewards and punishments of a farm ecosystem (Thompson 2008).

As I have argued elsewhere, this pattern of thought has been influential in American politics. Thomas Jefferson, 3rd President of the United States is known as an advocate of agrarianism, even while the premises of his philosophy are often misunderstood. Jefferson wanted to build the new republic on the foundations of agriculture, rather than manufacturing. He believed that a manufacturing economy would produce a citizenry obsessed with the expectation that job creation was someone else's responsibility, at the same time that they resented the imposition of taxes needed to deliver essential social services. Neither wage laborers nor manufacturers (e.g. capitalists) would shoulder the burdens of state-building willingly. When times were bad, they would take their capital or their labor elsewhere. Farmers, on the other hand, saw their labor and their property interests as integrally tied to the land itself. Land could not be relocated in times of trouble. The farmer could be relied upon for military service and the duties of citizenship because their quotidian world—their *habitus*—was inextricably tied to their land, in both a local and a national sense (Thompson 2014).

Jefferson expressed this vision through the Louisiana Purchase and the Lewis and Clarke Expedition that was commissioned to explore this addition to the United States' national territory. After Jefferson, it was Abraham Lincoln who did the most to embed agrarian political values into American political culture. The Homestead Act of 1862 encouraged agricultural settlement of Western lands. Also in 1862, the Morrill Act established Federal funding for universities dedicated to the improvement of agriculture. Finally, Lincoln worked with Congress to establish the U.S. Department of Agriculture (USDA) in the same year. Lincoln considered the USDA to be "the people's department," and saw encouragement of agriculture as the surest route to what Emerson would call "self-reliance," (Thompson 2010). These were all ways in which "the environment" was seen as a crucial force for

shaping the national personality. Still later, the Theodore Roosevelt administration undertook the emblematic policies to *protect* natural environments precisely because they were seen as crucial for the formation of an independent and self-reliant personality, (Thompson 2009).

1.4 The Neglect of Agrarian Thought in Western Environmental Philosophy

Yet agrarian philosophy has been largely absent from the lexicon of recent environmental philosophy. There are many possible explanations for this, and I will mention only a few in the present context. First, people in Western industrial society have become far removed from farming. Agrarian ideals are understandable in cultures where perhaps 30–80% of the population have direct experience with farming or some form of household food and fiber production, but societies in the industrial West now have as little as 1% of their total population employed in farming. Citizens in industrial societies are several generations removed from the farm and may truly be said to lack knowledge of where food comes from. They in no manner resemble the Socrates of Xenophon's *Oeconomicus*, to whom the passage quoted above was addressed. Although Socrates was not a farmer, Xenophon's text takes pains to show that nevertheless he possesses much of the abstract knowledge needed to succeed at farming. But to a Western urbanite, it is absurd to suggest that someone who fails at farming "cannot plead ignorance", or that "all know" how the land responds to good treatment. Agrarian texts and ideas simply do not resonate with the experience of the average person from a Western industrial democracy.

Contemporary economics, philosophy and sociology in the West continue to be significantly influenced by models of human nature that were advanced in the era of the European Enlightenment. These models emphasize the person as a unified, rational decision maker who is actively entertaining possible courses of action in light of their possible consequences. This model suggests that ethics may consist in fully appreciating the costs and benefits associated with each of several options, and in selecting the option that has the most attractive or ethically justifiable outcome. In the utilitarian tradition, the ethically justifiable choice is the one that achieves an optimal trade-off of benefit and harm, once impacts for all affected parties have been taken into account. For deontologists or contractarians, ethics involves the search for decision rules that more effectively treat others with respect, that achieve impartiality or embody some standard of fairness (Thompson 2008). Students of Western philosophy know that specification of these general approaches requires considerable detail, but in the present context, what is significant is the way that all of them presuppose a conception of the moral agent as decision maker who weighs options in light of key values. The approach leads one to see other human beings as valuable, and ethics consists in proper recognition of that value in the act of choice, however value is further specified and defined.

Attempts to extend these ethical theories to environmental issues have led to the search for a conception of value that accords proper recognition of non-human animals, or other living beings and of ecosystems as conglomerations of organisms and even inorganic processes working in systematic ways. In contrast, agrarian philosophy tends to frame key ethical claims in terms of moral character and the formation of virtues and vices. Emphasis is laid on the way that practices are reinforced and become institutionalized through repetition and through the integrated conditioning the biophysical environment and the farming system. These practices create meaning and sociability, but they may or may not be the focus of deliberative decision making in which a subject explicitly considers multiple options in light of their expected value. Thus within Western philosophy and science there are intellectual biases that have worked against a number of virtue and practice-based traditions in ethical thought, and agrarian philosophies may be some of the most prominent examples to have suffered from this neglect.

1.5 Agrarianism and the Cultivation of an Inter-cultural Context for Environmental Thought

Fascination with industrial processes has also been noted in development studies, where there may be widely shared tendencies to denigrate rural personalities and livelihoods. What is more, agrarian ideals have often been associated with forms of political conservatism, including the preservation of ethnic, racial and gender stereotypes. When this is the case, suspicion of agrarian claims is fully justified. I should be clear that my purpose is NOT to argue that agrarian philosophies could or should be preserved or that one could simply adopt an unreconstructed set of agrarian views as an adequate environmental ethic for the modern age, (Thompson 2012). My point is that these views do contain important sources of insight into the way that human cultures relate to their biophysical environment, and that they have clearly had the ability to regulate and guide human utilization of and interaction with ecosystem processes in the past.

Given the breadth of appeal that a carefully specified form of agrarianism might have, we may speculate that agrarian ideals could serve as a more authentic and congenial articulation of the way that some individuals, groups and cultures understand and articulate environmental imperatives. If this is the case, democratic engagement demands that these people are given the opportunity to express an environmental ethic in terms and concepts that give voice to their actual feelings and opinions. If agrarian philosophies quite different from the viewpoints that I have associated with contemporary environmental philosophers in North America do in fact continue to resonate with ordinary people, people who are not schooled in the languages of economic analysis or Western philosophical ethics, then there are prima facie reasons to engage these viewpoints respectfully. We are obligated to listen and to try and understand these perspectives in the language and concepts in

which they are being articulated. If my speculation is correct, these concepts and ways of self-understanding may not translate easily into the language of benefits and costs, on the one hand, or of intrinsic value and rights, on the other.

Finally, I do think that the ethics of virtue, the emphasis on place and the attention to habit and practices that characterize of agrarian philosophy has an important role to play in our collective thinking on the environment. As I argue at more length in my book *The Agrarian Vision*, agrarian ideals provide a way to understand and orient ourselves to our place within the natural world. They offer an understanding keyed to our work and to our engagement with nature, rather than one which suggests that nature must be set aside and protected from human activity. But at the same time, agrarians have never thought of nature solely in terms of "natural resources" that are simply there for human exploitation. Agrarian ideals have emphasized humility and obedience to nature, at the same time that have seen human society as fully embedded and interactive within it.

Contributors to this volume who bring the East Asian perspective to environmental ethics have chosen to embrace an agrarian approach from different perspectives and in different ways. As I have indicated too briefly above, if agrarian philosophy *is* to become a participant in our ongoing dialogs on global environmental ethics, it will require substantial development, amplification, critique and revision. What has been offered here is the merest of beginnings. In that spirit, let us open the conversation and see where it leads.

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Chapter 2
Agrarian Tradition and Chinese Culture: An Interpretive Overview

Chun-chieh Huang

Abstract This article discusses the relationships between agrarian tradition and Chinese culture. Economic life, social structure, political monarchy and cultural developement in traditional China had been based upon and permeated by the time-honored agrarian tradition. Farming had determined the way of life and political monism in pre-modern days. However, it is too farfetched to say that the so-called "Oriental Despotism" was established on the control and operation of the hydraulic system in Chinese history. In traditional China, the basis of imperial rule was deeply imbeded in agrarian patterns of life. For example, the death sentence in imperial China was carried out only in fall when harsh autemn winds arrives. Another aspect that exhibited the deep influence of agrarian tradition upon Chinese culture lies in the realm of thinking. Traditional Chinese thinkers, being baptized in the spirit of correlative mode of thinking, stressed an intimate relationship between the natural order and human order. The running theme of Chinese philosophy was homo-cosmic continuum. This philosophical theme had been deeply permeated by the agarian life experience. In sum, the agrarian tradition and the Confucian thought constituted the two sides of the coin of Chinese civilization.

Keywords Agriculture · Homo-cosmic continuum · Subsistence economy · "Orental Despotism"

2.1 Introduction

Based on intensive and repeated cultivation and market economy (Hsu 1980, 109–138) the agrarian tradition was the foundation of the development of Chinese culture for several thousand years. Prior to the twentieth century, it was the farming village, not the metropolis that was the foundation of the society and economy of

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traditional Chinese culture. The farming village not only provided the resources for Chinese traditional life, it also molded the traditional Chinese character. To be a farmer and intelligentsia at once remained a traditional Chinese ideal. Chinese history featured a continuum between village and city; agricultural products penetrated the network of market economy as they were delivered to the city. Countryside scholars from the farming villages who passed the civil-service examination would become high officials in the city. In old age, they would return to their hometowns in the countryside to be local gentry and carry on as pillars of village life. Modern European history witnessed rapid urbanization and the concomitant rise of opposed interests of industrial labor vs. farm labor of city and village, respectively; however, such phenomena seldom appeared in Chinese history (Murphey 1954; Mote 1970). The Western powers came to East Asia at the end of the nineteenth century, resulting in the break up the traditional continuum between the farming village, which was the root of the society and economy of traditional Chinese culture. Rising metropolises (like Shanghai) exalted and exhibited the ways of Western capitalism and drove development in China for the last hundred and 50 years (Murphy 1974). Traditional Chinese economic life, social hierarchy, political and intellectual development were all fertilized, penetrated and impacted by the agrarian tradition. Agrarian culture was also intimately related to the conservative nature of traditional Chinese authoritarian rule.

The cycle of agrarian life, typified in the saying, “in spring plow, in summer cultivate, in autumn harvest, in winter store” determined the basic form of traditional Chinese economic life. The *Book of Odes* describes scenes of rural people toiling arduously to plow and cultivate the soil over 2000 years ago. During the annual cycle of rural life, spring was the most toilsome season. It was the season for plowing and planting, when the farm girls would pick mulberry leaves (to feed the silkworms). After nearly a year of arduous labor, only in the cool autumn month of September would the harvest season begin. After the farmers had completed all of the harvest matters, the farm maidens would have to go out to gather dried grass and straw to bind and weave and store until needed. Indeed, all of the household affairs would be handled in the off season while the farm families waited to commence the spring planting. This sort of life style was conducted in step with nature’s cycle of the change of the seasons, and gave rise to and nurtured the traditional Chinese farmers’ dedication to diligence, frugality, chastity and toil.

2.2 Special Characteristics of Traditional Chinese Farming Society and Politics

China’s agrarian tradition carved out the distinctive features of traditional Chinese society. Pre-modern Chinese society was built on familial relationships. The basic unit of the agricultural economy was the household of owner-cultivators. All of the agrarian activities – an annual process of raising and transplanting seedlings, hoeing

weeds and getting rid of insects, and gathering and storing the harvest – were extraordinarily toilsome. The practical need of this kind of economic life was a key factor which determined why the traditional Chinese regarded family relationships as so important. In the context of these large families (clans), the significance of each additional person in the clan was that he or she would contribute some additional labor. Therefore, it was considered that having more sons and grandchildren would ensure the prosperity and well-being of the family. This metaphor of an endless string of sons and grandchildren had important social significance. Besides treating the large, extended family as important, traditional Chinese society's life attitude of resting contented on one's native soil and being unwilling to move was even more directly related to the agrarian background. One of the major differences between the agrarian tillers of the central plains and nomadic herders was the contrast between the farming village life and the wandering nomadic life. The traditional Chinese people were earth-bound. They deeply cherished their bit of earth. They deeply believed that, "If he has land, he will have wealth. And if he has wealth, he will have its use" (c. *Great Learning*, Chapter 10). They were full of affection for the "good earth." They regarded the prospect of turning their back on their land and leaving their hometowns as ranking among life's great tragedies. Hence, during Chinese New Year, if they were sojourning in a faraway land, Chinese people would still raise their index finger and point to the bright moon in the sky and speak of their sadness at being so far from home.

Together in separation
We weep as we face
The Omnipresent moon
On this night our thoughts synchronize
Our hearts unite in our hometown
Despite our distance, miles apart!

The spirit of "*Rendao"* (Noble humane way) in Chinese traditional politics and the traditional policy of upholding agriculture while depressing commerce both were inseparably related to China's agrarian tradition. The operations of dynastic imperial rule invariably had to bear in mind the crucial agricultural life pattern based on the cycle of "in spring plant, in summer cultivate, in autumn harvest, in winter store up." For example, the execution of criminals could not be carried out during the spring, the season when the myriad things were coming to life. The severe and solemn death sentences be carried out only when the harsh autumn winds arrive; hence the death sentence was called "the autumn verdict." Next, starting from the establishment of the Han dynasty in the late third century BCE, China's dynastic courts always adopted the policy of upholding agriculture while repressing commerce. Every spring, during the season of planting, the emperor would symbolically plow the soil to signify recognition of the crucial importance of agriculture. Towards merchants, who tended to hoard goods for speculation and play tricks to increase the value of their wealth, the courts adopted strict measures. For example, merchants were banned from "donning fine silk clothes and riding carriages." Furthermore, the sons of merchants could not participate in the official imperial examination. While these measures were counterproductive during the period of

industrial-commercial development, they were indicative of the deep and abiding relationship between traditional Chinese politics and the agrarian tradition.

The Chinese political tradition was always characterized by "political monism," (Treagold 1973, xxii) with the emperor as the ultimate source of authority. This sort of political tradition could be regarded as the political manifestation of the monistic landlordism of premodern China's agrarian society.

2.3 Traditional Chinese Farmers' Sentiments and Reverence for Nature

In traditional Chinese thought, the mainstream trend lay in seeking to synchronize the human order with the natural order: this was the quest to achieve the status of homo-cosmic continuum. Although traditional Chinese thinkers may have diverged in their specific teachings, all of them shored on idea in common: the conduct of human activities into harmony with the cycles of nature. Chinese people tended to be filled with a deep sentiment for nature, a profound sense of reverence. In the spiritual world of the Chinese people, one does not find any characters like Johann Wolfgang von Goethe's (1749–1832) tragic hero Faust who seeks to unveil the secrets and harness the powers of nature. Rather, Xunzi (fl.298–238 BCE) wrote that man need not worry about the depths or extents of nature but just to harness the powers of nature needed for human life, such as for irrigation, navigation, architecture, etc. The Chinese tradition offered very few examples of people who sought to conquer nature; an example is the ancient myth of Kua Fu who tried to catch up with the sun.

This sort of thinking that sought homo-cosmic continuum was concretely based on the old agricultural economy. From the dawn of history, Chinese people arose at sunrise to work in the fields and returned home at sunset to rest. Steadily grasping their hoe, they would face life in the wide nature. They deeply believed that, "Heaven above possesses the virtues beneficial to life," "Heaven would never cut off the path of human beings." Hence, they thought that people should never do things contrary to Heaven. They also believed that despotic rule which did not incorporate the *Rendao* (Noble humane way) would arouse the ire and rage of Heaven and Man and encounter Heaven's condemnation. The Chinese people's sentiments and reverence for nature led them to build "Happy Rain Pavilions" and Locust Spirit Temple to pray for blessings from the azure spirits on high. According to statistics compiled by a historical geographer, during the 518-year period from 1373 to 1891, there were locust disasters 72 times in China, which on average occurred every 7.2 years. During the Ming dynasty (1368–1644), there was a locust disaster every 6.3 years. On one occasion, the locust disaster was so severe that it flared throughout the Yellow River basin, in cluding Hebei, Shandong and Henan provinces. However,

the good Chinese farmers erected many large Locust Spirit Temples to beseech the locusts not to return to devour their crops and livelihoods (Chen 1982, 23–58, esp. 50–58). One might think that this massive proliferation of the Locust Spirit Temples reflected the foolish superstitions of the farm people, but couldn't we rather say that the temples reflected the farm people's deep respect for the forces of nature?

Above, we noted the relationship between the agrarian tradition and Chinese culture in terms of economy, society, politics and thought. We can venture further to say that Chinese culture was deeply fertilized by the agrarian tradition. At root, Chinese culture is a deeply agrarian-based culture. This culture was erected upon the agrarian economic system of intensive cultivation and market economy and the agrarian society based on familial relationships. Moreover, the political decisions and the intellectual ideal of homo-cosmic continuum were all intimately related to the agrarian tradition. This sort of "agriculture-based culture" arose together in step with the Chinese Confucian tradition to become the two main pillars of traditional Chinese culture.

2.4 Agrarian Culture and Persistent Autocracy in Chinese History

Now, we are in a position to consider whether agrarian culture was or was not a key factor in the formation and persistence of centralized autocracy in Chinese history. Many scholars support this thesis; some even consider that the centralized autocracy founded upon agrarian culture became the gatekeeper which controlled and probably stymied industrial and commercial activity in traditional China. However, answering this question would require a profound inquiry into the historical records and archaeological sites.

1. The so-called "Oriental Despostism"

   The leading contemporary scholar to argue that agrarian civilization created China's despotic imperial system was the American Sinologist, Karl A. Wittfogel (1896–1988). In his book, *Oriental Despotism: A Comparative Study of Total Power*, Wittfogel emphasized that the foundation of authority in dynastic imperial China was established on their control and operation of the hydraulic system. On this basis, he claimed that Oriental Society was Hydraulic Society (Wittfogel 1957; Eisenstadt 1957–58). He further claimed that Oriental despotism was established on management and control of agricultural hydrology and, importantly, irrigation. Wittfogel's claims were highly influential among American Sinologists; for example, the renowned sociologist S. N. Eisenstadt (1923–2010) made the claim that control of the waterways was a crucial factor in the struggles for power among the feudal lords in antiquity. Maintenance, repair and defense

of the canals were important responsibilities of the central government. Indeed, they were symbolic of the quality and effectiveness of the government organization itself (Eisenstadt, 1969, 36). This sort of claim invites at least two basic questions: (1) What was the significance of the irrigation system in Chinese history? (2) In Chinese history, were rivers under the control of the central government? Let us discuss question number one first. Eisenstadt was not convinced by Wittfogel's account of Oriental despotism; still, he accepted Wittfogel's contention that hydrology was a crucial factor in Chinese history.

2. Critique of Wittfogel's Account of Oriental Despotism.
   Is the notion of Oriental despotism defensible? On what grounds could it be established? Scholars point out that the rise of Chinese agriculture was not closely related to the Yellow River basin. The earliest neolithic culture arose in the Yellow Loess Plateau in the southeast. Slightly later, a Neolithic pottery culture appeared in the Yellow Loess Plain along the Yangzi River and the Huai River. Since the plain is elevated, it was impervious to flooding. Moreover, Chinese agricultural irrigation appeared relatively late. In classical Chinese documents, the earliest records of irrigation and repair of waterways can be traced back to the early-to-mid sixth century B.C.E. (Ho 1969, 1975, 1976). Advocates of the view that the agrarian tradition was the foundation of Oriental despotism tend to maintain that central imperial authority exercised direct control over irrigation and waterway matters. This claim surely goes beyond the testimony of the data. At the beginning of the Former Han dynasty (B.C.E. 206-8 C.E.), local governments actively controlled waterway management activities. In the Tang dynasty (618–907) as well, most hydrology and irrigation engineering was in the hands of local government officials (Twitchett 1960). From the Song dynasty (960–1279), all of the civil engineering involved in hydrology, waterways, irrigation, etc., always depended on the leadership, financial backing and labor supply of local gentry (Yang 1969). This was especially true in the Qing dynasty (1644–1912) (Chang 1967). Moreover, that the people living on the north China who were influenced by the Yellow River only numbered about one fifth of the empire's population, (Perkins, 1969, 172). Consequently, the importance of waterway and river management to Chinese farmers was not nearly as important as Wittfogel and Eisenstadt imagined. For this reason, in Chinese history, we often witness the suppression of powerful enemies from the north, northwest and northeast, as well as control of the canals for shipping between south and north, which meant that China had to maintain a strong, vigorous central authority; we still also could say that China's agrarian tradition also followed in step with cycles of nature, with the lifestyle of and also supported a patrimonial, patrilocal and patriarchal rural society, which possibly contributed to the development of despotic Chinese autocracy. However, I would maintain that the evidential support is very weak for the claim that the agrarian tradition was responsible for the rise of Chinese dynastic autocracy.

2.5 Were Chinese Farmers Typically Conservative in Character?

Were Chinese farmers conservatives who "heeded Heaven to follow their destiny" because their small scale farm economy offered little incentive to innovate and be enterprising?

1. Subsistence Economy

   Just like farmers in other parts of the world, traditional Chinese farmers tended to be conservative in personality. They seldom had the incentive to innovate and be enterprising like we are accustomed to seeing in industrial-commercial society. Engaging in their farm life, Chinese farmers sought to make their livelihood. At sunrise they would go out to toil in the fields and at sunset they would return home to rest; they thus tended to be highly resistant to change. They remained glued to the soil and did not move about. Although their life was toilsome, they tended to face life's trials and travails with utmost patience and tenacity.

   The conservative personality of traditional Chinese farmers was determined mostly by the patterns of traditional Chinese agricultural economy and rural society. Moreover, we could describe traditional Chinese agricultural economy as a sort of subsistence economy. Given the great pressure of large population and small-scale farm production, the life of the peasants was extremely arduous. Even though they toiled for hours behind the plow, they still might not earn enough to get a warm dumpling to eat. Throughout Chinese history, for the farmers who lived on the border of starvation, getting enough for survival was their highest calculation. All of their economic activity was aimed at maintaining security of livelihood and reducing risks. Conditioned by this sort of agricultural economy, Chinese farmers took mutual support as the cardinal principle of human relationships. This conservative personality profile was characteristic not only of Chinese farmers but also farmers of Southeast Asia, (Scott 1976).
2. Static Rural Society

   Next, the static traditional Chinese rural society also contributed to the farmers' conservative personality. Chinese rural society was shaped and formed out of familial relationships. The land in rural China was not entirely open for sale and purchase. For example, before anyone could sell family land to outsiders, they had to get the approval of kinsmen (Fei and Chang 1948, 176). The traditional famers were deeply earthbound and rural China become a very static society. Living in the very static society of rural China, it was natural that the farmers' personality was conservative in nature.
3. Rational Choice in Agricultural Economic Activity

   However, we should not exaggerate the extent of the conservative character of the Chinese farmers. Indeed, as economists point out, ever since the Warring States period (463–222 B.E.C.), China has had market economy, division of labor and commercial exchange of goods. This was not only simply a feature of

social economy but was also promoted by imperial policy. In traditional China, every farmer or household was a basic unit which could independently make economic decisions. In traditional Chinese history, many economic activities exhibit fully independent personal choices (Zhao 1992, 2–3). Although the Chinese farmers who operated under this sort of market economy could decide what crops to grow and what farming methods to apply, they always were constrained by the relative conditions of human population and available tillable acreage. However, basically, they still were able to exercise a measure of rational choice in their operations. They could try the paths of obtaining superior seed, improving cultivation technology, adjusting production methods, etc., to break through the limitations imposed by human population and available land to earn the greatest income. Ever since the first farmers plowed virgin land, endeavored to irrigate rice paddies, and worked to apply fertilizers to boost the productivity of their land, the Chinese farmers were nothing like the stereotypic conservative image people tend to hold of them. In the researches on the farmers' economic activity conducted by political scientists, it was found that the most important determinant in the farmers' activities was consideration of personal benefit. On this basis, they concluded that the farmers' decisions could be studied under "rational-choice" theory (Popkin 1979). In Chinese history, although the community style life of the Chinese farmers was quite different from the free personal choices exercised by farmers today, still when they conducted their economic activities, they always exercised rational choice.

4. Three Characteristics of the Role of Farmers
   To summarize, when we discuss the personality of Chinese farmers, we must consider the role played by farmers in Chinese history. Scholars who researched farming villages in northern China in the twentieth century pointed out that the Chinese small-scale farmers had three basic characteristics: they were profit-seekers, they produced to maintain their standard of living, and they were exploited tillers, (Huang 1985, 6). In fact, the Chinese small-scale farmers maintained these three characteristics under different conditions throughout history. The Chinese farmers calculated that in order to maintain their standard of living, they had to seek profit; and yet because they were in the weak or unfavorable position and were easy to be exploitated, they had to engage in farming with the utmost deliberation and caution to be able to earn enough to have warm dumplings to eat.

2.6 Conclusion

In the nineteenth century before the Western powers encroached on China, the Chinese farmers still navigated relatively still waters of historical time. Chinese civilization was a sort of agrarian civilization. The sort of agriculture conducted in traditional China was almost what we might call "horticulture." In pre-modern

China, while the image of the farming village was filled with a pastoral ambiance, the farmers had to undertake arduous fieldwork plowing and cultivating. Still, their whole life through, they felt profound humility and gratitude to nature. The Chinese people were deeply earth-bound. They derived significance of life from their engagement in farming in the same manner that, in the words of Max Weber (1864–1920), Abraham had done for European farmers: by engaging in farming, they realized their China values of life.

The premodern Chinese farming village was a peaceful, quiet, pastoral world. Yet, it was also a patrilocal, patrimonial, patriarchal society. In rural China, the "Dominant Kinship Relationship" was the father-son relationship; it was not the husband-wife relationship that dominates Western society (Hsu 1971). Although traditional Chinese farming society, which was based on patriarchal authority, was closely related to the formation and development of autocracy in Chinese history, we still cannot maintain that autocracy manifested in Chinese history was established on the basis of controlling the management of hydrology and waterway.

Lastly, ever since the first millennium before Christ, after the "axial breakthrogh" in Chinese civilization, imperial China exhibited a basic change in the structure of person-to-person relationships – but there was little change in the underlying person-Nature relationship between man and nature, as the long-standing Chinese agrarian tradition continued to be the concrete foundation for China's philosophic position of Homo-cosmic Continuum. After entering the third millennium, the question of how to catalyze a vital creative transformation of China's time-honored agrarian tradition stands as our greatest challenge.

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Chapter 3
The Agricultural Ethics of Ninomiya Sontoku

Tomosaburo Yamauchi

Abstract The environmental thoughts and practices of Ninomiya Sontoku 二宮尊徳 (1787–1856) or Kinjiro 金次郎 are based on the pre-modern, ecological world view that is characteristic of pre-industrial Japanese society; it consisted mainly of Shintoism mixed with Japanese Confucianism and Buddhism. The main virtues he practiced and recommended for people were diligent labor, frugality, and concession in agriculture and economics, in order to increase natural produce by "assisting the transforming and nourishing process of Heaven and Earth" (贊天地之化育, 大學). He not only saved devastated farms, but also saved people from mental collapse by helping them to be independent financially and morally. Sontoku's achievements testified to his belief that Confucian moral politics (仁政) rather than modern Western power-politics and self-interested economics, can make people happy and restore nature at the same time. In post-war, modernized and industrialized Japan he was neglected and his school of thought was almost forgotten. However, recently his thoughts and practices have been revived, and looked under fresh light of global environmental crisis.

Keywords Social welfare ethics · Environmental ethics · World view · Eco-holistic level · *Hotoku-kyo* · *Nen-giri* · *Bun-do*

> Heaven gave the virtue of production and reproduction to earth, which was generated owing to heaven's virtue. Parents nourish their children without thinking of gain and loss, and take pleasure in seeing them grow up, while children so nourished are loyally attached to parents. Husband and wife, enjoying each other, bring forth offspring to succeed them. Farmers work hard, taking delight in making plants grow and flourish, while grasses and trees, too, thrive joyfully. In all these cases, all parties have, without any grievances against each other, only the feeling of joy. (Ninomiya Sontoku, 1970, 42).[1]

[1]The numbers following "*Talks*" in the parenthesis are sentence numbers of *Night Talks of Nimomiya*.

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3.1 Introduction

Ninomiya Sontoku (二宮尊徳, 1787–1856), the renowned farmer-sage, lived during a time when people were fortunate enough to enjoy a highly sophisticated and nature-oriented culture, without the presence of environmental degradation. It was also a time, however, when devastation of agricultural villages had culminated in mass starvation. Famines owing to crop failures were ruining entire villages, particularly in the northwest and central agrarian districts of low productivity where Sontoku lived. In 1783, out of a total population of 30,000,000, 500,000 people died from famine owing to the devastation of many rice and vegetable farms. This picture somewhat anticipates, if enlarged on a global scale, today's environmental crisis and increasing world hunger. However, most people who live in affluent countries might not consider today's ecological crisis or famine relevant to their lives.

The Fukushima nuclear accident of 2011 changed the lives of many people. This incident forced many individuals to begin to see that their lives were going in the opposite direction of Sontoku's original way of life. While Sontoku saved many villages and people, and worked to enrich the natural environment, the Japanese government of today has made the lives of many people increasingly miserable by destroying numerous cities and villages, thereby degrading the national environment. The government has also forcibly closed numerous nuclear plants, with only two plants still currently operating among the original 51 plants. While most Japanese people maintain their faith in the official policy of promoting industrialization, agriculture falls ever further into decay in Japan. Currently, most foods are imported with only 40% of all food products being domestically supplied by Japan. If one looks squarely at today's global environmental crisis and searches for a way out of the crisis, one cannot help but reflect back on Japan's old traditional society when the natural environment was not only preserved but often enriched, thereby nourishing the larger population on these rather small islands. (For this reason, Western environmental thinkers today, having criticized Western modernization, are starting to reflect on traditional Eastern environmental thinking.)

3.2 Three Worldviews

The following schema set up by Ralph Metzner shows the contrast between the industrial age and the emerging ecological age (Metzner 1994, 170):

	Industrial age	Ecological age
Scientific paradigm:	Mechanistic view	Organismic view
Epistemology:	Logical positivism	Critical realism
Role of human:	Conquest of nature	Symbiosis
Values in relation to nature:	Instrumental	Intrinsic
Relation to land:	Land use	Land ethic

(continued)

	Industrial age	Ecological age
Human/social values:	Patriarchy	Partnership
Theology/religion:	Transcendent divinity	Nature as sacred
Education/research:	Specialized discipline	Unified worldview
Political systems:	Nation-state sovereignty	Transnational federations
Economic system:	Multinational corporation	Community-based economies
Technology:	Exploitation/consumerism	Restore ecosystem
Agriculture:	Factory farms, agribusiness	Poly and permaculture

Metzner writes, "A growing chorus of voices is pointing out that the fundamental roots of the environmental disaster lie in the attitudes, values, perceptions and basic worldviews that we humans of industrial-technological global society have come to hold. The worldview and associated attitudes and values of the industrial age have permitted and driven us to pursue exploitative, destructive, and wasteful applications of technology," (Metzner 1994, 163).

One can find a model of the ecological age in Edo-era (1603–1867) Japan. During this era, the natural environment was not only well preserved but it was enriched. The above-mentioned schema looks as if one were juxtaposing contemporary and traditional Japan, which corresponds so well with the evolving Japanese experience of, and attitude toward, the environment. However, there is a gap between the emerging ecological age and the traditional Edo-era of Japan. While traditional Japanese thinking on the environment was actually lived and practiced, the emerging ecological ideals characterized by Metzner have not as of yet been realized. It would be difficult to accept these ideals for a majority of people because they are much too different from the current popular and prevailing worldview. In contemporary social ethics in Japan, most people would consider the unfettered pursuit of human interest (e.g. the prosperity of society itself) as a good thing. By contrast, environmentalists and environmental thinkers consider it better to promote environmental wellness given that the industrial society has not only degraded the natural environment but has shown that the industrial society is not sustainable. Therefore, contemporary ethicists tend to be separated into two camps: those who believe in the traditional social ethics that pursue the social happiness (or human interests), and those who are concerned with the well-being of the natural environment (or natural welfare). If the former were to pursue human interest at the risk of neglecting natural welfare, then in the long term they could not help but fail to increase and even possibly destroy human interest by creating an unsustainable society. If environmentalists were to pursue natural welfare alone, and to neglect human interest, however, they would become so-called eco-fascists. This situation results in a moral dilemma, or conflict of sorts, between the values of "human interest" and "natural welfare," since one cannot pursue both at the same time. This sort of moral dilemma has not yet been resolved in today's environmental ethics, hence, contemporary approaches to ethics are separated into two camps: (1) the traditional social welfare-ethics, such as Richard Mervyn Hare (1919–2002), and others, and (2) the emerging environmental ethics based on the ecological worldview, such as Arne Naess (1912–

2009), J. Baird Callicott, and others. As long as the two camps do not converge, there can be no soft landing from an industrial society into an ecological world.

The worldview of the Edo-era Japanese thinkers is a bit different from the emerging worldview expressed in Metzner's chart. The environmentally enriched society in the Edo-era continued for close to three centuries until Western modernization was introduced into Japan during the Meiji Restoration in the last half of the nineteenth century. By looking back at the Japanese traditional way of thinking, which combines Shintoism, Confucianism, and Japanese Buddhism, it is clear that there was no moral conflict or dilemma like the above-mentioned one at that time. Possibly, this was due to the division of levels in their moral thinking, even if they did not express it clearly. There were no sharp lines that divided the social and environmental ethics, nor were there clear distinctions between intrinsic and instrumental values. If only the levels of moral thinking could be distinguished, thinkers with different views from different traditions would be able to agree at some level, while disagreeing on another level. Such a way of thinking can be documented in Sontoku's practice and thinking, which is explained below.

Three world- views are currently present:

1. The worldview of the industrial age,
2. The emerging ecological worldview, and
3. The traditional Neo-Confucianism of Edo-era Japan.

Before delving into this problem, the founding fathers of Japanese Neo-Confucianism Kaibara Ekken (貝原益軒, 1630–1714) and Ogyū Sorai (荻生徂徠, 1666–1728), whose influence on Sontoku was immense, should be briefly introduced.

3.3 Two Forerunners of Sontoku: Kaibara Ekken and Ogyū Sorai

Kaibara Ekken's organismic view of nature is introduced as follows:

> Heaven and earth give birth to and nourish all things, but the deep compassion with which they treat human beings is different from (the way they nourish) birds and beasts, trees and plants. Therefore, among all things only humans are the children of the universe. Thus, human beings have heaven as their father and earth as their mother, and receive their great kindness. Because of this, to always serve heaven and earth is the human way. In what way should we serve heaven and earth? Humans have a heart of heaven and earth, namely, the heart of compassion, which gives birth to and nurtures all things. This heart is called humaneness (仁, Ch.: "*ren*," Jpn.: "*jin*"), humaneness is the original nature implanted by heaven in the human heart. (Tucker 1989, 136)

This citation, taken from Kaibara Ekken, is from the author's book, *Yamato Zokkun* (大和俗訓, *Precepts for Daily Life in Japan*). It suggests that "heaven and earth are the great parents, [whereas] our parents are a small heaven and earth." This

parallelism between macro and micro-cosmos is arguably Ekken's favorite theme, and appears again and again in his main writings.[2]

Sontoku was by no means a deeply learned scholar; rather, he was an autodidact-practitioner. Thus we can only guess, interpret, and reconstruct his various writings using an integrated systematic moral theory as collected by his followers. He was well read and possessed a deep understanding of the traditional Confucian classics, which he liked to corroborate by his own experience of operating farms and households. Intellectually, Sontoku was most influenced by the Neo-Confucianism of Ekken. In addition, another Confucian scholar who greatly influenced Sontoku was Ogyū Sorai.

Ogyū Sorai's basic attitude was that of agnosticism, meaning that he argued that no one could really know about cosmos or heaven, that the only thing human beings could do was to worship heaven, which was not a transcendent personal God, but rather a symbol of nature (i.e. "Heaven-Earth-Nature"). This view reflected the Shintoist nature-worship religion. Sorai argued that the way (i.e. human morality) is not the way of heaven-earth-nature (i.e. not heaven-given morality), but rather was created by ancient sages for the purpose of the general happiness of the people (安民).

In order to clarify his thought, it would be convenient to separate Sorai's thought into three facets of moral thinking as follows:

1. The environmental philosophy based on the organismic view of nature, which could be called "the eco-holist level."
2. The social ethics that aims at the general happiness of people that is very similar to the British utilitarianism, which could be called "the humanist level."
3. The teachings, or general moral principles, of various virtues that were created for the purpose of general happiness, which could be located at "the institutional and instructional level."

In these three facets of moral thinking, one finds three levels of the Confucian key word *ren* in play, (Yamauchi 2014). The three levels of *ren* are explained as follows: (1). *Ren* is the virtue of heaven's virtue of production and reproduction (天地生生之德), (Shimada 1967, 45; 49; 51). Here *ren* is understood as a heavenly virtue in comparison to a human virtue. That *ren* is usually rendered as "humanity" or "humanness," meaning that the translation is misleading since humanity does not cover the heavenly virtue of *ren*. (2). *Ren* corresponds with utilitarian "impartial benevolence" as it is translated into Japanese "*jin-ai*" (仁愛). Sorai said that *ren* is what embodies the sage king's way of peace and contentment for all who reside under heaven, (Sorai 1974, 17). He also emphasized that *ren* is a generic virtue that is above all virtues and consistently governs them, (Sorai 1974, 54). This theme coincides well with "the increase of the general happiness" of utilitarianism. (This is perhaps the reason why the Japanese Confucian philosophers introduced English utilitarianism into Japan when they first introduced the modern philosophy and

[2]The original source of this idea is in the Chinese Neo-Confucian essay entitled *The Western Inscription* 西銘 by Chang Tsai 張載 (1020–1077), a Chinese Neo-Confucian and one of the forerunners of Chu Hsi 朱熹 (1130–1200).

began to accept the Western modernist way of thinking.) (3). *Ren* is a generic name for all virtues. Sorai believed that the five relationships and divisions of social classes were not the natural way, but rather the way created by the sage kings to contain the relationship ethics *of loyalty, filial piety, and other virtues (of which, in a narrow sense, ren* is a part), (Sorai 1974, *Measures on Great Peace*," p. 467, "*Tomonsho*," pp. 351f. and "*Bendō*," pp. 13f).

Another similarity between Sorai's ethics and Western utilitarianism is the indirect appliance of the utility principle (of general happiness). In Hare's two-level utilitarianism, simple general principles for everyday practical usage—called intuitive or prima facie principles—are derived from the utility principle. Thus, practical rules, political and legal institutions, and other kinds of systems were chosen and justified based on the criterion of contributing to the increase of people's interest (i.e. the general happiness). General moral precepts, or principles, such as "honesty" and "kindness" were considered as being created for the purpose of the maximization of people's interests. In this regard, people do not need to constantly think critically about the course of action that would lead to general happiness. Rather, they need only to obey the accepted, simple, and general principles—the general principles that would make society better and help people to possess an upright character. This rough sketch of the division of the fundamental utility principle and secondary intuitive principles should be sufficient for our purpose of comparing two utilitarian views: Western philosophers' and Sorai's.

When Japanese philosophers began delving into modern philosophy, they accepted mainly British utilitarianism. The Japanese version of Mill's *On Liberty* was enthusiastically read, indicating that Neo-Confucian thinking had similarities with the utilitarianism; that is, Neo-Confucian social ethics coincided well with utilitarianism at the above mentioned *humanist level* of moral thinking. Both moralities pursued the increase of people's general happiness in society. Thus began the Japanese modern philosophers' trial of combining the Western and traditional Japanese Confucianism. Nishi Amane (西周, 1829–1897), Nakamura Keiu (中村敬宇, 1832–1891), and Katō Hiroyuki (加藤弘之, 1836–1916) were originally Confucian teachers. Having accepted Western philosophies, Nishi, Nakamura, and Katō combined these philosophies with traditional Japanese Confucianism, and started eclectic modern Japanese philosophy. Katō, a founder and president of Tokyo University, published a book entitled *The Rights of the Stronger.* This book was later translated and published in German. He developed a new theory of human rights on the basis of an organismic view of nature, criticizing, like Professor Tu Wei-ming in many influential writings, the enlightenment thinkers and praising much of Sontoku's Confucian view, declaring that Sontoku's philosophy was superior to such philosophies as Thomas Hobbes' (1588–1679) and Ogyū Sorai's, (Hiroyouki 1990, 168f).

3.4 Sontoku's Method of *Bun-do*

Sontoku stands among the Japanese Neo-Confucians. He called his teachings *hôtoku-kyo* (報徳教), where *hotoku* means repayment for heaven's virtue. Heaven is often expressed as heaven-earth-nature (天地自然). Heaven's virtues include the virtue of nature, ancestors, and society. The so-called Japanese love of nature (自然愛) stemmed from their primordial nature-warship (自然崇拝) religion of Shintoism (神道), which developed into a form of nature-service (自然奉仕). Hence, this was the origin of Sontoku's theme of "assist in the transforming and nourishing process of heaven and earth (贊天地之化育, 中庸)." In this context, Sontoku's *hotoku* can be regarded as a kind of nature-service through farming.

Sontoku declared that *heaven's way* and *the human way* are different, and that there is no good and evil in heaven's way; thus good and evil exist only for those humans who create it. (Cf. Ninomiya 1970, (2)[3] Therefore, humans play a decisive factor in anything that is profitable for human existence and society, and determine that anything that is harmful for humans must be evil. Heaven's way is quite different from the human way; and if we leave farming to heaven's way, all land will become wilderness. Consequently, human beings must take care of rice in order for it to grow and for it to do so, eliminate any weeds. Additionally, human beings must also protect their farms from wild pigs and deer. (Cf. Ninomiya 1970, 2) Sontoku also said that when the fruit trees bring abundant harvest, this will surely result in a poor harvest the following year. This is called "*nen-giri*" (年切, yearly limitation). In order to avoid this extreme change in the yearly harvest, the farmer should trim the branches off, pick up buds, and fertilize in order to achieve constant annual crop harvests. (Cf. Ninomiya 1970, 153).

> Therefore, the human way," Sontuku explained, " consists of restraining desires and feelings, and making effort after effort. Humans want to have, by nature, delicious meals and beautiful clothes. The human way (i.e., human morality) involves refraining from such desires due to the limits of one's income. It is the same with material ease and luxury. One should refrain from alcohol, ban delicious meals, and beautiful clothing, and instead be diligent, frugal, and concede, from one's own income, money to other people and to one's own future. (Ninomiya 1970, 4)

He called his method "*bun-do*" (分度). Sontuku's method of financial accounting consists of delegating the average of 10 years income, one fourth of which one must concede for one's own future and for society. In this way, one must live on the remaining three fourths of one's average income. He applied this method to his farming, as well as some samurai families and domains (i.e. a feudal territory of his lord). He strictly opposed debt, alleging that debt and deserted land are the disease of the country. He lent money without interest to people who would work. His success not only made him famous but also helped to increase his followers.

[3] "Heaven's Way 天道," "Heaven's-principle 天理," and "Heaven-Principle-Nature 天理自然," are used here.

Such were Sontoku's teachings of social morality. He recommended the three virtues of "diligence" (勤), "frugality" (儉), and "concession" (讓) and asserted that their opposites are "laziness" (怠), "luxury" (奢), and "deprivation" (奪). For example, imagine a baseball team whose manager practices Sontoku's *hotoku* teaching (like K. Matsusita who founded the world famous electric company following *hotoku* teachings). Imagine that this team wins every time due to their hard training, cooperation, teamwork (e.g. players not taking credit individually), and effective managing. After the team clenches the championship, they become relaxed, feel proud of themselves, become arrogant, lazy, and addicted to luxury, thus causing the team to weaken and making it difficult to restore the glory of the olden days.

Similarly, in case of households, Sontoku said that when parents become rich by hard work, sons tend to become lazy and addicted to luxury. Then, the next generation, now poor and depressed, will change its attitude and begin to work hard and be frugal. In contemporary Japan, the law of inheritance has been switched from the old system under which the eldest son (or son-in-law) inherited and took care of other members of family into a new system under which sons and daughters inherit the property equally; this system along with the decay of agriculture has broken up the traditional family-centred human relational ethics; and society has become more individualistic, more self-interested than ever. Confucian relationship ethics (親義別序信) is disappearing and society is turning from community (as it is termed by Tönnies: "*Gemeinshaft*") toward self-interested society ("*Gesellshaft*"). Hence, in the case of a state, if people remain diligent, frugal, and concessive, then certainly the state will become rich and prosperous. However, if after people become rich, they tend to become lazy, addicted to luxury and depraved; then, the state will decline and become poor, similar to contemporary Japan after the initial growth of the economy in the 1960s–1980s.

Sontoku's three virtues were, as we saw, applicable effectively to a person, a family, a state, a local economy, and also a whole state. It may be said that these virtues were not applicable in cases where people were competing. For example, individuals cannot concede to their rivals; rather, they must, in cases of games and artificial institutions, compete with one another. Similarly, when states are economically competing with one another, an increase in concessions may lead to a loss of the game. When we consider the global competition of economy, if the competition becomes cutthroat beyond the due degree, it will destroy the global economy. If one imagines two worlds where people in one world follow the *hotoku* teaching, and people of another world are lazy, addicted to luxury, and depraved, which would represent the better world in which to live?

It is true that when a country is both economically and politically powerful and competitive, its people tend to be happier—however, this is only if allocation is fair. But, when powerful capitalist countries start to compete in international power politics, they not only cause the global economy to become unstable, but also deepen the gulf between the rich and the poor, and heighten the global environmental crisis, (Iwao 2012). It is here that one can find the fatal defects of capitalism itself.

Sontoku's *hotoku*-teaching contributed, contrary to today's capitalism, by making the economy stable, reducing the difference between the rich and poor, and

enriching the natural environment. Thus, it is arguable that one way that could serve to save the Japanese economy from today's impasse would be by following Sontoku's *hotoku* teachings.

Hotoku-ism could, following Sorai's ethics, be further divided into three levels beginning with the basis of the organismic view of nature, which is further referred to as the "eco-holist level." *Hotoku* (報徳) means repayment for heaven's virtue, as well as service for heaven through farming which enriches nature. Hence, Sontoku's *hotoku*-ism should be located on the eco-holist level.

The second level is where humans are separated from the natural environment and what is to be considered relies solely on human interest, which I called "the separated or humanist level." Sontoku's method *bun-do,* whose aim lies in "ruling the country and making the people happy" (治國安民); can be happily located at the humanist level. If the final goal of our human morality is to make people feel content and happy, then such various moralities converge at the humanist level, as Sontoku's *hotoku*-ism, Confucian ethics of *ren*, Buddhist ethics of *maitra* (慈悲), and traditional Japanese Shintoism.

Sontoku's three virtues of "diligence," "frugality," and "concession," which originated from the method of *bun-do,* can be located on the third "institution and teachings level." If all virtues, customary moralities, religious teachings, laws, and rules could be considered as being created for the purpose of the general happiness of people (according to the two-level utilitarianism of Hare and Singer), then one can locate these precepts and teachings on the third "institutional and teachings level."

When we converge on the humanist level, even if we diverge in other respects, we can *agree* (on the humanist level) to *disagree* (on the institutional level).

3.5 Is There Any Way to Integrate Industry and Agriculture?

> Good and bad luck, happiness and unhappiness, pain and pleasure, anxiety and joy are all relative to each other because while it is the greatest pleasure for a cat to catch a rat, the ending is usually most painful for the rat. Similarly, the greatest pleasure for a snake is the greatest pain for a frog, and the greatest joy for a hawk is the greatest pain for a sparrow; the pleasure for a fisherman is nothing but a pain for fish. Such is the way the world is. (Ninomiya 1970, 41)

> The argument about good and evil is so difficult that if one argues about the basic fact, there is neither good nor evil. If one traces the origin, there is no good and evil. Because one separates the good from the origin, the evil will appear. The good and evil is the human way that humans think out. Hence, there would be no good and evil, if there were no humans. There are humans, so there is good and evil. Therefore, humans consider it good to develop the wilderness and evil to damage farms. Yet, for wild pigs and deer, development means evil and the devastation of the farms is good. The law will forbid theft as evil, while for thieves theft must be good and those who prevent it must be evil. Therefore, it is hardly clear what is good and what is evil. (Ninomiya 1970, 26)

Viewing these words, Sontoku only saw the relativity of moral judgments and failed to offer a solution to this dilemma. There must be, at a certain level of moral thinking at which moral judgments are so relative; yet, it is not the case because Sontoku believed in a common good and evil. It is true that there is no common criterion of good and evil between rat and cat, snake and frog, hawk and sparrow; yet, this occurs because humans bring human criteria of good and evil into cases where they are not appropriate. In human society, when it is peaceful and people are contented, individuals are able to accept the common criterion of good and evil according to the common social norms, values, customs, and laws. Within such a society, their values and moral judgments could not be said to be just relative. However, when we think of the natural environment separately from human social values and moral judgments, then these values and judgments could not be applied to nature; and there may occur a sort of moral dilemma between human and natural values; that is, when human society thrives neglecting the natural welfare, nature will deteriorate and when people endeavor to recover nature, people cannot achieve it without any cost to society.

In order to avoid such a dilemma, one can shift the arena of argument towards the eco-holist level. In his cosmological schema, Sontoku expresses the whole world through a circle, and says, "all things fuse into one in a circle" (一円融合). To Sontoku, the circle seems to represent the cosmos in which everything is involved and implicated; outside of it nothing exists. His circles include, mystically, many things within them. For instance, in one circle Sontoku includes heaven and earth, however, in another circle he includes all four seasons. Similarly, another circle represents the rich and poor, while yet another circle refers to natural things and human affairs at the same time, and so on. Thus, his cosmic circles mean that our world and cosmos are limited, and all existence within it has a limit.

One cannot imagine there being no world (where nothing exists), however, we can imagine that all existence, natural world and human society alike, wishes that the world exists. It is a common good for the human society and natural world that both continue to exist. Here, then, is a common criterion for both humans and nature. It is good for both humans and nature that both survive.

For Sontoku and the Neo-Confucians of the Edo-era, heaven-earth-nature was an organism that bore everything; that is, the cosmos was their father and mother, and everything lived in a land community (if I borrow the land ethic terms of Aldo Leopold [1887–1948]). Then, what was urgent and most important for them was the prosperity of the land community and the sustainable society. In this eco-holist (or eco-humanist) level, there is neither anthropocentrism nor eco-centrism; accordingly, no moral dilemma occurs, since humans and nature are one. (The *ren* of making everything as one body was the favorite theme of Wang Yang-ming 王陽明 [1472–1529].) There is one thing that is separated from the totality of humans and nature even at this level; that is, the human as *a moral agent*. As humans who serve as moral agents, we make the world (as *a moral patient*) better or worse. It is human beings who degrade the natural environment and cause the crisis; yet, it is also humans who can restore the environment. (If we can do nothing about changing the

world, then, originally, the moral question as to how we are to restore the environment would not have arisen.)

There is, on the other hand, a different level from this eco-holist one. It is the level at which humans and nature are separated thus allowing humans to pursue human interests and natural welfare separately; hence, the moral dilemma will occur between human interest and natural welfare. It was once believed that it was acceptable for nuclear plants to make people happier at the cost of degrading the natural environment; for industrial society was believed to be better than agricultural society.

Such beliefs have made it easy to accept the degradation of the natural environment, which has ultimately resulted in the dying of nature today. Granted, it is possible for humans to restore nature, what ultimately must be done is that limits to industrialization must be enforced and sustainable agriculture must be carried out. To dominate and use nature for human purposes is only *partly* permissible; if humans were to conquer the *whole* globe and misuse the *whole* of nature, there would be no future for human beings any more. Yet, to switch from the industrial age to the ecological age is not a practicable ideal, but only a utopian ideal because we cannot live without industry. Naturally, the next problem to be faced is how to mix up industry and sustainable agriculture and how to put limits on industrialization (i.e., how much, by what standard, and to what degree)?

3.6 How Are We to Solve the Moral Dilemma?

It is impossible to turn back our course of industrialization; however, we still may consider whether destruction of the natural environment can be ameliorated, since we do live in a mixed society of industry with agriculture. We cannot choose agricultural society as preferable to industry, because we cannot live without industry any more. Therefore, our ethical choice cannot help us to choose between the purely industrial and the purely agricultural society. Thus, our choice must be between a mixed society (of agriculture with industry), or an alternatively mixed society. In the case of the people who lived during the Edo-society era, they could choose to live in a better mixed society living within a closed country. However, this is no longer an option for us in today's society; we cannot freely choose, because industry and agriculture are fully involved in the global interdependent international relations. Suppose we lived in a closed society like the Edo-society, our choice would be between a mixed society and an alternative mixed society. Then, the criterion of the choice would be the wellness of mixture; that is, the quality of the mixture as seen from the viewpoint of the welfare of the whole of humanity and of nature. Here, we are shifting the level of moral thinking from a separated level (of humanist ethics) onto an eco-holist level.

We humans were originally born from heaven-earth-nature (so it was considered in the organismic age and ours). Humans and nature are so interrelated, interdependent, and interpenetrating that both could be separated not in this level, but only in

the humanist level. When we see the matter from this organismic viewpoint, we see everything as a part of the limited whole—the whole family, the whole society, the whole state, and the whole cosmos. The world we live in includes within it "the human interest" and "the natural welfare." At the same time, both must be well balanced; when the balance decays, the world will be degraded. When human interests and natural welfare are thus seen from the organismic viewpoint, both are mixed and fused into a whole. It is here that we can remember Sontoku's world where "all things are fused into one in a closed circle."

> The world (天下, all-under-Heaven) has its own 'shared limit' (分限, limitedness as part), all district, all villages, and all families have their own 'shared limit'. This is a 'natural part given by heaven' (天分, heaven-given-part). To decide the degree of outgoings is to be defined by *bun-do* (分度). Today, in a degenerate age, all people pursue luxuries and people who keep *bun-do* are only a few. Yet, if people do not keep *bun-do,* they will become financially deficient, even if they dominate a large country. If they do not know *bun-do*, that makes the matter worse; they will not be able to remedy the deficiency, even if they dominate the whole world, because luxury does not know limits while the heaven-given-part is limited. The state is to *bun-do* what a house is to a founding stone. Like a house can be built on the basis of foundation stones, the state can be managed on the basis of *bun-do*. If only people preserve *bun-do* in awe, the fund will increase from day to day, which will again enrich the state and make people happy and peace. (Ninomiya 1970, 4)

In Sontoku 4 worldview the whole (whole family, whole area, whole state, and whole cosmos) comes first and the various parts, second. The whole is always prior to its part.

We saw that our approach to ethics is separated from both camps of the traditional social welfare-ethics similar to that of Hare, Singer, and others, as well as newly emerging environmental ethics based on the ecological worldviews of Naess, Callicott, and others. According to Professor Peter Singer's animal liberationism, human beings (including sentient beings) possess intrinsic value, while non-sentient beings possess only instrumental value. Although this is true on the humanist level where humans are separated from nature, it is not the case with the eco-holist level where humans and nature are fused into one within a limited circle as with Sontoku. In order for humanity to be viable, it must be founded on a sound environment. Therefore, humanity cannot be separated from the natural environment; however, it may be separated on the humanist level. In this sense, humans cannot help being symbiotic with nature. Human interests that are increased beyond the due degree (i.e. *bun-do*) could be defined as anthropocentrism, while human interests that share a fair degree, as well as have a balanced relationship with natural welfare is to be called humanism. Thus, humanity is destined to be symbiotic with nature.

Today, humankind is being threatened by an ecological crisis; the feeling of crisis was exacerbated after the 3/11 nuclear accident of Fukushima; it is as if we were clinging to a huge sinking ship much like the people aboard the Titanic. In order to save the earth, some sort of earth-first ethic is necessary. People today are sharply divided by political and economic systems, various religions, and ideologies, yet the environmental crisis must be shared by all mankind since people cannot survive without a sound environment. Thus, to save the earth from crisis, there must be a common supreme morality for humankind, let alone for all living beings on the

world. Traditional Confucianism, Sontoku's *hotoku*-ism, and today's utilitarian ethics share the common aim that humanity should survive. Whichever viewpoint or worldview we hold, humanism is our common faith. Therefore, there is a possibility here that human beings as a species can be integrated. If people converge on this point, there is hope for the restoration of nature.

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Chapter 4
Andō Shōeki's Agrarian Utopianism: An East Asian Philosophical Contextualization

John A. Tucker

Abstract This essay explores the thought of Andō Shōeki vis-à-vis interpretive fields broader than those of Japanese intellectual traditions by contextualizing Shōeki's ideas in relation to several ancient Chinese works pertinent to in-depth understandings of the theoretical foundations of his thought. These texts help illuminate why Shōeki's writings achieved such cultural broadcast as they did in his day and thereafter. These works reveal that many of the more memorable themes in Shōeki's writings resonated with larger East Asian patterns of thought, making Shōeki not simply an important Japanese thinker but one of considerable standing in East Asian philosophical history.

Keywords Andō Shōeki · Analects · Zhuangzi · Mozi · Mencius · Daoist primitivism · Xu Xing · Shizen shin'eidō · E. H. Norman · Maruyama Masao · Yasunaga Toshinobu · Jacques Joly · Robber Zhi · A. C. Graham

4.1 Introduction

Andō Shōeki 安藤昌益 (1703–1762) is among the most enigmatic philosophers of Tokugawa (1600–1868) Japan. Relatively little is known about his life. His thought had scant following during his day and then for nearly two centuries thereafter it was virtually unknown. Since being "discovered" in the early-twentieth century Shōeki's writings have gained increasing attention, but interpreters typically contextualize his ideas in light of their own times rather than with sensitivity for their historical and philosophical origins. Shōeki's denunciation of virtually every major tradition of thinking in East Asian history—Confucianism, Buddhism, Daoism, military strategy, and Shintō—has left many clueless regarding whence, exactly, Shōeki's ideas came and where precisely they sought to lead. What Shōeki generally advocates, "direct tilling of the soil" (*chokkō* 直耕), precluded most opportunities

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for popularization within in the marketplace of mid-Tokugawa Japan wherein samurai, merchants, and chōnin (townspeople) were prime consumers of new ideas. Moreover Shōeki's contempt for those—whether rulers, emperors, philosophers, religious teachers, merchants, or artisans—who consumed without plowing fields, planting seeds, and cultivating food won him few friends among potential well-heeled patrons. His distrust of writing, which he deemed a tool of oppression, coupled with his subversive attempts to establish new written forms, have been admired by some, but just as often considered unnecessarily esoteric and profoundly removed from ordinary understandings.

Yet more than any idiosyncratic or inherently obscure aspect of his thought, Shōeki remains an enigma largely due to the interpretive parameters brought to bear on his thinking, especially by Western scholars. Rather egregiously, Shōeki's interpreters seem to assume that Japanese contexts are sufficient for fathoming his philosophy. When that approach yields few insights, the conclusion has been that Shōeki was an eccentric thinker, and at worst, an inscrutable paradox quickly to be put aside. We are reminded how few followers Shōeki had, implying that unpopular thinkers can be safely disregarded upon death. In the West, even after Shōeki's discovery, his thought has been bracketed out if not forgotten, by appeal to the insignificance, perhaps even irrelevance of his ideas, regardless of how interesting, amusing, or provocative. This tendency has been compounded by the reluctance of Western intellectual and philosophical historians of Japan to think beyond old categories—the Zhu Xi School, the Wang Yangming School, Ancient Learning, Kokugaku, Mito, plus a few random idiosyncratics (Shōeki might be found here)—that have bound conceptualizations of Tokugawa thought to replay mode throughout the twentieth century. Shōeki never fit nicely into the established niches, making him an anomaly if not a nobody.

Among Japanese scholars and intellectuals, however, this has hardly been the case: nearly one hundred book-length studies of Shōeki's thought have appeared, reflecting a fascination with his provocative if historically marginal ideas. In part Shōeki's rejection of Confucianism and all "isms" has appealed in postwar Japan more than ever, largely due to the postwar reaction against all forms of thought, all "isms" (*shugi* 主義), that contributed to the pro-imperial, pro-military ideologies of the 1930s and early 1940s. Equally fascinating is Shōeki's readiness to theorize with fables, including birds, beasts, fish and insects, conversing about the world and all its problems. As the excesses of modernity—pollution, noise, and nuclear catastrophe for the sake of ever gaudy materialism—prompt strong countercurrents, Shōeki's rejection of Tokugawa "early-modernity" seems all the more prescient.

This essay sketches Shōeki's ideas historically in relation to an interpretive field grander than that of national traditions of thought. In particular the essay contextualizes Shōeki's thinking within East Asian philosophical traditions, suggesting that three ancient Chinese philosophical texts are exceptionally pertinent for understanding what might be the theoretical foundations of Shōeki's ideas. These texts also shed light on why Shōeki's thought achieved some cultural broadcast, greater or lesser, in his day and thereafter. The three texts, fairly well known among intellectuals throughout Japanese history, include a Daoist classic, the *Zhuangzi*

莊子 (J: *Sōshi*), especially its Yangist and Primitivists chapters; the masterwork of the Mohist tradition, the *Mozi* 墨子 (J: *Bokushi*); and an important Confucian text, the *Mencius* 孟子 (C: *Mengzi* J: *Mōshi*).

The essay shows that some of the more conspicuous and brilliantly outrageous components of Shōeki's philosophy such as his scathing critique of rulers as thieves and more generally, those who don't till the fields or produce by their own labors the essentials of daily life and sustenance as, again, thieves, are comprehensible as early-modern Japanese reverberations of basic Yangist and Primitivists positions expounded in selected chapters of the *Zhuangzi* and the *Mozi*, and then reviewed critically in the *Mencius*. The essay claims that despite Shōeki's indictments of Zhuangzi the thinker for various shortcomings, Shōeki's thinking on political, social, and socio-economic issues, and most especially his primitive agrarianism, resonate conspicuously with—if they do not derive largely from, similar statements in the *Zhuangzi*. Considered in this light, as much as anything Shōeki might be understood as a mid-Tokugawa advocate of Daoist primitivism. To an extent, Shōeki also echoes ideas in the *Mozi*, especially that work's utilitarian disuse for specialized, expensive cultural expressions such as rituals, ceremonies, and music. Mozi's distaste for rites and music reflected his rejection of things that consumed resources of the realm without providing for the best interests of the population at large. In Shōeki, an analogous line of culturally Spartan thinking is voiced. Given that Mozi was among the few Chinese philosophers to reject rites and music on utilitarian grounds, Shōeki's ties to Mohist perspectives are not likely coincidental.

Shōeki's thought received relatively little attention in Tokugawa Japan (Watanabe 2012, 199)[1] partly because many Tokugawa intellectuals surely realized that Mencius had earlier considered the ideas of an agrarian-utopian, Xu Xing 許行 (C.372-C.289 BCE), and rebutted them solidly. Curiously, Shōeki does not attempt to counter Mencius by arguing that direct involvement in production of food and a host of goods for daily life is wholly feasible; instead he emphasizes over and again the natural authenticity of food production and the criminality of consuming produce without cultivating it. Although naïve, Shōeki's arguments convey a visceral power that logic, reason, and practicality, regardless of how realistic and compelling intellectually, remain challenged to match.

4.2 Shōeki's Life and the Legacy of His Interpreters

Much of Shōeki's life remains a mystery. He was born in 1703 in the village of Niida 二井田 (now Akita 秋田 prefecture), in the northeastern part of Honshū 本州. The second son of a farming family, Shōeki studied Buddhist teachings as a youth. He later traveled to Kyoto for much the same reason, only to develop doubts about

[1] In his survey chapter on Shōeki, Watanabe notes that a Kyoto publisher, Ogawa Genbei, published Shōeki's *Shizen shin'eidō* in 1753 and that a "later printing, with minor variations exists, so it would appear that the work met with a certain degree of response at the time."

the religion. He then turned to the study of Chinese medicine and Chinese learning generally, including Confucianism. Along the way he married and began a family. By the 1740s he was practicing medicine in Hachinohe 八戸, in Mutsu 陸奥 (now Aomori prefecture), in northeastern Japan not far from Niida. While in Hachinohe, he developed some radical philosophical ideas that were eventually recorded and preserved by his disciples. Around 1760, at age 60, Shōeki returned to Niida where he passed away in 1762.

His masterwork, *The Authentic Activities of the Way of the Five Processes and Unitary Generative Force Advancing and Retreating* (*Shizen shin'eidō* 自然真營道), published in 1753, never achieved wide circulation or even much notice, critical or otherwise, during the Tokugawa period. Some of Shōeki's disciples preserved the 101-kan manuscript and so it remained extant well into the modern period. By 1899, a copy had ended up in an old bookstore where Kanō Kōkichi 狩野亨吉 (1865–1942), then a graduate student at Tokyo Imperial University, bought it. Kanō recognized the text as significant but with the increasing conservatism of the late-Meiji, he was apparently not eager to initiate a major study of Shōeki's thought. After all, Shōeki's text casts all rulers as "stealing from the way" (*tōdō* 盜道), and philosophers of all stripes—Confucian, Buddhist, and Daoist—as big thieves as well. Shōeki reserved high and virtually exclusive praise for "direct tilling of the soil" (*chokkō* 直耕). While his advocacy of farming might have appealed to some, his omnibus denunciation of rulers as robbers could have easily been deemed treasonous given the Meiji constitution's characterization of the emperor as sacred and inviolable (天皇ハ神聖ニシテ侵スヘカラズ). Even during the supposedly more "liberal" Taishō 大正 (1912–1926) period, scholarship on Shōeki's ideas would not likely have been well-received by many other than agrarian-utopians, socialists, communists, nihilists, and anarchists.

However, Yoshino Sakuzō 吉野作造 (1878–1933), a professor of law at Tokyo Imperial University and advocate of *minponshugi* 民本主義, or the principle of the primacy of the people, was among the few admirers. In 1923, Yoshino helped Tōdai Library procure the manuscripts from Kanō. But soon after, disaster struck. With the exception of 15 volumes out on loan, Shōeki's manuscript was destroyed along with much of the Tōdai Library in the Great Kantō Earthquake of the same year. Kanō later found woodblock editions of the *Shizen shin'eidō* and Shōeki's *True Account of the Transmission of the Way* (*Tōdō shinden* 統道真傳) in other bookstores and bought them, (Yasunaga 1992, 2–3).[2] These texts were eventually included in the *Complete Works of Andō Shōeki* (*Andō Shōeki zenshū* 安藤昌益全集), a 21-volume compilation edited by the Andō Shōeki Research Society (Andō Shōeki kenkyūkai 安藤昌益研究會), but only published in modern editions appearing from 1982,[3] in the midst of the postwar, post-E. H. Norman boom in Japanese studies of Shōeki's thought.

[2] Naramoto Tatsuya 奈良本辰也, (1966–1967), early on provided a *kakikudashi*, or Japanese transcription of the *kanbun* (Sino-Japanese) text, into Japanese.

[3] Published by the Nōsangyoson bunka kyōkai 農山漁村文化協會.

Kanō also emerged as the first interpreter of Shōeki's ideas in the twentieth century. In an essay, "Andō Shōeki," published in 1928, Kanō praised Shōeki as a kind and gentle thinker, not a madman (*kyōjin* 狂人), who displayed a sense of love for his country and a desire for an ideal world free of struggle. Early in his essay Kanō characterizes Shōeki as a "pure pacificist" (*jitsu wa junsui naru heiwashugi no hito* 実は純粋なる平和主義の人), who never advocated violent struggle against the government, despite his criticisms of those in power. Kanō emphasizes instead how Shōeki hated violence. Kanō relates that Shōeki admired Zengzi 曾子 (505–436 BCE), one of Confucius' disciples, and the poet Tao Yuanming 陶淵明 (365–427), and suggests that Shōeki's choice of these two individuals reveals his mind of compassion (*aishin* 哀心). Kanō acknowledges Shōeki's criticisms of a host of thinkers including Confucius and the Buddha, but suggests that this reflects his love of his country (*aikokushin* 愛国心). Also Kanō hints that Shōeki would have equally criticized Western thinkers for much the same reasons that he did Confucius and the Buddha. Kanō adds that Shōeki's rejection of all forms of thought, including the written word, left him standing in the midst of intellectual nihilism (*shisō kyōmushugi*). But Kanō defends Shōeki by noting that it was his determination to immerse himself in *shizen* that led to his nihilism and likens Shōeki's perspective to that of scientists (*kagakusha* 科学者). Shōeki's intent was not to destroy or struggle but rather to assist in the betterment of the world (*kyūsei* 救世). Kanō adds that Shōeki's vision of the Japanese as an agrarian people (*minzokuteki nōhonsoshiki* 民族的農本組織) living cooperatively with one another sought to manifest a form of glory that perhaps transcended the much treasured samurai and bushidō cultural achievements distinctive, he claims, to Japan, and moreover would be admired internationally, (Kanō 1928).[4]

Early-Shōwa (1926–1989) studies of Shōeki such as that published by Kanō Kōkichi and another by Watanabe Daitō 渡辺大涛, emerged in an economic environment proximate to the Great Depression and amidst massive unemployment in Japan, not to mention early years of the communist experiment in the Soviet Union. Commenting on these studies, Miyake Masahiko claims that Kanō and Watanabe echoed post-WWI nationalistic rhetoric advocating imperial rule and the elimination of intermediaries that might block direct relations between the emperor and his nation. Within these contexts, economic and ideological, nationalist movements praising agrarianism (*nōhon shugi* 農本主義) and the importance of agrarian elements within the imperial polity found a significant following. Influenced by such thinking, Kanō and Watanabe perhaps read Shōeki variously, but each fashioned readings resonating distinctly with the circumstances of their day, (Watanabe 1930, quoted in Miyake 1971, 16–17).

E. H. Norman's lengthy essay, "Andō Shōeki and the Anatomy of Japanese Feudalism," published in the *Transactions of the Asiatic Society of Japan* in December 1949 introduced Shōeki to the Western world. Norman contextualized his interpretations vis-à-vis intellectual currents of the time, claiming that in

[4] The text referred to herein is a digital version Abe, 1958, published by Aozora bunko (http://www.aozora.gr.jp/), 2005, pp. 1–57.

Shōeki's ideas resided local foundations for democracy in postwar Japan. Although part of the postwar Occupation, Norman asserted that "democracy in Japan could not be realized by authoritative fiat from above and that sympathetic identifications with history were crucial" (Najita 2002, 64). In Shōeki, Norman found "impressive evidence" of "a philosophy vindicating resistance to unbridled authority and oppression" (Norman 1949, 1).[5] But Norman's essay on Shōeki received little positive attention in the 1950s, and even less in the 1960s. Western scholars "dismissed [Norman's study] as an exoteric exercise in intellectual history, the portrait of a rather queer and querulous man," (Dower 1975, 67–68). Western surveys of Japanese thought thus continued to omit mention of Shōeki.[6]

John Dower's *Origins of the Modern Japanese State: Selected Writings of E. H. Norman*, published in 1975, brought Norman and Shōeki into the limelight in the West. By that time, Norman's suicide in 1957, following McCarthy-era allegations that he was a Communist sympathizer, made Norman's 1949 study of Shōeki even more poignant.[7] Dower's introductory essay contextualized Norman's interpretations of Shōeki in relation to Norman's own pro-democratic thinking: Dower reported that Norman's collaborator, Ōkubo Genji, "confided […] that one of his [Norman's] objectives was to turn Japanese intellectuals away from their fixation upon the importation of American-style democracy and remind them that their own tradition provided a basis for populism, iconoclasm and 'liberalism.'" According to Dower, Norman "was very consistent in his philosophy of history: true progress toward freedom must develop from indigenous roots," (Dower 1975, 6–8). Ultimately, however, Dower's study more establishes Norman's place in Japanese intellectual history than it serves as a new exposition of Shōeki's thought.

The year before Dower's work was published, Maruyama Masao's 丸山真男 (1914–1996) *Studies in the Intellectual History of Tokugawa Japan* gave unprecedented attention to Shōeki as part of its quasi-Hegelian analyses of the supposed dissolution of the Zhu Xi mode of continuative mode of thinking. Maruyama's work had been published in Japan as a monograph in 1952 under the title, *Nihon seiji shisōshi kenkyū* 日本政治思想史研究 (literally, Studies of the History of Japanese Political Thought). The essays in the book had first appeared between 1940 and 1944 in *Kokka gakkai zasshi* 國家學會雜誌, well before Norman's study. The two

[5] Koyasu Nobukuni suggests that Norman wasn't simply interpreting Shōeki in light of his own times. He adds that Norman moreover misread Shōeki's texts in the process (Koyasu 2011, 124–125).

[6] For example, Ryūsaku Tsunoda, Wm. Theodore de Bary, and Donald Keene (eds.), *Sources of Japanese Tradition, Volume 1* (1957), includes no mention of Shōeki. The second edition of *Sources of Japanese Tradition, Volume 2: 1600–2000* pp. 416–424, does include a brief section on Shōeki, but curiously situates him in the chapter, "Eighteenth-Century Rationalism." More recently, Shōeki has received positive attention from other important scholars (see Najita 1993).

[7] A Soviet scholar, I.B. Radul-Zatulovskiĭ authored a Russian language study of Shōeki, *Ando Sëëki, filosof, materialist XVIII veka* (1961), interpreting Shōeki as a materialist philosopher. While Shōeki does emphasize a "unitary generative force" (*ikki* 一氣), Radul-Zatulovskiĭ's agenda is Marxist and so represents yet another reading of Shōeki that reflects the interpreter's agenda as much as the object of study.

men knew each other and their shared perspectives reflected a friendship that began in part as a result of their common interest in Shōeki (Maruyama 1974, 249–264). Maruyama surely deserves credit for integrating Shōeki into a comprehensive account of Tokugawa intellectual history, but like Norman he cast the Tokugawa period as feudal, and more egregiously, suggested that Zhu Xi's Neo-Confucian system of thought was somehow static and unchanging, except insofar as it was ultimately dissolved and undone in Japanese history by successive waves of opponents including Shōeki. As he later acknowledged, Maruyama's interpretive mistakes were many. Not a few could be explained, he hinted, as veiled expressions of his opposition to the dominant nationalistic ideology of the 1940s. That aside, since 1970, Japanese publications on Shōeki have appeared on a nearly annual basis, reflecting the more liberal intellectual climate of contemporary Japan and the textual and interpretive foundations provided by Kanō, Norman, and Maruyama – but most especially the seminal ideas that Shōeki himself set forth.

Alluding to the Japanese title of Norman's study of Shōeki as translated into Japanese, *Wasurareta shisōka* 忘られた思想家, Tetsuo Najita observes, however, that Shōeki remains "a forgotten thinker in Japanese history" (Najita 2002, 221). Despite Maruyama's contributions to incorporating Shōeki into the narrative of ideas, Western intellectual historians of early-modern Japan have simply not found an interpretive place for Shōeki, (Bellah 1957; Harootunian 1970, 1988; Najita 1987). Japanese scholars since the early 1980s, however, have been somewhat enamored with Shōeki. For example, Yasunaga Toshinobu 安永壽延 (1929–1995), one of Shōeki's innovative interpreters, describes him as,

> […] far from a "mutant" in the stream of the evolution of Japanese thought. He has been shown, rather, to be well within the tradition of Asian thought and the variation of that tradition which is Japanese thought. […] Ando Shoeki is testimony to the richness and variety of the intellectual history of Asia. Specifically, his philosophy is the product of the encounter of Buddhism and traditional Chinese medical theory; in a large sense, it was born from the vortex of a great variety of other streams of classical Asian thought, (Yasunaga 1992, 7–8).

Yasunaga adds that Shōeki is "no longer a 'forgotten thinker'; nor is he entirely unknowable or unknown (Yasunaga 1992, 7)."[8] Yasunaga's study is surely one of the grandest contributions to English-language Shōeki scholarship and valuably points to a new interpretive angle, that of Shōeki as a "ecological philosopher." Unfortunately, however, Yasunaga's lengthy introduction does not develop that line of thinking but instead is largely devoted to developing a narrative about Shōeki's life and thought, despite scant evidence available. Seeing Shōeki in terms of ecology is, however, another interpretation contextualizing the thinker in terms of

[8] Also see W. J. Boot on the question of whether Shōeki has been rightfully forgotten. In a review of Yasunaga's book, *Andō Shōeki*, Boot states, "What Shōeki wrote is impassioned, interesting, and sometimes fun to read, but not important, for the simple reason that Shōeki had few disciples, and never founded a school; in his last years he created some commotion in his native village, but that subsided after his death […]. And then he vanished from the scene, to make a reappearance in a second-hand bookshop only in 1899." (Boot 1995).

contemporary times rather than Shōeki's own thinking. Still, Yasunaga is not alone in this: other studies cast Shōeki in similar terms, (Nishimura 1992).

The last major work to appear in a Western language, Jacques Joly's *Le naturel selon Andō Shōeki: Un type de discours sur la nature et la spontanéité par un maître-confucéen de l'époque Tokugawa: Andō Shōeki (1703–1762)*, examines Shōeki's understanding of nature (*shizen* 自然), which Joly considers "the starting point and the completion of Shōeki's thought" (Joly 1996, 2). While Joly's book is exceptionally objective and scholarly, it too offers interpretations that occasionally reflect national interests: Joly's final chapter examines Shōeki and Jean-Jacques Rousseau (1712–1778).

Among the more pertinent and noteworthy Japanese studies is Minamoto Ryōen's 源了圓 examination of practical learning, *The Lineage of Practical Learning Thought* (*Jitsugaku shisō no keifu* 實學思想の系譜), which situates Shōeki's thinking within central currents of Japanese thought rather than treating it in relative isolation as a fascinating curiosity. Minamoto recognizes the multi-dimensional nature of Shōeki's learning: his rejection of so-called "feudal ideologies" (*hōkenteki ideorogii* 封建的イデオロギー); his denial of value judgments about above and below; his view of men and women as one body; and his interests in the Dutch. Most importantly, however, Minamoto offers a vision of Shōeki as a thinker whose often unique perspectives proposed practical approaches to the problems of his day, (Minamoto 1986, 121–132). Considered in that light, Shōeki appears not as an ivory tower intellectual so much as a concerned, reform-minded thinker who sought to transform his world through the power of his ideas and his example.[9]

4.3 Shōeki's Masterwork: The *Shizen shin'eid*ō

Earlier this paper translated *Shizen shin'eidō* 自然真營道 as *The Authentic Activities of the Way of the Five Processes and Unitary Generative Force Advancing and Retreating*, but did not explain why the title of Shōeki's masterwork should be understood in that way.[10] Simply put Shōeki, in his innovative title and throughout his writings, either redefined words with new written forms or attributed to established written forms entirely new nuances. While using written words in this way can be interpreted variously, one conceptual framework Shōeki well understood was

[9] Also see Watanabe Hiroshi, "Anti-Urban Utopianism: The Thought of Andō Shōeki" (2012). With his chapter on Shōeki as one of the important thinkers of the Tokugawa, Watanabe's study of Tokugawa and Meiji intellectual history adds credibility and momentum to the notion that Shōeki's thinking be included in any basic narrative of modern Japanese intellectual history.

[10] The English translation of Watanabe's *A History of Japanese Political Thought* offers a different translation, "The Way of the Operation of the Self-Acting Truth." Watanabe bases his translation on a reading of *shizen* as "self-acting, spontaneously doing" (2012, 199–201). The rendition offered herein follows Shōeki's fuller textual explanation recognizing *shizen* 自然 as *hitori suru* 自り然する, but then explaining *hitori suru* in terms of the five processes, advancing and retreating, and authenticity.

that of the *Analects* 13.3 on the crucial political significance of the rectification of terms (C: *zheng ming* 正名 J: *seimei*). By effecting what he construed as the right usage of language, Shōeki contributed, arguably, to the semantic foundations for right government of the realm. According to Confucius, without rectification or right use of language, egregious misuse of words and their meanings would result in disorder and anarchy. Shōeki never claims to be following Confucius in defining and redefining terms, but he clearly suggests that without some major overhaul of language and meaning as he proposes, the world would be in extreme disorder.[11] If language is reformed as he proposes, an age of peace, order, and authentic living truth might result. In this respect Shōeki's approach to language at the very least resonates with the thinking in the *Analects* 13.3.

Shōeki thus explains the meaning of the title, *Shizen shin'eidō*, in the opening lines of his text,

> The first character in the title (*shi* 自) refers to "five" (C: *wu* 五 J: *go*). The second character, (*zen* 然), refers to "processes" (C: *xing* 行 J: *gyō*). More correctly, read as a single compound, *shizen* is an honorific name for the "five processes" (*gogyō* 五行). What is here called "five" is not the numeral "five." More correctly "five" refers to the ceaseless processes of "advancing and retreating" (*shintai* 進退). "One," "three," "seven," and "nine" refer to the processes of advancing within the five processes of advancing and retreating. "Two," "four," "six," and "eight" refer to the processes of retreating within the five processes of advancing and retreating. Accordingly, "one," "two," "three," and "four," refer to the processes of advancing and retreating in the midst of advancing, while "six," "seven," "eight," and "nine" refer to the processes of advancing and retreating in the midst of retreating. "Ten" refers to what is not fully fathomed (*fusoku* 不測), to things that have names (C: *ming* 名 J: *mei*), but no form (*katachi nashi* 形無し). "Five" alone is in the midst of the numbers, standing as their master (*shu* 主). It alone never changes (轉ずること無し). Therefore, "five" is the [point of] truth and authenticity within things that change (*tenchū no shin nari* 轉中の真なり).
>
> Because "five" is truth and authenticity, it is never mixed, nor can it be departed from recklessly. Therefore it naturally advances and retreats well. Accordingly "five" is the central truth (*chūshin* 中真), and advancing and retreating are the "motions" (*kan* 感) of the truth. What moves is the cause of truth. Motion gives rise to generative force (C: *qi* 氣 J: *ki*). As generative force becomes full, advancing and retreating occurs. Accordingly there is no place that the fullness of generative force does not penetrate as it advances and retreats. This [pervasive activity of generative force] refers to the way (C: *dao* 道 J: *dō*). Therefore the way is the name of the unitary generative force (C: *yi qi* 一氣 J: *ikki*) advancing and retreating with the true and authentic spontaneous feelings of the five processes.
>
> For this reason, "true and authentic" (*shin* 真) and "the way" (*dō* 道) refer to the "five processes." In the morning the sun rises and in the evening, the moon descends. In the morning, people arise and in the evening they sleep, as the unitary generative force advances

[11] Watanabe does not interpret Shōeki's use of language in this way. Referring to Shōeki's philosophical writings, he states, "All of these works were rendered in an idiosyncratic variant of classical Chinese modified to correspond more closely to Japanese word order and grammatical usage, and copiously annotated to indicate intended readings. This was likely the result not only of a poor command of classical Chinese, but also of a conscious indifference to stylistic elegance." Watanabe, *Japanese Political Thought*, p. 199. Later, Watanabe does allow that Shōeki's writings were "full of neologisms and unusual expressions" because he "felt this was the only way to express truths long concealed from mankind" (2012, p. 201). This study shows, however, that Shōeki's claims were not entirely original.

> and retreats. With this in mind, the "true and authentic" of "five centered" does not refer to the [relative] truth that is part of what can be trusted and what is fake (信偽の信に非ず), but instead to the spontaneous truthing (*hitori shin ni shite* 自真にして) that is entirely "five" and entirely "centered" (*chū* 中).
>
> The word *zen* 然 refers to the self-doing (*hitori suru* 自り然る) of the five [processes]. Thus the five [processes] upon spontaneously-responding (*hitori kanjite* 自感じて) engage in active processes. For that reason when there is doing, there are active processes; when active processes occur, there is doing. Therefore, active processes engage in spontaneously doing (*gyō wa zen nari* 行は然なり). Because the five spontaneously act upon things and do things, the five processes consist of spontaneous self-doing (*gogyō wa hitori suru nari* 五行は自り然るなり). When the five processes spontaneously experience feelings, there is advancing and retreating and there is generative force. The advancing and retreating of unitary generative force is the work of truth (*shin no itonomi nari* 真の營みなり), (Shōeki 1977, 19–20).

Shōeki's masterwork thus defines a philosophical vocabulary that for all of its originality nevertheless recalls various iterations of Neo-Confucian metaphysics, especially those advanced by advocates of the centrality of generative force (C: *qi* 氣 J: *ki*) as opposed to principle (C: *li* 理 J: *ri*) – including two of Shōeki's noteworthy predecessors, Itō Jinsai 伊藤仁斎 and Kaibara Ekken 貝原益軒, as well as many other advocates of *ki*-centered metaphysics. *Shizen*, rather than referring to nature, rightly signifies the spontaneous activities of the five processes; *shin'ei* refers to the true and authentic activities which are the advancing and retreating of the unitary generative force; the way is the name of the unitary generative force (C: *yi qi* 一氣 J: *ikki*) advancing and retreating with the true and authentic spontaneous responsiveness of the five processes. Shōeki's title is thus translated here as *The Authentic Activities of the Way of the Five Processes and Unitary Generative Force Advancing and Retreating*.

Shoeki's rectification of terms is manifold. Another example occurs with the words "heaven and earth," typically written as *tenchi* 天地, but with Shōeki are often written as 轉定, though clearly with meanings analogous to the more standard understandings of those terms. Shōeki thus attempts to reinvent (or rectify) writing and philosophical meaning in an effort to bypass the oppressive nature of written words as traditionally received. According to Shōeki, written words (*moji* 文字) began with the trigrams of the *Book of Changes*, but remain simply the arbitrary personal fabrications (*shisaku* 私作) of those who wrote books as a means of elevating themselves and their teachings on those below them so that they could establish their own personal laws (*shihō* 私法). However in doing so, these individuals "did not till the soil" (*fukō* 不耕), but instead "ate greedily" (*donshoku* 貪食). For that very reason, Shōeki claims, they were "stealing from the way of heaven which is the way of honest, direct cultivation of the soil (*chokkō no tendō o nusumi* 直耕の轉道を盗み). Yet they cast such thievery and disorder (*tōran* 盗亂) as governing the world-below-heaven. The world of robbery and disorder was thereby established for eternity. Shōeki concludes that writing and learning (*moji gakumon* 文字學問) have served as utensils (*kigu* 器具) for robbing the way of heaven. Such people, Shōeki suggests, don't understand that the true way is rightly endowed by the hearth (*romen* 爐面). Shōeki therefore declares that those who employ the written word and book

learning (*moji shogaku* 文字書學) are "great enemies" (*taiteki* 大敵) of the true way (Shōeki 1971, 83–84).

Shōeki next explains why he uses writing to convey his thoughts, suggesting that in order to purge the errors of the authors of old texts that he too must use written words. Casting his work in a utopian light, Shōeki claims that by purging the roots of thievery and disorder in the words of old books he seeks to contribute to the realization of an eternal, limitless age wherein there are no thieves, no disorder and instead, only peace, tranquility, and living truth (*eiei mugen ni mutō muran anpei kasshin no yo* 永々無限に無盗無亂安平活真の世). In order to purge errors, Shōeki admits, he plans to use errors. After purging all errors, Shōeki adds, however, that his own writings will also be useless (*muyō* 無用). Shōeki adds that literary compositions (*bun* 文) are like bowls insofar as for people who have savored beverages that the bowls contain, the bowls then become useless. Similarly once people have comprehended their meanings (*i o eru* 意を得る), literary compositions become useless. They are of nothing more than temporary, provisional use (*kari ni mochiyuru* 假に用ゆる). Those fond of literary compositions are confused and deranged people who simply enjoy stealing from the way, (Shōeki 1971, 85–91).[12]

Shōeki's thoughts on language reform recall the *Analects* advocacy of rectifying language for the sake of laying the semantic foundations for a well-governed world, but his claims about the ultimate value of words equally resonate with the ideas in the Daoist classic, the *Zhuangzi*. In "External Things" (*Wai wu* 外物), the *Zhuangzi* explains,

> The fish trap (荃) exists because of the fish; once you've gotten the fish, you can forget the trap. The rabbit snare (蹄) exists because of the rabbit; once you've gotten the rabbit, you can forget the snare. Words (言) exist because of meaning (意); once you've gotten the meaning (得意), you can forget the words (忘言). Where can I find a man who has forgotten words so I can have a word with him? (Zhuangzi 1968, 302)[13]

The *Zhuangzi* allows that words are important: "Words are not just wind" (夫言非吹也) (p. 39). But they are no more important than the message they seek to communicate. Once their meaning has been gotten—and here Shōeki and Zhuangzi use virtually the same words (意を得る and 得意)—they can be forgotten. They are, to liken them to a Buddhist notion, comparable to *upaya*, or "expedient means." The latter are resorts that while perhaps false, nevertheless can lead to a positive, liberative result.

The *Zhuangzi* also questions the value of books purporting to convey the words of the sages, declaring that they can never fully capture what they seek to express.

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[12] According to Watanabe, in Shōeki's "'self-acting world' there are no written characters, no books, and no scholars." (Watanabe 2012, 209).

[13] While the parallels between Shōeki's thought and that of the *Zhuangzi* might seem obvious, Watanabe does not recognize it. Instead Watanabe seemingly accepts Shōeki's claim that his ideas were "as yet unknown and unspoken by the ancient sages, Shakyamuni, Laozi, Zhuangzi, doctors, sibyls, buddhas, wisemen, or scholars." Watanabe adds "His work did not derive from the teachings of any master, nor did he come to his knowledge from ancient books" (Watanabe 2012, 200).

For that reason, Zhuangzi suggests that although the world might value them (世雖貴之), he does not find them worth valuing (我猶不足貴也), (p. 152). The text even suggests that books recording the words of the sages include nothing more than "the dregs of the men of old" (古人之糟魄), (p. 272). Condemning doctrinal use of words, the *Zhuangzi* states that creating names for things as the Confucians and Mohists do is nothing but evil (*xiong* 凶 *kyō*). Ultimately, however, the *Zhuangzi* extols the use of "goblet words" (*zhi yan* 卮言 *shigen*), or words that are "no-words" (*wu yan* 無言 *mugen*), (p. 303–304). "Goblet words" are not used in Shōeki's writings because Shōeki has a definite sense of what is right and true as opposed to what is false and wrong. Goblet words, however, do not convey such a partisan perspective, but instead seek to harmonize, according to the *Zhuangzi*, all points of view in light of the heavenly equalizer (天均) (p. 41). a metaphor for the *dao*.

The *Analects* and *Zhuangzi* impacted Shōeki's thinking about language and its value or lack thereof, but in his concomitant readiness to denounce those who deceive others with language but don't cultivate the soil, Shōeki's agrarianism draws from thinking in the *Zhuangzi*, particularly its passages affirming Yangist-Primitivist philosophy. Shōeki charges that rulers throughout East Asian history, including the great sage rulers of Chinese antiquity—Yao, Shun, Yu, Kings Wen and Wu, the Duke of Zhou and a host of others—were simply thieving the way in setting themselves above others while consuming grain without engaging in agricultural work. This charge is one of the most frequently repeated in Shōeki's writings. Yet when asked whether making this claim amounted to "slandering the sages," Shōeki appealed not to the *Zhuangzi* but instead to the *Laozi* 老子, relating that the same reasoning appears in the *Daodejing* (道德經), chapter 18, which states, "When the great way declined, there were discussions of humaneness and righteousness" (大道廢, 有仁義). Laozi might have influenced Shōeki as well, but the *Zhuangzi* made the far bolder assertions that were so clearly echoed throughout Shōeki's writings. In the passages frequently attributed to Yangists and Primitivists, the *Zhuangzi* declares, for example, that the sages were great thieves. In its chapter, "Robber Zhi," the *Zhuangzi* presents that infamous robber lecturing Confucius about the real thieves of human history, charging that they were indeed the sages and those like Confucius who pontificated about them. Robber Zhi thus states,

> Well isn't this that deceitful Kong Qiu [Confucius] from the state of Lu! […] You make up words, spin tales, dishing up crazy praise for kings Wen and Wu. Wearing a cap that looks like the branch of a tree and a waist-belt made from the hide of a dead ox, with great verbosity you spout off erroneous explanations. You eat without ever plowing (*bu geng er shi* 不耕而食), clothe yourself without ever weaving (*bu zhi er yi* 不織而衣). Smacking your lips and drumming your tongue, you fabricate notions of "right" or "wrong," confusing the rulers below heaven, keeping the scholars below heaven from returning to the foundations of things, absurdly fabricating notions of "filial piety" and "brotherliness," hoping for good fortune with feudal masters or the wealthy and respected! Your crimes (*zui* 罪) are extremely serious. Go home this moment! Otherwise I will add your liver to dinner this evening, (Zhuangzi 1956, 80).[14]

[14] Translation adopted from Watson, trans., *The Complete Works of the Chuang Tzu*. Jacques Joly (2014) explores similar themes in Shōeki's thought and that of the *Zhuangzi*.

This passage portrays Robber Zhi charging Confucius with eating without plowing and wearing clothes that he has not woven. The first charge, eating without cultivating, is the same one that Shōeki makes against any number of rulers, sages, and all authority figures. The charge is repeated in the "Robber Zhi" chapter as well as in other chapters identified with the Yangists and Primitivists writings.

Another example of the *Zhuangzi*'s biting critique appears as Robber Zhi continues his lecture to Confucius,

> In the age of Shennong, the people lay down peaceful and easy and woke up wide-eyed and blank. They knew their mothers but not their fathers and lived side by side with the elk and the deer. They plowed for food, wove their clothing, and had no thought in their hearts of harming one another. This was perfect virtue at its height.
>
> But the Yellow Emperor could not attain such virtue. … Tang banished his sovereign and then King Wu murdered his sovereign, King Zhou. From that point forward the strong dominated the weak and the many abused the few. From the time of Tang and Wu, rulers have been followers of these rebellious men. Now you claim to cultivate the way of Wen and Wu. […] There is then no worse robber in the world than you. Why is it that all-below-heaven do not call you Robber Qiu if they call me Robber Zhi? (Zhuangzi 1956, 81)

After noting how Laozi criticized the sages, Shōeki added that the *Zhuangzi*, in the "Outer Chapters" (外篇), "called the sages thieves." The "Robber Zhi" chapter is part of the "Miscellaneous Chapters" (雜篇), but Shōeki is correct that in the "Outer Chapters" the *Zhuangzi* suggests that with the appearance of sages and rulers, the world degenerated, implying that the time before sages and rulers had appeared was an age of peace and innocence. While these themes are evident in the "Outer Chapters" and "Miscellaneous Chapters", they are muted in the "Inner Chapters" (內篇) of the *Zhuangzi*, leading many scholars to see them as the product of a writer or writers who had a profoundly different philosophical take on things. According to A. C. Graham's analysis of the *Zhuangzi*, the opening chapters of the "Outer Chapters" of the text were produced by an anonymous thinker identifiable as the Primitivist, "an extremist who despises the whole of moral and aesthetic culture." The Primitivist, Graham explains, wants to revert to the simplest mode of life, undisturbed by the temptations of luxury and sophistication, intellectual abstraction, above all by Confucian and Mohist moralism. Graham notes that the Primitivist associates a kind of cosmic power with the virtue of ordinary people to "feed and clothe themselves" (Zhuangzi 1981, 197–199).[15] Thus "Horses' Hoofs" (馬蹄), one of the "Outer Chapters," presents the following verses extolling weaving clothes and cultivating food.

> Weaving clothes (織而衣) and cultivating food (耕而食),
> Refers to sharing equally in virtue (是謂同德).
> It is oneness without partisanship (一而不黨),
> And refers to heaven's liberation (命曰天放). (Zhuangzi 1956, 23)

[15] Similar analyses of the *Zhuangzi* are in Fukunaga Mitsuji 福永光司, *Sōshi gaihen* 莊子:外篇, Chūgoku kotensen, vol. 8 (Fukunaga 1966, 3–16). Speculation about various layers of authorship in the *Zhuangzi* have circulated among Chinese scholars since the Han dynasty.

Graham links the Primitivist writings with a group called "the School of the Tillers" (*Nongjia* 農家), one extolling a "primitive utopia" wherein "everyone is required to support himself by his own labor and in which the ruler ploughs side by side with his people and does not raise taxes, issue decrees, punish or go to war, and government […] has no apparent function except to foster agriculture and keep the prices of grain constant." Graham adds that the only known advocate of Nongjia was Xu Xing, a fourth century B.C.E. leader of a small community of farmers and craftsmen who professed the doctrine of Shennong requiring "the ruler to plough with his own hands." Graham adds that while Primitivist writings are mostly in the opening chapters of the "Outer Chapters," some appear in the "Robber Zhi" chapter as well (Zhuangzi 1981, 198–191).

Yet according to Graham, the "Robber Zhi" chapter belongs to the Yangist miscellany, or passages within the *Zhuangzi* expounding Yangism, a philosophy affirming the simple pleasures of private life to the dangerous vicissitudes of office. However, Graham otherwise allows that in the "Robber Zhi" chapter there are overlapping Primitivist and the Yangist perspectives, (Zhuangzi 1981, 198–191). The opening passage of that chapter thus extolls "cultivating food and weaving one's own clothes," and condemns Confucius as one who "eats without cultivating food and wears clothes but does not weave." Clearly there are thematic continuities between the *Zhuangzi*'s "Robber Zhi" chapter and Shōeki's *Shizen shin'eidō* regarding the importance of tilling food and weaving one's clothes and the concomitant wrongheadedness of eating without tilling and wearing clothes that one has not woven. The latter, according to Robber Zhi, makes one a thief; in Shōeki's words, it amounts to "thieving the way of heaven."

There are, nevertheless, also significant differences: the Primitivist and Yangist writings in the *Zhuangzi* praise Shennong as the good ruler of antiquity who taught people to cultivate food and weave clothing. Shōeki does not endorse this view of Shennnog, claiming instead that those activities were always part of the natural way of the cosmos, ones that did not require a supposed "sage ruler" to teach them to humanity. Also, Shōeki turns the *Zhuangzi*'s critique of Confucius against Zhuangzi himself, noting that Zhuangzi too thieved the way of heaven by eating without tilling and wearing clothing that he had not woven. In doing so, Shōeki suggests that Zhuangzi did not live up to his own rather elementary ideals. One cannot help but wonder why Shoeki did not realize that he too stood liable to the same. That aside, the similarities between the *Zhuangzi*'s Primitivist-Yangist texts, especially the "Robber Zhi" chapter, and Shōeki's pro-agrarian philosophy suggest that the latter might well be viewed, within an East Asian context, as a Japanese expression of Primitivist-Yangist-Daoist claims extolling cultivating food and weaving clothes. Doing so, in Shōeki's view, involves one in the true and authentic activity of the way of cosmic processes of change.

4.4 Mozi's Critiques of Ritual and Music

One aspect of Shōeki's philosophy with conspicuous roots in another ancient Chinese philosophical text, the *Mozi* 墨子, consists in Shōeki's express disuse for music, tobacco, scholarship, poetry, dance, Noh drama, the tea ceremony, gambling, drinking, Buddhist teachings, decorative buckets, ornamental gardens, and fancy furnishings. In condemning these he asserts that they keep people from their proper and authentic activities: plowing the fields and weaving clothes. In this Shōeki seemingly echoes the *Mozi* with its utilitarian criticism of rites and music as wasteful activities that don't promote the overall welfare of humanity. The *Mozi* does not insist that rulers till the fields and weave garments, but it does argue that commodities should be kept simple and in line with their purpose. Clothes need only keep the body warm and protected, meaning that weavers should not cultivate fashion apart from those basic functions. Otherwise resources will be wasted. If hard work and frugality prevail, the state will grow and prosper. Similarly funerals should be limited in terms of shroud materials and casket sizes. The *Mozi* moreover declares that activities which do not profit the people should be forbidden by sage kings (不加民利者, 聖王弗為). In condemning music and dance, the *Mozi* notes how dancers and musicians who do not contribute to farming or weaving "feed off other people" (食乎人). Therefore the *Mozi* states that rulers should declare dance and music wrong (為樂非也).

The *Mozi*'s emphasis on cultivating food and weaving clothing is akin to that of Shōeki with the crucial difference being that the *Mozi* never ventures to condemn rulers as thieves as the *Zhuangzi* and Shōeki do. Granted the *Mozi* does criticize Confucian scholars in two chapters, "Against Confucians" (非儒), where Confucians are cast as so indolent that they must beg for grain. Overall Confucians are said to rely on the wealth and produce of others in order to survive. Yet the *Mozi* never takes the bold step of condemning them for thieving the way, nor does it seek to do away with all who are learned. Rather, it suggests that if those with learning, the literate (士), are not preserved, then the state will be ruined (不存其士, 則亡國矣). Nor does it assert that the ancient sage kings whom Confucians typically extoll were guilty of thieving the way because they did not plow the fields and weave their own clothing. Instead the *Mozi* argues that humanity cannot do without standards and laws (不可以無法儀). Furthermore some of the very ancient sages—Yu, Tang, Wen, and Wu—whom Shōeki took pains to condemn for thieving the way, the *Mozi* praises for loving and benefiting the people (愛人利人). Although similar in their advocacy of cultivating and weaving and their disuse for non-productive activities such as rites and music, Shōeki and the *Mozi* remain crucially different in regard to the standing of rulers. Explicit denunciation of rulers, past, present, and future, as unproductive thieves, as advanced in Shōeki's *Shizen shin'eidō*,[16] creates challenging

[16] Watanabe notes that Shōeki allowed for the possibility of a "right man" (*seijin* 正人), in the future who might appear as "a ruler of human society" (Watanabe 2012). It is also noteworthy that Confucians referred to ideal rulers as "sage" (*seijin* 聖人) rulers; Shōeki uses the same reading, *seijin*, but alters (corrects?) the first character 聖 with another 正, indicating "right," "righteous,"

obstacles all but preempting popular acceptance of any philosophical system. This was even more true in early-modern and modern Japan where, to one degree or another, everyone had a ruler, overlord, or emperor above them. In following, presumably, his philosophical conscience on these issues Shōeki effectively consigned his thinking to obscurity until it somehow found its way into a more tolerant philosophical environment.

4.5 Evaluating Agrarianism: Mencius' Critique

Shōeki's primitivism echoes themes earlier sounded in the *Zhuangzi*, especially the "Robber Zhi" chapter, along with noteworthy resonance in the earlier work, the *Mozi*. However, Shōeki's primitivism was apparently articulated with curiously little note of the *Mencius*' (C: *Mengzi* 孟子 J: *Mōshi*) pertinent analyses of the nature of work, divisions of labor, and responsibilities allotted to rulers and the ruled. This is peculiar because the *Mencius*' thinking on these matters crystallized in response to an expression of Primitivist thinking, this time not by a fictitious Zhuangzian robber haranguing Confucius but rather from a presumably historical voice of ancient Chinese Primitivism. Mencius, of course, cannot be construed as addressing Shōeki, but insofar as Mencius rebutted advocates of cultivating and weaving, i.e., the Primitivist line, and the latter so clearly echoes in Shōeki's writings, Mencius' critique of Primitivism can be seen as serving equally as a critique of Shōeki's agrarianism. In Shōeki's day, familiarlity with the *Mencius*, one of the Four Books on which Zhu Xi had written influential Neo-Confucian commentaries, was not unusual. Most likely educated Japanese who knew the *Mencius* saw in Shōeki's advocacy of direct cultivation an old line long since rebutted effectively by the *Mencius*. Careful consideration of Mencius' thinking on these issues, therefore, is in order here.

The *Mencius* (3A/4) relates that a man from Chu 楚 named Xu Xing 許行 claimed to be a follower of the teachings of the "Divine Farmer" (C: Shennong 神農 J: Shinnō). Xu Xing traveled to the state of Teng 滕, having heard that Duke Wen practiced humane government (仁政) there. Later a man named Chen Xiang 陳相 told Mencius about Xu Xing. Reportedly Xu Xing affirmed that Duke Wen was a good man, but added how Duke Wen maintained grain storehouses that "burdened his people" (厲民) for the sake of enhancing his own standing. According to Xu Xing, wise men should work the fields along with the common people and eat with them (賢者與民並耕而食). Moreover rulers should cook their own meals in addition to governing (饔飧而治). Because he saw no evidence of this in Duke Wen's

but also "correcting" and "rectifying." Shōeki's "right man" would reportedly "correct human behavior" so that the "World of Law" could become "the world of Living Truth, where all engage in Right Cultivation." Clearly part of this process involves correcting language.

approach to governing, Xu Xing questioned whether the Duke was truly a wise ruler, (Mencius 1941, 19–20).[17]

Chen Xiang sympathetically relayed Xu Xing's thinking to Mencius for his response. Upon hearing the specifics, Mencius asked if Xu Xing sowed his fields and ate what he harvested. Chen Xiang replied that he did. Next Mencius asked if Xu Xing made the clothes that he wore. Chen Xiang replied that he did not. Instead, he wore woolen clothes. Mencius asked about Xu Xing's hat and whether Xu Xing made it. Cheng Xiang replied that he traded grain for it. When Mencius asked why Xu Xing did not make his own clothing and headwear, Chen Xiang replied that doing so would take time away from farming and Xu Xing's ability to harvest a good crop. Mencius then asked about the pots, pans, and ploughs that Xu Xing used. Chen Xiang replied that he traded grain for them. Mencius follows up, somewhat sarcastically, asking if Xu Xing's devotion to tilling the soil oppresses the potters who made pots with which he cooks or the artisans who made the ploughs with which he plows. Mencius further inquired whether potters and artisans oppressed farmers in forcing them to trade their grain for pots and plows. Chen Xiang denied as much and ultimately admitted that one person cannot do everything.

Mencius then asked, rhetorically, if governing the realm is a profession that might easily be combined with tilling the soil. He continues by reasoning that there is "the work of great men" (大人之事) and "the work of small people" (小人之事). Mencius adds, as reportedly he had heard, "Some toil with their minds (或勞心), while others toil with their physical strength (或勞力). Those who work with their minds govern people (勞心者治人), while those who toil with physical strength are governed by others (勞力者治於人). Those governed by others feed them (治於人者食人), while those who govern others are fed by those they govern (治人者食於人). This, according to Mencius, is the right principle pervading all below heaven (天下之通義也), (Mencius 1941, 20).

Mencius suggests that a diversified economy cannot be sustained if everyone, including rulers, is expected to till, cook, and do whatever work their lives require. He makes his point by way of Xu Xing, advocate of self-sufficiency, establishing that Xu Xing hardly made all he consumed. If Shōeki factored this critique into his agrarian equation, he did so only insofar as he allows, occasionally, that some might devote themselves to gathering wood, while others might engage in other activities depending on where they live and the resources nearby. In an exceptional passage, Shōeki thus states:

> The duties of the men of the plains consist of producing the ten grains in abundance; the duties of the men of the mountain villages consist of gathering firewood to supply the flat lands; the duties of the men of the sea-coasts consist of fishing to supply the flat lands. The firewood, the ten grains, and the many fishes are all exchanged. People in the mountain villages can consume firewood, cereals, and fish, and build houses. People on the sea-coasts can also build houses, eat cereals, and fish. The same is true of the people in the plains. There is neither surplus in the plains nor shortages in the mountain villages and the sea-coasts. There is neither affluence here nor poverty there. There is no distinction between high and low in any place … . There is no one above so there is no exploitation of those

[17] For a gender-based reading of this passage in *Mencius*, see Birdwhistell 2007.

> below for luxury and greed. There is no one below so there is no flattery and deception of those above. Hence there is neither malice nor quarrels, and no rebellious armies. Since there is no one above, no one makes laws to punish those below. Since there is no one below, there is no one to violate the laws of those above and be punished by them … . Since there are no selfish teachings about the five constant virtues, the five relationships, and the four classes, there are no distinctions between the sages and the foolish. There are no samurai who criticize the misconduct of the common people and strike them on their heads … . The world is a unity … Heaven and earth create and man cultivates the soil. … This is the state of things in the world of nature. ("Shizen no yo ron 自然の世論," *Shizen shin'eidō* 自然真營道, vol. 25, quoted in Maruyama 1974, 261)

Shōeki's thought indeed went through various iterations, some implying that there would be no rulers, others suggesting that there might be rulers, but rulers whose engagement in community labor was so complete that it would appear that there was no ruler at all. With the above passage, the sanctity of tilling the soil, so often cited as the litmus test for one's authentic engagement in the way of change and transformation, is qualified with recognition that for certain people living in certain areas, by the seashore, for example, there is no sense in pontificating about tilling the soil and growing one's own grain. Similarly, for those residing on rugged mountainous terrain, tilling fields is not a realistic option. Whether on the basis of reading the *Mencius* or not, Shōeki in his most realistic, practical moments, realized that there would need to be a division of labor and something of an exchange-based economy.

Once this line is crossed, however, one can't help but wonder where it will end. After all, Shōeki was a physician. While he might have tilled the soil, it is doubtful that he would have turned away patients who needed medical attention to go weed or plow his own fields. Perhaps Shōeki should be seen as advocating "direct tilling" (*chokkō* 直耕), not in an entirely literal sense, but in a manner that called for everyone to be engaged in work that could be shared, to one degree or another, by all in a productive and beneficial manner. If so, then his philosophical system stands as one emphasizing the need for mutual respect and recognition of the integrity, as living creatures in productive process, of all together, without arrogance or condescension.

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Chapter 5
Agricultural Ethics in Early Chinese Perspective: Some Issues

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Abstract What sort of concepts do East Asian philosophical traditions offer in response to ethical issues in agriculture? Rather than sketch out general traditional East Asian views of humanity, nature, other species, etc., the present discussion considers a nest of issues faced by some American farmers, and considers how East Asian traditions would grapple with these issues. Early East Asian thinkers grapple with some parallel issues. Confucius (551–479 B.C.) diagnoses the breakdown of Zhou dynasty as owing to people losing sight of their *inherent relatedness* and *interpersonal ties, responsibilities and interests.* Mozi's (fl. 479–438 B.C.E.) teaching of impartial regard (*jianai)* warns against overly prioritizing one's own homestead and kin over and against others, urges taking one's neighbor's legitimate concerns and interests as seriously as one's own, and finally working together to reap the win-win rewards. The Daoist views of Laozi (fifth cent. B.C.E.) and Zhuangzi (fl. 370–300 B.C.E.) involve earth-centered ethics by conceiving human relationality as extending beyond the family and social spheres to the natural and ontological spheres. These early East Asian philosophical positions give interesting alternative ways to conceptualize ourselves, our existence in the world, and our agrarian practices on land in ecosystems in nature and alongside other farmers, which warrant further inquiry.

Keywords Individualism · Confucius · Relationality · Mozi · Impartial regard (jianai) · Laozi · Zhuangzi · The way (dao) · Non-intentionality and non-interference (wuwei) · Attunement · Resonance

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5.1 Introduction

Agricultural ethics and early Chinese thought[1] are two large, multifaceted fields, with some important overlaps.[2] How might they be fruitfully crossbred to gain new insights into agricultural ethics as well as to reveal more of the rich content of early Chinese thought? In the following discussion, I propose not to undertake a direct comparative study of Western agrarianism and agricultural ethics and early Chinese counterparts. Were I to boil the Chinese teachings down to general propositions for direct comparison, I would be doing them a disservice in at least two ways. The conversion of Chinese thought to general propositions would be in itself a distortion of these essentially contextualized and pragmatic teachings. Moreover, it would reduce their subtle insights into the gross form of general truisms that have a barren, impractical quality. What I propose to do instead is to introduce a nest of specific issues and problems faced by some American farmers today, then to consider how these real-life issues and problems would have been construed and discussed by early Chinese thinkers. If this rudimentary form of philosophic-agrarian cross-fertilization indeed can produce some promising hybrids, it can serve as a model for continued work in agricultural ethics.

In 2012, a friend in rural Minnesota told me about a nest of issues and problems that was vexing several neighboring farmers and straining their neighborly relations.[3] As I listened to his rendition of these problems, I was struck that early Chinese thought had some pertinent ideas and possibly could offer some fresh perspectives and insights. Before commencing my discussion of specific issues, let me offer a classification of contexts for regarding the farmers' nest of issues and problems that would be highlighted in early Chinese thought. Note that given the "rugged individualism" and "species centrism" ingrained into many American farmers (as in many Americans generally), they are not always sensitive to the typology of contexts that are taken as fundamental in traditional Chinese thought: (1) Neighborly relations among the farmers, (2) Awareness that land use and economic rights and values are contextual and never absolute, (3) Relationships between local farmers and, (a) local ecosystems, (b) the environment, and (c) other species (as classes and as individuals).[4] Again, I mention these particular categories as species of lenses or frames of reference that the early Chinese thinkers often hold up for reflection on such issues and problems. This system of contextualization would be working in the

[1] Early Chinese thought refers to pre-Qin thought of the late Spring and Autumn period (722–481 B.C.E.) and the Warring States period (481–222 B.C.E.), which ended with the Qin unification of China.

[2] There was an early Chinese school of Tillers (Agrarians), with some intriguing ideas (Graham 1979, 1989).

[3] Without getting into specifics, these farmers work fertile lands several miles east of Northfield, MN. The area in question forms a parallelogram of land of about 2 miles by 2 miles, leaning northeast at about 30°. See photo attached, provided by Dakota County government.

[4] Agrarian and neo-Agrarian American farmers would, in contrast, be sensitive to these contexts, which are integral to most schools of traditional Chinese thought.

background for a traditional Chinese thinker, but the discussion below is not organized around these specific categories.

5.2 Early Chinese Thought as Relational, Contextual, Ecological

A key distinguishing feature of early Chinese thought is relational thinking. Indeed, over 60 years ago, the eminent twentieth century Chinese philosopher Tung-Sun Chang observed that while traditional Western thought finds reality in substance, traditional Chinese thought has always found it in relations (Chang 1939/1952). The notion of substance went in hand with logic, metaphysics, quest for truth, whereas the notion of relation tended to involve practical thinking, ethics, quest for greater attunement, harmony, and productive life in relationships, in the flow of events (Needham 1956, 478). Moreover, the differences among the early Chinese schools of thought can be marked according to how they define and construe the core relations/ relationships of existence and practice, human and natural.

For example, the early **Confucians** construed humanity as relational, taking the family as the structural model and ethical benchmark for regarding individuals and collections of individuals. People are defined according to their multifaceted places in their respective nests or networks of family, educational, and socio-political human relationships, and they are evaluated according to how faithfully and well they strive to fulfill the implicit interpersonal obligations built into those relationships (Thompson 2017a). Various social units, such as urban neighborhoods and rural communities and villages, are viewed, not only by the Confucians but by traditional Chinese people generally, on the model of the family with rules set up like family rules, such that everyone in the community is regarded as related and mutually responsible to a certain extent.[5] The **Mohists** criticized the Confucians for construing the relationships too clannishly, not to mention asymmetrically and hierarchically, and so the Mohists offered the teaching of "impartial regard" (*Jianai*) to soften or mitigate the asymmetry and people's tendency to overly prioritize their own kith and kin. Impartial regard involves giving strangers and outsiders the benefit of the doubt in dealings on the understanding that their living conditions and circumstances and life commitments and concerns are, by and large, the same as or at least closely similar to one's own. Mozi (fl. 479–438 B.C.E.) argues that the widespread practice of impartial regard in the empire would engender more mutual recognition and eventually mutual respect among people therein. This mutual respect would help to overcome the infectious clannish tendencies of Confucianism and open the way to the formation of a more open civil society, which in turn would

[5] Indeed, people felt so closely related in rural villages that villagers were required to marry outside of the village in traditional China and Taiwan. I suspect that the same principle was followed throughout East Asia.

entail broader, more horizontal human relationships and increased economic activity and prosperity (K. Thompson 2014).

Finally, the **Daoists** saw that people in society were becoming overly sophisticated and departing ever farther from their original or core inner selves as well as their intrinsic relationships with nature, (that is, with other species, local ecosystems, and the environment generally). Consequently, the Daoists advocate that people simplify their lives by reducing their concerns and cares. They consider that, by withdrawing somewhat from the hollow, artificial world of social relationships and society, people could get back into close touch with themselves as well as with nature. One can find similar views, of course, in Western intellectual history, notably Thoreau, whose attempt to immerse himself in the life pulse, rhythms, and cycles of nature was also an attempt to bring himself into closer touch with his own inner impulses and sensibility (Thoreau 1966, 1992). His mentor Emerson honored nature but was more of a sojourner who needed human company (Emerson 2000). The early Chinese thinkers also registered the notion of mutual relationship, that people are formed interactively together, and not in vacuums as isolated individuals. Moreover, the Daoists and later the Chinese Buddhists recognized the mutual relatedness and conditioning, that is, the dependent co-arising, of all phenomena, of which people are an integral part and not set apart (Thompson 2012).

Interestingly, contemporary agricultural ethics includes a "relational" view which, in effect, is an extension of "human role ethics" in purporting to model our notion of human role ethics by "build[ing] on, and tr[ying] to sustain, animals in their various roles [*vis-à-vis* human beings] as" pets, farm animals, wild life, etc. (Sandoe et al. 2008, 31f). This relational view shares at least two important problems with Confucian relational thinking vis-à-vis other species[6]: it defines the animals' roles too narrowly in terms of human uses and/or needs and doesn't consider them in other perspectives, such as their own needs and interests. Moreover, this view prioritizes the animals that are close to us, "ours," and marginalizes those deemed "hostile" or "pest" or just "not mine," which entails and sanctifies reduced if any levels of human care and sense of responsibility for the other animals. The Daoist view is more sensitive than the Confucian or the Mohist view to humanity's deeper connections with the wider spectra of animals and wildlife in local ecosystems and the environment, and would disavow any qualitative distinction in human regard for their animals and other animals. The other animals must not be treated as merely "pests" or "weeds" *vis-à-vis* our pets and "livestock,"[7] but should be left alone to flourish in their own niches in the local ecology.

[6] Roger Ames is exploring the notion that Confucian relational ethics can be construed as a type of role ethics.

[7] The very expression "livestock" is unfortunate in suggesting a reduction of these animals to commodity property.

5.3 The Evolving Situation of Twentieth Century American Farmers: From Rural Community-Centered to Self-or-Enterprise-Centered

Before going through my friend's rendition of the issues and problems among some neighboring farmers, it is important to note that this thicket of concerns and difficulties probably would not have arisen among traditional American farmers, at least in this community, until the very recent past. My friend himself prefaced his account of these issues and problems by recalling a time *not so long ago* when neighbor farmers, (1) did not treat each other as competitors but watched each other's backs, (2) practiced mutual assistance, e.g., by pooling labor, equipment, and know-how, cooperating in building, harvesting, threshing, combining, shelling, hauling, etc., supporting and protecting each other in times of adversity, i.e., during draughts, storms, floods, blights, infestations, farm bankruptcies, attempted bank sales, etc., (3) and generally were positive and neighborly. And, as a universal norm, whenever they had plans that might impact their neighbors, they would first consult their neighbors and adjust their plans to mutual satisfaction. This is not to suggest that all neighbors were so neighborly, but it nonetheless serves as a general profile of the way family farmers, American family farmers, in particular, tended to operate and interact from early times until the Postwar period.

These traditional attitudes and patterns of relationship were eroded and weakened and in many cases they vanished in recent years. How did this come about? Things began to change during the New Deal and the Dust Bowl of the 1930s, and changed in earnest during the Postwar period when government agencies, agribusiness, farm associations, such as the Farm Bureau, and rural youth organizations like Future Farmers of America (FFA), began to promote the idea of expanding farm operations to industrial scale. There was also the attempt – through modifying the content of rural high school courses in farm management and operations as well as recommendations circulated by such rural organizations as the 4H Club and the Farm Bureau – to wean rural youth and young farmers from worn out, provincial, old school notions of family heritage, farm life and culture, particularly away from being family-centered and neighborly, to the new concept of farmer as entrepreneurial producer and businessman, not essentially related or beholden to neighbors. (In my personal memory, the Farmers Union was more supportive of individual family farmers.) U.S. Department of Agriculture officials thus were intent on increasing the efficiency and productivity of American farms by promoting this vital new image of the entrepreneurial farmer, to replace the lingering image of the lowly "dirt farmer" from in 1920s and 1930s, a period of rapid urbanization.[8]

[8] The American government may have been concerned that, in the long run, collectivized farming as practiced in the Soviet Union, China, and even Israel, would eventually out-perform traditional American small and medium-scale family farming. Large, practically corporate scale farm operations began to appear on the great plains of the Dakotas as early as the late nineteenth century. The expansive tabletop flatlands and the gigantic new steam powered tractors and threshing machines lent themselves to such large scale operations. In the 1930s, dust bowl conditions and farm bank-

Through the 1960s and into the 1970s, the highflying American rural economy allowed the family farm to persist alongside the rising corporate, industrial scale farm. However, a sort of perfect storm occurred in the rural heartland during the Reagan and Bush administrations in the 1980s and early 1990s. Crop prices dropped and languished while farm costs, such as for seed, fertilizer, feed, livestock care, farm machinery, and other costs, rose relentlessly. Dedicated family farmers strove to cope with the evolving economic conditions, such as by cooperating with other farmers, by expanding their own farm operations, taking town jobs to fill the budget gap, etc. Moreover, the Reagan government curtailed or even cancelled basic crop price support mechanisms, which had maintained the economic equilibrium of the American family farm and the rural economy generally for decades since the New Deal (Holt 1997).[9] This perfect storm effectively culled the herd of family farmers in America, as countless out-of-date, inefficient, or simply economically strung out family farmers called it quits and sold out, transferring their lands and operations to either more adaptive and resourceful family farmers or, unhappily, to corporate farms. It is a sad thing to see one's family heritage be swallowed up by a big operator. In my area, since the soil and ecological conditions are so favorable, at least two major seed companies have bought up neighbor family farmland to install and operate seed test plots and facilities. One benefit to neighbors has been that these installations provide fairly well-paid job opportunities.

The impact of this perfect storm on rural life in terms of economy, society, and even education, has been profound. Family farmers tend to do their shopping locally, so their business has been the principal support of rural towns and villages. In contrast, large-scale family or corporate farmers have the resources to conduct business more advantageously with distant markets and suppliers and don't necessarily avail themselves of local markets and suppliers. Moreover, their farm labor tends to be poorly paid and has to shop at large discount chain stores like Walmart and Kmart that do not feed their earnings back into the local economy as local businesses tend to do. The shrinking of the local rural economy leads to the exodus of the youth and even of the young generation workers and parents. This exodus entails the further shrinkage and impoverishment of the local community and social activities. Finally, the reduced local tax revenues and impoverished rural society lead to a decline in the quality of rural schools, which not only limits the economic opportunities of rural youth but also reduces their chance to enter a college or university, except for local technical institutes or colleges.[10]

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ruptcies opened vast tracts of flatland where family farms once stood for large scale farm operations in the lower plains, notably in Kansas and Oklahoma. See the classic film *The Grapes of Wrath* (1940).

[9] For an effective dramatization of this period see the film *Miles from Home* (1988), starring Richard Gere and Jason Campbell.

[10] Besides the problem of worsening rural schools, the weak rural economy makes it impossible for many rural families to finance a college education for their children. At the same time, state colleges and universities are raising tuitions and prioritizing other categories of students, ethnic minority students, in particular, which leaves nearly no slots open for rural youth! This is scandalous and ironical not only do rural students bring a closeness to nature and other cultural insights to

During and ever since this perfect storm of the 1980s and early 1990s, there has been a widespread drive by government, school, agribusiness, even media, to further instill capitalist dogmas and thought into the hearts and minds of rural youth. Explicitly, as well as on subliminal levels, media, agribusiness, government, etc. all tout capitalist myths: be a rugged individualist, every man for himself, neighbors are competitors, "to thy own self be true," etc. More specifically, in response to the old school neighborly thinking of the recent past, the following messages are coming through: Your bottom line is sacrosanct, hoard thy labor and equipment, be stingy in sharing – request high fees. Treat times of adversity as times to buy out thy neighbor's land, livestock, farmhands, etc. Disregard the impact of your farm operations on others and the environment. Discount the collateral damage they wreak. If it makes money for you and fuels your bottom line, it is your birthright, by God! Government agencies actually tend to favor such thinking since it is thought to ultimately result in further culling, integrating and ultimately enlarging American farm operations, which is to entail ever greater efficiency, and more sustained tax revenues. Agribusiness favors such "look out for number one" thinking, for less rural cooperation means more individual sales of machinery, seed, fertilizer, etc.

At the same time, the trend is not entirely toward integration and economies of scale. During and since the aforementioned perfect storm of the 1980s and early 1990s, many sincere family farmers have remained dedicated to their small scale operations, and adopted measures to stay afloat, (see Pichaske 1997, 1998 for evidence of their spirit and devotion). They have innovated and diversified their farm operations, they and their spouses and children have taken part time jobs in town to supplement their farm income, some have even sent their children to college to gain cutting-edge knowledge in advanced technologies and niche crops and livestock, etc. Some enterprising small operators now custom grow range chickens, pigs, and cattle to sell directly to the end-buyer at a much better price than they could receive from meat packers. Some are custom growing organic produce, vegetables, and even meat, for local restaurants. Some rural youth are innovative in coming up with niche crops that command higher prices than the mainstream crops. In recent decades, there has been a reemergence of Agrarianism, sometimes called Neo-Agrarianism, with a dedication to animal welfare, the environment, and sustainability in farming techniques and operations, not to mention the older communitarian and lifestyle ideals. Organic farming and local farmers markets have arisen and taken off, as well, in recent decades. Several of my rural neighbors have made such adaptations and are engaged in such operations, (see also Thompson 1995: 2010, 2017).

To summarize, up until the recent past farm neighbors regarded themselves as allies and as mutually reliant in the pooling of resources, manpower, and machinery and in facing not only the elements but financial and market storms. This was the sort of rural community that I knew personally from the 1950s through about 1980.

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the table but rural families tend to be the most diligent in paying their taxes and sending their children to the armed forces in times of national emergency and war. This is the thanks they get from judicious state politicians and university administrators.

From 1980 to 2000, I was less involved in the rural community and just vaguely aware of the changes and evolving patterns of neighborly relations and dynamics that were in play, though I did know that the go-go days of the 1960s crop prices and rural economy were long gone. From around the year 2012, I became a little more involved in the rural community. That was when a rural friend told me about the following state of affairs and nest of problems which, again, would never have arisen in earlier decades, not in anybody's wildest dreams.

5.4 The Specific Rural Scenario and Nest of Problems

According to my friend's account, which was later corroborated by other the observations and recollections of others, including of county government people, the nest of issues and problems in question arose in connection with little Spring Creek, which flows north and east through several farms between an east-west county road ("Wall Street") and state highway 19, then it flows through a viaduct under highway 19 and meanders northeasterly until it feeds into the Cannon River near Randolph, Minnesota, about five miles to the north. In the past, the neighbor farmers always tended to cooperate with each other and county agents in managing the creek – dredging and digging it out, making better culverts under the highways and crossroads, etc. Importantly, past development was always *moderate* and not very invasive. Moreover, none of the farmers expected to realize 100% land utilization, but they, for example, allowed for considerable wetland and ecosystem preservation, which they saw as good for soil fertility, reducing pollutants, and the local ecology generally.[11]

In 2012, an old farmer upstream, who ran fields along the country road with some wetland adjacent to Spring Creek, wanted to retire and rent out the farmland, which had 80% productivity along the creek and in the wetland, to his nephew. The new renter, this nephew, immediately insisted on taking steps to "maximize his land utilization and productivity to close to 100%, hence he wanted to tile the fields and deepen the creek in order to significantly improve the flow of the current and drain the wetland so the land could be completely farmed. Why didn't the old farmer didn't tell his nephew that it wasn't right to make "improvements" that would adversely impact neighboring farmers. I was told that the new renter wouldn't accept any considerations that would affect the bottom line of his own farm operations. Nothing else had any priority or interest to him.

As to possible impacts, at the time I noted that this new renter's deepening of the creek and draining of the wetland would cause the downstream farmland to flood and wetlands to grow and become marshy, impacts exacerbated by the narrow culvert under the east-west Highway 19 and the north-south township crossroad to the

[11] During the senior Bush administration (1988–1992), in particular, numerous wetlands were drained for other uses. Why didn't this Texas outdoorsman recognize the importance of wetlands in overall scheme of things?

east. The kicker was that the flooding would impact high value experimental fields that belonged to a very large Agribusiness concern to the east and still south of Highway 19. At the time, the Agribusiness manager running those fields was aware of the new renter's plans and threatened to: (1) erect dykes, which would send the waters back to flood the land of the offending farmer, and (2) sue all of the farmers involved, i.e., the new renter for creating the conditions for flooding the land and some nearby downstream farmers for not enlarging the culverts under highway 19 and the township crossroad to release the increased water flow. The new farm renter's actions of extreme tiling and deepening of the creek and then the big Agribusiness' threats to construct dykes and initiate law suits were simply *unprecedented* in that local rural community. At the same time, it showed the writing on the wall. It was a wakeup call. People were starting to take self-centered city slicker approaches, which seriously exacerbated what before would have been neighborly rural issues to be amicably settled.

After skirting the Agribusiness' experimental farm land, Spring Creek flows north under Highway 19 and then east through a sod farm – the set-up of which itself had required the draining of wetlands, which earlier had been replete with wildlife, including exquisite songbirds about a decade earlier. At any rate, the sod farmer agreed to cooperate in managing the creek, as long as the upstream folks bore some of the expenses so his bottom line would not be affected. Next, the creek continues east across a north-south township crossroad and then north into a narrow, half-farmed eco-preserve wetland just east of the sod farm. After this eco-preserve wetland, the creek continues north and east into sandier and less intensely farmed soil with wider buffer until it feeds the Cannon River near Randolph, Minnesota.

As to further impacts, I saw that the proposed "improvements" by the new farm renter would impact the eco-preserve and adjacent downstream field. (1) The increased water volume and speed would require deepening and widening the creek through the eco-preserve land to avoid additional flooding and crop loss; (2) trees along the creek in the eco-preserve would have to be thinned or cut down, and (3) the increased flow would seriously impact the creek habitat by washing out many species of flora and fauna, including beavers. (4) The upstream tiling of the land and enlarging of the creek would allow significantly more herbicides, pesticides, chemical fertilizers, etc., to enter the waterway and further pollute not only the sod farm and the eco-preserve but everyone downstream as well as the Cannon River, a major tributary of the Mississippi River.[12] In short, while the new renter's seemingly simple and prudential act of tiling the soil and deepening the creek would increase his land's productivity by perhaps 25%, it would come at great cost to the downstream farmers, ecology, and waterways.

[12] Upstream factory-scale livestock farmers also wanted Spring Creek to be expanded, to allow greater waste discharges from their "facilities." They encouraged the new farm renter to proceed with his plans to tile the soil and deepen the creek bed. "Great idea, kid." One such upstream farmer paid "a friendly visit" to the farm with the eco-preserve to suggest "doing something about that creek": "It should be cleaned out! Get rid of those trees." (In fact, "those trees" hold the top soil and have become "wildlife shelters," providing homes to countless birds. This is what Zhuangzi would call "the usefulness of the useless.")

One further point. Recall that the experimental fields of a large Agribusiness lie just downstream (north) of the offending new renter and across highway 19 from the sod farm and the eco-preserve. A key R&D man of that Agribusiness, which shall remain unnamed, who had played a key role in developing that company's special GMO seed/pesticide package some years earlier now lived in a mansion on that farmstead.[13] Around the same time, about 2012, he found that years of repeated use of the same GMO seed/pesticide package had made the soil lose its viscosity such that the originally A-1, deep, rich, fertile black top soil had turned into dried up old sponge-like material and lost much of its precious fertility. The land could continue to yield good crops, but with exponential applications of chemical fertilizers, and irrigation had to be introduced. A corporate vow of silence prevented further details or even opinions from being divulged about this situation on threat of court action.

5.5 Perspectives from Early Chinese Philosophy

How would the early Chinese thinkers view this rather peculiar state of affairs and nest of issues and problems? What sorts of insights would they have and what approaches would they recommend for addressing this state of affairs and alleviating these irksome problems? First, they would view these problems in terms of the *relations* among the people involved. The gold standard of traditional Chinese thought – a reflection of China's early agrarian society – is that human beings are essentially *relational*, not individual. On the eve of the Warring States period in early China (480–221 B.C.E.), Confucius' diagnosis of the rising tide of violence and warfare of the time was that people were losing sight of their basic *relatedness* and the concomitant virtues. Throughout the *Analects,* Confucius stresses basic familial and neighborly relationships, which extend to educational, social, economic, and political *relationships* – and the *concomitant virtues.* Confucius' core virtues are all fundamentally relational and interpersonal. He thus reaffirms the archaic Sinitic stance that, (1) people are essentially *relational*, and (2) the basic virtues involve people's recognizing one other, developing mutual trust and respect, and working together for harmony and prosperity.[14] This conception resembles communitarian thinking, but the focus is on *specific relationships and expectations* among family and community members, especially in geographically connected settings, always with harmonious, prosperous communities as the goal.

But, as the Confucians tended to overly prioritize hierarchical family and local ties, Mozi proposed a more general ethics for civil society on the understanding that people ought to treat one another and others on a fair basis more generally. His

[13] "GMO" is a vernacular name for crop varieties developed through genetic engineering.

[14] I regard "Chinese" as describing the empire, language, culture, and people of that land from the Qin dynasty in the third century B.C.E. to the present, and use "Sinitic" to describe that various tribes, cultures and languages that contributed to the formation of, and later were assimilated into, the greater "China" melting pot.

leading idea was *jianai* (impartial regard), a strengthening of Confucius' teaching of the Silver Rule ("Do not do unto others what you would not have them do unto you") and a clarification of Confucius' admonition to "love others." People should at least be open minded to others, and initially give them the benefit of the doubt. Mozi thus extended the matrix of the view that personhood is *relational* from family and community to people from other families and communities, and finally to simply other people at large, albeit in a distributive sense (Thompson 2014). Nowadays, modern people, Americans in particular, are conditioned and taught to regard themselves as self-reliant individuals; however, recent psychological research has shown that this is largely a myth and that in fact people are shaped in the flow of human life, as confluence among their key relationships in the context of which their first order moral concepts emerge. Individuality is more about how we distinguish ourselves from the others as confluences in this interpersonal flow than how we imagine that we construct ourselves in a vacuum on our own by our own plan, (see Gergen 2009).

Confucius' and Mozi's ethics of people as relational reflected the rural family and rural society and social formations of Sinitic culture in early China. Other-regard and honorable relations within and among the rural clans ensured mutual security and increased the chances of not just survival but mutual prosperity. At the same time, it was appreciated that everyone should work as hard as possible to gain sustenance, as the *just* fruits of their labor. Profit motive was thus contextualized to clans and communities, and relativized to matrices of human relations rather than to so-called discrete individuals, as in contemporary economy and society. An early Confucian saying has it that, "A close neighbor is more precious than a distant relative." Given this emphasis on the reality, importance, and mutual obligations involved in interpersonal relatedness, especially in the case of rural folk who are particularly reliant on good neighbors, the Confucians and Mohists both would have called on the farmers in question to hash their problems out together, and recommended that the new farm renter take the opinions and interests of the neighboring farmers into consideration in forming his farmland improvement plan. They would also have told him ask his uncle, the landowner, for his sincere opinion and advice about the land development plan and its impact on the neighboring farmland.[15]

Second, the Confucians and Mohists would view economic rights and values in family and community context. They regard clan (never individual) prosperity as intimately related to community prosperity. In the traditional Chinese relational view of self and personhood, the rural American neighbors should communicate and interact sincerely and deeply about their complex web of farming and economic considerations. They should strive to understand each other's concerns, interests, and needs better and to exercise give-and-take. Regarding the notion of contextualization of profit, the overly demanding new land renter should have followed precedent and settled for, say, 80% rather than 100% productivity from his bit of land. Third, the early Chinese thinkers would have considered the relations between

[15] I suspect that the landowner feels embarrassed by the negative impact the new renter's actions have on the neighboring farms. The neighbors probably wonder what happened to him.

people (the farmers), and (a) the local ecology, (b) the environment, and (c) other species. In the view of classical Chinese Daoism as well as Huayan Buddhism, the world in which humanity dwells forms a complex web in which everything, ourselves included, is not only interdependent but interactive (Chang 1963; Cook 1977; Tan 2009). Hence, particularly in rural and agrarian affairs, people should adopt a sensitive, holistic perspective and take multifaceted approaches to issues and problems, for:

1. Everything is interconnected and impacts everything else. The butterfly effect is a reality. Hence, farmers ought to be closely attuned to the lay and condition of their land, and be sensitive and mindful of the ecological impact of their farm operations.
2. Everything happens and exists in specific contexts (niches). These sensitive, attuned, mindful farmers must bear in mind the special features of their locale and adjust their farming strategies accordingly.
3. Farmers dwell and work with other farmers (rural social ecology), with whom they should share a common understanding, and with whom they should share the insights of their sensitivity and mindfulness of the features of their locale and their farming strategies.
4. Farmers dwell and work among other species (rural local ecosystem), They should appreciate that the other species evolved here and also occupy these lands and deserve a share of the bounty of the land, on the understanding that the other species exist there by natural selection and likely make unseen contributions to the farm in terms of pest control, soil fertility – as well as add to the beauty of the scene.
5. Farmers dwell and work with nature (rural natural environment), which they should respect and to which, in a sense, they should pay homage. They should carefully take care of their lands and ecosystems, for they are in effect drawing on nature's bounty and fertility for their own benefit. Indigenous peoples tend to revere the land and forest for this very reason!

Regarding the nest of issues and problems, since the new farmer was at once so concerned about his bottom line and so out of keeping with his human neighbors, he had no sense of attunement or belonging, not to mention mindfulness regarding his land's ecological setting, the environment, or other species. Daoist, Buddhist, and even simply Agrarian minded people could attempt to teach and persuade him to be more sensitive to the pulse and rhythms of his land's natural setting, but he would remain a hard sell unless he were to have some sort of life-altering experience or new relationship. Yet, it has been known to happen.

In contrast with the Daoists and Huayen Buddhists, Confucius notes but does not really register the deeper patterns of relationality that layer and contextualize humanity in nature. For example, he comments on the silent but fecund cycles and processes of nature and gazes upon a stream, lamenting the flow of time. He also comments on natural phenomena though in more of an aesthetic rather than an objective vein (Analects 17.19, 1.12, 11.25). He at times admits he does not know nature, the seasons, the soil, etc., as well as the farmer knows them, but intimates

that such knowing is not de rigor for the gentleman. And, Mozi's utilitarian, impartial regard styled ethics and morality naturally tend to lead to an exploitative, utilitarian-minded approach to natural phenomena and nature (in this he anticipated Xunzi (fl. 298–238 B.C.E.), the Francis Bacon of early China).[16]

From the dawn of distinctly Chinese, or rather Sinitic, thought, the early classical Daoists Laozi, (sixth cent. B.C.E.) and Zhuangzi (fourth cent. B.C.E.), in particular, recognized the Confucian-Mohist over-prioritization of human concerns, i.e., their species-centrism, for what it was: a reflection of their one-sided "*human all too human"* attitude toward nature, natural species, and natural phenomena.[17] Laozi and Zhuangzi regard this attitude as ultimately *unsustainable*, for it alienates human life from its roots in nature, which leads to a lack of attunement with and a callousness toward nature that eventually could usher in practices that erode and deplete the biosphere on which human life depends. For Laozi, many of humanity's problems stem from people's thinking just as human beings in a limited human perspective. Since this blinkered, linear human all too human view does not register the layered and nuanced big picture, what humanity often takes to be "its advantage" often turns out to be "its disadvantage" and, at times, "its tragic loss." As so-called intelligent human beings, people should take care that their perspective appreciates and embraces other species' perspectives.[18] Thus,

> *Laozi*, ch. 1, guides the reader to a meditative standpoint in order to experience the emergence of all things from the indeterminate, and to discern the interpenetration of perspectives. (Chang 1975 3–6)

> *Laozi,* ch. 2 reveals the one-sidedness of human judgments in linear human thinking that invites negation, and advocates dealing with things "non-intentionally" (*wuwei zhi wei*) as well as "teaching without doctrines" (*wuyan zhi jiao*), perhaps somewhat in the spirit of the later Wittgenstein. Hence,

> The wise do not accumulate.
> The more they work for other people, the more they gain.
> The more they share with others, the more they receive.
> The *Dao* followed by nature is to do good, not to harm.
> The *Dao* followed by the wise is to work, not to claim credit. (Chang 1975 7–12)

In sum, the *Laozi* conveys a sensitive, non-interfering, non-invasive, win-win mode of being and acting that is mindful of both human (social) and natural (farm) contexts and concerns. This view recognizes our ultimate "relational being" in nature as well as in society,[19] which implies the selflessness of identifying one's self with the world:

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[16] See Xunzi's essay, ch. 17, "On Nature (lit. Heaven)." Xunzi rejects all of the old traditional religico-cultural associations of nature, and stresses that humanity must harness nature's cycles and processes in order to obtain the raw materials needed for preparing food, clothing, and shelter. His perspective is entirely pragmatic and exploitative (Watson 1967).

[17] The Confucian Mencius frequently draws radical distinctions between humanity and other species that tend to reflect biases against other species, which the Daoists would never countenance.

[18] This is a principal theme of *Zhuangzi*, ch. 2, "Making All Things Equal" (Watson 1967).

[19] In recent years, a parallel term has appeared in Buddhist studies, "interbeing," which indicates that all phenomena, all things, all creatures, all events, are produced out of concatenations of rela-

> We have great trouble simply because we have a self.
> If we were selfless, then where would the trouble be?
> If we were to identify ourselves with the world,
> Then within ourselves there would be the world. (*Laozi* ch. 13; Chang 1975 40)

Dao and the *Dao* perspective are all-pervading; hence, by attaining *Dao*, one's outlook will open outward and be sensitive to and mindful of other perspectives. In effect, one will spontaneously begin to nurture all creatures through living in a manner alert to their belonging together. "All creatures will thus be nourished; none will be controlled" (*Laozi* ch. 34; Chang 1975 97).

In the intervening centuries until Zhuangzi wrote, thinkers began to dispute what was natural and genuine and what was human and artificial. For example, for Confucius and Mencius (371–289 B.C.E.), humanity is born with various capacities and aptitudes, such as humaneness, appropriateness, ritual propriety, wisdom, and fidelity, for dwelling and acting harmoniously together. They held that humanity is naturally familial and social, and has natural propensities to form relationships of mutual dependence and trust. Gradually, other thinkers began to dispute that many of Confucius' ideas were fundamentally limited and skewed, what we might call cultural sublimations of basic human impulses and thus more artificial than natural. These disputes spilled over into disputes over whether education is an opening and cultivation of our natural gifts or an invasive twisting of raw human nature by conditioning and strict training.[20] Moreover, such views tended to entail differing political stances and policies. Consequently, in ch. 6, "The Great Teacher," the *Zhuangzi* questions whether the very distinction between humanity and nature can be marked with any clarity or certainty:

> Some people know and live by nature while others know and live by humanity. However, people of the latter type nourish what they know with what they do not know, and only thus do they live full lives. (Watson 1964 71, with alterations)

That is, the artificially constructed human knowledge and practices are unknowingly grounded in instinct and tied to nature. Zhuangzi continues, "Knowledge depends on something to be correct, but what it depends on is uncertain and changeable. Ultimately, how do I know that what I call nature is not really human and what I call human is not really nature?" This is reminiscent of Wittgenstein's explorations of the practical grounds of knowledge and certainty in the opening sections of *On Certainty* (1969). It also anticipates recent neo-Darwinian accounts of human behavior and how and why we construe and utilize "artificial" human knowledge in the ways that we do.

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tional conditions. As with the avocado, each of the relational conditions is itself similarly formed of relational conditions, and there is no ultimate substantial ground or first cause to be uncovered.

[20] Indeed, the later Confucian thinker Xunzi would agree with these critics but with the caveat that even though Confucian ideals, virtues, practices are ultimately artificial, they provide the best means for transforming originally weak and self-centered people into reliable social and ethical members of a civilized community.

What is Zhuangzi's solution to this puzzle? In a later chapter, "Autumn Floods," ch. 17, he [i.e. the author] writes[21]:

> The natural lies *within* and the human lies *without* – and *virtus (de)*[22] abides in the natural. Know the actions of nature and of man, but follow nature *as the root* and be at ease with *one's own situation*. Then one will be set to expand or contract as the times require. (Watson 1964 104)

Zhuangzi's and Laozi's key point is to be sensitive, attuned, and mindful of one's natural context as well as of one's given human element: the former is deeper, inner, while the latter is apparent, outer. Nonetheless, both are equally crucial facets of human life. As to the subtle interplay of the natural and the human, Zhuangzi concludes with cautionary words:

> A horse or a cow has four feet, that is nature. Put a halter around a horse's head and put a string through a cow's nose, that is human. Therefore, it is said,
>
> *"Do not let humanity destroy nature. Do not let cleverness destroy destiny. And do not sacrifice your name for gain." Guard your nature with care and do not let it go astray. This is called returning to one's true nature.* (Italics added, Ibid.)

Ironically, Zhuangzi starts the discussion of the distinction between nature and humanity as a sort of "rectification of names," but goes on to show that the terms "nature" and "humanity" are deeply interconnected and mutually dependent. In the bubble of our social world, especially in human society, we human beings do not often see or feel the deeper connection between ourselves and nature; for the reason that we always focus on and prioritize our own immediate concerns.

> It could be said that we take for granted, and forget, nature, i.e., the Way (*dao* 道), that is the veritable womb of our human existence.

Consequently, we worship Gods that we conceive in our own image, arrogantly grant no ethical status to nature and non-human species, and liken the "lower part" of humanity to animals *a la* Confucius and Mencius for whom our lower part is "base" and call it "animal."

While Confucius focuses on people's neglect of *interpersonal relationality* and the concomitant interpersonal virtues and concerns, Zhuangzi looks into humanity's neglect of its *deeper relationality*, its fundamental ultimate identification with nature. He asks, "When people proudly say to each other, 'I am I,' how do they know that their 'I' is the genuine 'I'?" For Zhuangzi, the genuine "I" is relationally connected at multiple levels and ultimately identified with nature (*dao*). He considers that,

> We are "the universe hidden in the universe," to be realized through practices conducive to (and reflective of) the *dao* experience. (Watson 1964 77)

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[21] Ch. 17 is included in the "Waipian," or outer chapters of the *Zhuangzi*, which are generally considered to have been written by a firsthand disciple soon after Zhuangzi passed away.

[22] Commonly translated as virtue, *de* pertains to one's instinctive yet cultivatable capacities. *De* also allows for one's sense of attunement with nature and others, as well as one's practical efficacy and interpersonal charisma.

5.6 Conclusion

The foregoing discussion amply shows that early Chinese philosophy offers conceptual resources for approaching both the nest of issues and problems posed above and agricultural ethics and sustainability generally. It offers fundamental ideas, insights, and ways to encourage people to overcome, for example, the *individualistic predilection* and uncritical *species centrism* in thought and practice, which stymies their broader ethical sensitivity and reflection.

Confucius reminds us that we are not isolated selves but exist as *relational persons or being* in our networks of familial and community relations. Mozi (fl. 479–438 B.C.E.) broadens the scope of relational being by introducing the powerful concept of impartial regard *(jianai),* the call to treat others who are outside of our perceived networks of relationships fairly, to give them the benefit of the doubt. As to species centrism, Laozi and Zhuangzi argue that it is at once self-diminishing and defeating to "view the human narrowly through the human," and to "imagine ourselves as superior to the myriad other creatures."

> All creatures, ourselves included, go through the same processes of evolution, genesis, and decay – reproduction, formation, development, growth, and eventual dissolution – through which they all return indistinguishably to the origin, *dao*.

Laozi and Zhuangzi argue effectively that the human is nested and contextualized in the natural, and so:

> People ought to meditate, or at least ponder and reflect, and proceed to cultivate themselves so as to experience and better appreciate their identification with the world, the ultimate ground of their ethical sensitivity, attunement, and mindfulness.

Laozi and Zhuangzi open the way to justify a reflective humane ethics that might embrace agrarian, environmental, sustainability, and animal welfare concerns. Daoism thus provides substantial intellectual and practical resources for moving from a human-centered to a more earth-centered or multi-centered ethics, so that we may fulfil the call of Kate Rawles to:

> Acknowledge the intrinsic as well as the instrumental value of other living things and systems – and act in a way that respects this value…. The ultimate source and measure of value is not ourselves, and… not our economic systems, but the bigger context of which we are just a part – the earth itself…. (Rawles 2008, 53f.)

Speaking of attunement with nature, particularly of the farmer's sense of affinity with his or her own land, my friend back in rural Minnesota also talked about how contemporary young farmers do their farming, such as applying seed, chemical fertilizers, pesticides, herbicides, etc., strictly by the book and tend to discount the older, more intuitive ways of operating. They don't grasp that while their soil might be of a certain *general* type, for example, it still might have *special* characteristics and require different mixes of seeds and fertilizers than their sacred "book" prescribes. The older and past generations of farmers, at least the good farmers, were closer to the land and sensitive to the nuances of the soil and topography. They used smaller machines and operated in closer proximity to the biosphere and the earth

"here and now" and tended to have a better sense of what was happening on and in their land. Older and past generations of farmers tended to love the wildlife. They realized that while the wildlife took away a segment of the crop, even some livestock, the wildlife fed back environmentally in various respects. Moreover, the old school farmers grew many different crops and stressed crop rotation. They did not tend to select crops solely by market value but also considered what rotations were best for maintaining if not improving the quality of the soil, that is to say, they were concerned about maintaining the viability of their soil and the sustainability of their farm operations and practices. Older and past generations of farmers had more of what Michael Polanyi called *tacit knowledge* about their land and the art of farming. Simply put, they had more heart and could take the crop recommendation of Agribusiness concerns with a grain of salt.[23]

The Daoists, Zhuangzi in particular, celebrate craftsmen, tradesmen, and farmers for their gradually acquired affinity for and skillfulness in the medium in or with which they work, for the Daoists deem that such people's dedicated life work collectively constitutes spectra of *approaches to attunement, sensitivity and mindfulness of* the Way, ultimately, identification with nature. These spectra in a sense complement the spectra created by all of the other creatures in the biosphere, and open up humanity's capacity to sense and appreciate the perspectives of other species, finally to grasp "the happiness of the fish" (Watson 1964 110).[24] This is not to deny the value of using scientific data in farming, but to stress that the aspiring good farmer needs to be sensitive and mindful of his natural and social contexts, and have an affinity for his soil and livestock, so as to underwrite an ever more particularist and pragmatic tacit understanding of his lands and operations – in view of which to apply the more general scientific data.[25] Moreover, this signifies that there is something to be said for holistic, natural ways of dealing with crop pests rather than the unilateral use of chemical pesticides, as we gather from the above example of disgruntled Agribusiness R&D man. Perhaps this leads us back to the age old Agrarian notion that farming is a noble enterprise requiring not only dedication and determination but profound sensitivity and mindfulness.

How has that nest of issues and problems unfolded since 2012? In 2012, the new upstream farm renter made his planned improvements of tiling the wetland and

[23] For an example, see Svenson (1992), esp. pp. 60–64.

[24] Thompson (2016).

[25] There is an unexpected albeit rough-hewn aesthetic sensibility built into this sense of sensitivity and attunement. Note Holt's appreciative accounts of recollected sights, sounds, and smells of his early farm life 40–50 years ago: "The smell of the furrow slice; the bite of a January wind; the mute roar of a big tractor engine and the feeling of power as you throttle up; the depression of a down market;... the exuberance of cattle frisking in the bedding straw; the heat and dust of the haymow; the raw power of the big animals; a mounted cultivator stuck in a mud hole;… a 20-mile unobstructed view; unobstructed windsweep; fishing in the creek;… a fresh jug of water and a few minutes in the shade; the crib driveway in summer and in winter; callouses; getting the check after the sale of a bunch of high-choice steers; straight back furrows and neat dead furrows; sitting on the porch; and many, many others….. Only the other farmers who read this will know what that was like," (Holt 1997 213f).

deepening the creek. The next spring rains were unusually heavy and flooding was widespread in the area. With the increased creek water flow, the experimental farmland between the "improved" land and Highway 19 was effectively turned into a lake. The sod farmer had further deepened his portion of the creek, so his land was not flooded. As for the farm with the eco-preserve, however, water stood in the field alongside the creek well into the summer, too late to be farmed. The new farm renter did not regard these problems to have been either his fault or concern, and literally laughed them off. I am not sure if the Agribusiness made good on its threats to build a dyke or to sue, however the Rice County government stepped into action and expanded the culvert under highway 19. The precious Agribusiness fields now appear to be protected from future flooding, except in cases of exceptionally heavy or prolonged rains. The fields along the eco-preserve continue to be at risk of flooding in case of a relatively wet spring. That farmer is waiting and watching to see whether the lands will flood under normal spring rain conditions. He would like to avoid making extensive "improvements" in the creek running through his land if possible, for that would affect the natural flora and fauna in the eco-preserve. Moreover, the soil has a greater chance of absorbing and cleansing the creek water if it flows more slowly and through substantial undergrowth and brush. (Another example of what Zhuangzi would call "the usefulness of the useless.")

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Chapter 6
Analysis of the Relationship Between Eco-humanity in Ancient China and Its Conduct of Agriculture

Huaike Xu

Abstract The major differences between the patterns of ancient Chinese and Western ecological thought are: Ancient Chinese ecological thought was an articulation of the intimations of natural instinct as intermediary for defining ecological thinking and behavior, unlike the notion of a direct ecological sensibility invoked in the West. And the ancient Chinese approach of expressing their "sensitivity" and "uses" of the natural ecology differed from Western approaches, especially in conduct of agriculture; because ancient Chinese ecological thought involved extending natural instincts to humanity independently, thus forming China's culture-specific ecological humanity. The ancient Chinese approach involves important instinctive and values for the contemporary development of ecological ethics and working to solve the agricultural problems of today.

Keywords Ancient China · Eco-humanity · Nature of heaven and earth · Nature of things · Agriculture

6.1 Introduction

Ecological thought today comes mainly from two sources: One is from heaven, God, or divinity, and the other is from nature itself. The first source has guided people throughout history to *unconditionally love* nature. This love makes inroads into our thinking, stirring the spirit of ecological ethics and giving rise to related problems of philosophy and faith. The second source originates in the physical world, and inclines people to *unconditionally exploit nature* as resources. But it plays a real role in satisfying the people's desires for survival and material comforts. In terms of the relationship between man and nature, the two sources reflect humanity's existential bipolarity as beings of spirit and matter. Since we are irreducibly both, this leads to complex problems in developing ecological ethics and solving ecological problems. Ancient China produced its own unfolding of

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ecological thought with similarities to and differences from the evolving ecological thought of our time. It is the differences in ancient Chinese ecological thought that have potential for resolving the conflict between the two extreme positions based on spirit and matter, respectively.

Accordingly, the main differences in the mainstream ecological thought of ancient China and the West lie in the following:

1. Theoretically, ancient Chinese ecological thought was neither conceived in terms of belief in God nor by direct sensibility of the natural world. It was neither anthropocentric, biocentric nor ecocentric. Rather, ecological thought and behavior were understood as socio-cultural construction *with the assistance* of a heavenly nature, on the one hand, and the material world, on the other. Here heaven did not indicate god itself, as in western cultures, but had its own autonomy corresponding to the earth. Ancient Chines environmental philosophy reflected an ecological holism based on the regulated, harmonious sociality of human beings. In reality, ancient Chinese culture was a kind of sage-oriented culture: the sages were regarded as the discoverers and narrators of the nature of heaven and earth, so their words and deeds were the criteria of man's social behavior.
2. Practically, the ancient Chinese had a different way to deal with the relationship between loving and using ecology in their ecological thought. They didn't advocate unconditionally loving *or* using the ecological resources, but rather loved and used them conditionally. They integrated the two cases organically, letting love have its natural basis and belief. Their conditional loving of the natural ecology was tempered by use within its bounded degree and was responsive to the validity of use: precisely the way of the golden mean. The mechanism constraining love and use did not reside in the human itself, nor in God or ecological factors themselves, but in the ecological humanity that was regulated by the complementary nature of heaven and earth. This complementarity reflected a thoroughly ecological culture of humanity, working through the practical process of material transformation with nature.

Humanity could reflect not only inherently natural relationships but also objective characteristics common to humans and nature. Ancient Chinese ecological humanity aimed at combining the integrity and functions of nature with the objective development of human society in an organic fashion, thereby integrating the intrinsic value of the natural ecology into cultural and material practice. The philosophical goal was ultimately to construct unified metaphysical abstractions that would subsequently be reflected in the concreteness of material form. Material practices embody the unique Chinese ecological thought, which had been a consistent spirit of China's agricultural civilization for thousands of years. In this way, the ancient Chinese thinkers helped humanity to establish and maintain ecological values and express them in culture and social practice.

6.2 The Relationship Between the Nature of Heaven and Earth and Ecological Humanity

Ancient Chinese ecological thought and practice stemmed from the ecological attributes of human beings, namely their ecological understanding of human nature and its cultural construction. The ancient Chinese ecological thinkers believed that all the beings and their practices in the material world existed within and through their peculiar properties, which are controlled by the nature of heaven and earth. Thus conceiving the heaven and earth as parents, and ecological humanity as the medium, they unified the nature of heaven and earth, humanity and things. Ancient Chinese philosophy defined the essence and necessity of eco-humanity on these grounds, forming a cultural interpretation system for the concept and practice of eco-humanity.

6.2.1 The Understanding of the Nature of Heaven and Earth

The nature of heaven and earth was understood by ancient Chinese thinkers and scientists as the operating system of natural phenomena, involving an intricate mixture of phenomenon, essence and human emotion. Sometimes the phenomenon takes the place of operating rules of heaven and earth, while sometimes the essence mingles with a phenomenon, and sometimes emotional factors arise to articulate the phenomena and objective rules. The nature of heaven and earth refers to the mutual relationship of material entities and its role in governing the universe, namely, the substantial nature of relations among all the material entities in the world. Which was the ultimate final force for generating and functioning with other objects. In the sages' view, the nature of heaven and earth had a kind of objective existence and served as an object through which men and women could cognize and understand phenomena in nature. So, knowing the natural world and the relationship between human beings and nature should begin with the nature of heaven and earth.

The phrase "the nature of heaven and earth" was quoted from a famous ancient book called *Zuo's Biography of the Spring and Autumn Annals*: *Only if humanity frankly faces the happiness or sadness resulting from loss or gain of material or spiritual interests, thereby keeping in harmony with the nature of heaven and earth, can man survive eternally on the world*, (Zhang 2010, p. 321). The nature which was here the essence of existence and operation of the heaven and earth (and the governance of everything) was also the root and basis of the existence and operation of the universe and human beings. This nature is also the basis for interpreting the material world and the social order. All things are distinguished in terms of their distinctive natures, *so the only way to know the natural beings is on the basis of their respective natures, which differ from humanity's nature* (Qing Dynasty, Guo 1961, 695).

The "nature" here not only has recognizable features but also exists independently of human influence and control. Heaven and earth give rise to and govern all things, so their nature is the determining factor of natural order. *So whether anything can be recognized or not, it should be sorted by its nature,* (Qing Dynasty, Guo 1961, 1087). We know that classification is the premise for our recognitions of things. The physical world, which is reined in by heaven and earth, is the basis for classifying and recognizing things. According to the rationale of the Ideal Way (another path of ancient Chinese ecological humanity—Daoism: the ultimate law of natural change) nature can here be understood like this: The Ideal Way is a cognizable and practicable expression of the nature of heaven and earth and the world's existence and operating laws. Nature should be interpreted as properties and manifestations of Ideal Way. As a kind of presence and phenomenon under the Ideal Way, it becomes a standard for man to recognize nature and judge human behavior. It forms a subjective interpretation of operating regularity among phenomena of heaven and earth, involving humanity's awe-stricken feeling for nature.

6.2.2 The Relationship Between the Nature of Things and That of Heaven and Earth in Agricultural Activities

The nature of things in ancient Chinese culture refers to the natural attributes of substance, objects or organisms, and it bears similarities with Lucredius (Lucretius Carus, 99–55 B.C.) conception of the nature. The Ancient Chinese culture that originated from the Yellow River Basin was based on agriculture, with agrarian traits evident in understanding natural physical properties. These traits became the theoretical basis of the conduct of agriculture in ancient China. The key point stressed by the sages was not any sort of inherently material composition, but the law (or systemic regularity) of its existence, patterns of movement, and relationship with heaven and earth. Based on this fountainhead, Zhu Xi (1130–1200) noted that *the nature of humanity and objects is endowed by heaven (and earth)* (Zhu et al. 2002, 2688). That is, it is naturalness that provides for the state of existence and interoperability of humanity and the things of the world, as governed by the law of heaven and earth. The ultimate source for forming the nature of both things and heaven and earth was conceived to be *qi*, the energy of life—a universally held interpretation of objects in ancient Chinese culture. *Qi* was thought to regulate the relationship between heaven and earth, on the one hand, and humanity, on the other. *Qi* also explains the relationship between the biological growth of creatures and heaven and earth. The ideal state of balance among them was called *Great Peace.*

Agricultural production was conceived of as a fusion process of the nature of things and that of heaven and earth, so Yilong Ma, a famous agricultural thinker of the Ming dynasty emphasized that agricultural production should be adapted to the climatic conditions, geographical position, and the characteristics of the crops in a timely and orderly fashion without any mistakes. Then one will have twice the yield

for half the effort. Production of crops, poultry and livestock was regarded as inseparable from the nature of heaven and earth. The understanding of this union that emerges through agriculture regards human intuition as the intermediary by which the early Chinese people attempted to understand the nature of the world. On this basis, Xunzi (325–238 BCE) thought that when all things were matched and handled in proper sequence, obtaining favorable timeliness from heaven, drawing advantages from geographical position, and were harmoniousness with humanity in intermediate position, humanity would experience benefits pouring in from all sides. In fact, the early Chinese understanding and utilization of the nature of agricultural livestock expressed the harmonious spirit that is resonant with the natural rhythms and harmonizes the relationship between the nature of objects and that of heaven and earth. Thus, Buwei Lu (third century BCE), a philosopher of the Qin Dynasty, declared that crops were cultivated by man, nurtured by earth, and fostered by heaven. Several agricultural books of the time, such as the *Huainanzi* and *Important Arts for the People's Livelihood,* etc., expressed precisely the same idea. Agricultural production activities are only limited by one's practical strength to realize the agricultural nature of an object. As Chao-Cuo (Han dynasty) said: *millet, rice, cloth and silk are generated in the soil, grow up in due time, and are assisted with manpower* (Ban-gu 1963, 1134). The recognition and practice of the nature of objects in agricultural activities thus provided the knowledge and logic base for the notion of eco-humanity to form in ancient China.

6.2.3 The Formation of Eco-humanity

Xunzi (a book written by Xunzi), integrated the nature of human beings and that of heaven and earth, indicating that the nature of human beings was been derived from the nature of heaven and earth. Xunzi wrote: *Inborn nature is the consequence of Heaven* (Knobloch 2002, 136). The nature referred to here was an explanation of the origin of humanity, which independently extended the nature of heaven and earth into the generation of human nature to form the original state of eco-humanity. Whether human nature is good or evil, the common characteristics of views on eco-humanity stressed that people should submit to the nature, and insisted on esteeming the natural law in practice. They view the nature of heaven and earth as a criterion, and seek to achieve the ideal resonance between humanity and the nature of heaven and earth.

Like Xunzi, Zhu Xi thought that the nature and the spirits of essence of human beings both grew out of heaven. He said: *The nature (of heaven and earth) is ontology as well as its inner reason, and only when this reason is realized in human minds can it really become the nature of human beings* (Li 2013, 25). The operating rules and principles of heaven and earth have been translated into humanly recognizable objects and made the basis of humanity through a psychological transformation that is effected through cultivation. The transformation occurs through the practices whereby a person learns to know, perceive, and interact

appropriately with natural phenomena. Laozi said: *Man takes his law from the Earth; the Earth takes its law from Heaven; Heaven takes its law from the Ideal Way. The law of the Ideal Way is its being what it is* (Legge 1891, 10). It is obvious that "take the laws" cannot be the objects themselves, but should come from the nature of heaven and earth or from content or form of reasoning, which is itself an unchangeable principle of the nature of heaven and earth. That is to say, only the nature of heaven and earth can build the relative relationship with the take-laws. *It is heaven's appropriateness to give us sunlight regularly, and it is earth's appropriateness to benefit us sustainably. Appropriateness means their intrinsic reason while Nature their inherent essentiality, for the various patterns of appropriateness play their roles abidingly to be realized and followed, so humanity imitated it as Rites of the operative norm,* (Committee 1992, 1448).

This means that only the nature of heaven and earth can be correlated with or mapped onto humanity and shape it. By complying with and imitating the nature of heaven and earth, humans can transfer this nature into their code of conduct (their ethics). Only if the material entities and their operating principles of heaven and earth become the foundation of human thought and behavior can society be formed in accordance with the natural world. Such formations of human nature constitute the ecological humanity which is tied firmly to the nature of heaven and earth, and is a special mixed comprehension of heaven and earth's function. *The Doctrine of the Mean* further explained the relationships among the natures of heaven and earth and natural things. *Therefore, sincerity is the way of Heaven. To think how to be sincere is the way of man,* (Legge 2014, 179).

The two "natures" are obviously different from each other. The former can be understood as the existing state and operating process of heaven; the latter is the object, method and motivation for humanity to realize the former. It becomes the performance and practice of human nature. Mengzi proposed another transformation pattern of the nature between human and heaven and earth. He said: *He who has exhausted all his mental constitution knows his nature. Knowing his nature, he knows Heaven,* (Legge 2014, 324). This position requires that the nature of heaven and earth should appropriated by the human mind and then moderate or govern psychological dispositions and habits of thought in a person's dealings with nature. The ideal form of humanity is completely consistent with the nature of heaven and earth. It is conceivable that eco-humanity in ancient China is a thoroughly naturalistic interaction involving both the objective basis of nature's movements and the subjective adjustment of human psychology.

However, in ancient Chinese literatures the nature of heaven and earth had different terminologies. One was called *Qi* or *Vital Energy* in the *Huainanzi*, which said: *For the vital energy of heaven and earth, the most important thing is to keep it harmonious with each other. When it is in harmony, the positive and negative factors in it can be adjusted with each other to separate day from night, and generate all kinds of the things in the world,* (He-Ning 1998, 934). A related term was *Constant Nature* of heaven as expressed in the *Yizhoushu (ca. 279 BCE). Heaven has its constant nature, while man must absolutely comply with it, so the compliance is unchangeable and the constancy is irreversible either; the invariance property is the reason,*

(Zhang 2000, 14). It is because of the invariant and constant nature of heaven that man has the chance to realize and comply with it. And, some ancient books call it Destiny as noted in (Zhan-Guo Period) *Lü's Commentaries of History: The Nature, which is the foundation of the whole shoot, can neither extend nor shorten, but stays in accordance with the natural tendency. This is the Destiny* (constant number) *of heaven and earth* (Lü 1999, 192). In fact, all these categories are alternative names for the nature of heaven and earth. The ancient sages regarded them as the basic law, which could be known and imitated by man. In ecological ethics, if the nature of humanity keeps consistent with that of heaven and earth, it is called ecological humanity.

The mechanism of the generation and transformation of ecological humanity in ancient China can be expressed graphically as follows:

The upper and lower frames represent the nature of heaven and earth respectively and their mutually transforming relationship. The nature of things is generated from the nature of heaven and earth, and the ecological humanity encounters the nature of things through the nature of heaven and earth, forming the specific contents, methods and qualities of its ethics: virtue, justice, manners, wisdom and sincerity. Through openness to encounter, communicating with the nature of things is sustained. Through submission to the oversight and constraints of heaven and earth, acceptance becomes the generative mechanism of ancient Chinese ecological humanity.

6.3 The Main Forms and Contents of Ecological Humanity

The second principal feature of ecological thought in ancient China is the expression of ecological *love* and *use*. The ancient Chinese ecological thinkers deployed ideas of a series or structure of unique mechanisms for the responses between the two kinds of subjects (heaven and earth, on the one hand, and human beings, on the other). This system of mechanisms came to constitute the distinguishing characteristic of ancient Chinese environmental ethics. Ancient Chinese culture teems with the thought of loving and using nature. Ancient Chinese ecological humanity is expressed through this system of love and use, especially in the conduct of agriculture.

6.3.1 The Main Forms of the Eco-humanity

Figure 6.1 above shows that the thought and action of loving and using ecology in ancient Chinese culture were not derived directly from the ecological relationship between heaven and material nature, but came from the transformed result of the nature of heaven, earth, mankind and things—a different type of mixed nature. That is to say, recognition of the ecological elements and the ways to play roles emerges

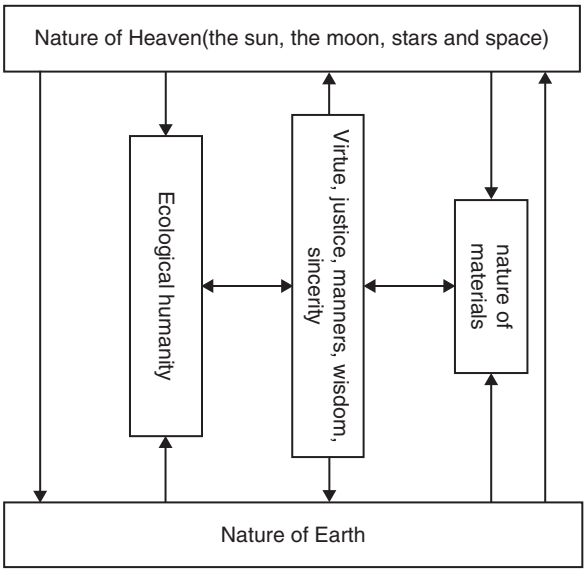

Fig. 6.1 The transformating mechanism among the cognitive factors in Eco-humanity

from the nature of heaven and earth directly, but they are converted into an understanding of the physical properties and utilization in material practice. In material practice (e.g. work), the natures of human and things are placed jointly into the frame of heaven and earth, transforming the linear and distinct relationships of "love" and "use" between man and things into the whole of heaven, earth, man and things. From a spiritual relationship comes a functional one, *in which all the creatures grow together without harming each other, and the inevitable natural rules parallel without interfering with one another,* (Tse-si 2010, 66).

This transformation overcomes the one-dimensional interest relationship between man and things, generating the natural domain for man to use the natural things, including agricultural resources. Within this domain, all in nature are orderly, so humanity is good. Beyond this domain, the system of love and use will lose its order, and humanity is evil. It is obvious that the base for judging whether the eco-humanity in ancient China is good or evil relies primarily on the dictum 'Do not go against the nature of heaven and earth,' and secondarily on judging according to the consequences of human behavior and its practice. The fundamental method is to evaluate whether man and nature are in harmony or not. Expressed traditionally this is the perspective of interaction between the heaven and human, but if it is translated into the ecological point of view, the focus for human beings should be the nature of heaven and earth, and modes of action should always return us to this focus. Namely, action should not be permitted to violate the law of unity of heaven and earth. Thus Guan-zhong said: *If we want to realize the conduct rules, we should observe the heaven upward, and meanwhile survey the earth downward,* (Guan-Zhong 2010, 221). This shows that the main forms of eco-humanity in ancient China are in harmony with nature, and call for consistency between human beings and nature both internally and externally.

6.3.2 The Contents of the Eco-humanity

In the process of responding to the nature of heaven and earth and the things of the world, the nature of heaven and earth and the inviolable natural rules have been changed to a new system where the standards of judgment are the ideas of human goodness. They are virtue, justice, manners, wisdom and sincerity, namely, the moral series of the rules of human mentality and conducts. The human moral series connects with the nature of heaven and earth, continually adjusting the relationship between human beings and the nature of things, and building a belief and behavior mechanism from information feedback and response. This is a set of special mechanism and methods for shaping ecological humanity in the ancient Chinese culture. The Confucian Zhongshu Dong said: *The heaven, earth and human beings are the source of all beings; it is born from the heaven, raised by the earth, and made realities by human beings,* (Su-Yu and Zhong-Zhe 1992, 168).

From this the particular path to generate ecological *loving* in ancient Chinese culture can be seen: It was neither purely due to a human being's one-way initiation or emotional feeling for nature, nor entirely due to the stress people endure from the struggle to survive. The way derives from enlightenment about the very possibility of understanding the nature of heaven and earth, and from the human ability to cognize this possibility and to adjust this cognition in light of practical experience. Such adjustments occur both in our beliefs and in our behavior. Consequently, the totality of heaven, earth and human natures has coalesced organically to form the content or substance of humanity. *All beings from the heaven to the earth are different, their inner operational orders rely only on the ritual system and mechanism in which all of them develop regularly without deviating and ceasing, incessantly merging into each other, and the harmonious beauty will generate and populate,* (Cheng 2004, 90).

This illustrates how the ancient Chinese ecological humanity had bidirectional cognition value and practice rules according to the nature of heaven and earth. Lao-tse thought that all the things were: *The Ideal Way gave them birth; The 'power' of the Ideal Way reared them, Shaped them according to their kinds, Perfected them, giving to each its strength,* (Lao-tse 1997, 108–109). These cases demonstrate how the ancient Chinese loved and used the ecology, and affirmed a deeply holistic form of ecological ethics. That is, the practical relationship between humanity and the heavens, earth and everything in nature reciprocates the loving relationship to form a moral system for loving either man or things. Of course, it is obvious that the heavens, the earth and man are all the *ends*, and each of them is allowed to occupy its only own position, as Lao-tse said that: *Therefore the Ideal Way is great; Heaven is great; Earth is great; and human being is also great. In the universe there are four things that are great, and human being is one of them,* (Lao-tse 1997, 52). But these ends are not equal in status because their orders and contents are different, and their primary and secondary relationships are distinct. In light of the eco-humanity in ancient China, the nature of heaven and earth is superior to human being; Therefore, the proper position is: *A sage is one who is in harmony and virtue, with heaven and earth;*

in his brightness, with the sun and moon; in his orderly procedure, with the four seasons, (Guo-Yu 2006, 350). However, although there are differences in their ranks, the relationship among them is not completely active or passive and human initiative is still the key factor for the harmony of this large complicated system. Here we focus mainly on the harmonious thoughts of the heavens and man in ancient Chinese ecological humanity and its mechanism of transforming the moral ontology.

Ancient Chinese ecological humanity, was not without reverence for the contents and forms of nature, but the object, goal or end of these contents and forms was changed or transformed through human love and use. It was not the separate essences or being of the heavens, the gods or of things that should be revered, but the characteristic and generative force hiding in the unity of heaven and earth, and playing a role in the human veneration for the unified system of nature. So the first sentence in *Yinfu Scriptures* was: *Observing and running in accordance with the nature of heaven and earth, that's enough*. It is the mixed nature of heaven and earth that makes humankind generate and perform the ecological humanity.

6.3.2.1 Ancient Agriculture in China: Practice of Its Ecological Humanity

Human existence and the unavoidable prerequisites for both human's natural quality and sociality demand the use of natural resources. The question of how to deal with the relationship between *love* and *use* of the ecology is either a source of confusion in many ecological cultures and it becomes an unavoidable dilemma in the Western treatment of recent ecological problems. Ancient Chinese ecological ethics had to address realistic concerns that correspond to these sources of confusion and conflict. Ancient Chinese neither loved the natural resources blindly nor used them at random. Their ethic was instead a value equivalence and functional transformation process starting from the nature of heaven and earth, and going through the nature of mankind to the nature of the materials, and culminating in human being's material demands for ecological resources. These transformations are judged according to the natures of heaven, earth, mankind and things jointly.

This conjoint procedure for valuation is another feature in ancient Chinese ecohumanity. From the perspective of ecological practice, it requires human beings to adjust their own ecological humanity in practice to conform to the nature of heaven and earth. Ancient Chinese ecological humanity demanded that human should comply with the attributes of the nature, namely, the nature of heaven and earth when they use the natural resources. This is the premise and upper bound for the use, otherwise, use not only violates the nature of heaven and earth, but also goes against the human value system of virtue, justice, manners, wisdom and sincerity. Such use will ultimately be opposed to what humans want. Therefore, *the former sage wrote the Book of Changes to teach us to submit to the nature of heaven and earth as the rationale for lives,* (Guo-Yu 2006, 403).

The ancients repeatedly instructed people how to *use* ecology, *if we use it in obedience, the pros and cons of heaven and earth and all of the things will be in order and harmony; if done aversely, they will be in disorder and run into the chaos,*

(Kong 2004, 1). Mo-tse said: *If we submit to the will of heaven and earth, love and benefit each other, we will be rewarded; on the contrary, if we run counter to it, antagonize and damage each other, we will be punished,* (Zhi 2013, 14). So *the reasons why all the plants have displayed their luxuriant growth are that they gain their lives from the sunshine and root themselves in the ground, and are properly utilized by mankind; as for human beings, only when it fits the will of the nature of heaven and earth, can it last exiting in the world, or it will perish ahead of the expected time* (Yang 2002, 403). Here they warn people of the consequences to act against the nature of heaven and earth. Its theoretical and empirical basis of the ecological humanity can be found in the ancient Chinese farming practices. The specific performances are as follows.

6.3.3 Definition of the Properties of Human's Desire in Using Ecology

In the ecological humanity, humans' desire is still in contradiction with the supply of materials, and the ancient ecological thinkers were clear about this. Xun-Kuang said: *Men are born with desires which, if not satisfied, cannot but lead men to seek to satisfy them. If in seeking to satisfy their desires men observe no measure and apportion things without limits, then it would be impossible for them not to contend over the means to satisfy their desires. Such contention leads to disorder. So he claimed that the desires would not want for the things which satisfy them and goods would not be exhausted by the desires,* (Knoblock 2002, 55). In this way both the nature and society can go well with each other. The Book of Rites proposes clearly to limit the non-ecological desires of human being, and it says: *Haughtiness of man to nature is not permitted to grow excessively, and the material desires are not permitted to inflate to their decadent joy to the extreme,* (Knoblock 2002, 55). From the perspective of thrift, Lao-tse thought that the ecological action of humanity should be: *Simple views and courses plain and true would selfish ends, and many lusts eschew,* (Lao-tse 1997- 38). He further emphasized*: Hence the sages put away excessive effort, extravagance, and easy indulgence,* (Lao-tse 1997, 50). That is to say, people should find a natural balance between the human's desire and the materials supply.

To perceive ancient Chinese ecological humanity from the perspective of consuming, the main way to deal with the conflict between man and ecology is to eliminate the excessive expansion of material desires of mankind. This exactly becomes the key point that is the root cause to give rise to the contradiction between man and nature, namely humankind's extravagant possession and consumption of natural resources. Ancient agriculture in China was famous for its intensive and meticulous cultivation rather than the pursuit of extensive farming and poor harvests. This farming system was the practice of Chinese eco-humanity in agricultural activities, and it *was* the very process for unification of the nature of heaven and earth, humanity and the physical nature of the world. This point about the moral ontology of farming

must be stressed. It integrated the human's material desire and labor ability with ecological laws, avoiding the exploitation of depletable agricultural resources with low efficiency, and thereby doing great damage to a large area of ecological environment. This integrated system of practice simultaneously preserves the ecological sustainability for agriculture. Before the modern industrial pollution, a large area of cultivated soil that had been used for thousands of years in China was more vital than it had been in its original state *before* cultivation. This is a concrete illustration.

6.3.4 Principles to Consume Ecology in Farming Practice

Ancient Chinese ecological thinkers put forward their ideas on the ecological limits of using materials with respect to the human desires and human practical abilities that were characteristic of China at that time. The ethos of ecological humanity teaches that all the ecological elements are one, and man is neither allowed to nor has need to take unlimited actions. As to the limit of using ecology, the ancient ecological thinkers had their rules, which were: *Let the states of equilibrium and harmony exist in perfection, and a happy order will prevail throughout heaven and earth, and all things will be nourished and flourish,* (Tse-si 2010, 5). These rules could be called basic ecological consumption requirements and rules of human being. *The Old Sage Talkings About 180 Precepts* (an ancient Taoism book) stipulated some of the human ecological actions, of which there were at least 24 precepts directly related to ecological consumption, including: people were not permitted to rashly cut trees, pluck flowers and grass, destroy mountains and rivers and dig ponds and lakes; people were not allowed to ride horses or drive gharries without cause; monarchs were not allowed to kill a cow; senior officials were not allowed to kill a goat, and scholars were not allowed to kill a dog as well. Here "rashly" and "without cause" in Chinese characters refer to the conditions for using resources, and the degree to which they can be developed. It should be permitted to develop and use ecological resources appropriately, but excessive development and use should be given up. These provisions standardize human ecological actions, preventing the nature of humankind from dissevering from its unity with the nature of heaven, earth and things, reflecting the precepts of ecological humanity.

Technologies and tools are the means of material transformations between nature and human society. The degree to which humans use nature depends on the level of existing technologies and their corresponding physical tools. But humanity is the critical factor influencing the properties of technology, and the culture or ethos of a people shapes the way that technology functions with and affects nature. The innovations and applications of Chinese traditional agricultural technology accurately reflect the characteristics of the ecological humanity. One of the earliest monographs on agronomy—*Important Arts for People's Livelihood* (written by Sixie Jia, around 540 A.D.) pointed out that if farmers complied with seasonal variation, and judged the condition of the land, they would get more gain with less

effort. If on the contrary they were wayward in regard to the natural rules, their lives would be painful and have no gain. It articulates the correct relationship between natural and human forces in agricultural activities, but it also indicates the property of Chinese agricultural technologies and the basic principle determining the technical relationship of the heaven, earth and mankind in agricultural production process. In the reciprocal flows of material and energy with nature, mankind, as a special subject, can not break the natural law by relying on their technologies.

Based on that, the agricultural technological innovation and use in ancient China conformed to the natural relationship of material transformation and human labor amongst heaven, earth and human beings. First, comply with the law of natural material circulation. Fertilizers are the important contents and guarantee of reasonable material circulation in farming process. Before 200 B.C, Chinese had a series of mature and applicable farmyard manure techniques and they have lasted for several thousand years up to now, including cultivation, collection, fermentation and real-time application. Not only has it not been updated or denied by modern science and technology, but it become one of the main components of standard organic and genuine sustainable agriculture in the present time.

Second, be far away from the natural limits. Agricultural production cannot go without the natural environment, therefore, agricultural technology absolutely cannot destroy the internal rules of nature and its inherent limits of natural productive forces. It was in line with this principle that Chinese traditional agricultural technologies based their foundation on intrinsic force and inherent relationship of nature, such as pest controlling technology. Around 300 B.C, *Oecophylla smaragdina* was popularly used to kill pests in mandarin and pomelo trees in southern China, and breeding and selling *Oecophylla smaragdina* were common commercial activities in the locality. It is the earliest and most famous example of biological control technology in the agricultural history of the world. More generally, employing agricultural technologies in a moderate way is one of the effective methods to keep human forces far away from the natural or environmental limits. In the view of China traditional agriculture, all the agricultural elements, including farming technologies, comprise one organic whole, so farmers should adhere to the rational use of agricultural technologies consistently.

The idiom "watering the garden with a pitcher" in *Zhuang Zi* can illustrate the idea of agricultural technology. The idiom derived from a story about a Confucius student, Tse-kung. Once Tse-kung saw an old man getting water from a well with a pitcher to water his plants. Huffing and puffing, the old man used up great energy but produced very little. Tse-kung asked him: "Why don't you use a machine called well sweep? It can water a hundred acres a day, it doesn't take much effort, and it yields a great advantage." The gardener flushed with anger and said with a laugh: "It's not that I don't know about the machine, but that I would be ashamed to use such a thing!" (Zhuangzi 1999, 82–82). For some reason, such tools would make simple things complicated, thus having negative effects on the pure and natural soul of the workers.

The natural humanity is not only the origin of ecological humanity, but also the warnings of natural limits. Furthermore, the ancient Chinese farmers cherished their

tools very much, including those working animals, and never overused them. All these examples illustrate a truth: from soul to habit, in the labouring process the ancient Chinese labourers can embed their technological rationality and humanity in the intrinsic value of nature. Therefore China has a successful intensive and meticulous agricultural system which originated from Xia Dynasty (2100 B.C.) and has lasted to recent years in China. Intensive agriculture which has lasted for thousands of years was exactly due to the rational use of agricultural technology determined by ecological humanity, improving land utilization, reducing agricultural demand for land, making the inside and outside material circulation systems coordinate between human society and nature, maximally protecting the natural ecological system.

6.3.5 Emphasis on the Principle of the Combination of Using and Nourishing Ecology

Ancient Chinese ecological humanity required obtaining natural resources at an appropriate time and using them within a certain limit. The reason why ancient Chinese have created brilliant agricultural achievements is the important role which the ecological humanity has played. This role cannot be obscured, and the success of Chines agriculture demonstrates its scientific and practical utility. The direct relationship between the 24 lunar terms and various farming practices in the traditional Chinese calendar were enacted in accordance with the systemic integrity of heaven, earth, mankind and ecological things, and in the relationship the harmony of man and environment was regarded as a whole process to recognize and carry out. As a matter of fact, it was a product of combination of the nature of heaven and earth and ecological humanity. Given its basis in this mixed but integrated ontology, the ecological culture further encouraged humanistic ecologicalization, mainly through in the combined practice of using and nourishing the ecological elements, including the protection of agricultural environment. This notion played an important ecological part in the era of traditional agriculture. According to the records of *the Book of Rites*: *The emperors shall not kill animals on a large scale, and the other feudal princes must not kill animals in group.…When Otters sacrifice fish, people are allowed to catch fish in the streams and meres; when jackals sacrifice animals, people are allowed to hunt, when little birds grow up to adults, people are allowed to set nets to catch them; when the plants and trees become yellow and their leaves fall, orders are given to the foresters to go among the hills,* (Cheng 2004, 23). Never permit people to kill fetus animals and pregnant animals and destroy birds' eggs. The other sages who held this view were Xun-Kuang and Men-tse etc. The four factors of heaven, earth, man and things are the relationship of subjects, of which the relationship between man and things is a simple inter-subjective one based on practice. There are no direct mutual restrictive factors between man and things before the ultimate constraint arises from the perspective of ethics.

After the nature of heaven and earth establishes an upper limit, the nature of man and things intervenes. The original direct relationship between man and things will be transferred into an indirect one, and form the unity of relationship among heaven, earth, man and things. So the nature of man is in agreement with the nature of things with the help of the nature of heaven and earth, and things used and loved by man also become the inevitable choice for human sustainable existence. Here is a typical example to illustrate the role that ancient ecological humanity plays in traditional agricultural practice. In the perspective of ecological humanity, agricultural soil itself is a natural living entity unseparated from its environment, including the nature of heaven and earth. Its vitality is one of the determinants of food production, so the ideas and methods to cultivate soil's fertility—namely, consecrated as energy of soil in ancient Chinese ecological humanity—have evolved into a system of soil technology which is a successful example to maintain the soil sustainability for green agricultural use for nearly 5000 years. This fully embodies the recognized value of the present relation between man and nature in the ancient Chinese ecological humanity.

6.4 Conclusion

In order to realize the sustainable development of man and nature, humanity must return to the restrictions by which the nature of heaven and earth rules the nature of human being so as to recover and remodel the whole ecological humanity, turning the indirect relationship that is alienating humanity from heaven recently into a renewed direct relationship as manifested in ancient Chinese ecological humanity.

1. Theoretically, man is a kind of objective existence with subjectivity in nature. As humans possess dual subjective attributes of nature and society, their social properties should be subordinate to those of nature, namely, the nature of heaven and earth should be the final restriction on the nature of humanity. Humanity cannot ever break through the natural intrinsic rules. That is to say, only when the four natures of heaven, earth, man and things are unified as one, and the two worlds—human society and nature resonate in the same natural order system could a harmony between nature and the social order be formed, and humanity maintain the health and sustainability of the ecological environment on a global basis. In the conduct of agriculture, people must never sever the internal holism of the ecological environment, of other species and humanity.
2. On the practical level, humanity should love and nourish the natural ecology while using it. In the contemporary conduct of agricultural, this attitude is particularly important. When using the natural ecology, the ecological humanity of ancient Chinese thought and society was in line with the nature of heaven and earth, supporting the material demands of human beings, but opposing unlimited subjective desires. Respecting either the telos of nature or that of society involved observing the objective rules of the nature of heaven and earth. Which existed

inherently in ecological humanity as a form of farming practice. From the perspective of consumption, there is actually a potential hypothesis that man has impacted all of nature and thus must therefore operate strictly within the twin limits of natural ability and not go beyond them. Otherwise, humanity will lose either the biological attributes or the natural qualities it possesses. And, that would be a deviation from the nature of heaven and earth.

The reason for the global crisis of human survival lies in the lethal separation of the nature of human beings from the nature of heaven and earth. Nowadays, excessive exploitation of agricultural resources and serious environmental pollution is resulting in an increasing scarcity of agricultural resources, thus causing a new crisis for humanity's survival. Only by adhering to the principle of the unified relationship of the four subjects, can ecological humanity be realized on the understanding that *heaven and earth come into being together with humanity, and all of the natures and humanity belong to one organic unity,* (Guo 1961, 79). The value of this approach for the development of science and technology has been confirmed through the positive results of thousands of years of Chinese agricultural civilization, and also has been proved *via negative* by the modern scourges of environmental pollution and ecological crises.

Of course, there are other non-mainstream explanations about the ancient Chinese ecological humanity, for instance, Xunzi's notion of harnessing the regular patterns of heaven and earth so as to exploit and make unconditional use of the natural ecology, while Buddhism insists on absolute love of all life forms, and so on.

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Chapter 7
Food Ethics as More Than Food Security: Asia's Critical Role in Discourses Around Animal Welfare and Environmental Challenges

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Abstract Asia's livestock sectors are scaling up, supersizing and intensifying to meet soaring demand for high value animal sourced foods (ASF). This soaring growth in AFS consumerism in Asia is changing 'foodways' rapidly and bringing into focus the impacts of Asia's 'livestock revolution' on future generations and local or smallholder farmers, animal welfare and the environment. This discussion considers the evolving storyline in Asia through the lenses of narrative ethics to reveal underlying values and responsibilities, and concerns, costs and opportunities. Consequently, I suggest that policy makers across Asia and morally able citizens take up a conception of the public trust doctrine (PTD), namely, a *public trust emphasis* (PTE) for animal agriculture as a pivotal platform to mitigate the current impacts of the tragedy of plenty and to guide the future trajectory of animal agriculture. PTE can be an ethical catalyst to (re)invigorate or (re)seed fairness and social justice in the food chain. In helping policy makers and the public across Asia think

The continent of Asia, home to over four billion people, is ethnically, culturally, religiously and politically diverse. It is usually divided into the following regions: central, eastern, southern, southeastern and western Asia. According to the United Nations, Asia is made up of 50 countries and covers a geographical space of 44,391,162 km^2 (http://unstats.un.org/unsd/methods/m49/m49regin.htm). There are numerous political, economic and trade pacts that reflect special interests of different Asian nations. Different countries have different developmental status and have different literary and education realities and levels of exposure to agricultural and mass media technologies. Given this diversity and vastness, and space limitations, the discussion here will highlight developments in southeast and south Asia. Hence, some of the discussions and comments may not apply universally.

This essay developed from a cross-cultural exchange event hosted by the Institute for Advanced Studies in Humanities and Social Sciences (IHS), National Taiwan University. I am grateful for the opportunity to learn from my colleagues across the world about food and agricultural ethics issues facing the continent of Asia and deepen my understanding of the local food realities of the peoples of Asia.

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about animal welfare and environmental sustainability specifically and PTE generally in more concrete terms, I recommend operationalizing social justice and risk issues into familiar ethical categories: Safety, Quality, Security, Humaneness and Sustainability. These categories form the basis of some of our basic or common ethical commitments about our contemporary food system and relationship to food and to each other and in turn generate action-guiding principles (namely, Responsibility-Responsiveness, Innovation-Partnership, Respect, Resilience/Stewardship, Diversity-interdependence), which subsequently can motivate a framework for both shared ethical governance, and ethically inspired business models.

Keywords Animal ethics · Public trust · Sustainable animal agriculture · Food ethics

7.1 Introduction

There are more mouths to feed in Asia (FAO 2002; UNPD 2012; http://esa.un.org/unpd/wup/default.asp[1]), many more in urban centers and megacities like Shanghai, Beijing, Tokyo, Seoul, Delhi and Mumbai due to large-scale migration from rural areas.[2] The burgeoning populations in Asian cities and megacities have gastronomical proclivities for meat (Popkin 2003; Delgado 2003; Rosegrant et al. 2012) and other animal products. Furthermore, these urban denizens want their animal protein quickly and conveniently (Huh 2000). Soaring demand for animal sourced foods (ASF) means that billions more animals must be raised and slaughtered for food, either done domestically or from without and imported in, typically in intensive industrial production systems if these animals are pigs and chickens (Limlamthong 2013; Fraser 2002, 2008; Thompson 2001). Industrial animal agriculture in turn puts more demands on agricultural lands, ecosystem resources and food producers (Anderson 2010; Herrero and Thornton 2014; Thornton 2010; Goulet 2000). These changes in 'foodways' or values around food in Asia require policymakers and industry leaders to also pay attention to impacts on animal welfare and the environment along side standard conceptions of food security that involve availability, affordability and accessibility. The discussion below considers the evolving storyline in Asia through the lenses of narrative ethics to reveal concerns, costs and opportunities. Intensification and more technology may not always be the answer (Ilea 2009; Thompson 2008) and greater attention to preserve local food systems in the wake of these changes (Harvey and Hubbard 2013; Makkar 2012; FAO 2012a; McDermott

[1] See also State of the World Population 2014 at http://www.unfpa.org/sites/default/files/pub-pdf/EN-SWOP14-Report_FINAL-web.pdf and http://www.theguardian.com/global-development/2014/jul/10/urban-population-growth-africa-asia-united-nations.

[2] More than half the world's population (54% or 3.14 billion) now lives in urban areas across the world. According to the United Nations, the number is expected to go beyond 60 by 2050 (State of the World Population 2014 at http://www.unfpa.org/sites/default/files/pub-pdf/EN-SWOP14-Report_FINAL-web.pdf).

et al. 2010; Poppy et al. 2014; FAO 2013c) may be an essential part of the solution. Backing innovative research in animal welfare science (Mench et al. 2008) and agricultural and environmental ethics, increasing public education about food issues and encouraging citizen participation in agricultural policy-making (Ortega et al. 2009; Swanson et al. 2011) could dramatically reduce inequity and social injustice in animal agriculture and promote greater food security, safety and sustainability.

7.1.1 Narrative Ethics: A Primer

How we go about diagnosing ethical concerns has implications for how and what solutions are considered. Narrative ethics is an approach in ethics that encourages philosophical reflections on moral and social values, and on the metaphysical, material and expressive meanings that form the bases of our practices and institutions (Hunter 1996) through careful consideration of the *logos*, *pathos* and *ethos* associated with central existential storylines (Liszka 2003). Ethicists rely on a narrative analysis to (i) help facilitate moral examination, explanation, and justification, (ii) encourage deeper philosophical investigation and contemplation on the background forms and structures of life itself (Nussbaum 1990), and (iii) study both the moral psychology and motivations of individuals and communities that make up the story's central characters. Briefly, the logos or logical proof of a story concerns the rational justification offered for a theme or central plot. Analysis of the logical proof, involves examination of the conditions or reasons that contribute to the development of the theme and its likely trajectory. The pathos or pathetic proof, on the other hand, sheds light on the motivational or emotional appeals, e.g., fear, sympathy, guilt, shame and hope, a story may evoke as it unfolds for those exposed to it (adapted from Ramage and Bean 1998). Lastly, the ethos or ethical proof is concerned with the moral agency or character and proclivities of the agents or subjects who are portrayed in the story. The ethical proof can elicit, for example, identification with or revulsion for the main characters in some cases (Anthony 2009; Murray 1997). Through these analytical devices, ethicists can invite those exposed to stories, for example, readers who are bystanders and unsuspecting conspirators to ethical infelicity, to (i) consider the effectiveness of the reasons provided in support of a particular conclusion, and the strength of an argument's inference, including the social, historical and technological reasons behind changing values and how current attitudes and dispositions toward 'the other' have developed, and (ii) take a proactive role in promulgating both life plans that reflect authentic and long-term meaning and values that foster interest in the quality of life for all people, respect for sentient beings and partnerships with nature in the interests of social, economic and ecological sustainability.

A narrative ethics approach can be very helpful to developing regions like Asia address changing values around food and agriculture in an age of seeming *plenty* and consider the justifications typically offered for the global food system, highly centralized industrial animal agricultural systems and increasing demand for

ASF. Through the lenses of logos, pathos and ethos, we may discover how Asian countries can avoid some of the pitfalls that seem to have plagued many parts of the developed world where similar storylines have unfolded. In the context of food and agriculture in Asia, these three main elements can be teased out as follows: (i) Rationality vis a vis the economic, technological and political determinism and resulting function and dysfunction, e.g., a smallholder farmer wants to increase her market access in order to avoid being trapped in poverty but instead is alienated and marginalized from society in the era of plenty; (ii) emotional ardor, e.g., a father, as primary breadwinner, wants to be seen as a hero for providing high quality ASF to his family that is on par with social notions of achievement and success; and (iii) ethical conviction, e.g., reflecting the virtues of fair-mindedness and temperance, a community seeks to put their faith in people and relationships with their local food producers rather than in technology and regulation and wants their purchasing power to translate into support for human dignity, sustainability and humaneness.

A narrative approach can expose issues that go beyond what we typically raise or are comfortable discussing, such as the economic and technological successes associated with industrial agriculture and the moral imperative to feed the global population. It can challenge us to also deliberate about the emotional and ethical content of our existential condition so that we do not miss the core of the issues that plague the shape of our relationship with food today. Citizens in Asia who are genuinely interested in addressing the issue of industrial animal agriculture and the consequences of the region's soaring demand for ASF, should transcend framing or address the issues in economic, technological or political terms only. Together with their respective policy makers, there is an opportunity for them to propose better alternatives to bad taste and manners, and bankrupt morality as part of being co-authors of their food destinies. The three vignettes below highlight these elements and attempt to showcase the complexities surrounding Asia's relationship with contemporary animal agriculture.

7.1.2 Vignette 1, Logos: The Narrative of Plenty and Shifting Values in Asia

The logos of a story refers to the effectiveness of reasons or evidence offered in support of a main point/plot, i.e., to the logic of the reasons given to justify a certain central theme (Ramage and Bean 1998). The logos centers on the rationality of a main storyline and in our case it involves considering the wisdom to turn to high input, centralized industrial animal agriculture to satisfy Asia's growing demand for ASF. The case for industrialized and intensive food production (including livestock production) in Asia is compelling (Limlamthong 2013; FAO 2011, 2013b). However, in some cases, this turn comes at significant costs to local food economies and communities, to animal welfare and environmental sustainability (FAO 2006b, 2009a, c, 2011). The following is an account of the main theme and its justification.

By 2050, you and I will share this planet with roughly nine billion fellow travelers (Parker 2011). The majority of them, more than half of the world's population, will live in Asia (FAO 2009c, 2013b; http://esa.un.org/unpd/wup/default.aspx). Asia is a region experiencing high growth in disposable incomes (e.g., average incomes in India and China have seen three and fivefold increases between 1990 and 2008, respectively (Otte and Grace 2013). The people of the future are projected to have greater proclivity for higher value food items such as fruit, vegetables and ASF like meat, milk, eggs and fish.

Increased demand for ASF has led to livestock industrialization in Asia, the so-called Livestock Revolution (Delgado 2003). Asia accounts for 70% of world's poultry, 44% of sheep and goats, 49% of bovines and 84% of pigs (FAO 2012b). Asia's livestock sectors is scaling up and not only supersizing but also intensifying. Large-scale vertically-integrated farms are becoming important mainly in the high value modern retail markets found in Asia's megacities and urban centers. Scaling up and intensification, a process which began approximately 30 years earlier, starting first in Japan, Taiwan and Thailand and it has taken off the furthest in East Asia, have meant larger farms and more animals raised across the industry. Growth in production and consumption of eggs and poultry meat have skyrocketed in India, where broiler and layer operations produce between 5000 and 50,000 birds per cycle. In Thailand the average size for broiler farms is now 10,000 birds per house. The corporate farm size is 20,000–100,000 birds. The broiler industry is completely dominated by a dozen vertically-integrated companies. For example, 20–30% of the Thai layer industry is controlled by integrators (Poapongsakorn 2013). Chinese production of poultry meat and eggs has also soared in the last two decades fueled by a combination of large farms and higher productivity per bird. Today, large-scale commercial farms and integrated companies with annual production of 10,000 birds are responsible for almost 50% of the production and the commercial broiler market in China (Otte and Grace 2013). A consequence of this is that small-scale farmers rely less on livestock as a source of income and backyard poultry production (represented by 34 million rural households) occupies a marginal place in satisfying the growing market demand for chicken products in China. Not unlike what occurred in Thailand between 1985 and 2005, approximately 70 million small Chinese poultry growers have left the sector (Poapongsakorn 2013).

Across Asia, pig populations grew moderately between 2000 and 2010 and populations have grown by 75% over the last two decades (FAO 2012b). Intensification of pig production is occurring most rapidly in East and Southeast Asia (Oh and See 2012; The Straits Times 2014). Intensification is marked by larger farming operations that are located close to feed sources, and the ascension of vertical integration, contract farming, specialization and stratification of production into breeders, multipliers and finishers. Pigs are kept in close proximity in stalls and often cannot perform species-specific behaviors (Chen and Wang 2013). There is higher animal turnover than in traditional farms since farmers are encouraged to use production trait selection and enhanced management techniques (Smith 2013). Pigs receive specialized high nutrient density diets to help them grow faster and pharmaceuticals are used to curtail the spread of production diseases (Limlamthong 2013).

The shift in values behind Asia's Livestock Revolution has occurred rather rapidly and unreflectively in Asia. This shift reflects a movement towards material prosperity among many consumer-citizens in urban centers and megacities. As a result of this narrow focus, many Asian consumers have bought into the idea (likely unconsciously) that food is like personal electronics and clothing – a commodity – that can be produced cheaply anywhere and distributed globally. Many are oblivious to the true cost of their food (including the high cost of energy to produce, process and distribute food) and elements involved in the journey of their food from farm to fork, the kind of care received by farm animals, the deleterious outcomes for farmers and the agro-ecological environment and risks to human health and safety, ecosystem resources and agricultural lands in the region. Not unlike their North American or European counterparts, denizens of Asian megacities are disengaged with how food is grown, harvested, processed or transported and thus unaware of the extraordinary challenges experienced in the region as a result of the rapid changes in the food system, and uncritical of the justification for the highly centralized global industrial food system and its suitability for Asia. As it is easy to forget that eating is an agricultural act, (Berry 1990[3]), sustainable, local animal agriculture, for example, is not considered as a viable option for feeding Asia's growing urban populations. Cities around Asia are asked to adopt more industrialization and globalization, and to put their faith in technology and food companies instead of relationships with local farmers and their place-based knowledge regarding the soil to health connection (this is true even for current initiatives such as 'sustainable intensification' (Garnett et al. 2013). The time-tested logic of healthy soils-plants-animals-eaters-economies (Howard 1940) has been overtaken by food policies that mandate more production and which do not encourage temperance among consumers. Echoing Wen Tiejun, the dean of Renmin university's Agriculture school, the fundamental premise supporting large scale production systems (e.g., for swine and poultry production) needs to be revisited, since it may not be possible to feed everyone the meat that they crave and it may be that People must simply eat less [of it] (Moore 2013).

With most producers and agribusinesses focusing on profit and maximizing output, and since the success of today's global food system is premised on how well the current demands of urban consumers are met, little attention is given to the impact of industrial animal agriculture on future generations and local or smallholder farmers. The centralized industrial global food system does not encourage (i) valuing food that is harvested in the height of nutritional value or (ii) keeping agricultural land in production of food instead of development of skyscrapers and CAFOs or (iii) ensuring that farm animals are placed in conditions for which they have suitable adaptations or (iv) protecting the natural landscapes we cherish or (v) promoting the important roles of smallholder and subsistence farmers and local food economies as buffers for local food and nutritional security and anchors of community and stewards of place. Contemporary industrial agriculture has ended up neglecting the wisdom of farmers and deemphasizing their roles in our communities. The pressure for the Asian producer of poultry, fish, beef, pork and milk to succeed in their commer-

[3] http://www.ecoliteracy.org/essays/pleasures-eating

cial enterprise can lead to the abandonment of sustainable production practices that have (until now), stood the test of time. For many smallholder farmers interested in their slice of the pie, the learning curve to adopt keen financial management skills to meet the capitalist demands of industrialization is steep and opportunities for increasing market access cutthroat (Makkar 2012; FAO 2011, 2012a). The ones who remain to farm are likely disappointed that little attention has been given to developing science and technology for the realities of local food economies.

7.1.3 Vignette 2, Pathos: How to Feel About Too Much of a Good Thing?

The pathetic proof concerns the emotional reality of a narrative and excites emotional responses from audiences to the storyline itself, its central images or main characters (Ramage and Bean 1998). Analyzing the pathos can help audiences to feel, imagine and experience the reality or impact of central messages conveyed through the story. The pathetic appeal dovetails with the story's logical proof and highlights that morality is also a social experience, governed by moral sentiments like sympathy, empathy, compassion, feelings instead of just rationality and norms. Pathos turns abstractions of logic into something concrete and palpable, felt as, for example, of remorse, sadness, shame, guilt, admiration, hope or determination. A pathetic proof is important when we realize that eating is a particular experience that generates emotions and deep feelings since food is inextricably wound up with our identities and ways of interacting with the world (Kaplan 2012). Eating and food production, including animal agriculture, are sites of keen political contest laden with both shared and divergent sentiments, feelings, beliefs, philosophical commitments and passionate motivations. These sites can generate quite a bit of emotional power. Seeing someone do something that one judges as wrong or reprehensible (mistreating food animals, for example) might generate feelings of sadness, disappointment or indignation towards the other. One might boycott a brand or ASF completely as a result of one's reaction. The emotional response underscores the point that there are important social relations rendered by our experience with and through food.

Why does food and agriculture generate the emotional power that it does? Agriculture is not only highly significant for the economic and social sustainability of many people and communities, but it has been and continues to be a form of human activity that generates moral values and orients individuals and communities to the good life (Berry 2002). It predisposes them to excellences of character and is a source of moral sensitivity and judgment where ethical ideas like fairness and social justice can be sowed and nurtured (Berry 2002; Thompson 1993), and where ideals of citizenship and community cohesion (Thompson 2010; Burkhardt 2000) are sowed. Rapid changes to the nature of global plant based agriculture and livestock production in the last century or so has put many people and communities at risk and challenged this important source of moral preparation and forced deep-

seated feelings about what we should want and value. A look at changes to China's (one of Asia's and the world's leading economies and keenest adopters of intensive and industrialized animal agriculture) relationship to food below will provide an opportunity to experience the emotional reality that can engender emotion ardor over costs and opportunities regarding agricultural development and industrialization for the rest of the region.

For Mainland and Diaspora Chinese in Asia (e.g., in Thailand, Indonesia, Philippines, Singapore, Taiwan Viet Nam and Malaysia), meat symbolizes prosperity. China's small-scale pig farms can no longer meet domestic consumer demand and industrialization and imports are marshaled as solutions by the federal government. However, too much of a good thing signals a tragedy of plenty. This headline from *The Economist* (December 20th, 2014) is a case in point: *China's insatiable appetite for pork is a symbol of the country's rise. It is also a danger to the world*. The article goes on to claim that, [China] now produces and consumes almost 500 million swine a year [a sevenfold increase since the 1970s], half of all the pigs in the world. The tale of Chinese pigs is thus a parable of the country's breakneck economic rise. But it is more than symbolic: China's lust for pork has serious consequences for the country's economy and environment – and for the world… The average Chinese now eats 39 kg of pork a year (roughly a third of a pig), more even than Americans… and five times more per person than they ate in 1979.

The Chinese pork consumption is more than half of the total meat consumption of South East Asian countries, e.g., the Philippines, Viet Nam, Indonesia, Thailand, and Malaysia. Together, Asian meat consumption for the South East Asian countries and China is expected to show a 30% increase over 2001 figures (USDA 2014a, b). Due to its citizens' large appetite for ASF, China now relies on the United States and Brazil to help grow its food. In 2013, a Chinese company, Shuanghui International Holdings Ltd., purchased US pork giant Smithfield Foods Inc. (Mattioli et al. 2013). Although China's pig farms have expanded and multiplied and outfitted with the latest intensive farming technologies to maximize yield (e.g., many are equipped to raise and slaughter upwards of 100,000 pigs per year), and more than half of the world's pigs are now raised there, China still imports pork. It is cheaper for China to buy US pork than to raise it within its borders. It costs the Chinese approximately $0.68 per pound (versus $0.57 per pound in the United States) to produce pork in their newly minted, industrialized pig CAFOs. Pollution and drought has limited production in China. The cost of feed is still cheaper in the US due to subsidized grain, higher availability of arable land, water and grain resources (Philpott 2014). In 2014, the huge Chinese state-owned foodstuffs conglomerate Cofco Corporation, purchased a lion's share in Noble Agri Group, a major processor and distributor of corn, wheat, soybeans and vegetable oils, producer of sugar and ethanol and international trader in cocoa, cotton, coffee and sugar. Cofco has access to food from low cost producers in South America, Africa, and Eastern Europe and to affluent consumers in Asia and the Middle East. Also in 2014, Cofco acquired a controlling interest in Dutch-based grain trader Nidera an exporter of American grain, linking American farmers directly to China's consumers (Gough 2014). China imports a quarter of US soy crop to process into meal for pigs and oil for people for

its industrial pig farms (Jin and Zhang 2014). These measures are attempts by China to shore up its domestic food security needs amidst rising urbanization.

A pork reserve has also been set up by the ruling Communist party in order to maintain pork's affordability. The government subsidized pork production in 2012 by $22 billion, approximately $47 a pig. Other pro-pork policies include grants, tax incentives, cheap loans for farms and free animal immunization (The Economist 2014). The government recognizes the importance of pork for the local economy and doubled imports during the blue ear pig disease outbreak in 2007. According to the most recent Chinese government estimates, 68,000 pigs died from blue ear disease, 175,000 were slaughtered and an additional 1.5 million were vaccinated in the first eight months of this year. But in a typical year, China loses some 25 million pigs to disease, The outbreak also caused a subsequent buying frenzy for cheap pork (Cha 2007).

The ripple effects of the world's largest economy on the rest of the world are significant. China's heavy reliance on imported processed soy or corn for feed is influencing economies and environments across the globe. Very soon, Chinese pigs will eat more than half of the world's feed crops. Shifting land use and deforestation in the Amazon rainforest has also been affected by China's demand for pork. For example, more than 25m hectares of Brazilian rainforest is now land dedicated to cultivate soy. In Argentina (who exports about 8 million tons of soyabeans to China), soya plantations have taken over thousands of hectares of forest once used for traditional cattle-breeding (The Economist 2014; FAO 2012c; see also http://www.earth-policy.org/plan_b_updates/2009/update86).

Not unlike large CAFOs in the United States, Chinese producers often add small doses of antibiotics (the use of which is hardly regulated) to their feed. Widespread use of antibiotics has led to bacteria in animals and humans that are resistant to most antibiotics (Briggs 2015; Otte and Grace 2013; see also http://www.cdc.gov/drugresistance/threat-report-2013/). Antibiotics are not only present in the pork served during mealtimes but also in the 5 kg of manure that the average pig produces a day. Billions of tons of farm animal waste are a major contaminant of water and soil pollution in China.[4] Compared to the polluting effects of small farms, intensive pig farming in China contributes both directly and indirectly to anthropogenic climate change. Greenhouse-gas emissions from agriculture in China has gone up by 35% between 1994 and 2005 (Chen and Wang 2013) intensive farms in China have also been linked to increased emissions of nitrous oxide and methane, green house gases reputed to be more potent than carbon dioxide. To add insult to injury, by eliminating rainforests

[4] Despite control efforts like use of antibiotics, production related diseases have risen given both the number of animals raised each year for food and the manner in which they are raised. On January 19, 2015, a *New York Times* headline read, China: WHO Report 3 Deaths Among Bird Flue Cases in Human. This news story reported that there had been 15 serious cases of H7N9 avian flu in humans, and as many as 450 cases of the H7N9 strain had surfaced since March 2013. Many infections were connected to exposure to live poultry. Headlines like this (and others concerning swine flu H1N1 (see http://news.bbc.co.uk/2/hi/asia-pacific/8339356.stm, for example), reflect both changes to the physicality and morality associated with food consumption and animal agriculture.

due to the expansion of intensive animal agricultural production farms, the planet is deprived of the natural cooling function the plants and trees displace (FAO 2006b).

In China where farming accounts for approximately 65% of water usage, rapid socioeconomic development, urbanization and industrialization, climate change and limited arable land per capita plague water-stressed provinces (Kinver 2014). According to the study, China faces most of the major challenges to sustainable agriculture… Because arable land is available mainly in the water-scarce north, irrigation has become widespread, covering 45% of the country's agricultural land and accounting for 65% of national water withdrawal (Dalin et al. 2014). With nearly two-thirds of Chinese cities designated as water-needy and nearly 300 million rural residents lacking access to safe drinking water, and 40% of rivers were seriously polluted, China's water issues is in a grave situation (quoting China's vice minister of water resources, Hu Siyi) (China.org.cn 2012). China's food industries have also been plagued by food scandals. In 2013, 16,000 dead pigs were dumped in the tributaries of the Huangpu river, a source of Shanghai's potable water, as a result of a virus outbreak (Davidson 2013). The incident highlights both a great need to address food governance, raise awareness among the public and emphasize the inextricable link between animal welfare (including farm management, disease prevention, humane slaughter and culling and disposal of carcasses), food safety and quality, human health and respect for the environment.

There are many reactions to this narrative of plenty. For some, this vignette regarding China may engender horror, pause, outrage, and perhaps feelings of consternation, disapproval, fear, indifference, acquiescence and trepidation. For others, it might not yet have sunk in the costs of industrial animal agriculture and 'pigging out' on ASF. China is certainly not alone in Asia in craving more meat and shoring up its domestic food security (Delgado 2003; Huh 2000). Asians may be enjoying their material wealth and livestock revolution and not notice the subtle transformations that have been occurring around and to them.[5] The full range of emotional reactions to China and Asia's livestock revolution and pursuit of material wealth may still yet be undocumented and undistilled as the region begins to becoe more aware of the costs as highlighted above.

7.1.4 Vignette 3, Ethos: The High Price of Cheap

The analysis of the *ethical proof* can reveal the moral character or ethical agency of central protagonists and antagonists and other significant characters in a story. In the global food system, the central figures can be policy makers, regulators, agents in the supply chain, activists and the consuming public. The analysis usually encompasses virtues and vices, and moral qualities that are admirable and those that should

[5] Another sign of both prosperity for middle and upper class in China and the long arm of the global food economy, Chinese tables will feature a new, unlikely addition to their traditional meals: lobsters from the US state of Maine for the Lunar New Year (http://www.bbc.com/news/magazine-31541092).

be shunned. We might ask what we owe to each other and what are the background conditions that might frustrate the performance of central duties. In this instance, we can ask what kind of people do we want to be and what role does food play in the shape of our moral lives, as well as what are the barriers that make it difficult for citizens to discharge their duties? The ethical proof can highlight the complexities faced by moral agents as they attempt both to be mindful of the vulnerable in their midst and to balance equitable distribution of benefits and burdens intragenerationally, interspecifically and intergenerationally (Barry 1999). Consideration of the ethos of these agents can also reveal both the underlying value commitments guiding food and agricultural policies and practices and the conflicts of duties and interests that individuals, agencies, and organizations face. The following are some challenges to the ethical agency of those impacted by rapid changes in animal agriculture and soaring growth in AFS consumerism in Asia that reveal underlying values and responsibilities.

7.1.5 Private and Collective Duties

Many parts of Asia are enjoying more prosperity and the Livestock Revolution (Delgado 2003) as a result. However, not everyone is similarly fortunate. As a matter of agency, urban shoppers and households, rural and subsistence farmers throughout Asia must ask themselves to what degree are they complicit in perpetuating unfairness and social injustice as a result of their participation in the global food system.[6] A case in point concerns diversity in effects regarding food sovereignty.

The notion of food sovereignty is gradually taking hold across Asia as people share stories about food through social media and become more knowledgeable about food and environmental issues through both Web and conventional media. Food personalization, a form of customer-centricism or food sovereignty is one important way *consumer-citizens* in urban centers and megacities can consider green [food] virtues (Jamieson 2007) as part of expressing their moral agency and private duties vis a vis food. Exercising their sovereignty rights around food can translate into demanding from the regulatory and production sectors greater accountability for food policies and traceability back to the farm, respectively. In China, for example, greater public outcry around food issues has led to food safety as a policy priority (Reuters 2015; Ortega et al. 2009).

[6] Not much is known about how much and in what ways Asians across the different countries and cities and rural areas value sustainability or animal welfare, namely, value-added dimensions of consumerism of ASF. Beyond market research, questions regarding fairness and social justice as it relates to food should become staple questions asked of citizens in megacities to gauge their comprehension of the impact of their consumerism (see Eurobarometer discussion below). For example, do Asians desire to know more about what they are getting out of specifically priced-products? Do they reflect an active agency of we eat what we are or is it the more passive, you are what you eat mindset?

An analysis of ethos will also show that, in contrast to those who *can* exert their sovereignty, there are also many millions of people in poverty in Asia who cannot. For them, moral agency about food matters involves overcoming political and social invisibility. Social justice and fairness is about the avoidance of victimization – from environmental injustice (e.g., displacement from traditional lands, pollution from CAFOs situated close to low income housing estates; contaminated sources of irrigation and potable water that lead to illnesses; work conditions that contribute to low self worth, and poor general welfare and impoverished labor rights). Also, the poor and the working poor who rely on cheap food to lift them out of their station may remain trapped in poverty partly by their own hands and despite their best efforts. For example, those working in the food industry may not be paid a livable wage, are exposed to health hazards on a daily basis and are forced to become contract farmers or adopt costly agricultural technologies in order to remain temporarily solvent or constrained in their ability to provide adequate animal care to their animals. These individuals represent members of the Asian public whose ethos are complicated by the livestock revolution and lifestyle changes of their fellow urban travelers.

While individual citizens in urban centers across Asia may have private moral duties to promote better human health, food safety, quality of life for both human and animals, and work towards addressing climate change, biodiversity, water and energy shortages and pollution through their lifestyle choices, together, *regulators* and *policy makers* have a responsibility to ensure that those benefitting from contemporary animal agriculture do not neglect their shared or collective responsibilities. Here, effective public policy at local, national and international levels has to guide and set boundaries not only for individual actions but also provide judicious analysis of public health and welfare, economic and ecological trends, technical and policy options, and their impacts and trade-offs on various stakeholders. For example, dramatic increases in foreign imports of meat, breeding stock and animal feed in countries like S. Korea, China, Japan and in South East Asia pose challenges to national food sovereignty interests and domestic economic control. Policies involving food security and sovereignty should also consider how external constraints like drought, water shortages and lack of arable land for the production of animal feed can challenge the capacity of producers to be moral agents (see also BBC 2015; Alexandratos & Bruinsma 2012; Hoffman and Ho 2011; Muller 2013; Nan 2014).

When considering the moral agency of policy makers and regulators, it is important to keep in mind their primary priorities. Policy makers and regulators must juggle obligations to both citizens and agents of industry in the food supply chain. Typically, their gaze is on mitigating food related crisis, promoting biosecurity and guarding against bioterrorism and directing commerce and trade. However, given the magnitude and complexities concerning agricultural changes in Asia, social justice and fairness also demand attention. For example, without government support smallholder farmers are unlikely to thrive. A case in point: The success of the dairy industry in India, is attributed to long-term government support and high tariff and non-tariff

protection, and it has been central to the rapid growth of the dairy industry and rise in per capita income for small and medium scale farmers. Government help has come in the form of equitable land allocation and price and marketing support for poor farmers, who are also supported by access to cheap long-term credit, veterinarian services, and public venues for income generation like schools (Kumar et al. 2013).

Agents in the Supply Chain (e.g., large and medium scale producers and farmers, processing operators and retailers), on the other hand, are typically concerned about their brand name and public image, market access, curtailing risks that affect their bottom lines, and the benefits and costs associated with their response strategies to the public's demand for value added agricultural commodities. Where socially minded consumer-citizens are more vocal, the corporate food sector (e.g., food and agribusinesses, and retailers) and producers are increasingly being challenged to consider business models that transcend immediate profit and proximate time horizons. Cultural food traditions across Asia have come under threat as the personal relationships built between local farmers and local community members have started to erode. The civic spirit and moral virtues (e.g., justice, loyalty) of large-scale corporate agribusinesses who are not located in Asia or in the countries of relevance are gradually being questioned as a result. Business tactics such as maximizing profits by optimizing taxes (i.e., where the majority of revenue is declared abroad in order to minimize local tax responsibilities by substantial amounts) or interpreting commercial laws that may be in place to help smaller and local producers compete with large retailers and producers for the benefit of Goliath companies, may prompt criticism. For example, many consumers still think that the purchases that they make, e.g., the food that they buy, goes to someone who or a company that pays local taxes and who contributes to economy of the region or country so hospitals, public schools, road can be built. Instead, they may not realize that they may be only helping to make a Goliath stronger. From the viewpoint of the conscientious citizen and local producer, every time a food choice is made, it should contribute to the place where it is bought in some way. These concerns behoove agents in the supply chain to consider their civic commitment to place and local people, and to ensure that while they may be revolutionizing the availability of food, it does not come at the cost of revered cultural traditions and important social relations. Abdicating moral (and legal) responsibilities to protect shared assets and to promote opportunities for win-win partnerships with the Davids in their midst expresses the vice of greed and selfishness will not carry favor with members of the public who value something other than cheap food.

In confronting their moral agency and duties and reflecting on their interests, policy makers, regulators and industry/supply chain agents must overcome the moral psychology of denial and psychic numbing (Lifton 1982). The former is a systematic reluctance to confront the need to overhaul our food system since 'no real problem exists' from their point of view or there is no incentive to acknowledge that one exists. The latter is a tendency to withdraw attention from future threats despite acknowledging that a problem persists since either doing something is perceived to have massive consequences but low probability of a successful outcome or the benefits of acting are not clearly visible. The conditions of denial and numbing

lead to a fragmentation of responsibility and perpetuate a cycle of inertia that can lead to social injustices and inequity.

7.1.6 Animal Welfare

Protecting the welfare of farm animals is everyone's responsibility. As demand for meat grows and new methods and technologies of farming become more mainstream and challenge traditional husbandry and stewardship values in Asia, the public, regulators and industry must be vigilant in ensuring that farm animal abuses and neglect are eliminated and that farm animals receive a good quality of life and a humane end. Per intensive industrial practices, providing good animal welfare is no longer a necessary precondition to maximizing production yield. Many agribusinesses and producers now breed farm animals that cannot perform the biological functions characteristic of their species. For example, high value commodity livestock like pigs are raised in CAFOs and in many systems they are wedded perpetually to slatted metal beds. Many of their natural behaviors, like breeding, rooting and nest making are curtailed. They many enjoy only limited exposure to sunlight and may not have the most humane of deaths or receive veterinary care. Furthermore, Asia pig varietals like the once raised in China have been taken over by foreign breeds because the latter can produce more meat in a shorter time frame. Elsewhere, following global industry norms dairy cattle either do not have or have very limited opportunity to care for their calves and have seen increases in production disease like mastitis laminitis.

It can be seen as a moral failing if consumers of animal products do not educate themselves on the plight of the animals whose lives are sacrificed for them and make ethical purchases based on this knowledge. Isn't this the least that consumer-citizens can do? Hiding behind the invisibility of the absent-referent, since most of us consider farm animals only in their final forms as ASF or animal protein (Adams 2000) is a mark of moral lethargy and a sign that the virtue of fairmindedness has been defenestrated. For their part, agribusinesses and food companies in Asia must address the question, How should livestock be raised ethically, on a large scale and at reasonably low costs to consumers since decisions about which animal production systems to support in local and regional communities have inherent social, ethical and environmental justice implications. It would be remiss if regulators and industry did not raise it periodically.

7.1.7 Circumstances of Farmers and Rural Citizens

Worldwide, almost a billion households rely on livestock for their livelihood (FAO 2012a). Six hundred million live in South Asia and 70% of them live in rural areas (Smith 2013; FAO 2013b). A significant number of people living on less that USD$2

a day depend on livestock production for health-nutrition and income (Drewnowski 2011; Fulgoni et al. 2011; Zanovec et al. 2010). Ownership of farm animals and animal-source foods (e.g., milk, meat, and eggs) convey vital health and nutritional benefits to populations in developing countries, where the supply of high-quality protein is often limited (Smith et al. 2012; Randolph et al. 2007). Since livestock also plays an integral part in the social and economic lives of farmers in developing countries in Asia, it is important to know what are the implications of the growing scale of livestock farms for small-scale farmers? Can they be competitive and sustain existing livelihoods?

If the current trends continue, animal agriculture across Asia is likely to see only increasing vertical integration and coordination to overcome high transaction costs faced by farmers and to improve farm efficiency. Farmers across Asian nations who seek to emulate highly-industrialized meat production to maximize profits or to gain market share, will undoubtedly experience lifestyle and values changes; they may take on debt, for example, something novel, as they try to secure quality inputs on credit and achieve market recognition for their quality outputs. The following conditions will impact the moral capacities and character of rural citizens and farmers and any scrutiny of their moral agency and motivations should be fully appreciative of these realities. Smallholder farmer who have access to various sources of market information, to communication technologies like cell phones, education, experience, access to credit, and who are able to navigate environmental externalities and over come information deficits will be able to minimize risks associated with transaction costs and be more efficient and profit efficiency. Dramatic improvements in transport infrastructure, sustained increases in domestic demand, steady supply of farm labor, access to modern technology and knowledge about farm management and herd health along with institutional development that emphasize improving the efficiency of low input farms have also paved the way for many smallholder farmers in Asia to gain a foot hole in the livestock revolution. While in general smallholder farmers are less efficient in securing profits than larger farms due to higher transaction costs, smallholder farmers who are able to use their farm resources more efficiently than the large-scale producers can boost their survival and compete modestly with the latter (Ajuha and Staal 2013). Unfriendly policies or regulations and difficulty controlling production diseases can limit the growth potential for these farmers and lead to additional frustration. Mindfulness of changes in animal agriculture throughout Asia will involve recognizing that in some cases, the forces promoting the scaling up of livestock production may drive small producers out of business. Evidence from Thailand and China shows that the numbers of smallholders have significantly declined as a result of intensive industrial livestock production. The rise of multi-national agribusinesses and their control of larger farms pose a number of concerns, including displacement of rural citizens and the rise of contract farming (Poapongsakorn 2013).

These changing circumstances have also altered the rural landscape and forced rural inhabitants to move to urban centers to find work. Further, new forms of agriculture encourage new diets and they challenge farmers to remain economically viable in ways that they may not be accustomed to. Physical displacement or the transition to contract farming results in traditional agrarian or subsistence farmers

losing their animals, their primary sources of fertilizer and draft power, and their locus of cultural and monetary wealth, improved income, and risk management and insurance policy through agricultural diversification (Godfray et al. 2010a, b; McDermott et al. 2010; Randolph et al. 2007; Smith et al. 2012). Lastly, it is unclear that large cities can accommodate droves of unskilled new denizens. Social programs may be absent or inadequate to prevent many of these emigrants from languishing, for having lost their social support networks and structures. If new emigrants from the countryside do not have job skills compatible with market demands or cannot find work, urban poverty will rise. In moving large numbers of people to cities, pollution and resources use would also likely increase. We would be rushing to judgment about the ethos of producers if we did not also recognize the changing conditions that they currently face.

7.1.8 Environmental, Economic and Geopolitical Concerns

All foods have an associated environmental cost. Resource use, waste output, and greenhouse gas (GHG) emissions (Ilea 2009; FAO 2006a, 2009a; Pelletier and Tyedmers 2010; FAO 2009b) from animal agriculture make the sustainability of industrial and intensive livestock production arguably the greatest sustainability concern for food system stakeholders (FAO 2006a; Environmental Working Group 2011; Nierenberg 2005). Global livestock production is also the largest user of land worldwide. It impacts air and water quality, soil nutrients and greenhouse gas (GHG) emissions, and energy usage on regional to global scales. In an integrated food system and globalized world economy, what happens in one corner of the world has reverberations across the global. So when China and other parts of Asia face land, water and nutrient scarcity, eventuating in food price hikes across Asia, the ripples are felt everywhere. Also, in a globalized world economy, Asia's dependence on foreign food has global implications for the price of corn and soybeans and can impact the affordability, availability and accessibility of staple food commodities elsewhere in the world (FAO 2013a).[7] Many industrialized countries have since traded economic growth for environmental stewardship. As traditional smallholder farmer are forced to give way to larger industrialized CAFOs in countries like India and China, fewer farmers are looking after agro-ecological spaces in rural communities. This poses a threat to the diversity in farming methods and traditional ways of knowing.

[7] Countries in Asia have been cited as participating in land grabbing for agricultural purposes (The Economist 2013). Companies from countries like China and South Korea have been increasing their collaborative development initiatives and foreign in the African continent and allegedly also stepped up land acquisitions and leases for agricultural and biofuel production. (See more at: http://www.iias.nl/the-newsletter/article/rethinking-chinas-land-grabs-chinese-land-investments-central-asia#sthash.jy8HX4Bj.dpuf). These developments have led to ethical concerns about new forms of colonialism, entrenching institutional corruption, and displacement of local peoples (UNCSD 2012).

Asian countries are also among the most vulnerable to adverse effects of climate change and industrial animal agriculture; the impact of both pose a great challenge to sustainable and social development and can result in many severe economic and societal repercussions. Much of the arable land worldwide is being used to produce (e.g., soybean-based) fodder to feed farm animals like pigs and cattle in CAFOs, industrialized facilities. The upshot is that there is increasingly little land left for the poor and subsistence communities. Divorcing grazing animals from pasture through industrialized mass production systems and soaring prices for basic foodstuff will exacerbate the set of deleterious social and economic consequences for small, poor and subsistence farming families (Ahuja and Staal 2013; FAO 2009a, 2011). Also, increasing demand for fodder-production areas and indiscriminant pesticide use can gravely affect rainforests, soils and water catchments (see *Climate Change 2014: Impacts, Adaptation, and Vulnerability IPCC Working Group II Contributions to ARS* @ http://www.ipcc.ch/report/ar5/wg2/).

Specific environmental and health related concerns from meat and dairy productions of which the moral agents throughout Asia must be mindful include:

- *Emissions* from major greenhouse gas pollutants like carbon dioxide, methane, nitrous oxide, hydrogen sulfide, oxides of nitrogen, ammonia (Alvarado et al. 2012) which can have detrimental human health implications (Kirkhorn and Garry 2000)
- *Land usage* where there is seeming competition for land due to food, biofuels and feed (CAST 2013; Pimentel et al. 2009). There is a global movement to use land in order to produce food that will be consumed directly by human beings since farmland is scarce and reclamation projects could thwart climate change mitigation initiatives, contribute to deforestation and diminish biodiversity (Godfray et al. 2010b).
- *Water,* in terms of both shortages and contamination. Globally, agricultural production is one of the greatest consumers of water (Godfray et al. 2010b; Strzepek and Boehlert 2010). Increased population growth and emigration to cities and megacities will increase competition for water between industries, agriculture and municipalities. Groundwater contamination and pollution, e.g., nitrates and salt, from animal agriculture can have both welfare effects on people and farm animals (Grout et al. 2006)
- *Impacts from Climate change* such as longer and more intense drought and inclement weather conditions which could harm certain species of farm animals and the productivity of crop, forage and grassland systems (Stehfest et al. 2009; Sanderson et al. 2009)
- *Energy* and animal agriculture's current reliance on nonrenewable fossil fuel sources like petroleum and coal, and its carbon footprint (Godfray et al. 2010a; IPCC 2006) for planting, fertilizing, and harvesting of crops, and mixing and delivery of feed *to the housing area* (Schade and Pimentel 2012)
- *Poor nutrient and waste management* from manure from large scale concentrated animal agriculture that has been linked to contamination of surface water, groundwater and air (Knowlton et al. 2004)

- *The impact of animal diseases or zoonoses*[8] on people, animals and the environment (e.g., from pharmaceuticals polluting soil and water) due to poor regulatory oversight and absence of appropriate regulation, rapid intensification and high industrialization and soaring growth of livestock production, structural changes in global animal agriculture (such as high stocking density and turnover of animals) and feeble or ineffectual public health systems. Expansion of agricultural areas through deforestation, intensification of agricultural land use through irrigation, the increased scale of animal production systems, spatial proximity of these CAFOs to markets or feed sources, the spread of new pathogens from local animal populations globally through trade in livestock or wildlife species and animal products, and live and wet markets where a variety of animal species are kept closely, also pose risks for intra and inter-disease emergence and transmission. Close attention should also be paid to the extent to which transboundary and endemic diseases affect poor and rural agricultural communities as well as wildlife (Otte and Grace 2013)
- *Lack of adequate producer education and knowledge transfer* to address sustainability issues at the farm level. Farmers (and rural communities) caught in the breakneck speed transition from agrarianism to industrialism require assistance in dealing with: (i) increasing privatization and corporate control of the food sector, including understanding their rights and interests and how to promote shared governance of essential common resources and service, (ii) financial management and animal husbandry, (iii) preservation of local 'foodways' and identities, (iv) impact of land distribution and alternative technologies, (v) health and well-being, (vi) education of women, who currently represent the main agricultural workforce (Pinstrup-Andersen 2000) and (vii) developing transport and sanitary infrastructure (Godfray et al. 2010a, b). Research on livestock is still limited by data availability at farm levels. Most research reflects small sample surveys, Hence, there is a need for national farm surveys of modern livestock farms in order to get a more comprehensive view of how wholesale changes in animal agriculture is changing farming cultures and communities and relationships to the land and animals (Ahuja and Staal 2013; FAO 2011).

As issues regarding value added animal agriculture (e.g., the moral status of farm animals and their welfare per se or the sovereignty rights of smallholders or environmental sustainability) gradually come into focus for Asia, the onus is on the citizens of Asia (in the capacities as consumers, policy makers, supply chain agents, for example) to ensure that farm animals have adequate care and welfare and to guarantee that social justice and fairness form the basis of humane and eco-centric agriculture (see Anthony 2003). How should the region respond to the narrative ethics account explored above and what elements should serve as the ethical bases for animal agriculture? To this discussion we now turn.

[8] Zoonoses are diseases which are transmitted naturally between humans and vertebrate hosts. Nearly 60% of all human infectious diseases and 75% of emerging diseases are zoonoses (Taylor et al. 2001; Woolhouse et al. 2005).

7.1.9 *Agriculture as a Public Trust Resource: Overcoming Bad Taste and Manners and Bankrupt Morality*

A cornerstone idea in ethics is fairness. Fairness is a central element in social justice (see Rawls 2001; Miller 2003). In food and agricultural ethics, fairness is often connected to the question of how burdens and benefits are equitably shared or distributed among relevantly affected moral agents and subjects. As a matter of justice, fairness encompasses respectful treatment. Ensuring that the burdens and benefits of agriculture are shared or distributed fairly is about respecting the constituents involved in agriculture and remains one of the main challenges for agricultural and food ethics (Burkhardt 2000; Anderson 2010) in an age of plenty, where the chasm between the 'haves and have nots' is growing wider.

As the vignettes above indicate, *the tragedy of plenty* has come to Asia. Although the promise of the availability of cheap and abundant food has come to many parts of Asia, the benefits have not trickled into all segments of society and it is not without negative consequences. As indicated above, the negative effects of social injustice and unfairness are most pronounced for the most vulnerable, such as people from rural communities, smallholder farmers, the urban poor and climate refugees (FAO 2011; Pinstrup-Andersen and Watson II 2011), and farmed animals and fragile agro-ecological space. In some cases, those directly responsible for the tragedy may not actually dwell in Asia now. That is, they may be people from past generations or from developed economies whose collective actions are now being felt by current citizens in developing regions around Asia. In other cases, the people who currently populate Asia's megacities, often without a true understanding of the current nature of the global food system, are partially responsible. That said, Asia should not sleepwalk deeper into the tragedy.

As Asia finds itself moving rapidly from plant-based diets to animal protein, I suggest that Asian countries and their morally able citizens consider taking up a conception of the public trust doctrine (PTD), namely, a *public trust emphasis* (PTE) for animal agriculture as a pivotal platform to mitigate the current impacts of the tragedy of plenty and to guide the future trajectory of animal agriculture. PTE can be an ethical catalyst to (re)invigorate or (re)seed animal agriculture with fairness and social justice. Although the particularities will vary from country to country and from region to region, PTE can offer Asians who yearn for value added agriculture and who express their moral identities through their food choices a blueprint for their agricultural system that cultivates:

- The long range view and create sustainable futures for future people
- Local, healthy and affordable food
- Respect of peoples, and animals
- An ethical sense of place and the reality of interdependence between all constitutive members of the agro-ecological commons
- Responsible use and management of land and water and nutrient source including protecting air quality
- Measured policies on energy, pollution control and waste

What is PTE and how can it serve as an ethical ground to motivate respect for the agro-ecological Commons, including its constituents like farm animals?

PTE is inspired by the Public Trust Doctrine (PTD). Core concepts associated with PTD is attributed to Joseph Sax (1970) and Edith Brown Weiss (1984). PTD carves out the nature of a shared Commons and ensuing ethical commitments and constrains on behavior. PTD implies that citizens and industries can only benefit from the Commons, a resource that belongs to everyone, just in case they refrain from practices that could lead to its destruction or waste of its substance. This is sometimes referred to as a *usufruct*[9] view of the Commons. Examples of PTD can be found in the *Common Heritage of Mankind Principle* (CHMP) (1954), the *UN Convention on the Law of the Sea* (1982) and the *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space* (Outer Space Treaty or OST, 1967[10]). Environmental law employs PTD to compel private interests to acknowledge that the atmosphere and clean water are public trust resources (Anthony 2014). PTD has been used to require federal and state governments to proactively concentrate on obligations to future generations citing that they have a sovereign fiduciary obligation to prevent waste or degradation of the atmosphere from greenhouse gas pollution (Wood 2013).

The central idea behind PTE for animal agriculture is this then: There is an agro-ecological Commons from which we benefit but we are all charged with protecting. The agro-ecological commons and its constituents, like farm animals are considered to be *trust assets*. State, federal and intergovernmental agents and those in the industry who benefit from livestock production have a duty to protect these trust assets. Private citizens and consumers also bear some responsibility to the Commons. PTE recommends that the responsibility to manage and protect the agro-ecological Commons is not merely a private duty matter, but a collective action one. PTE suggests that all agricultural activities must be addressed holistically with an eye towards fairness, social justice and sustainability in order to avoid irreparable and significant harms to future generations and other vulnerable community members.

Why should we consider the PTE for animal agriculture? Animal agriculture should be considered a public trust resource since its condition affects other public trust resources (e.g., water and nutrient security) that are bound to the survival and wellbeing of present and future people and animals. If animal agriculture becomes a *public trust resource,* then governments (on our behalf) would have the authority

[9] I am indebted to Clark Wolf for introducing me to this notion. For a thorough-going discussion on the concept, please see Clark Wolf's 2012. "Environmental Ethics, Future Generations, and Environmental Law." In A. Marmour, ed. Routledge Companion to the Philosophy of Law. pp. 397–414.

[10] See also: Convention for the Protection of Cultural Property in the Event of Armed Conflict. The Hague, 14 May 1954. Available at http://portal.unesco.org/en/ev.php-URL_ID.13637&URL_DO . DO_TOPIC&URL_SECTION. 201.html

7 See http://www.un.org/depts/los/convention_agreements/convention_overview_convention.htm

8 See http://www.unoosa.org/oosa/SpaceLaw/outerspt.html

to manage it responsibly and are obliged to sustainably manage all of the renewable resources within their jurisdictions. Given the way in which the global food system is organized and interconnected through commerce, resource use, waste and pollution production and environmental factors such as climate change (FAO 2013b), everyone who participates either indirectly or directly in the global food system for animal products and who benefits from animal agriculture have a responsibility towards protecting the trust assets that comprise the agro-ecological commons (including agricultural animals), namely, to ensure that the effects of the tragedy of plenty is minimized or forestalled and where possible reversed.

PTE would entail that unsustainable agricultural practices cease and that measures to mitigate climatic and environmental challenges which place food security in a particularly vulnerable position, be a priority (see *Climate Change 2014: Impacts, Adaptation, and Vulnerability IPCC Working Group II Contributions to ARS* @ http://www.ipcc.ch/report/ar5/wg2/). Management of the agro-ecological commons would include regulating the huge demands on energy and nutrients that have emerged as much of the world (including Asian consumers) gravitate towards more meat-based diets and technological advances like transportation, modern communication devices and media, refrigeration and supermarkets become available to more segments of the global population. PTE would impose limits on exploitation and curtail property rights of self-interested parties since rights to use and benefit from trust assets (including the sacrifice of farm animals) are grounded on (i) rights and responsibilities *in trust* for the perpetuity of humanity and (ii) respect for the agro-ecological Commons and its constituents in themselves.

As beneficiaries of and participants in its trending Livestock Revolution (Delgado 2003), Asian countries and their citizens have a special role to play in addressing the growing global priority around farm animal welfare and sustainable agriculture. Since the industrial model of animal agriculture (e.g., intensive dairy, poultry and pork industries) has become the dominant model for global agriculture and is what is currently feeding and slated to feed Asia's growing population in the future and will have a significant impact on Asia's vulnerable populations (including animals) and resources, Asian policy makers, citizens and industry agents have a legal and moral responsibility to: (i) pursue models of animal agriculture for their region that are guided by fairness and social justice, and (ii) minimize the risks to vulnerable parties who are and will be impacted by food policies and the vagaries of the global food system, including farmed animals, ecosystem services, air, water, land, and biological diversity a.k.a. the agro-ecological commons.

PTE will challenge the region to consider:

(a) How social justice should motivate our agricultural policies and business models?
(b) How we should innovate our agricultural practices to be more diverse, inclusive and accessible?
(c) What are effective solutions to mitigate risks in the food system for all relevant stakeholders?

(d) How to effectively make the argument and delineate criteria for assigning greater significance to public rights to resources in the agro-ecological Commons over individual or commercial use rights, including the priority to protect the interests of farmers (as primary caretakers of livestock and stewards of the land) and local farming communities, farmed animals and not just that of multi-national agri-businesses or food corporations.

7.1.10 Animal Welfare and Environmental Justice, Opportunities for Asia

The narrative ethics analysis above highlights a great opportunity for citizens of Asia to be part of the global discourse to mitigate the effects of the tragedy of plenty in pursuit of a more sustainable and humane animal agriculture. Asian countries can provide moral leadership in their aspirations for sustainable, humane and socially just food systems, especially in the wake of soaring world and regional meat consumption, climate change and global need to bolster sustainable agriculture. Further, since a number of Asian countries like India and China will have greater and greater influence on the world stage, there are important research trajectories that Asian countries can propose, especially in conjunction with promoting global cooperation to address food and water insecurity, energy and climate change.

How might Asian countries mitigate the tragedy of plenty and take steps to incorporate PTE in animal agriculture? The first opportunity to do this involves an invitation to think philosophically and participate meaningfully in conversations about the ethical bases of PTE. As the demand for animal products increases among Asian countries and the region's impact on global agriculture deepens, the citizens of Asia have an important role to play in determining how rights, opportunities, resources, costs and benefits are allocated to those centrally associated with food production by social and economic institutions. More specifically, Asia nations and their citizens should consider raising central demands of social justice and ethical risk management-communication by addressing the following questions that similarly motivate reforms in the global food system elsewhere across the world:

- Are the major actors in agriculture thinking critically and often enough about broader societal concerns? Producer concerns (including how smallholder and subsistence farmers who are going to be impacted by rising demands by urban dwellers in the region, changes to agricultural lands due to development, and the long arm of globalization and technological fetish and vertically organized business structures of industrial food production)?
- Are these actors acting with ethical integrity in response to the concerns regarding parity and social justice in animal agriculture?
- How are they innovating in response to these concerns? In terms of product and process (how are producers of all stripes, consumers and citizens involved in transparent and accountable decision-making)?

- What should the region's research priorities be around food security, climate change, waste and energy and local food economies?
- How are new research lines (including private-public collaborations around agriculture) addressing these concerns?
- How do the major food policy decision makers view risk and how different is their conception of risk from that of vulnerable peoples and communities across Asia? How do they view benefits and harms within society around animal production issues?
- What is the production sector and food industries doing to reform their business models to address social and distributive justice issues and the unique cultural folkways among Asian countries around food and to address risk in animal agriculture?
- What opportunities do consumer-citizens and their governments have to shape best practices and mutually beneficial agricultural standards for their local realities in a global food system dominated by multi-national corporations and agribusinesses?

Further, highlighting how farm animal welfare intersects with social justice for a moment, the beneficiaries of farm animal use (especially Asian countries at the cusp of grappling with farm animal welfare and industrialized agriculture as matters of ethics) must address in earnest these important questions (Sandøe et al. 2003):

- What is a good animal life?
- What is the baseline standard for morally acceptable animal welfare?
- What farming purposes are legitimate?
- What kinds of compromises are acceptable in a less-than-perfect world?

By making social justice questions around food and agriculture more mainstream for those in Asian countries, the governments and industry actors in the region can be more proactive in promoting greater food sovereignty for producers and the public and resist the irreversible effects of agricultural and technological determinism due to the globalization of food.

The second opportunity for Asia concerns the relationship between research and public policy in helping to shape a more ethically inspired food system and animal agriculture. The extent to which the public in Asian countries gives specific consideration to social justice issues around food and agricultural issues is at the moment an understudied area. Applying values aware research to agricultural science and policy has the potential to provide exciting new market avenues for a variety of farmers from the production sector in the region. From a shared governance point of view, values aware research can bolster public participation in shaping the mode by which agricultural policies and food related trade evolve in the region and around local food folkways identities.

In seeding values aware research (and recognizing that each country or region in Asia will come with its own peculiarities), it is important to remember two main elements that are highlighted by the narrative ethics analyses above. The analyses of logos, pathos and ethos reveal the demands of social justice and ethical risk

management and communication that should guide PTE. The social justice questions around animal agriculture as described above and as reflected in PTE can be understood to have four main components. The substantive ones concern (Miller 2003):

- Need, which is a claim about protection of basic necessities, either legally or normatively
- Desert, which is a claim about just compensation for performing one's duties
- Equity, which refers to the social ideal that society regards and treats its members with respect, and that benefits such as certain rights should be taken seriously and be distributed fairly

On the procedural justice side, social justice is concerned with ethical forms of public engagement. If certain viewpoints are not represented, are unfairly represented or dismissed or trivialized, then the deliberative process may be perceived as inadequate or untrustworthy (Anthony 2012b; Borner and Menz 2005; Burgess 2004). This dovetails with the secondary ethical point below.

In terms of risk, PTE goes beyond the standard expected value conception of risk that is often used in scientific inquiry and engages with the public conception of risk that is at the heart of concerns about technological change. In the case of the former, risk is a function of the probability that harmful events will occur and the magnitude of their occurrence (Friedman and Savage 1948). This conception of risk typically drives public policy and scientific investigation. In contrast, a public conception of risk can be characterized as a feeling of well-being concerning one's general situation. Given recent restructuring of the global food industry that has altered the power relationships of various actors, for example, regulation of the industry is moving toward greater private control, and the power of supply chain agents has dramatically increased. The public conception of risk is tied to trust and vulnerability, fairness, special interests, uncertainty, dread, catastrophic potential, controllability, and arrogance of experts and decision makers (Thompson and Dean 1996). In addressing risk then, credible authorities will be seen as those who recognize the vulnerability and position of epistemic dependency of certain publics and producers across the continent.

In helping policy makers and the public across Asia (and the world for that matter) think about animal welfare and environmental sustainability specifically and PTE generally in more concrete terms, I recommend operationalizing social justice and risk into familiar ethical categories: Safety, Quality, Security, Humaneness and Sustainability. The categories form the basis of some of our basic or common ethical commitments about our contemporary food system and relationship to food and to each other.[11] These ethical categories in turn generate norms/principles, which

[11] I recognize that there may be great variability in terms of how these ethical categories and principles/norms are understood or prioritized across Asia. Discourses about this variability should be seen as opportunities to engage both the nature of value pluralism in ethical governance and shared interested and aims across the world.

Fig. 7.1 Reconceptualizing animal agriculture – ethical consideration. A model by Raymond Anthony – 13 May 2014

subsequently can motivate a framework for both shared ethical governance, i.e., the translation of collective moral intentions into effective and accountable institutional actions (McDonald 2001), and ethically inspired industry business models. The principles include:

- Responsibility-Responsiveness (attentiveness)
- Innovation-Partnership
- Respect
- Resilience/Stewardship
- Diversity-interdependence

This relationship is captured in Fig. 7.1, which highlights funding objectives for an ethically inspired animal agriculture in the current climate:

Briefly, the ethical commitment towards *Safety* is connected with feelings of unease when confronting unknown/unfamiliar risks and threats. Food safety should be the priority of governments and the suppliers of food producers in Asia and across the globe. The ethical priority of safety must deal with social justice and risk management against known knowns (such as dealing with labor issues like the rights of undocumented workers); unknown knowns (such as dealing with global markets, foreign trade and demand and impact on the demand for Asian meat consumption but what the nature of the threat will be is still unknown), and known unknowns (it is hard to forecast or anticipate emerging vulnerabilities around anticipated challenges due to food insecurity, climate change or the spread of animal disease). In turn, this basic commitment recommends the *Principle of Responsibility*:

Are agents with influence meeting fundamental duties to Asian diverse publics? Are the procedures for public participation in the food system around risk just and are the outcomes meeting social justice requirements?

The ethical commitment towards *Quality* involves acknowledging all the interests that are at stake and not just the material composition or the health/nutritional benefits of a product/commodity. It includes relying on the credibility of certain sources of assurance. Who is an expert/authority on animal agriculture these days? Should we believe something reported to us by these experts? Is their assessment credible? What makes a source and assessment credible? And what do existing Partnerships in animal agriculture look like and do existing research emphases address future vulnerabilities adequately and justly? The *Principle of Innovation* is recommended and is about designing quality driven food policies and market innovations that have more equitable voicing mechanisms and is socially more inclusive so that the relevant public values help to overcome both the moral psychology of denial and psychic numbing.

The ethical commitment regarding *Humaneness* is tied to overcoming hubris/arrogance. More than any single factor (Shrader-Frechette 1991; Slovic et al. 1985), arrogance contributes to a loss of public confidence in policy makers, industry agents, scientists' and their ability and willingness to safeguard public interest. This translates into the *Principle of Respect*, for workers, animals, and everyone who participates in the market food system and those who are outside the chain and future generations.

The ethical commitment regarding *Sustainability* involves rehabilitating ideals of citizenship and moral excellence. It is about realizing that animal agriculture is a dynamic interface between socio-political-economic-ethical-technical-natural biophysical systems that must be balanced judiciously. As an ethical commitment, sustainability is about being mindful not to squander opportunities for future people to meet their own needs and challenges, and also encompasses curbing waste and excess in the food system. For example, how should we measure and value post harvest losses and successes and how we train and screen the labor force are important for animal welfare and environmental protection in Asia as it is across the world. This translates to *Resilience/Stewardship*, a responsive stance/attitude that champions transparency and connectivity in the food system. This principle encourages business models and the norms in research funding to be functionally robust and self-correcting.

The basic ethical commitment towards *Security* does not only concern food, water, nutrient and environmental security but also raises the concern that all other forms of farming have been usurped by the intensification paradigm. Should policy makers and the public protect and continue to promote local food economies and systems as viable options for food security? What is our shared moral responsibility in staving off agricultural monocultures for Asian's diverse populations? The *Principle of Diversity-Interdependence* is recommended and involves both celebrating the coexistence of different production-consumption systems and dismantling the blackbox phenomena around current agricultural practices and policies so that

social justice and fairness elements can form around alternative forms of animal agriculture that may be more suitable for local food systems.

7.1.11 Planning Ahead: A View from Without

Asian consumers are in danger of sleepwalking through an era of *plenty* and seduced by its promise of disburdenment into single-mindedly pursuing immediate material wealth to the exclusion of values that are authentic and enduring in meaning (Anthony 2012a; Appleby et al. 2003; Borgmann 1984). Many are oblivious to the real cost of their food and may not appreciate the price humanity is paying for their cheap, readily available abundant food. However, while Asian cities enjoy abundance, there is also abundant wastage. Many in Asia still suffer from food shortages and nutritional and food insecurity. Hunger and malnutrition still persist despite greater food production in many Asian countries as a consequence of the global food system, through technological innovation or market redistribution. Spurred on by market forces and science and technology and being detached from the realities of food production (including the plight of farmed animals) and the environmental costs of their consumerism, many Asians may not appreciate lessons inherited from communities that are committed to local food systems and from their agrarian ancestors who partnered with nature in the interest of sustainable production.

Alternative philosophies like PTE challenge our fundamental premises about what is and what to value (Mekonnen and Hoekstra 2012; Singer and Mason 2006). PTE encourages farms of the future to inculcate an ethical sense of place. It promotes practices that insure local integrity of both natural and social patterns of interactions from one generation to the next. It encourages experimentation and creativity with new farming systems or reinvigoration of successful traditional systems, in order to image and replace dominant models that currently perpetuate injustice, inefficiency and waste. PTE also challenges current actors in the food system (like consumer-citizens in Asia's megacities and supply chain agents) to make clear connections between production efficiencies and social justice concerns (animal welfare, environmental justice issues, smallholder farmer sovereignty).

Public participation in Asia will be essential in establishing norms of fairness and social justice that Asia's diverse population can endorse and apply to their lives, no matter where they happen to be in the food system. There is some innovation already coming out of Asia to address the issues highlights in the vignettes and discussion above. There is a lot that can be learned from these local innovations (see, for example, UNCSD 2012). Without being presumptuous or ethnocentric, there may also be opportunities for Asia to learn from partners from without. For those with access to the digital world, tools like the IFADAsia portal and Eurobarometer[12] can help elu-

[12] It was recently announced that the European Commission will launch a EUROBAROMETER survey on animal welfare in 2015, updating its 2007 survey which should then that that European Citizens are really concerned about the treatment of animals and about improving their welfare (http://eurogroupforanimals.org/news/european-commission-eurobarometer-on-animal-welfare-welcome/).

cidate public values and perceptions (see http://asia.ifad.org and http://ec.europa.eu/public_opinion/index_en.htm) provide clues for mobilizing economic, political and social resources to actively address food, water and nutrient insecurity and social justice issues around agriculture. Public consulting and solicitation tools can also jumpstart education and knowledge transfer opportunities for citizens who are currently unaware of the total impact of the global food system on their lives and the future. These public consultation tools are excellent ways to uncover local realities and discover local challenges.

Asia can also turn to existing models that have been successful in promoting fairness and social justice through transformations in agriculture. An interesting model that has gained some currency and which can be explored as a way to bring Asian realities to light and to the table is the *Dreaming New Mexico Project* (http://www.dreamingnewmexico.org). A Bioneers Collaborative Project, the Dreaming New Mexico project seeks to reconcile nature and cultures at the local state level. By surveying citizens and businesses around the state to consider what a restoration economy would look like and what they want for themselves, the next generation and the Earth, collaborators on this project are beginning to explore Big Picture questions regarding pro-citizen and values oriented agriculture. A primary goal of the Project is to implement both values aware and evidence based research to more effectively and justly feed current and future generations, and to include those who have been previously marginalized by the conventional farm to fork market chain.

In terms of innovating for animal welfare and advocating for social justice and fairness for smallholder farmers, Asian countries in similar situations may turn to Brazil's *PAS Leite* initiative to understand how federal and local anti-poverty strategies are been relatively successful in being employed using local animal agriculture structures. PAS Leite, a programme tied to the *Strengthening Family Agriculture* axe of Brazil's Zero Hunger or Fome Zero strategy,[13] is helping to ensure the livelihoods and food security of rural and smallholder dairy farmers. PAS Leite appeals to dairy production as a central pillar in stabilizing local food systems and farming communities and may reveal ways in which communities in Asia can promote vibrant local food systems and rural communities, avoid civic unrest and poverty which may arise due to higher global prices for and scarcity of food, energy and water.

7.1.12 The Next Leg

PTE encourages shared governance and responsibility for the shape and design of animal agriculture, the health and continued viability of the agro-ecological commons and the food system. More specifically, PTE would entail that:

[13] Brazil's Zero Hunger (www.fomezero.gov.br) seeks to develop local and national strategies to address hunger, malnutrition and poverty.

- All of Asia protects certain central natural resources for human being's very existence like air, fresh water and oceans, and farmed animals
- National and state governments in the region exercise a continuing fiduciary duty to sustain the viability of those resources for use by present and future generations
- The relationship between private interests and the interests of society as a whole and to non-human life be renegotiated to ensure social justice, fairness and sustainable
- Rights (e.g., property rights) would be recast 'in trust' for the perpetuity of humanity because everyone (future people included) is entitled to participate in their enjoyment
- Private industries consider property rights (and profit entailed from trust assets) in conjunction with responsible and reasonable use of natural resources and farm animals

Greater exposure to and education on these issues are essential in addressing them conscientiously. Steadily, animal welfare, food security, farmer sovereignty and environmental sustainability issues have been coming into focus for Asia. In 2013, the Ministry of Education in China, for example, included animal welfare in the curriculum of veterinary medicine (http://english.agri.gov.cn/hottopics/ah/201410/t20141029_24271.htm[14]). Interdisciplinary conferences around these issues discussed above (e.g., The First International Conference of the Asia-Pacific Society for Agricultural and Food Ethics (APSAFE 2013). Faculty of Arts, Chulalongkorn University (November 28–30, 2013), and 1st International Conference on Sustainable Agriculture, Food, and Energy (SAFE 2013) in Padang, Indonesia (May 12–14, 2013) are also starting to draw more researchers to tackle them.

These developments suggest that peoples and countries across the globe dealing with similar issues highlighted here are interested in animal agricultural research questions and initiatives that foster public trust outcomes for agriculture and not just limited to getting out as much as they can from Asia's current Livestock revolution. This bodes well for paradigms like PTE. Funding values aware and evidence-based research with a view towards social justice and risk, should be considered within a global context of how core food system environments (e.g., governance initiatives, policies and regulations, programs, infrastructure, resources and services, economic incentives, natural and social environments, socioeconomic and demographic factors) impact main points within our food system (processing, purchasing, harvesting, transportation, distribution, consumption, research, commerce and trade, waste and storage (inspired by NRC 2015; FAO 2013a; Pinstrup-Andersen and Watson II 2011; NRC 2010; EC SEC 2010/379) and with the following central research areas in mind: Moral and legal dimensions of food production and processing systems; Equity in different food markets and as it concerns just deserts; Dietary and food consumption habits of the various societies across Asia; Local and community food

[14] I am indebted to Andreia De Paula Vieira for alerting me to this development and for her insights regarding the interface between animal welfare science and sustainability studies.

Fig. 7.2 Funding needs and opportunities (with social justice and risk management in mind). By Raymond Anthony May 13, 2014

security needs and deficits; Food cultures and identities across Asia; Climate change and environmental preparedness; Novel technologies and political (e.g., democratic) processes to insist on transparency, traceability and trust; Unskilled labor, training and knowledge transfer opportunities and occupational hazards; and Human-animal-environment narratives across regions and countries (Fig. 7.2 above). These central research areas can help to shed light on significant social justice and fairness concerns that have been highlighted above through the logical, pathetic and ethical proofs, respectively.

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Chapter 8
An Ethical Theory Analysis of the Food System Discourse

Ronald Sandler

Abstract The ethical and political discourse around food production and consumption is increasingly focused on the systems that provide the food that we eat. The predominant "industrial" or "global" food system has received a barrage of criticism in recent years, including that it displaces smallholding farmers, exploits workers, undermines cultural practices, disrupts rural communities, degrades the environment, promotes unhealthy eating, empowers corporations over individuals, causes animal suffering, diminishes food autonomy and security, and reduces the aesthetic quality of food. Critics of the global food system argue that we ought to reject the system in favor of shorter food supply chains, more local and regional food systems, which engender responsibility and empower smaller producers, workers, communities, families, and individuals. However, the "alternative food movement" has itself been subject to large amounts of criticism on the grounds that its food system vision would actually reduce food security, diminish diet quality, decrease food access, and make our diets less aesthetically interesting. Moreover, the movement has been charged with being classist, valorizing elitist ideas about "good food", and promoting a false nostalgia about pre-industrial food conditions and practices. In this paper I provide a brief overview of the global food system and alternative food movement before discussing the ethical perspectives embedded in the cross system critiques. I suggest that proponents of the alternative food movement prioritize one type of ethical concern – recognition and respect – while proponents of the global food system prioritize another – bringing about overall beneficial outcomes. I then explore how a third ethical outlook – virtue-oriented ethics – might approach the food system issue. I suggest that a virtue-oriented approach is useful for identifying both insights and limitations of positions in the food system debate.

Keywords Food systems · Food movements · Ethical theory · Virtue ethics

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Parts of this chapter are adapted from Sandler (2015).

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The ethical and political discourse around food production and consumption is increasingly focused on the systems that provide the food that we eat. The predominant "industrial" or "global" food system has received a barrage of criticism in recent years, including that it displaces smallholding farmers, exploits workers, undermines cultural practices, disrupts rural communities, degrades the environment, promotes unhealthy eating, empowers corporations over individuals, causes animal suffering, diminishes food autonomy and security, and reduces the aesthetic quality of food (Pollan 2007; Shiva 2000; Schlosser 2001; Petrini 2004; Lappe 1985; Alkon and Agyeman 2011; Gottlieb and Joshi 2010). Critics of the global food system argue that we ought to reject the system in favor of shorter food supply chains, more local and regional food systems, which engender responsibility and empower smaller producers, workers, communities, families, and individuals.

However, the "alternative food movement" has itself been subject to large amounts of criticism on the grounds that its food system vision would actually reduce food security, diminish diet quality, decrease food access, and make our diets less aesthetically interesting. Moreover, the movement has been charged with being classist, valorizing elitist ideas about "good food", and promoting a false nostalgia about pre-industrial food conditions and practices (Desrochers and Shimizu 2012; McWilliams 2009; Laudan 2010; Paalberg 2010).

There are historical, cultural, economic, and political aspects to the food system debate. But it also has an ethical dimension. In this chapter I provide a brief overview of the global food system and alternative food movement before discussing the ethical perspectives embedded in the cross system critiques. I suggest that proponents of the alternative food movement prioritize one type of ethical concern – recognition and respect – while proponents of the global food system prioritize another – bringing about overall beneficial outcomes. I then explore how a third ethical outlook – virtue-oriented ethics – might approach the food system issue. I suggest that a virtue-oriented approach is useful for identifying both insights and limitations of positions in the food system debate.

8.1 The Global Food System and Alternative Food Movements

Every food system involves agricultural production (or capture), processing, preparation, consumption, and waste disposal. They all involve transportation, distribution, the use of technology, and exchange (or trade). What is distinctive about the global food system is that the food production and delivery networks are *transnational* and *industrial*. Because the system prioritizes efficiency, cost minimization and market success, it favors the following features, several of which are central to the ethical discourse regarding it.

- *Global Sourcing* – Materials, labor, and processing are sourced wherever they are least expensive.

- *Economies of Scale* – Consolidation, vertical integration, and large-scale production are favored because they increase coordination and reduce cost per unit of production.
- *Large Actors* – The primary (or most influential) actors involved are corporations, international institutions, and national governments, due to their economic significance and ability to act globally and set or influence policy.
- *Mechanization and Innovation* – Mechanization and novel technologies and processes are readily adopted if they can increase efficiency and lower cost.
- *Standardization* – Standardization of inputs and processes along the supply chain increases production efficiency and allows for ready substitution.
- *Commodification* – All elements of the system are valued (primarily or exclusively) in terms of their economic usefulness.
- *Cost Externalization* – Reducing consumer price and increasing profits incentivizes trying to pass on costs (e.g. ecological, social, or public health) of production processes to others, or to society as a whole.
- *High Input Needs (and capital costs)* – Intensive, large-scale production and global distribution require high levels of material inputs – e.g. fertilizer for agriculture, machinery for processing, and fossil fuels for transportation.

The quintessential illustration of the industrial food system and the complexity of the global food chain is the fast food restaurant cheeseburger. It is inexpensive, sold around the world by large corporations, the same at every location, thoroughly processed, immediately available, anonymously produced, and globally sourced. The fast food cheeseburger is by no means an exception. In both affluent and developing nations, food is increasingly global, processed, and ready for consumption.

The *alternative food movement* refers to people and groups committed to promoting alternatives to the global industrial food system. Like the global food system, the alternative food movement is not centrally organized and is highly dynamic. It is constituted by individuals, families, food cooperatives, farmers, community organizations, student groups, restaurant owners, chefs, NGOs, activists and others trying to grow and eat independently of the global food system and develop alternative agro-food networks. There are several different aspects of the alternative food movement, a cluster of over-lapping commitments and goals that are adopted by many who identify with it.

Organic foods are distinguished by the processes by which they are produced. Organic agriculture does not use genetically modified crops, synthetic chemical inputs, or antibiotics/hormones. Organic growers use techniques such as integrated pest management, crop diversity and rotation, cover crops, and manure fertilizing in order to control pests and weeds, enrich soil, and manage waste. Although "organic" is often officially defined by production method (e.g. by the USDA), those in the organic movement, which has been expanding globally since the 1960s, frequently embrace a much broader set of commitments. They typically reject not only chemical monoculture, but also corporate industrialization more generally in favor of smaller independent farmers, local production, shorter food networks, whole (natural or less processed) foods, humane animal agriculture, and strong ecological

sustainability. However, as the demand for organic foods has grown, large agro-food corporations have increasingly brought foods to market that qualify as organic – i.e. foods that do not contain genetically modified organisms and are not grown with synthetic inputs. As a result, the terms *local foods* and *slow foods* have emerged to capture some of the broader commitments formerly encompassed by *organic*.

The *local food movement* emphasizes the distance between where food is produced and where it is consumed. One aspect of this distance is spatial or how far food travels before it is eaten. This is often referred to in terms of *food miles*. Another dimension of the distance between food production and consumption that concerns *locavores*, those who identify with the local food movement, is social. Social distance refers to the large number of actors that comprise global supply chains, as well as its generally impersonal nature. Social distance is related to the hiddenness generated by industrialization. In a global industrial food system, we do not know – and often cannot even find out – where the ingredients in our food come from or who the farmers and workers are that grow and prepare it.

Whereas local food is in contrast to global food, *slow food* is in contrast to fast food. Slow food ties concerns about the industrialization of the food system to broader cultural critiques of "fast life." By slowing down food, the movement aims to challenge the industrial character of contemporary society, such as its frenetic pace, its focus on product over process, its emphasis on quantity over quality, its prioritization of the individual, and its homogeneity. On the slow food view, we have lost track of the things that really matter for living well – relationships, aesthetics, experiences, diversity, and caring for others (human and nonhuman). Food is an ideal place to make a stand against fast culture, on this view, since it is central to daily life and cultural practice and the effects of industrialization on it are so pernicious.

The *food justice movement* refers to organizations, activists and efforts to reduce injustice in the food system and to use food as a means for addressing unjust inequalities more generally. The food justice movement is diverse with respect to the issues it addresses, the types of organizations involved, and how it pursues its goals. For example, *fair trade* organizations are concerned with eliminating exploitation in global trade practices by ensuring that farmers in developing nations receive a fair price for their goods and are empowered to protect the integrity of their communities and the agricultural and ecological systems that support them. Worker organizations are aimed at improving the working conditions and compensation of agricultural and food industry workers. Community organizations promote accessibility to nutritional and fresh foods and the elimination of food deserts. Large non-governmental organizations (NGOs) aim to raise awareness of global malnutrition and address the poverty that causes it by means of aid and intervention programs.

What frequently binds the elements of the alternative food movement together is the view that the dominant global food system is deeply ethically problematic. In the next section I discuss the different ethical outlooks embedded in the global food system and the alternative food movement.

8.2 Two Ethical Outlooks

There are two primary ethical arguments offered in support of the global food system. One is the *feed the world argument*. There are over 7 billion people on the planet, 815 million of whom are undernourished. As a result of population growth, poverty reduction, economic growth, and changes in dietary habits (e.g. shifts to greater meat consumption) it is estimated that global crop demand will increase between 60% and 120% by 2050 (Cassidy et al. 2013; Alexandratos and Bruinsma 2012). Feeding the world is a challenge that must be met with finite natural resources. According to the United Nations Food and Agricultural Organization (FAO), ~38% of the Earth's surface is already used in food production (crop and pasture) (FAOSTAT 2014), and most land well suited to agriculture and not vital for other purposes is already under some form of agricultural use. (The only substantial areas for potential increase are forested regions in parts of Africa and South America.) Moreover, recent research suggests that there is an overall planetary limit to how much plant matter can grow in a year, crop or otherwise, based on such things as land availability, solar radiation and precipitation (Running 2012). Thus, any additional plant resources we use for ourselves will diminish what is available for other species. It is already estimated that humans appropriate ~25% of biospheric or net primary plant production (Krausmann et al. 2013). The situation is similar with respect to the oceans. Less than 13% of global fisheries are currently underexploited. The rest are fully exploited (~57%) or over-exploited (~30%). There is not a lot more production to be gotten from the sea, particularly if we are to leave sufficient resources for other species (FAO 2012).

Although the amount of agricultural land in use per person has been declining, in every major region, including Africa, Asia, Latin America and Oceania, more calories, fat and protein are produced and available in the food supply *per capita* today than in 1960 or 2000 (FAOSTAT 2013; FAO 2013). Proponents of the global food system argue that this is the result of technological innovation and industrial efficiency, which have been spreading through the agriculture and food sectors over that time. The way to get more calories out of the same amount of land is to intensify production, to innovate and adopt new agricultural technologies, to add inputs (e.g. synthetic fertilizer) as needed, to specialize production to what is best suited for a region (and then trade globally), to reduce crop loss (e.g. to pests and spoilage), to eliminate waste in the supply chain, and to deliver food when and where it is needed all over the world. This is the only way to feed the world; which ought to be our primary goal. Proponents of this argument will often add the corollary that the more efficient we make food production – the more that we can produce per unit of land – the more space and resources we can leave to other species. So there are ecological and biodiversity benefits to maximizing agricultural efficiency and intensity (Desrochers and Shimizu 2012).

The second central argument in support of the global food system is the *argument from preference satisfaction.* No other system can deliver to consumers what they want, when they want it, at a price they are willing to pay. In economics, a

market or system is considered well-functioning to the extent that it satisfies people's preferences; and satisfying preferences is a measure of welfare or well-being. So, the better a food system satisfies people's preferences, the better it promotes human well-being. The global food system is extremely efficient at satisfying people's culinary preferences. Those of us who live in affluent nations can get exactly the food we want at almost any time of the year. This applies not only to processed foods, but also to fresh foods and to dining out. Only a global food system can deliver berries to New England and citrus to Northern Europe in the middle of winter, and provide a constant supply of fresh caught tuna and salmon to Chicago and London. In the United States, for example, 91% of seafood (NOAA 2013) and 38% of fresh fruits and nuts are imported (USDA 2012a). The UK produces only 23% of the fruits and vegetables it consumes (DEFRA 2012). Moreover, all these foods are available at prices people are willing to pay – $1 for a double cheeseburger and $1.99/lb for fresh pears. The global food system makes this possible by driving down costs in the ways discussed earlier: global sourcing, minimizing labor costs, specialization, vertical integration, standardization, and economies of scale. In the United States, average household food expenditures are now 10% of household income, whereas in 1950 they were over 20%. In the UK, average household expenditures on food are only 11.6% of total expenditures (USDA 2014).

That those of us in affluent nations with food abundance spend so small a proportion of our incomes on food means that we can be choosier. We can pay more for what we want when we want it, since we do not need to make our choices on the basis of cost and nutritional content alone. One thing affluent people increasingly want, all over the world, is convenience: fast food, processed food, prepared food, restaurant food, and food delivered to our doors. Processed foods have also been increasingly adopted in developing nations, in large part because they enable longer storage in the absence of reliable electricity/refrigeration and can ease the very significant time and labor burdens associated with food preparation.

The global food system is a market system that responds to consumer demands. No other system could reliably deliver the variety of foods that people want, when they want them, at the price they are willing and able to pay. That is, no other food system can satisfy people's food needs and preferences so well as a global industrial food system. Because a system promotes well-being to the extent that it satisfies people's preference, and the global food system satisfies preferences so well, we ought to embrace the global food system, according to this argument.

Each of the arguments in favor of the global food system appeals to a conception of what matters (or what has value), as well as a conception of how we ought to respond to what matters. What has value is human welfare; and we ought to try to promote human welfare as much as possible. In the feed the world argument, the system is thought to be justified because it best meets the basic needs of people. In the preference satisfaction argument, the system is thought to be justified because it best satisfies people's preferences (and preference satisfaction is what constitutes well-being). This is a standard consequentialist, and utilitarian in particular, form of argumentation. The aggregate well-being of people is best promoted by the global food system, so it should be embraced.

Some of the arguments against the global food system aim to show that it is inadequate on its own value and theory commitments. For example, it is sometimes argued that intensive monoculture actually reduces agricultural productivity in the long run or when all types of crops are considered; or that it is not efficient when all the externalized ecological and human health costs are considered; or that the market does not efficiently deliver calories to where they are most needed but to where they are most economically valuable, which is often being used as fuel or feed rather than food (Sandler 2015). However, what drives many of the ethical concerns about the global food system is that the system's value orientation is wrong. It prioritizes aggregate well-being and efficiency, and in so doing it does not adequately recognize the value of the individual or community (Thompson 2010). That is to say, even if the system were maximally efficient at promoting human welfare in aggregate – feeding as many people as possible and satisfying as many preferences as possible – many ethical objections to it would remain.

For instance, if a person has a right to the product of their labor or to their property, this means that others cannot take it or use it without their consent, *even if it would increase aggregate welfare to do so*. Concerns about the global food system's exploitation of workers are not about the value of their labor not being fully maximized. They are about workers' worth as people not being fully respected. Similarly, concerns about animal treatment in industrial food systems are not about whether animals are being used as efficiently as possible to convert calories into meat, eggs, and dairy. In the United States, for example, per cow milk production increased from 9700 lb/year to over 21,700 lb/year between 1970 and 2012 due to innovations in milking technologies, feeds, breeds, confinement systems and hormones, as well as concentrated specialization (USDA-NASS 2014; USDA 2012b). The problem, instead, is precisely that they are treated as locations of food manufacture that ought to be optimized, rather than considered as mattering in themselves or for what they are. The same is true of the global food system's impacts on the sovereignty of communities, autonomy of consumers, cultural diversity, and equality. The concerns are that the value, importance or worth of these are not appreciated, so they are undermined in the pursuit to maximize yields, decrease costs, and grow the global food supply. Moreover, respecting them – treating and considering them in accordance with their value – would often reduce market efficiency. It would require taking better care of animals, paying workers more, providing more information to consumers, reducing the externalization of environmental impacts, and affording communities more power in decision-making processes.

Respect based concerns regarding the global food system are not thought to be accidental to it. Rather, they are seen as flowing out of the industrial and market-oriented aspects of the system which, as discussed earlier, favor commoditizing all inputs (including animals and labor), externalizing as many costs as possible, developing a low cost easily replaceable workforce, aggressively automating and adopting novel technologies, sourcing wherever costs are lowest, and standardizing processes and components throughout the system through top down control and vertical integration. On this view, cleaning up the system is not possible, because the industrial imperative and the value orientation that gives liscence to it are at the

core of the system and the core of the problem. To eliminate animals suffering, worker mistreatment, exploitation of indigenous knowledge, gross inequality, and corporate control requires replacing the system. A reformed global food system is an alternative food system.

Thus, the core arguments for the alternative food system are premised to a significant extent on an alternative value system, a standing-based one on which priority is given to: respecting the sovereignty of communities and their right to maintain their traditions; farmers receiving fair compensation for their products; the rights of workers to be treated justly and to receive a living wage; the right of animals to not be exploited for human ends; and the autonomy of consumers and their right to know where food comes from and how it is produced. Shorter, more personal, less corporate food systems, nonindustrial agricultural and capture systems, and more attentive and appreciative consumption of food are thought key to realizing these.

At the center of the food system discourse, then, is a classic ethical theory debate about whether priority in ethics ought to be given to the consequences produced (commonly referred to *consequentialism*) or respect for standing (commonly referred to *deontology*).

8.3 Is There a Middle Way?

I argued above that part of the food system debate involves a fundamental disagreement about value and ethical theory. On the one hand, defenses of the global food system prioritize well-being and aggregate outcomes, while critics of the system prioritize worth and respect. This is part of what makes the global food system and the alternative food movement seem fundamentally incompatible (among many other factors). It also invites inquiring whether there is a middle way between the two, an ethical theory that could incorporate what is insightful about each view. In the Anglo-american ethical theory discourse, virtue ethics has been defended as such an alternative (Hursthouse 1999; Swanton 2005; Sandler 2007). On a virtue ethics approach to ethical theory, aretaic concepts are the primary evaluative terms. Instead of evaluating actions, practices, policies and institutions in terms of either rights or consequences, it is done in terms of virtues and vices – e.g. courage/cowardice, humility/arrogance, compassion/callousness, caring/indifferences, respectful/disrespectful, and frugal/gluttonous – and something is right to the extent that it expresses or hits the target of the operative virtues. Virtue oriented ethical theories also are prominent in non-western ethical traditions focused around practices of self-cultivation, such as Confucianism, Daoism, Buddhism and Hinduism. Thus, not only might virtue-oriented evaluation help provide a fresh perspective on the ethics of food systems debate, it might also be conducive to cross-cultural discourse.

Which character traits are virtues and which are vices is determined by how well they respond to or promote value (Sandler 2007). Because there are many different types of value (e.g. economic, aesthetic, cultural, and intrinsic), virtue ethics involves a diverse, pluralistic set of evaluative concepts, as evidenced by the variety

and richness of virtue and vice terms (Van Wensveen 2000). Therefore, one way in which a virtue-oriented perspective might advance the food system discourse is by validating the values underlying both positions. A virtue-oriented view recognizes that efficiency is a virtue, particularly when there is a limited resource base and scarcity – i.e. if everyone uses as much of a resource as they would like, there will not be enough to fulfill everyone's wants and needs. The food supply is an instance of moderate scarcity. Sufficient calories and nutrition are produced for everyone, but not if they are wasted or used inefficiently. So the virtue of efficiency (and avoidance of profligacy or wastefulness) is operative. However, respect for the autonomy and dignity of people is also a virtue, since people, as individuals, have worth. Therefore, efficiency is not always over-riding; it must sometimes be tempered with respect.

One implication of the variety and richness of virtue-oriented evaluation is that it often is more nuanced and situational than rights or consequence based evaluation. On most virtue-oriented theories, there is not a lexical ordering of virtues that applies across all contexts. It is not the case that efficiency always comes before respect, or respect always before efficiency, for example. Moreover, it is preferable to pursue a way that hits the target of all the operative virtues as well as possible – e.g. to develop an efficient agro-food system in which people are respected and animals are well-treated. In some cases, this will involve compromising a bit on one value or another, but it will not involve failing to recognize it or dismissing it in total. People and animals would not be commoditized in the pursuit of efficiency (even when efficiency is pursued) and therefore the pursuit of efficiency would not need to be reflexively rejected on the basis of respect for communities and individuals. As a result of this situational sensitivity, virtue-oriented evaluation may endorse organics in some situations, but not others, or local food networks in some situations and not others.

In addition to incorporating what is insightful in the value orientation of each side of the food system discourse, as well as discriminating situationally regarding such things as local/global and organic/conventional, a virtue oriented perspective can critically assess some of the underlying assumptions associated with each position. For example, part of the argument for the global food system is that it excels at satisfying people's culinary desires. However, on a virtue oriented view, it is possible to evaluate people's desires. If people's desires are contrary to virtue, then it is not good that they are satisfied. If people with food security and food choice have a preference for large amounts of inexpensive meat, but satisfying this preferences involves significant ecological impacts, large amounts of animal suffering, and inefficient use of resources (animals return to the food system only ~10–12% of the calories fed to them), then their preferences are ecological insensitive, indifferent, and inefficient. They are preferences people ought not have. It does not count in favor of the global food system that it is able to best satisfy affluent people's culinary preferences, when those preferences are not virtuous (or are vicious).

Similarly, a virtue oriented approach can critically assess the different positions' conceptions about what the goals or aims of our food related practices, policies and institutions should be. For example, critics of the global food system (in affluent nations) often appear to prioritize the quality of the diets of people with food security: "Maybe all I'm saying here is this: There are two important struggles in food.

One is for sustainable agriculture and all that it implies – more respect for the earth and those who live on it (including workers), more care in the use of natural resources in general, more consideration for future generations. The other is for healthier eating: a limit to outright lies in marketing 'food' to children, a limit on the sales of food like substances, a general encouragement for the eating of real food" (Bittman 2014). Sustainability is certainly important and so too is healthy eating. But on a virtue oriented perspective, improving the quality of the diets of people in affluent nations, who already live well by global and historical standards, is not as important as securing a nutritionally adequate diet for the 815 million undernourished people in the world. It is not even more important for affluent people or in affluent nations. Eating locally is often very good for people to do. It is frequently ecologically sensitive and appreciative. However, it is by no means the extent of our responsibilities around food, or even our first responsibility. Justice and compassion involve caring and acting to help improve food security for others, and this might sometimes involve embracing aspects of the global industrial food system or transferring resources that we might spend on premium foods for ourselves to those who are in serious need.

8.4 Conclusion

The foregoing was meant to be exploratory. The question was whether a virtue oriented approach to ethical theory and evaluation could provide a useful alternative to the consequentialist orientation of global food system advocates and the rights-based orientation of alternative food system advocates. It appears that virtue oriented ethical theory does have the potential to offer a fresh perspective on the discourse, and it provides some resources for productively working through the entrenched positions within it. Thus, these initial explorations are encouraging. A virtue oriented perspective should be developed and incorporated into the food system discourse.

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Chapter 9
Theorizing Alternative Agriculture and Food Movements: The Obstacle of Dichotomous Thinking

Lisa Heldke

Abstract How can we understand and move beyond a persistent tendency to think, write and organize about food and agriculture as if it were possible to separate a theorist's views on gender and race from their views on farm animals? Considerable scholarship already addresses this question. This paper suggests that philosophy can contribute to the discussion by focusing a particular kind of attention on patterns of thinking. In particular, dichotomous thinking has traditionally provided grounds for separating production from consumption, and continues to present an obstacle to efforts at connecting "farm issues" to "fork issues." Three characteristics of dichotomous thinking present particular obstacles to scholarship that would deeply integrate food studies with agriculture studies. (1) Dichotomies tend to set up not just a contrast but an antagonism between their two poles, such that to be *this* means to be *not that.* (2) Dichotomous thinking tends to erase nuance, to eliminate anything between the two dichotomous options, and to purify or "clean up" the ambiguous case or extraneous material, by shoehorning it into one option or the other; and (3) Particular groups of dichotomies operate together, such that they mutually reinforce each other to create a way of understanding the world that is more plausible because of its cohesiveness. These snarls of mutually-supportive dichotomies that are nevertheless purist and puritanical in their impact, present a real (i.e. ideological, theoretical, conceptual) challenge to creating scholarly and activist movements that integrate the best of agrarian thinking and the best of critical food studies scholarship attentive to race, class and gender oppression.

Keywords Dichotomy · Production · Consumption · Alternative agriculture · Agrarianism · Local food

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> *It would be difficult to begin with a careful and sympathetic account of cooking, eating, and growing food and end up with radical dualism as an adequate account of those experiences.* (Curtin p. 9)

Difficult, but not impossible. While any number of popular slogans remind us that food comes from agriculture (and that it is therefore impossible to have the one without the other), it nevertheless turns out to be remarkably difficult to work in these "new," "alternative" or "progressive" food and agriculture movements in ways that fully embody the connections between growing food and eating it. Such a realization should stand as a caution to those of us engaged in alternate food and agriculture studies, whether as activists, as mainstream writers, or as scholars.

Why is integrative work so difficult? This complicated question demands many different kinds of answers, of which philosophical answers are one useful sort. Philosophy's capacity for abstraction, while not always useful, is an asset in the present case because it draws our attention to large patterns of thinking while also inviting us to (temporarily) ignore details and particularities. Furthermore, this abstraction gives us the opportunity to imagine and suggest alternative patterns of thinking that might prove useful for advancing alternative food and agriculture movements in different promising directions.

This paper focuses on the problems associated with one such existing pattern: namely, western philosophy's propensity to dichotomize, a propensity that can tend to shape everything in its path, including food production and consumption. I begin my examination of dichotomy with a backstory, one that comes from the field of cultural food studies and illustrates the relative ease with which our analyses sequester production from consumption, agriculture from food. Some ten years ago, I published a book called *Exotic Appetites: Ruminations of a Food Adventurer,* in which I developed a portrait of a phenomenon I called "cultural food colonialism" (CFC). I defined CFC as a set of attitudes and practices that shape the ways Euroamericans eat the foods of those we define as "Other," i.e. those formerly colonized by, or ethnically and racially marginalized by, Europeans and Euroamericans. In contemporary American society, "eating ethnic," as it is often colloquially known, is an activity especially popular among those of us with considerable cultural or educational capital but relatively little money—academics, for instance. Cultural food colonialism, I suggested then, is problematic in part because it serves to shore up and to normalize other, more material forms of colonialist exploitation. As I put it in *Exotic Appetites*, it "softens us up" to accept other (arguably much more serious) material and economic forms of colonialism.

Cultural food colonialism is characterized by three features: a fascination with the exotic; a purist obsession with authenticity; and a tendency to regard the exotic/authentic Other as a resource for the cultural colonizer's use. As its name suggests, CFC is an explicitly cultural phenomenon, one that focuses on the consumption of food, not its production; in the book, I documented its existence by examining restaurants and restaurant reviews, cookbooks and cooking shows, travel and eating essays, movies, and (perhaps most importantly of all) conversations with colleagues about where to eat and what to eat and who had just eaten what. In the parlance of

the then-current American academic scene, *Exotic Appetites* was definitely a "food studies" book, not an "agricultural ethics" book. Or, to put it another way, it was about the consumption "side" of things, not the production "side."

For a long time, my working title for the book was "Branches Without Roots." That's because the project began for me as an analysis of my own tendency both to valorize, admire, and attempt to coopt the "colorful" cultures of people of color, immigrants, and other racialized Others, who seemed so much more "in touch" with their "roots" than I; and to bemoan my detachment from my own cultural heritage. Rejecting my own roots, I saw myself as attempting to nestle in the branches of Others' cultures, by "eating ethnic" at every chance I could get. But such rootless[1] behaviors, I suggested, are persistently unsatisfying, in no small part because they are so random, arbitrary and disconnected. Food colonizers eat whatever they want (and can afford) whenever they want it; they (more accurately, *we*) feel no real need to attend to the *cultural* contexts in which cuisines are situated. Food—cuisine—is, for the adventurer, a plaything to be explored, not a significant part of someone else's culture that can be strengthened or damaged.

If you've written a critique of some cultural practices and attitudes, and you've called those practices "branches without roots," and you're now looking for a set of cultural practices to offer as a *corrective*, what do you look for? Roots of course! And where do you find those roots? In agriculture, of course, where the roots can be literal! (Insert rueful, self-deprecating emoticon.) So, when I set out to develop a cultural food anticolonialist attitude with which to conclude *Exotic Appetites*, I assigned the attitude two characteristics, one of which is agricultural at its heart.

The cultural food *anti*colonialist attitude is characterized by a persistent skepticism about one's own motives, a characteristic I call self-questioning, and by a commitment to "eating in context." The latter characteristic is agricultural in its essence. Contextualism speaks directly to the eater's desire to develop some enduring, non-arbitrary, and nontrivial connections with and through their food—some roots. Such connections are, ironically, part of what the food adventurer is seeking, when we go on our quests for "authenticity," seeking it in the connections that Others have to their own traditions. I argued that, while our desire to latch onto someone else's "authentic cuisine" and call it our own undeniably raises the specter of colonialist exploitation, that desire for authenticity, or at least the desire for some non-arbitrary, non-trivial relationship to what we're eating, is actually reasonably useful and is something to be saved.[2]

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[1] Rootless cosmopolitanism: I of course did not intend for my position to invoke the anti-Semitic ideology that brought us this phrase, but the link is of course made almost unavoidably. And ultimately, I must recognize that views such as mine are susceptible to being taken to that extreme. That is why I shall ultimately argue that we need to challenge dichotomies using methods other than simply offering the other horn of a dichotomy, in order to correct the extremism of the first horn.

[2] I submit that it might be something similar to the idea of a "focal practice" developed by Albert Borgmann. Paul Thompson describes Borgmann's position in Chap. 4 of his book The Agrarian Vision.

Where, I asked, could we cultivate contextual relationships that would give us a new kind of authentic connection? In the late 1990s, before the dawn of the locavore movement made such a claim prosaic (and, perhaps, even made that claim "part of the problem"), my answer was, "in bioregionalism and the sustainable agricultural movement." In these *agri*cultural movements, one could develop *cultural* roots of a new kind, by using literal roots. These alternative agriculture movements, I suggested, give eaters a way to understand that location matters when it comes to our food. As eaters, we are *not* "nowhere in particular," we are here; and "here" is a specific (agricultural) place. Our supermarkets may suggest that we are in "Anytown, USA," but the soil *and all the people who now live there* suggest otherwise. I argued, further, that food adventurers could cultivate a new, hybrid kind of culinary authenticity that was based upon migrant ethnic cuisines rooting themselves agriculturally in their new environments, alongside older migrant communities and native communities.[3] This rooting would take place by substituting regionally-appropriate ingredients, cooking methods, etc. for traditional things that are not available in the new place. If authenticity is understood in part as sensitive attention to context (rather than, say, slavish replication of the ways "they" do it "over there"), then Minnesota Hmong food can be authentic in a way that only partly derives from the way Hmong communities in Laos or Cambodia would cook; it also derives very much from Hmong agricultural practices in Minnesota, and from Hmong adoption of various culinary elements they find there as well. Would-be anticolonialist eaters could deepen *our* roots by, say, eating within our bioregion, but enjoying the culinary creations of our various neighbors, who include natives as well as old and recent immigrants to the bioregion. And as a bonus, eating locally would no longer need to mean "dull" in Minnesota in the winter; cabbage and potatoes can be endlessly interesting, if every ethnic group subjects them to culinary techniques emerging from their own traditions.

In sum, I attempted to make my *food*-cultural project speak from and to an *agri*-cultural reality: all food comes from some dirt somewhere, and if we would pay attention to that fact, we could have a more *culturally* authentic relationship to our food. How could we eaters be anything *but* rootless branches, if we didn't pay attention to dirt? Rootedness, when it comes to food, is more than just a matter of cultural connections; even if the recipes we were cooking in our kitchens were our own grandmas' recipes, instead but of some other people's grandmas', if our cooking never touched the ground, it couldn't root itself (Better: if we didn't recognize that our food comes out of the ground, our cooking can never root itself).

Note that my motivation, in defining contextualism in agricultural terms and placing it at the heart of the cultural food anticolonialist attitude, was not environmental ethics; my interest in movements like sustainable agriculture lay in the fact

[3] While her project is different in many respects from mine, I think that Amy Trubek's attempt to create a distinctly American concept of terroir might be a fellow traveler to this idea. See *The Taste of Place: A Cultural Journey into Terroir*.

that they gave a foundation to our *cultural* practices. I was trying to say that food culture is always already *agri*culture.[4]

And then we had a locavore revolution. Suddenly, cultural "foodies" became passionate about alternative agriculture: about biodynamic, beyond organic, hundred mile, sustainably harvested, know-your-farmer, CSA, seasonal, heritage bred, hand fed, Rhode Island Red agriculture. Narrated by a number of very-high-profile works of journalism, essay and memoir, the American eating public's interest in local foods exploded into a movement. Perhaps it is more accurate to say it exploded among certain segments of the American public—many of whom were counted among the Euroamerican food adventurers I'd been analyzing in *Exotic Appetites*. Suddenly, the people I'd been associating with cultural food colonialism were "finding their roots"—their sustainable, local, heirloom-tomato roots. Oddly, stunningly, one of my chief proposals for a food anticolonialist attitude—contextualism—was being operationalized by its exact intended audience—food adventurers. Or so it seemed.

This was undoubtedly good news. Eating—to paraphrase Wendell Berry—was again becoming an agricultural act.[5] Today, we talk about food movements and agriculture movements in the same breath; we even hyphenate them as food-and-agriculture movements. Scholars use the concept of the "food system" to connect the activities of producing food (farming) with the activities of consuming it (eating).[6]

In the intense, heady (and sometimes almost optimistic!) atmosphere that characterizes the current American alternative agrifood scene, it can now often *seem* as if any separation—benign, hostile or somewhere in between—that had existed between food studies and agriculture studies, between the consumption and production sides of food, has grown over. Food-culture folks have, of late, been singularly focused on the "agri" part of agriculture—and ag folks have shown considerable attention to the "culture" part. It's true that some of the popular consumer movements that have sprung up in support of alternative agriculture can feel a little too simplistic in their approaches, a little too rah-rah, a little too thin of concept to be in

[4] I was operating in ignorance of an important tradition that was attempting to do just this sort of work. The Annales school of history, which originated in France, included such notable writers on food as Fernand Braudel. And on this side of the Atlantic, sociologists Harriet Friedman and Melanie DuPuis were doing work that explored production-and-consumption. It is surprising to me that I failed to find this work when I was researching *Exotic Appetites*. Is this a function of the fact that there was not yet an established concept of a "food studies scholar" and that "food studies" as a stand-alone (inter)discipline was just coming into its own? (Or was it because I was a lousy researcher?) Thanks to Alice Julier for challenging me on this point.

[5] See Wendell Berry, "The Pleasures of Eating." In Curtin and Heldke, op cit.

[6] A recent definition of food system Alice Julier and Gil Gillespie have developed illustrates the effort to understand the relationships between and among production and consumption: "the set of complex, interrelated, and often tangled biophysical and social structures, processes, and materials that yields plant, animal, mineral, and synthetic substances that people define as consumable for sustenance or pleasure and that a population in a time and geographic areas consumes for sustenance" (60).

it for the long haul. But on the *scholarly* front, both "sides" of the food and agriculture divide are coming to articulate, in clear and important ways, that food and agriculture are connected to each other and must be studied together. My food anticolonialist hope *seems* to be coming to fruition; food *seems to be* remembering its agricultural roots. Likewise, agriculture studies, in the form of movements like the new agrarianism, is bringing attention to the *culture* side of agriculture.

These are positive intellectual and cultural movements in the United States, and they deserve some celebration. But all celebrating aside, it is still difficult to do scholarship that bridges the chasm between food and agriculture; scholarship, for instance that places the most subtle and nuanced agrarian thinking in conversation with food studies scholarship that is, in particular, deeply attentive to matters of race and racism, gender and sexism. Too often (to put it bluntly), participants in alternative food movements who wish to include attention to agriculture in their work do so in a way that sees them bracketing or sequestering their important critical analyses of race, class and gender oppression, as if these structures did not shape the agricultural context as well. For instance, witness the ways in which food activists and scholars alike have taken up the agricultural work and thought of Joel Salatin. Salatin's "beyond organic" approach to agriculture is deeply entangled with his libertarian and conservative Christian views, views which led him, among other things, to assign very traditional gender roles to women and men. Salatin himself is very clear—and apologetic—about the fact that his agricultural practices are deeply connected to his religious beliefs. Food writers and food scholars too often have proceeded as if those religious beliefs could be bracketed, as if they were not integral to his farming theories and practices and thus did not need to be interrogated when one is discussing Salatin's farming.

Salatin has of course sometimes been criticized in both the mainstream and scholarly food presses; views he has expressed about the role of women on his farm have come in for some pointed criticism. But it is the nature of that criticism that I question. His critics seem to treat his gender conservatism as *separable* from his agricultural practices, as if it is possible to unproblematically love one but not the other.

Vasile Stănescu's essay "'Green' Eggs and Ham? The Myth of Sustainable Meat and the Danger of the Local," offers a similar argument, well documented. He observes that "since locavores choose to focus, unscientifically, only on the question of food, that focus blends over into negative portrayal of women," and, further, that "there is [a] tendency to argue for the return of traditional gender roles of heterosexual men farming and ranching while heterosexual women cook and clean." To be clear: Stănescu is not (simply) criticizing someone like Joel Salatin for holding reactionary views about gender; he is interested in showing why *otherwise-progressive* figures disregard, or even validate, gender views they would otherwise eschew, because those views are part of an agricultural practice they choose to advocate. As illustration, he points to two high-profile writers that contribute to what he calls gender conservatism: Michael Pollan (author of *The Omnivore's Dilemma*) and Barbara Kingsolver (whose nonfiction work *Animal, Vegetable, Miracle* chronicled her year of eating locally).

How can we understand—and, hopefully, move beyond, this still-persistent tendency to treat sociocultural commitments as separable in principle from agricultural commitments—to think, write and organize about food and agriculture as if it were possible to separate a theorist's views on race from their views on farm animals? I suggested at the outset that answering this question requires all disciplinary hands on deck—including the discipline of philosophy. Considerable scholarship already does exist. What philosophy can contribute to it is a particular kind of attention to patterns of thinking.

I think part of our difficulty in doing this connecting work has an abstract and philosophical root: the persistence of dichotomous thinking. The difficulty of doing work in critical food studies that never loses touch with agricultural production, and of doing work in alternative agriculture that stays similarly connected to critical social issues of consumption arises, in part, from a particular set of dichotomous assumptions. Careful, persistent attention to these dichotomies, and to the general tendency toward dichotomous thinking, can make real (albeit abstract) contributions to advancing both alternative food and agriculture movements and the scholarship supporting them. Such work is by no means sufficient to the complex and complicated task, but it is nonetheless useful.

For several years now, I've been thinking about the connections between and among a resilient set of dichotomies that permeate and give shape to the ways we think about food and agriculture. Food/agriculture is itself one of the dichotomous pairs, as is consumption/production. Others include culture/agriculture, global/local, inclusive/isolationist and cosmopolitan/provincial; transient/settled and outsider/insider; urban/rural and industrial/agrarian; mixed/pure and contextual/universal. Other pairs are even more foundational and abstract; their scope includes these pairs, but also extends far beyond them; culture/nature and self/other are two more far-flung pairs.

Philosophers have exhaustively detailed the ways in which dichotomies and dichotomous thinking lie in the background, or on the "garden level" of much of the history of western thought. Foundational dichotomies such as mind/body, self/other, subject/object, and reason/emotion make their way into everything from religious doctrines to scientific theories to commonsense beliefs. While many contemporary philosophers have done this analytic work, my own choice for the philosopher who most compellingly lays out both the history and the consequences of dualistic thinking, going back to the ancient Greeks, is John Dewey. His work *The Quest for Certainty* interprets our obsession with dualism as an outgrowth of our desire to have certainty in an unstable, often dangerous world. Indeed, Dewey's understanding of the emergence of dichotomous thinking in western philosophy is particularly useful in this context, for he argues that the contemporary distinctions between theory and practice, between art and craft, between abstract and applied knowledge, even between nature and culture, can all be traced to our early vulnerability as humans, a vulnerability that led us, on the one hand, to try to *make* (that is, *craft*) certainty in an uncertain world, and, on the other hand, to reach beyond this uncertain world, to locate—in the gods or in the Forms—some absolute certainty that could not be budged.

I presume the existence of that work, in order to consider the particular ways in which dichotomous thinking grounds the disconnection between production and consumption—or, to put a more optimistic face on things, the ways it continues to present an obstacle to efforts at connecting "farm issues" to "fork issues." Three characteristics of dichotomous thinking present particular obstacles to scholarship that would deeply integrate food studies with agriculture studies.

1. Dichotomies' tendency to set up not just a contrast but an antagonism between their two poles, such that to be *this* means to be *not that.* Each pole gets defined in such a way that it contains nothing of the other. Contrasts are not just sharp, they are mutually exclusive; part of the very essence of one pole consists of being *not-that*. (For an example, consider the familiar Cartesian description of body, which includes being *not mental.*) To be urban is to be not at all rural—and vice versa. Fail to maintain this separation, and you risk contamination.

From a dualistic perspective, contamination—or impurity—is a danger. Thus, this first feature leads to:

2. A tendency to erase nuance, to eliminate anything between the two dichotomous options, and to purify or "clean up" the ambiguous case or extraneous material, by shoehorning it into one option or the other. Dichotomous thinking requires understanding cases in the middle as being, "really," instances of one of the two polar extremes—or as understandable primarily as admixtures of the two. The poles are the conceptual foundations in terms of which other things are defined; they, in contrast, are never explained in terms of the "murky middle." When the two poles of a dichotomy are morally freighted (as they so often are), dichotomous thinking thus encourages rigid partisanship, a belief that only one pole represents the right choice, the virtuous position, the thing worth caring about.

Anthropologist Amy Trubek (citing political theorist Wendy Brown) reads in this tendency to *purify* a companion *puritanism,* a "righteous insistence on knowing what is True, Valuable, or Important." In the present moment, one of the categories that has come to express such a righteous insistence is food; which are the "'good' and 'bad' foods[?]" (p. 193).

The debate about the merits of local food being vigorously carried out in the mainstream press illustrates this tendency. A recent opinion piece and the comments it engendered are quite typical of the sharp antagonisms that have arisen over this set of issues. In "A Bitter Reality," Tom Keane argues that "the local food movement is an affectation based on bad logic and bad economics, one that, widely adopted, would actually harm the environment and potentially impoverish millions. Particularly here in New England, it would also turn mealtimes into dull, pallid affairs." Keane dismisses the virtues of local foods on all counts, including economic, culinary and environmental ones, and argues unequivocally for a globalized food system. Responses posted online to his piece in the first two days were almost all critical—and almost all equally sweeping in their praise of local foods and their criticism of global food.

This example interests me not because of the truth of any individual claims made, but because of the stark way it illustrates the partisanship. One respondent to Keane's "Bitter Reality" illustrates this tendency, even as they attempt to challenge it. In an effort to nuance the issues of local food, they write, "It's not always about giving up things outright nor is it about trying to make the whole world filled with only small farms," but in the same paragraph they suggest that "For those who find the whole philosophy taxing to think about, you can boil it down to a simple A or B choice: if there are 2 apples for sale and one is grown in New England and the other in Washington State or New Zealand...choose the local one!" (Keane).

I've already alluded to the final feature of dichotomous thinking that is particularly helpful for reflecting on food and agriculture dichotomies. It is this:

3. Particular groups of dichotomies operate together, such that they mutually reinforce each other to create a way of understanding the world that is more plausible because of its cohesiveness. This clumping tendency magnifies the power of any individual dichotomy, while also often masking any implausibility it would have, were it to be examined on its own terms. Consider, e.g., how the modern western philosophical binaries of mind/body, reason/emotion and man/woman effectively created a world view that long seemed more coherent and plausible because each pair relied upon and "stuck up for" the others.

The local foods case illustrates this clumping effect as well. The act of naming something "the local foods movement" has had the effect of collecting together a whole set of (perhaps previously only loosely-related) practices and principles that partisans then tend to defend or criticize as a package. While it can be salutary to understand a set of concepts as related to each other, doing so in ways that prevent us from seeing them as separable and able to be operationalized independent of each other, mitigates those salutary effects. In the case of the local foods movement, for instance, those defenders of "the local" who have investigated the reasons for the movement less, or who tend toward the doctrinaire, may resist acknowledging numerous studies that show that understanding the environmental impact of our food is far more complicated than answering the question "how far was it transported?" "Local" became shorthand for "foodmiles," which, in turn, was shorthand for "ecologically ('green-ly') transported." Once these linkages were formed, it became very difficult to decouple the "local" from "green"—and not just "green transportation." Rather, it came to seem to encompass all things ecological, despite research throwing this very generalization into question. Indeed, even considering energy use alone, the research showed that transport represents a relatively small portion of the energy used in producing food, such that labeling a food "green" solely because it was transported a short distance is quite tendentious.[7]

[7] See Edwards-Jones, et al. See also Sarah DeWeerdt. The two accounts together offer academic and mainstream explorations of this issue. For some of the first work on the relation between miles food travels and ecological effects, see the work of Rich Pirog and Iowa State's Leopold Center for Sustainable Agriculture. Regarding the tendency to associate the local with all things positive, see Branden Born and Mark Purcell; and Mark Purcell and J. Christopher Brown.

Within any cluster of dichotomies, the relationships among dichotomies are complex; wormholes connect particular ones together in ways sometimes evident, sometimes hidden. Arguments that begin using one set of terms can slip, virtually without notice, to another. This tendency strengthens the sense that particular dichotomies are in fact integrally connected to each other. In the cluster containing cosmopolitanism and localism, for instance, the path connecting "cosmopolitan" and "urban" is so broad and flat that sometimes the terms are practically understood as synonyms. The connection between purity and localism, on the other hand, is more indirect and less well traveled; it may require a journey through other concepts like "authenticity." (This kind of link can be put to rather crafty uses, saying indirectly or by insinuation, what can't/shouldn't be said directly. For instance, given the insidious associations with the concept of "purity," it can be handy to use the word "local" instead, knowing that it will make back-channel connections to purity.) Many of these pairs are linked to each other by a virtual conceptual superhighway. The links between urban/rural and culture/agriculture, for instance, are incredibly strong. So, too are the links between consumption/production and culture/nature. Some pairs are subsets of other pairs; some are connected only by association or intimation (cosmopolitan/local is one subsidiary form of the global/local dichotomy, for instance, while hybrid/pure is connected to urban/rural far more indirectly. Some of the connections are explicit, widely understood, and often reinforced (food/agriculture and consumption/production, for instance). Others are secret, hidden, sometimes shameful or at least embarrassing (urban/rural and hybrid/pure comes to mind in this context as well). Much of the power of each individual dichotomy lies in the facts of its being connected to others in multiple ways. It also derives from our varying willingness and unwillingness to admit and name these connections. Some of the links are logical or conceptual; other links are something more like "guilt by association."

Whatever their genesis, whatever the means by which they persist, it is worth our while even just to notice the various tangles, connections and slippages among these various dichotomies; rendering them visible means at least being aware of the ways in which one's thinking is being shaped, and may mean being able to imagine a different configuration. In my own experience, recognizing *and also problematizing* the kind of easy slippage between food studies and culture on one side of the line, and agriculture studies and nature, on the other, has been instructive for developing a more precise understanding of the character of the obstacles to truly integrative alternative food and agriculture movements.

To generalize, these snarls of mutually-supportive dichotomies that are nevertheless purist and puritanical in their impact, present a real (i.e. ideological, theoretical, conceptual) challenge to creating scholarly and activist movements that integrate the best of agrarian thinking and the best of critical food studies scholarship attentive to race, class and gender oppression. Problems arise for scholars and activists whether they come from the food side *or* the agriculture side; they are manifested in persistent views that contrasts the urban, cosmopolitan, transient, cultural hybrid to

the rural, localist, rooted, "natural" purist.[8] I'll offer a brief example of the sorts of problems I believe thinkers from either the food side or the ag side confront, when they attempt to do work that genuinely embraces the "other side." I conclude with a brief look at an unlikely image to serve as a philosophical intervention in our dichotomizing tendencies.

Before proceeding, I should note several things about my approach. First, I choose as examples extremely familiar figures about whom much has been written. This is intentional, not lazy. Second, I am painting in broad strokes, which enable us to notice patterns and tendencies, not to establish airtight causal chains. Third, I am intentionally not drawing sharp divisions between activism, scholarship, and popular writings on these topics, because these three strands of work in alternative food and agriculture clearly interpenetrate and influence each other and often share important assumptions, even as their methods and aims obviously differ.

First, then, an example from the consumption side. While many consumer movements have lately attempted to link production and consumption interests by advocating for and supporting alternative agriculture in multifarious forms, such movements can sometimes embrace a naïve "agrarian-ish" philosophy that is rooted less in contemporary agrarian theory and more in popular fantasies of the "family farm." Such enthusiasm for family farm rhetoric too often pays little attention to the fact that, for agrarian thinkers historically, the aspects of that philosophy that are specifically focused on the raising of animals and crops attach, in essential ways, to hierarchical and exclusionary sociopolitical commitments.[9] The result is that alternative food movement advocates who embrace values of antiracism, feminism, queer friendliness and multiculturalism may *well* have criticized "beyond organic" farmer Joel Salatin for, say, not allowing woman interns on his farm,[10] but they will not treat Salatin's misogyny as in any ways conceptually connected to his views on agriculture, despite his being pretty clear about the fact that these various views are mutually constitutive. Apropos this point, Alice Julier notes, in private correspondence, that "The fastest growing segment of people going into sustainable agriculture right now is women. Conventional agriculture is dominated by men. So, you have this person advocating the basic philosophy of sustainability here who is defining it in ways that exclude the vast majority of new practitioners. Add to that fact

[8] Alice Julier argues that the urban agriculture movement represents an important—and growing—exception to this claim. I would agree, and would point to this movement as an important source of models and inspiration for deeply integrative work.

[9] Here, the work of the group known as "Twelve Southerners," called *I'll Take My Stand* is emblematic.

[10] He apparently now does accept women interns. The application form includes the following caveats (which are accompanied by pictures of young women and men who are, for the most part, fair haired, fair skinned): "Bright eyed, bushy-tailed, self-starter, eager-beaver, situationally aware, go-get-'em, teachable, positive, non-complaining, grateful, rejoicing, get'erdone, dependable, faithful, perseverant take-responsibility, clean-cut, all American boy-girl appearance characters. We are very, very, very discriminatory" (http://www.polyfacefarms.com/apprenticeship/).

that conventional agriculture is a hostile, gender-divided place for women; land ownership, inheritance and education are all stratified."[11]

Seen from the other direction, when culturally progressive food theorists and activists embrace an alternative agriculture movement like agrarianism, they may elect not to examine how the agrarian ideals they embrace—Wendell Berry's emphasis on longevity in place for example—links (by way of wormholes but also by way of some more direct conceptual connections) to a particularly stealthy kind of ethnocentrism, racism (and insiderism). An agrarian thinker like Berry is quite clear that the pieces of his philosophy fit together conceptually. It is less than thoughtful if critical food theorists don't take such linkages seriously—meaning, by seriously, not just acknowledging that a particular agrarian thinker advocates sexist or racist views, but addressing the ways that those views are related to the claims they make about farming.

An episode of a video program called "Portlandia" effectively shows those connections using sardonic wit. In the episode, a young, socially-conscious urban couple is portrayed attempting to make menu selections while out for dinner on their first date. They interrogate the server about the chicken they have considered ordering; eventually, they decide the must visit the farm to see how their animal was really raised. The farm is of course the parody of an idyllic land where all the chickens have happy lives and names. The farmer, however, turns out to be a hypnotic cult leader with a collection of wives, all of whom are dressed in appropriately submissive clothing. They adoringly cater to his every need. While visiting the farm, the couple falls under his spell and decides to stay; the woman dons the appropriately womanly garments and ministers to the farmer/cult leader's every need. They finally (somewhat inexplicably) snap to their senses and return to urban life and the restaurant, where they proceed to order dinner.

The show could be taken as a broad swat at someone like Salatin, who was catapulted to super-stardom (in part) by Michael Pollan's *The Omnivore's Dilemma.* Pollan's work has undeniably contributed enormously to the visibility and power of alternative agricultural movements; it has also been quite exhaustively critiqued from the vantage point of various alternate food and agriculture theorists. To that extensive body of critique I want only to add the observation that his book is a good illustration of the fact that even members of the "choir" are susceptible to the pitfalls of dichotomous thinking. Pollan is especially prone to the "clumping" tendency, the third feature of dichotomies I described.

Where do we see examples of work from the agriculture side that continues to struggle to connect food and agriculture, consumption and production? Here, the work of Wendell Berry is instructive. Berry has unarguably made monumental contributions to the movement known as the "new agrarianism," a movement that many would say he originated. While there is much in Berry's work to be admired, it is also quite apparent that the way in which he sharply contrasts rootedness and transience, and valorizes the former, ends up rendering all those displaced from their lands into hyphenated or abridged or qualified moral agents, much as, in centuries

[11] See Eleanor J. Bader.

past, people of color and white women were only partial citizens. In a world filled with refugees and asylees, as well as willing migrants, it is problematic, at least, to suggest (as I believe Berry does) that rootedness is a kind of non-negotiable condition for full membership in the moral community.

While Berry is trying to be careful not to demonize the transient ones (whom he calls "road builders," and describes as placeless), he nevertheless spends little to no time acknowledging and valuing the contributions of the newcomer, the outsider, the interloper to the community. I submit that his inability to do so is also an outgrowth of the tendency toward dichotomization. In particular here, it is a kind of inverting or upending of a dichotomy that has received considerable attention of late. Whereas it often flies under the name of cosmopolitanism versus provincialism (under which flag it is clear which side of the dichotomy is valorized), Berry has switched things up to favor the "provincials." Such a move, I submit, ends up morally privileging those who are racially and economically in a position to stay put.

It might appear otherwise; that is, it might appear that such a move valorizes the vantage point of people of color and ethnic minorities. In "A Native Hill," for instance, he praises "The Indians and the peasants [who] were people who belonged deeply and intricately to their places. Their ways of life had evolved slowly in accordance with their knowledge of their land, of its needs, of their own relation of dependence and responsibility to it" (Berry 2002, p. 11). That praise dries up, however, if, say, those Indians find themselves becoming "placeless," moving from where they belong (i.e. the places they've been "for a long time") and hitting the road. Given the frequency with which ethnic and racial minorities are most likely to find themselves forcibly displaced, globally, this means that these groups of people are going to be most prone to becoming "placeless" ones who cannot be fully parts of Berry's virtuous communities.

Berry is well known for having written a work that confronts racism directly (*The Hidden Wound*), so to make this charge against him might seem unfair, or at least out of left field. I mean, rather, for it to show the degree to which dichotomous thinking can tend to reintroduce difficulties in spite of a theorist's best intentions. Berry means to address the particular nature of racism in America; he does so in one of his major works. The fact that, elsewhere, he develops a view that ends up perpetuating racism in another form is in no small part due to the persistence of either/or thinking. For Berry, you're either a road builder or a rooted one, because you're either part of a healthy community or you're part of its dissolution.

In discussing Berry, philosopher Paul Thompson's book, *The Agrarian Vision,* reproduces this problem, even in the context of a work that explicitly challenges dichotomous thinking. In a discussion of Berry's history of farming in America, Thompson observes that "Berry's critique selects one dimension of that history"—a history that sidesteps the ways in which agrarian ideals are wound around with race, gender and class exploitation. While Thompson acknowledges that "the way one tells the story is crucial to its moral lesson" (p. 117) and acknowledges that "in another context we might ask" questions about the relative repressiveness of industrial agriculture, slave plantations, the manorial system, and the family farm, these

questions "must be deferred in the present context," because we need to "pay attention to the disappearance of place, the dissolution of community and the dissipation of human virtue" (pp. 117–8).

I submit that one cannot talk about the dissolution of the community—or any of these other things, for that matter—without talking seriously about the structural inequality present in that community that is dissolving. To paraphrase Eve Sedgewick, "An understanding of virtually any aspect of modern Western culture must be, not merely incomplete, but damaged *in its central substance* to the degree that it does not incorporate a critical analysis of modern race and gender systems" (p. 8, emphasis added). We cannot *not* talk about race and gender, even as we are talking about community and longevity and all the other agrarian virtues Berry articulates. To suggest that we can, I submit, is to participate in the kind of tidying up and sorting that I have suggested is one of the standard problems with dichotomous thinking.

So far in this essay, I have attempted to make plausible the claim that a dominant tendency in western philosophical thought—dichotomization—can be seen as partially responsible for various difficulties being experienced by writers in both alternative agriculture and alternative food studies work. I've done so by way of a sketch, and with the aid of a few already-very-well-known examples. My aim and methods both have been suggestive, not deductive. I will conclude this suggestive sketch by pointing to one way in which we might counter (or perhaps reframe?) dichotomous thinking.

I suggested at the outset that Dewey's analysis of the history of dichotomous thinking is particularly salient to the present discussion. However, I'm less certain than I used to be that Dewey's usual proposed method for challenging dichotomies is effective at redirecting the kinds of situations we face. Dewey routinely suggests that the way to (re)solve dichotomies is to burrow underneath them until one locates the common assumptions that inevitably underlie them. Recall that, in my sketch of his argument in *The Quest for Certainty,* for instance, I noted a number of dichotomies that Dewey believes emerged from a single (category of) desire; namely, to get some stability in a precarious, unstable and dangerous world. Locate the shared assumptions, Dewey suggests, and you can see your way out of the dichotomy. Thus, for Dewey, the most important way to move beyond dichotomous thinking is to find the commonalities, and show the two "sides" that they are really just two aspects of the same "side."

Of late, I have found myself unsatisfied with this solution, which tends to minimize the degree to which dichotomies do draw us in, and satisfy us on some level. I have been exploring a different approach, one advocated by French theorist Michel Serres in his work *The Parasite*. Serres' work does not attempt to find common ground or otherwise resolve dichotomies in order to solve the problems dichotomous thinking present our fifth. Instead, he proposes a kind of grasp-the-nettle approach that involves acknowledging the overwhelming tendency to think in dichotomies, and, at the same time, the overwhelming messiness and unruliness of the resultant dichotomies. Serres challenges the neat, tidy two-ness of dichotomies by drawing on an unusual, unappetizing image; the parasite.

Serres' proposal begins from two features of the living world he finds inescapable and pervasive, namely: beings' dependence upon other beings for sustenance, and the tendency of that dependency to diminish the being on whom it comes to rest. Nature, in short, is full of beings that are (literally or metaphorically) parasites. In this relationship, we can, he believes, find a way to think into the ways in which dichotomies fundamentally shape western philosophy, beginning with the subject/object dichotomy. The parasite image or model (it is more than a metaphor) is, I submit, particularly apt and suggestive for the topics of food and agriculture.

The word "parasite," in French, has three chief meanings, and in exploring dichotomies Serres draws on all three: the biological one (an organism that preys upon a host); the social meaning of an uninvited guest who somehow worms an invitation for dinner, but then must "sing for his supper," and finally (a meaning it has in French but not English), noise, static, or interference in a system. Serres offers the parasite as a "reformulation of the once great and now weatherworn Enlightenment divisions between self and collective, society and nature, the scientific and the literary, myth and politics" (Brown, p. 1). The metaphor of parasite calls us to notice that the two poles of the dichotomy are neither independent nor (mutually) interdependent. Rather, the relationship is a "hungry" one, in which one party is regularly at the mercy of the other. The effect of this rethinking is to pay attention to the mess, the between-ness, the relationship; to notice the amount of "stuff" that is not captured by either of the poles.

In the same sweeping, all-encompassing spirit in which Serres rethinks dichotomies-in-general, I suggest putting the metaphor to an additional, related use, this time as a (slightly ironic) way to rework the dichotomous thinking that has persisted in food studies and agriculture studies, despite the best intentions and efforts of theorists and activists in both groups.

Several features of the parasite recommend it for this purpose, and counter the specific problematic features of dichotomous thinking I identified above. First, as I have already noted, it doesn't use the Deweyan move of attempting to eliminate dichotomy by insisting that opposing poles are not actually in opposition, but instead share the most basic, fundamental assumptions. It isn't, for instance, particularly useful to suggest that food and agriculture can be reduced to some more fundamental category. There *are* vantage points—consumer and producer, for instance—and sometimes those vantage points are organized in genuinely parasitical fashion, with one "eating into" the other in a way that diminishes the second. It would be a mistake to take those vantage points as fixed identities, however; for instance, the consumer is also regularly the consumed. Relatedly, the relationship between the intrusive parasite and the unsuspecting host—or between noisy interruption and the one interrupted—is always unstable and susceptible to reinterpretation, from a different vantage point; one man's noise is another man's conversation.

Third, the parasitic relationship might still be characterized as antagonistic, but neither member of the antagonistic pair can define itself in exclusionary ways (the way, say, mind and body are defined in classic Cartesian dualism). The host and

parasite are too much like each other, too much in each other's debt, too likely to become the Other to ever be defined as mutually exclusive. The parasite model also makes room for nuance, subtlety, shades and variation, by virtue of the fact that even the two poles do not have fixed identities. Perspective is all-important.

Consider how differently Serres' model would treat the outsider than does Berry's. The drop-in guest knows that tomorrow he may play host; the annoyed host knows that he may tomorrow find himself dependent on someone else's unwilling hospitality.

We cannot begin our work to create alternative food systems anywhere other than right where we are, with the assumptions and institutions that we already have, with the messy, hostile dichotomies that plague our thinking. Euroamericans, for instance, cannot disregard the agrarian legacy we have inherited from our Jeffersonian past—a legacy which, in turn, cannot be separated from the history of chattel slavery in this country. But while we cannot choose different starting points—we cannot choose to be unshaped by our history—we certainly can and must question—continually—the features of our world that our starting assumptions occlude or efface.

In proposing a focus on dichotomy, I've suggested only one aspect such questioning might take. It might feel like a ridiculous luxury to add "challenge dichotomous thinking" to the list of tasks that we should add to our work in alternative agriculture and food theory and practice. Nevertheless, I believe that keeping one eye trained upon this set of dichotomies with their powerfully hypnotic pull can enable our resultant theoretical and practical work to be all the more effective. Failing to take dichotomization into account will unquestionably hobble our efforts to create alternative food and agriculture movements that meet the expectations of the land and of the people who dwell and eat in it.

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Chapter 10
Zhuangzi and Agricultural Ethics

Kai-Yuan Cheng

Abstract Paul Thompson (The agrarian vision. University Press of Kentucky, Lexington, 2010) has developed a virtue-based view of agriculture, and claims that it is the key to environmental sustainability. This chapter aims to improve upon this agrarian view by exposing some of the theoretical defects inherent in it, and by showing how those defects may be overcome by incorporating some alternative ways of thinking about the man-nature relationship from the perspective of Zhuangzi's philosophy. This agrarian, Dao-constrained, position is developed on the basis of a no-self thesis proposed in Cheng's (Philosophy East and West 64:563–597, 2014) reading of the dream of the butterfly.

Keywords Zhuangzi · Agrarianism · Agricultural ethics · Paul B. Thompson

It shall raise little controversy to say that agriculture is important. We are, however, less clear on why exactly it is important. Suppose someone says that its significance spawns the fact that it provides us with food, which is necessary for our nutrition and survival, and thus makes it possible the creation of a variety of things deemed valuable in human civilizations. Underlying this commonsensical rationale is a kind of consequentialist mentality, where the value of agriculture is regarded as derived from its instrumental value, as a means to an end.

Paul B. Thompson (2010) contends that there is something more than that in agriculture. He has recently developed an agrarian version of environmental ethics in which it is argued that agriculture is imbued with intrinsic value. His main idea is that the specific ways in which agriculture is practiced—communal cooperation, reliance on land and weather, etc.—are central to the cultivation of moral characters such as trust, honesty, mutual respect, and the like. Since these virtues are intrinsically good, there is something intrinsically valuable in agriculture. Agriculture, when practiced with a right mindset, is also critical to achieving sustainable development, as Thompson maintains.

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The aim of this paper is twofold. One is to point out some of the potential weakness in Thompson's agrarianism, in particular some of its theoretical inadequacies when seeking inspirations from Greek philosophies and cultural heritages. Another is to show how those shortcomings may be overcome by exploiting some of the insights from Zhuangzi's philosophy. It is not new to exploit conceptual resources in Daoist philosophy to address some of the key concerns in environmental ethics (see e.g., Loy 1997; Ip 1983; Goodman 1980; etc.). The novelty of my attempt lies in the extension of a no-self thesis which is central in Zhuangzi's philosophy (Cheng 2014) to illuminate a man-nature relationship that is much needed to suitably constrain Thompson's virtue-based agrarianism. The purpose of doing so is not to reject Thompson's view. On the contrary, the aim is to fully realize its merits and potential in its attempt to tackle contemporary worries about sustainability.

The plan of this paper is as follows. In section I, some of Thompson's main motivations and arguments for agrarianism are laid out. In section II, some weak points are shown to reside in the theoretical framework of Thompson's agrarianism. In section III, Zhuangzi's ideas about the nature of man and his relation to nature are excavated to suitably constrain Thompson's agrarianism. Section IV is a conclusion.

10.1 Thompson's Virtue-Based Agrarianism

Thompson's agrarianism is motivated by seeing a strong connection between sustainability and agriculture, each of which has been widely considered as important in its own sake but the intricate and crucial link between them tends to be overlooked. On the one hand, the idea of sustainable development was once introduced as a political concept in the Brundtland Report, an output of the World Commission on Environment and Development. Its main concern is the intersection of global developmental processes and economic growth in both industrialized and industrializing countries. Later, the idea in question has been expanded to express a more general concern about environments, both local and global. This change of usage was largely due to the noticeably negative impact of climate change in the past few decades that threatens the inhabitability of our planet on a global scale.

On the other hand, agriculture is an old practice of human societies that is key to providing food and hence endurance. By this nature, agriculture has had two interlocking features: it offers a way of life in which human activities are naturally embedded in an ecological system, and meanwhile inevitably bringing human impacts on the natural environment. As industrialization evolved rapidly in the last century, the practice of agriculture has been infused with concepts of modern economics and decision-making theories such as efficiency, benefit and cost analyses, trade-off, calculation and maximization, etc., to the extent that the majority of people have led a way of life that is both far removed from the agricultural system and destructive to the natural environment due to the excessive usage of polluting and harmful chemicals in farming.

In face of this intricate relation between sustainability and agriculture, Thompson's central claim is that, once a proper version of agrarianism is articulated and properly developed, it can be clearly seen how agriculture can play a crucial role to resolve our most concerned issue of sustainability. He states this claim as follows:

> My contention…is that farms, farming communities, and the agricultures that support entire civilizations are excellent models for the complex kinds of ecosocial hybrid systems that need to be sustained if our society is to achieve sustainability at all. (Thompson 2010, p. 11)

Thompson's considerations in support of his central claim consist of two main parts: one negative, and the other positive, as far as I can see. On the negative part, he criticizes two influential views in environmental ethics: the so-called "dogma of pristine nature" and "dogma of environmental impact", respectively. The first dogma is an eco-centric view, which sees the best environment as one that is free from any human intervention. The most serious difficulty with this dogma is that it is unrealistic. A significant percentage of land on the planet Earth is used for plant and animal production. For example, 50% of land in U.S.A. and 40% of land in U.K. are used for farming. The figure is 23% in Taiwan.[1] The last figure may appear surprisingly small. However, when adding the fact that 70% of land in Taiwan is covered by mountains, which are not apt for farming, the percentage of land for farming is actually very high. While the idea of pristine nature may be praiseworthy, it seems unrealistic when applied to the current human inhabitation of Earth.

The second dogma is an anthropocentric view, which calculates the actual and potential amount of environmental impacts caused by certain human activities or projects based on scientific disciplines such as biology, ecology, economics, etc. An inherent defect under this dogma, in Thompson's view, is its implicit assumption of a fact-value dichotomy. A standard reasoning under this dogma is to subject ecosystem processes to scientific studies presumed as objective, and to regard value assessments concerning how we ought to favor one action or project over another as belonging to an independent domain and to be taken care of at a later stage. This implicit presupposition often leads to an exclusive focus on outcomes or impacts, which often brings about disturbing decision-making and results. In Thompson's view, this presupposition is wrongheaded, for not only is science itself a "cultural activity" and hence not value-free, but also an ecosystem considered in itself is capable of "actually creating values" (2010, p. 25).

A no less acute remark made by Thompson concerning these two dogmas is that each dogma is problematic in its own way, but when combined, they become self-destructive. The basic idea is this: If pristine nature is on the top of our value priorities and hence we try to preserve as much of it as we can on the basis of impacts considerations, a natural solution is, then, the use of as little farming land as possible. Given that the quantity of people to feed and to consume remains the

[1] From the website of Directorate-General of Budge, Accounting and Statistics of Executive Yuan in Taiwan.

same, industrialized agriculture is inevitable. That means that pollution and misuse of land often follow. Thompson expresses this point below:

> …combining the dogma of environmental impact with the dogma of pristine nature creates a disastrous environmental ethics for cultivated ecosystems (that is, for agriculture). Agriculture by its very nature and intention involves an impact on nature. However ethical imperatives for land use are expressed, the result of any call to limit the environmental impact from agriculture means the less agriculture, the better. However, if agriculture is to be minimized on a per-acre basis, it must be practiced as intensively as possible on those acres. This reasoning categorically supports industrialized agriculture over organic or low-input alternatives… (2010, pp. 25–26)

These negative reflections lead Thompson to search for some alternative way in which we may escape from the traps of those two dogmas, considered either in isolation or in combination. The result is an agrarian version of environmental ethics.

Its key idea is to view agriculture not only, or not only as a form of human activity performed for the purpose of food production, but also as having some intrinsic values in its practices, especially in terms of cultivating virtues and moral characters for those people who are directly or indirectly involved in those practices. Thompson states this idea below:

> An agrarian is more concerned with the way a local food system embeds people in practices whereby their commerce with nature and with one another creates an enduring sense of place…The agrarian hope is that these kinds of localized transactions will gradually develop into an affection for the people and the places where one lives, and that through the constant repetition of these rhythms, this affection, this sympathy, will mature into full-fledged habits of character—virtues if you will. (2010, p. 39)

This virtue-based version of agriculture is different from industrialized agriculture. The latter places agriculture as on a par with other forms of human practice such as finance, industry, etc., which are operated under rationalization principles that try to maximize efficiency and overall utility. In contrast, the former abandons this instrumentalist way of understanding and practicing agriculture. The challenge for Thompson is, then, to articulate the intuitive and compelling impression that agricultural facts are inherently linked to virtues and values that go beyond considerations of impacts, outcomes and trade-offs.

Thompson sought inspirations from a variety of sources, contemporary as well as ancient, in the Western tradition. Thomas Jefferson, the third president of the United States, is one salient case on which Thompson's view relies. In the eyes of Thompson, Jefferson was able to see the importance of agriculture in shaping the characters of a citizen and developing a sense of attachment to the land. Thus, when it comes to building a sustainable piece of land as well as a great nation, Jefferson favors virtues over efficiency. As Thompson quotes Jefferson: "Cultivators of the earth are the most valuable citizens" (Thompson 2010, p. 46). This agrarian view is especially relevant and insightful in the contemporary era of globalization where finance and industry dominate human lives. In those practices, the characteristic mobility of capital and the fabrication of factory components require no deep attachments to the land. These features have led to a natural and potent tendency toward unrestricted consumption and exploitation of natural resources in our times.

Thompson's invoking of this Jeffersonian tradition of agrarianism is admirable, especially in the context of implementing the agrarian ideal in the U.S. Daniel Spencer, nevertheless, has criticized Thompson's selective exploration of conceptual resources from Jefferson's position. Spencer draws our attention to its lack of "critical assessment of the role agriculture and agrarianism have played in imperialism and expansionism: Jefferson's Louisiana Purchase, after all, was not of an empty canvas but an inhabited continent and was central to the American imperial project of western expansion" (Spencer 2011, p. 3). Despite this criticism, Spencer does not deny that the emphasis of moral ideal in Thompson's appeal to Jefferson's ideas provides us with "a vision of how we can re-embed ourselves and our communities into patterns with a compelling moral vision that contributes constructively to sustainability" (2011, p. 3). Spencer's criticism of Thompson is a helpful reminder concerning how we may assess and to what extent we may comfortably embrace Thompson's agrarianism. When excavating conceptual resources to develop his agrarian view, Thompson has a tendency to invoke some positive parts of the source that he finds favorable and to ignore or bypass some others parts of the same source that are in tension with his position. Exposing those negative parts and showing how they may be accommodated thus become critical to the success of Thompson's agrarianism. Bearing this in mind, we may turn to a major source of theoretical inspirations for Thompson's agrarianism—the ancient Greek tradition.

Thompson relies heavily on a contemporary scholar of the ancient Greeks, Victor Davis Hanson (1995), to situate thoughts and civilizations of the ancient Greeks in the historical and environmental backgrounds. Scholars of Western thoughts tend to focus their studies on the remarkable philosophies of Socrates, Plato, Aristotle, etc., and ignore the context in which those philosophical thoughts were made possible. Thompson writes as follows:

> …philosophers such as Socrates and Plato must be read in light of certain agrarian ideals that were the foundations of life throughout Greeks city-states and at Athens in particular… the Greek worldview incorporates both nature and society into an enveloping environment that aids or inhibits action in a very selective way. Human goodness involves the realization of potential that is latent in human character, but the potential for this realization is not wholly under any individual person's control. One develops virtues and vices as a result of how one's environment rewards or penalizes patterns of conduct in a systematic way. There is, therefore, no good person without a good environment. And for the Greeks, a good environment was not a pristine environment but a farm environment. (2010, pp. 26–27)

Virtues and moral characters, which are central to Aristotle's ethical position, are deeply rooted in a farm environment, around which families and communities are organized. Thompson continues to describe this historical background below:

> This type of thought places individuals within concentric webs: family, community, and nature. As described in Aristotle's *Politics*, those webs work as interacting hierarchies to establish feedback loops ensuring that individuals internalize the consequences of their actions into habits of personal character. One does not stand back from a potential impact and wonder how to value it; rather, one sees the whole organic situation as creating more specific value commitments, which are understood as virtues that integrate and preserve the whole. (2010, p. 27)

In drawing our attention to the cultivation of virtues by farming, Thompson further stresses that households in the form of relatively small family units are typical in the polis or city-states of ancient Greek societies. Two points are particularly noteworthy. First, small-scale household units are more or less self-supporting, but remain mutually dependent in a community as a whole. This type of household organization is different from a top-down, large-scale agriculture, and is key to the nurturing of qualities such as autonomy, equality, and freedom that are widely associated with the landmarks of contemporary democracy and philosophy. Second, Athens acquired the then newly developed naval technology and underwent a dramatic military and economic expansion due to the increase of sea power. This change of way of life—from farm to marine—brought to Athens newfound interests for their wealth and ways of protecting and expanding sea-based trading routes to guarantee an incessant incoming of wealth. The advocating of moral philosophers of Athens for loyalty to polis occurred in this context. Thus, philosophical thoughts of the ancient Greeks "were arguments that rest on agrarian ideals" (Thompson 2010, p. 28). Thompson is explicit in favoring this small-scale, community-based type of agriculture over a big-corporation, industry-based form of agriculture that is becoming more and more common in many regions of the world. A main reason for this preference is clearly the capacity of the former rather than the latter in instilling virtues in people, which bear intrinsic values.

Thompson seeks agrarian inspirations not just from Greek philosophy, but also from Greek poetry, especially from the poet Hesiod, who sees farming as a religious activity that involves man's interaction with the earth of a godly nature. Thompson writes:

> The Greek poet Hensiod (circa 700 BCE) saw farming as having a religious purpose, but the religious significance of farming for Hesiod was rather different than it might be for contemporary Christians, Muslims, or Jews. His Zeus was one of several immanent gods, fully present in Hesiod's daily life. The depiction of Zeus in Hesiod's poem *Works and Days* is one of a god thoroughly integrated into nature and the source of all natural unity. The seasons, soil, and water are themselves divinities begotten by Zeus that establish a place for human beings. A key message in Hesiod's poetry is that only farmers dependent on seasons, soil, and water can hope to attain piety or show proper respect to these divinities. Farming is the way human beings justly occupy a place in the divine (that is, natural) order… Agriculture is thus the singular practice by which humanity makes its way in the world in a pious and morally just manner. (2010, pp. 36–37)

Hesiod's poetic, or mystical, idea about the divine nature of earth gives agriculture a kind of significance that is distinct from, but not conflicting with, virtue-generating considerations. Thompson's agrarian idea involves a man-to-man relation through an interdependent pattern of activity among community members in a farming practice. In comparison, Hesiod's poetic idea reveals the nature of a man-nature relation, which sheds light on why participating in a farming practice is crucial for man, for it enables man to engage with land, which is holy in nature.

In my view, invoking Hesiod's poetry is pivotal to Thompson's agrarianism. Despite the agrarian claim that agriculture is intrinsically good because its activities generate virtues, there remains a leak in this view. Namely, land resources may be

inappropriately exploited in farming. For in the agrarian view, little is said about the nature of land. The divine image of the land and its relation to man can be of importance here. It provides some basic constraints on land use for farming. Community members would be sensitively restrained from excessive use of land, if they were aware of the intrinsically sacred connection between land and man. Taken together, moral philosophy and mythic poetry of the Greek tradition are two important theoretical pillars of Thompson's agrarian view.

10.2 Problems with Thompson's Agrarianism

If we looked closer into the Greek tradition, however, we cannot help identifying that certain aspects of Greek philosophy that are incoherent with Thompson's view are not adequately addressed. Particularly, for example, Socrates, Plato and other prominent Greek philosophers hold a dualistic view of human nature, where a person is construed as composed of two distinct kinds of entity: body and soul. They also embrace an atomistic view of nature, where the universe is particulate, reductive, material, inert, quantitative, and mechanical (Callicott 1987, p. 118). In this worldview, man seeks not unity with nature but conquest (McHarg 1969).

The dualist view of a person and materialistic-mechanistic conception of the world in the Greek tradition are in congruent with some of the core ideas in the Judeo-Christian theology. Together, they constitute the backbone of the Western civilizations. Thompson's agrarianism obviously operates under this framework. For a thorough implementation of this agrarian view, there appears to be unavoidable conflict between Thompson's agrarianism and the framework of Western civilization. Lynn White has addressed this issue well in the following passage:

> What people do about their ecology depends on what they think about themselves in relation to things around them. Human ecology is deeply conditioned by beliefs about our nature and destiny—that is, by religion…Certainly, the forms of our thinking and language have largely ceased to be Christian, but to my eye the substance often remains amazingly akin to that of the past…It is rooted in, and is indefensible apart from, Judeo-Christian theology…We continue today to live, as we have lived for about 1700 years, very largely in a context of Christian axioms (1967, p. 3)

To our concern in the current context, we ask: What do the Christian axioms amount to, and how are they related to the Greek tradition? Baird Callicott has answered these questions by articulating how a Judeo-Christian view absorbs some aspects of the Greek tradition as below:

1. God—the locus of the holy or sacred—transcends nature.
2. Nature is a profane artifact of a divine, craftsman-like creator. The essence of the natural world is informed matter: God divided and ordered an inert, plastic material—the void/waters/dust or clay.
3. Man exclusively is created in the image of God and thus is segregated, essentially, from the rest of nature.

4. Man is given dominion by God over nature.
5. God commands man to subdue nature and multiply himself.
6. The whole metaphysical structure of the Judeo-Christian world view is political and hierarchical: God over Man, Man over Nature—which results in a moral pecking order or power structure.
7. The image-of-God in Man is the ground of man's intrinsic value. Since nonhuman natural entities lack the divine image, they are morally disenfranchised. They have, at best, instrumental value.
8. This notion is compounded in the latter Judeo-Christian tradition by Aristotelian-Thomistic teleology—rational life is the telos of nature and hence all the rest of nature exists as a means—a support system—for rational men (1987, p. 117).

In this God-based worldview where a dualistic nature of man is held, it's both logical and natural for nature to be treated as equivalent to natural resources, as objects waiting to be perceived and exploited by subjects. Since Thompson's agrarian version of environmental ethics actively seeks conceptual supports from the Greek tradition, it is unclear how the agrarian ideal can get fully implemented in a Western (Christian) context in which Thompson situates his theoretical work. The capacity of farming activities in cultivating virtues in people does not deliver a moral implication that the land is not to be over exploited.

Thompson might contend that his appeal to the Greek tradition is well balanced such that the above worry can be rebutted. Hesiod's poetry, as mentioned earlier, expresses the idea that Zeus—a sacred being—is thoroughly integrated into nature, thus that man's attitude toward land is awe. Accordingly, the farming practice can be harmoniously gentle and appropriately constrained. Although this response is well motivated, the problem is how we may make sense of Hesiod's poetic idea. Is this idea merely a metaphorical expression, or something to be taken seriously, namely that it has some real ontological import? If the former were the case, we would have difficulty taking a sacred worldview seriously. If the latter were the case, there would seem to be a challenge of showing how we may substantiate Hesiod's idea in such a way that we do not treat it as a mere metaphor. This challenge is not easily overcome.

Even if there were some way to sustain on the idea that Zeus is a sacred being wholly integrated into nature, a more serious problem still remains. A direct conflict still exists between a sacred conception of nature expressed by the poet Hesiod and a mechanistic/atomistic worldview held by ancient Greek philosophers. A resolution of this conflict would seem to call for a more radical re-adjustment concerning how we may coherently answer the following three questions, which are crucial to achieve sustainability through agrarianism: (1) What is the nature of nature? (2) What is the nature of man? (3) How should man relate to nature? (see Ip 1983; Callicott 1987) These questions are ontological in character. We may here dub them as "the ontological challenge".

To be fair to Thompson, he did not ignore the ontological challenge. Thompson has argued against Cartesian dualism and an abstraction notion of space, maintaining that they are "the results of a particular intellectual history" (2010, p. 133),

particularly ancient Greek philosophy and geometry. In replacement, Thompson opts for the idea that we are embodied and embedded beings, meaning that our conscious minds are essentially anchored in our bodies and made possible by being situated in particular places and contexts. An agrarian life is thus in his view tailored made to implement the idea in question, and key to survival in face of contemporary environmental crisis. As Thompson write: "To be saved is to see ourselves embodied beings and to become reembedded in a thick network of focal practices situated in focal places among focal things" (2010, p. 135).

Thompson's awareness of and response to the ontological challenge are both praiseworthy and worth pursuing. Nevertheless, a main worry remains. That is, a God-based worldview coupled with a rationalistic Greek philosophy is so entrenched and resilient in the Western tradition, especially in the U.S. (see Mark Johnston 2010, Chapter 1 for some figures of religious beliefs) that it is unclear how much of this tradition can be altered or lifted by Thompson's considerations. In particular, the idea of self and subjectivity, upon which many of the contemporary social, political and legal systems are built, is so central in the Western civilization, that a deep appreciation of one's intrinsic connection to nature remains hard to grip.

10.3 Zhuangzi's Philosophy of Man and Nature

My main contention is that philosophical considerations of Zhuangzi, enjoying an equivalent status and degree of influence as Laozi in the tradition of Daoism, are highly relevant and significant here. His main ideas of man and nature are very different from the ancient Greek tradition: they are based upon a Godless-worldview where a no-self view is held, even though those ideas were developed also in a farm environment in ancient China at around a similar period of time (3rd to 4th BC). In this section, our goal is to see whether Zhuangzi's philosophy is a good, or better, fit to Thompson's agrarianism.

We start by noting that there have been scholars invoking conceptual resources in the Daoist tradition to develop theories of environmental ethics to tackle our contemporary ecological crisis. For example, Po-Keung Ip has appealed to the pair of notions Dao and De in the *Dao De Jing*:

> Dao is not anything like a creator god. Rather it is a totally depersonalized concept of nature…Dao is also depicted as a process of change and transformation. De signifies the potency, the power, of Dao that nourishes, sustains, and transforms beings…Since De is internalized in all beings in the universe, there is no problem of relating beings in the world. The De of Dao provides the essential connections. Man, being a member of beings, is without exception internally linked to Dao as well as to everything else…Thus, a crucial metaphysical linkage between man and nature is established. (1983, pp. 338–339).[2]

[2] The original text of the quoted paper uses the Wade-Giles spelling system. Here I adopt a more commonly used Pin-Ying system. So for example "Tao" is spelled as "Dao", and "Te" as "De". The same goes for "Chuang Tzu", to be spelled as "Zhuangzi", etc.

He also refers to Zhuangzi below:

> The notion of ontological and exiological equality of beings receives further elaborations in the hands of Zhuangzi. For Zhuangzi, beings are ontologically equal because they are formed as a result of a process of self- and mutual-transformations. The alleged individuality and uniqueness of beings can be determined only in such process. Everything is related to everything else through these processes of self- and mutual-transformation. (1983, p. 339)

Ip's ontological considerations from the Daoist tradition are relevant. However, it is not clear how a strong sense of self that is capable of rational thinking and determining who we are in some fundamental way figures in this cosmological view. Ontological equality for all beings may be an ideal, but how to give this idea some substance, especially in efforts to illuminate what self and subjectivity are, appears missing in Ip's Daoist approach.

David Loy has attempted to offer a similar Daoist approach to resolving the issue of sustainability, claiming that "A new approach is needed, and I suspect that any solution which is successful will embody an appreciation of the Daoist insight into the self-organizing spontaneity of the natural world" (1997, p. 7). Loy has gone a step forward, compared to Ip, to address the issue of self and subjectivity concerning the nature of man within a Dao-based worldview. He writes:

> Several passages in the *Dao De Jing* allude to the need to overcome subject-object duality (e.g., ch. 7 and 13, the latter the epigraph to this section), but, as we would expect from a later and more discursive work, the other Daoist classic the *Zhuangzi*, is less ambiguous in asserting that "the perfect man has no self": "If there is no other, there will be no I. If there is no I, there will be none to make distinctions". (1997, pp. 2–3).

Here two important points made by Loy are worth noting. One is that Zhuangzi, compared to Laozi in *Dao De Jing*, has more elaboration on the subjective dimension of a person than merely focusing on the rhythm of nature and change of things. Another is that Zhuangzi appears to claim that self does not exist, at least in a "perfect man". This is a substantial thesis about the nature of subjectivity and critical for us to make sense of what the link between man and nature could be. Despite this important clue advanced by Loy, he does not interpret the text of the *Zhuangzi* in any further details to show what a perfect man is and what it means to say that he has no self. This lack of philosophical elaboration is highly unsatisfactory, for given the centrality of the nature of self and subjectivity in our current concern, a no-self thesis can be at best a dogma, at worst a piece of mysticism. Either way, it's not apt to ground an agrarian practice in a contemporary context.

The limitations of Ip and Loy, among some other scholars who seek ecological inspirations from Zhuangzi's philosophy, are to be expected. For many of the core passages in the text of the *Zhuangzi* are obscure, written either in the style of a parable, riddle, or paradox, those having to do with the nature of self and subjectivity included. All these make it difficult to give an illuminating interpretation of Zhuangzi's view in a philosophically vigorous manner. In what follows, I undertake this challenge, aiming to explicate what Zhuangzi has to say about the nature of man and his relation to nature.

To begin with, the nature of man can be viewed from three angles: (a) body, (b) person, and (c) self. The idea of body is relatively uncontroversial. It refers to a biological organism, which is physically and chemically composed. The ideas of person and self are trickier. John Locke (1689/1997) sees a person not merely as a biological organism. A person is a reflective conscious rational being. Moreover, she is capable of relating herself as the same one to an earlier person through memory. In this idea of a person, a cross-temporal psychological continuity is involved, which constitutes the core of Locke's view of personal identity. It was later taken up and developed by Derek Parfit (1984). Neither Locke nor Parfit seem to have distinguished the idea of self from that of personal identity in the way as Mark Johnston (2010) does. That is, there appears to be a basic sense of self that is synchronic: right here and right now, even if I lost my long-term memory, there remained a strong sense of being me in the most intimate manner. An example is the main character—a CIA agent—in the movie *The Bourne Identity*. He cannot remember anything about his past after being wounded by a gunshot, but since then he has been doing all he can to protect himself against all sorts of dangers and threats from outside, driven by retaining a powerful sense of being him himself and by finding out who he really was. Johnston suggests that this synchronic view of self be distinguished from the diachronic idea of self. This demarcation is subtle, but important. In my view, it deserves taking seriously.

Our main concern is: Does Zhuangzi say anything about these three aspects of man, i.e., body, person (or personal identity), and self? My answer is positive. I (Cheng 2014) have argued for the view that the nature of self is central to Zhuangzi's philosophy, and that an ingenious argument for the illusive nature of self can be uncovered and reconstructed from the main text of the *Zhuangzi*, especially Chap. 2 entitled "Qiwulun" or "On Making All Things Equal".[3] Here I shall only sketch a main line of reasoning underlying some of the critical passages in the text that leads to the skeptical conclusion about self.

First, Zhuangzi has an acute observation about a richly mental life enjoyed by each normal individual. The following passage is a lively and very fine description of how a person is constantly occupied by the plethora of psychological states aroused and incurred by a wide variety of situations:

> Great understanding is broad and unhurried; little understanding is cramped and busy. Great words are clear and limpid; little words are shrill and quarrelsome. In sleep, men's spirits go visiting; in waking hours, their bodies hustle. With everything they meet they become entangled. Day after day they use their minds in strife, sometimes grandiose, sometimes sly, sometimes petty. Their little fears are stunned and overwhelming. They bound off like an arrow or a crossbow pellet, certain that they are the arbiters of right and wrong. They cling to their position as though they had sworn before the gods, sure that they are holding on to victory. They fade like fall and winter—such is the way they dwindle day by day. They drown in what they do—you cannot make them come back. They grow dark, as though sealed with seals—such are the excesses of their old age. And when their minds draw near

[3] The writing of Zhuangzi is classified into three categories: inner, outer, and miscellaneous chapters. The first category, which contains seven chapters, are widely believed to be written by Zhuangzi himself, while the other two categories written by his followers.

> to death, nothing can restore them to the light. Joy, anger, grief, delight, worry, regret, fickleness, inflexibility, modesty, willfulness, candor, insolence—music from empty holes, mushrooms springing up in dampness, day and night replacing each other before us, and **no one knows where they sprout from**. Let it be! Let it be! It is enough that morning and evening we have them, and they are the means by which we live. (tr. Watson 1968, p. 37; bold emphasis mine)

Zhuangzi observes that people's lives are governed by their mental states, changing from moment to moment. When inquiring further about how and from where those mental occurrences arise, Zhuangzi realizes that the answer is unclear.

Despite expressing ignorance, Zhuangzi intriguingly further pursues the inquiry in a paragraph immediately following the above cited one:

> Without them we would not exist; without us they would have nothing to take hold of. This comes close to the matter. But I do not know what makes them the way they are. It would seem as though they have some **True Master**, and yet I find no trace of him. He can act—that is certain. Yet I cannot see his form. He has identity but no form. (tr. Watson 1968, p. 37; bold emphasis mine)

In the first sentence of this paragraph, "them" clearly refers to mental occurrences, as just discussed. Zhuangzi is sensitively aware that mental states do not simply occur in a person; they occur as *mine*, as belonging to someone that is *me*. Moreover, in the absence of me, those mental states could not be allocated. In other words, there is a phenomenological sense in which a mental state and an owner are inherently linked in some most intimate manner. Zhuangzi calls the owner in question a "True Master". The identity of a true master can be affirmed, but no trace of it can be found, as Zhuangzi further observes. It shall be clear here that a "True Master", as an owner of mental states, does not refer to an individual person in the physical-biological sense. This is because if it were so construed, some trace of the owner could surely be found. A "True Master" appears to refer to some item in the mental realm of an individual person, something that lies in the innermost part of my mind. A "True Master" thus means something close to "Self" in the familiar Western idioms.

Zhuangzi is evidently intrigued by the mysterious True Master. After all, how can there be something in the world whose existence is so certain but meanwhile no evidence of it could be gathered. He thus ventures to search for the identification of it in the body:

> The hundred joints, the nine openings, the six organs, all come together and exist here as my body. But which part should I feel closest to? I should delight in all parts, you say? But there must be one I ought to favor more. If not, are they all of them mere servants? But if they are all servants, then how can they keep order among themselves? Or do they take turns being lord and servant? It would seem as though there must be some **True Lord** among them. But whether I succeed in discovering his identity or not, it neither adds to nor detracts from his Truth. (tr. Watson 1968, pp. 37–8; bold emphasis mine)

Here the True Lord clearly means the same thing as the True Master, and it seems to be anchored in one's body. On this basis, Zhuangzi examines several major organs and parts of the body to locate it. In the end, he cannot be sure whether this

can be successfully done, but still maintains that despite this uncertainty, no room is left for doubt concerning its identity.

Zhuangzi is here left with a deep puzzle: there is something whose existence is beyond doubt, but no empirical evidence whatsoever could be collected to demonstrate it. What could this oddest kind of thing be? Does Zhuangzi go any further to illuminate its nature? The answer, in my view, lies in the famous anecdote about the dream of the butterfly that appears in the last paragraph of Chap. 2:

> Once Zhuang Zhou dreamt he was a butterfly, a butterfly flittering and fluttering around, happy with himself and doing as he pleased. He didn't know he was Zhuang Zhou. Suddenly he woke up and there he was, solid and unmistakable Zhuang Zhou. But he didn't know if he was Zhuang Zhou who had dreamt he was a butterfly, or a butterfly dreaming he was Zhuang Zhou. Between Zhuang Zhou and a butterfly there must be *some* distinction! This is called the Transformation of Things. (tr. Watson 1968, p. 49)

My reading of this obscure but profound passage is that it calls into question a basic idea of self in which self, or True Master, has a persistent identity. Zhuang Zhou, as any other normal person like us, dreams a bizarre dream in which he becomes a butterfly. This dream is bizarre in that the self in the dream—or the one who occupies the phenomenological center of the mental realm of the person who dreams, i.e., Zhuang Zhou—has turned into a butterfly. After waking up, the self that used to take up the phenomenological center of the mental realm of Zhuang Zhou before having this bizarre dream resumes its central place. The possibility of having a dream like this shows that the self-identity of a person is not stable: it might change in different contexts such as in an unusual dream. Thus, if we take the idea of self as something that has a perfect identity, an idea well supported by some of our most basic commonsense phenomenology, that idea is seriously challenged. This is what I take to be the gist of the dream of the butterfly story. It shows that the self, understood as some persistently existing mental entity hidden behind one's psychological occurrences, is an illusion.

This reading enables us to make sense of the last two statements in the same paragraph: "Between Zhuang Zhou and a butterfly there must be *some* distinction! This is called the Transformation of Things." Zhuang Zhou and a butterfly are clearly distinct in the physical-biological sense. But they are not differentiated by two distinctively self-identities in each of their mental realms. For those self-identities do not exist. This implies that Zhuang Zhou and a butterfly can partake in the transformational processes of cosmology after they perish. Such a reading fits well with how Zhuangzi views life and death in another noted paragraph which describes Zhuangzi's reaction to the death of his wife:

> But I looked back to her beginning and the time before she was born. Not only the time before she was born, but the time before she had a body. Not only the time before she had a body, but the time before she had a ki. In the midst of the jumble of wonder and mystery a change took place and she had a ki. Another change and she had a body. Another change and she was born. Now there's been another change and she's dead. It's just like the progression of the four seasons, spring, summer, fall, and winter. Now she's going to lie down peacefully in a vast room. (tr. Watson 1968)

The concept of ki is central to Zhuangzi's idea of cosmology. It refers to some naturalistic energy or substance that permeates the universe and supports animate as well as inanimate beings. Life and death are thus compared to the progression of four seasons in this ki-based worldview: they are merely different stages of things undergoing constant changes of formation and deformation.

We may pause here to see where we are with respect to developing a plausible version of agricultural ethics. Earlier we have expressed a main concern about a possible source of limitation for Thompson's agrarianism: a Greek-Christian tradition of conceiving subjectivity in which his agrarian ideas are historically linked and embedded. In that tradition, a notion of self has been firmly in place, namely, self is construed as ontologically distinct from nature. Given this notion, there would seem to be no sound ground on which we may resist treating nature as equivalent to natural resources apt for exploitation. Now we have seen how a view of self in the *Zhuangzi* can be derived that is very different from that of the Greek-Christian tradition. It helps enabling us to let go of a deeply entrenched grip of a persistently existent self that takes up a central phenomenological position in a person. We can thus understand how a ki-based worldview is possible in which one's life can be a part of the natural order. Treating nature in an equal manner in which we treat ourselves would, then, become foreseeable. On this basis, a farming practice can be imposed a solid constraint on land use, a constraint that can be genuinely appreciated by communal members who understand this man-nature relationship characterized in the philosophy of Zhuangzi.

A communal member as illustrated above would be a true man—an ideal person who is able to think through all this—described by Zhuangzi below:

> The True Man of ancient times knew nothing of hating death. He emerged without delight; he went back in without a fuss. He came briskly, he went briskly, and that was all. He didn't forget where he began; he didn't try to find out where he would end. (tr. Watson 1968, chapter 6: "The Great and Venerable Teacher," p. 78).

The true man has an enlightened attitude toward death which enables him to fear and resent no death. What lies at the heart of this enlightened attitude is a deep understanding of the illusive nature of self in the way as described earlier. Only this understanding, coupled with a ki-based worldview, would lead to the supreme status of a true man who knows what he is and how he relates to others. On this basis, he also knows how to live, how to feel, and how to act. So, for example, Zhuangzi talks about "abandon self" (去己) and to "treat oneself like others" (自彼). These are extremely demanding moral imperatives that match to some of the highest religious standards. These standards are possible to be met, nevertheless, when someone truly understands that she and others are related in some ontologically continuous way with no distinctive selves demarcating them. In this way, we are also well placed to make sense of one statement cited earlier by Loy, that "the perfect man has no self".[4] We now know that it is misleading to think that only the perfect man has no self. As a matter of fact, no individual has a self, but only the true man understands this fact.

[4] 「至人無己」:appears in Chap. 1 of the *Zhuangzi*.

In addition to self and body, the idea of man also contains personal identity that involves the continuity of a psychological life in an individual, as mentioned earlier. This aspect of man touches upon some property of ourselves that we much cherish, that is, there is an individual psychology that gets shaped in a particular personal history that is uniquely mine. This is something that we care about, and hope that it will persist to exist after our biological death.

Does Zhuangzi say anything about it? This issue is intricate but crucial. Due to the limitation of the space given in this paper, I can only be very brief here to illustrate what Zhuangzi has to say about it.[5] A key passage is this:

> The clansman T'ai, now-he lay down peaceful and easy; he woke up wide-eyed and blank. **Sometimes he thought he was a horse; sometimes he thought he was a cow**. His understanding was truly trustworthy; his virtue was perfectly true. (tr. Watson 1968: Chapter 7 on Fit for Emperors and Kings; bold emphasis mine)

T'ai is described as a true man here with a trustworthy understanding and praiseworthy virtue. These qualities are exhibited through his "sometimes thinking of himself as a horse and sometimes thinking of himself as a cow". This behavior appears insane, if taken literally. I suggest that we adopt a judgment-dependence account of personal identity proposed by Mark Johnston (2010) to interpret it.

The basic idea of Johnston's theory is this. The issue of whether I will be the same person at t2 as a previous one at t1 is determined by my dispositions to make relevant judgments about my identity. This idea is backed up by the following considerations. Suppose there was an opportunity to taking a teletransportation device trip to another planet, where the traveler on earth will be instantly destroyed as soon as she presses the button, while her exact molecular blueprint will be sent to the planet and a perfect replica will be immediately re-constructed over there, how would one decide? There will be a psychological continuity, but not a physical one, in using the device. For those who think that personal identity consists in a psychological continuity of some sort, such as Parfit (1984), it would be perfectly fine in choosing to press the button, for one would survive this trip. For those who holds that personal identity consists in a bodily continuity of some sort, such as Wiggins (1980) or Wollheim (1984), one would surely refrain from using such device, for pressing the button would amount to killing oneself. Both groups of people are equally strong in their opinions, and their actions are accordingly equally determined. But which side is right? In Johnston's view, there is no fact of the matter that can help determine which group is right. He maintains that both are equally right, and the best way to explain it is that personal identity consists in one's identity-determining dispositions (Johnston 2010).

Johnston's view on personal identity is original and thought provoking. A thorough examination of its plausibility requires a separate occasion. But this theory helps us making sense of a true man like T'ai. In light of Johnston's view, T'ai's thinking of himself as a cow or horse reveals a set of identity-determining

[5] A more extended treatment is in my unpublished manuscript entitled "Personal Identity and Survival in the *Zhuangzi*".

dispositions in him. This set of dispositions determines that T'ai will survive as long as a cow or a horse continues to exist. Here, it is obvious that Zhuangzi does not think that there is anything special about a cow or a horse with which T'ai identifies himself. Just about any entity in this world could suffice. As a matter of fact, it is with this construal that we have a chance to better understanding the following difficult passages:

> Heaven and earth were born at the same time I was, and the ten thousand things are one with me.[6] (tr. Watson 1968: Chapter 2 Discussion on Making All Things Equal)
>
> Heaven and earth are one attribute; the ten thousand things are one horse.[7] (tr. Watson 1968: Chapter 2 Discussion on Making All Things Equal)

In these two statements, ~~my~~ man's existence is deemed as sharing a status and origin not different from those of heaven and earth, and so are ten thousand things in the world. This can be understood in an ontological sense, but I suggest that it can also be interpreted in an epistemic sense of some sort. Those statements can be read as expressing an attitude of a true man toward survival, something like a belief that her future existence will be continued by heaven and earth, by ten thousand things in the world. So an individual person can be extended endlessly, so long as nature does not cease to exist. An obscure passage can be understood in this light:

> Though the grease burns out of the torch, the fire passes on, and no one knows where it ends.[8] (tr. Watson 1968: Chapter 3 The Secret of Caring for Life)

This discussion of Zhuangzi's view of personal identity supplements the previous discussion on self and body, and gives us a more complete and coherent picture of what a man-nature relationship looks like in Zhuangzi's philosophy.

How do all the above discussions on Zhuangzi's philosophy of man and nature relate to environmental ethics in general and Thompson's agrarianism in particular? One significant implication is that the moral imperative of how one ought to treat another applies not merely to a person-to-person relationship, but also to a person-to-nature relationship, given the uniformity and continuity of man and nature. A logical link is this: If I am to treat other people in the same way as I treat myself given the ontological continuity between me and other people, I should on the same ground treat nature in the same way as I treat myself. I do not excessively exploit nature to fulfill my endless desires, just like reversely, I do not deem myself as an object used merely to fulfill some instrumental function. In this way, tension between man and his inhabiting in nature may be minimized, and a harmonious relationship between man and nature becomes possible. This is an ontological ground which Zhuangzi's philosophy can offer to environmental ethics.

This kind of ontological considerations enables us to resist classifying agriculture into a same category as other compartments of our modern industrial economics where efficiency, trade-off, and benefit-cost calculations dominate. For, in a Zhuangzian view, farming activities involves interaction between man and nature,

[6] 天地與我並生,而萬物與我為一(齊物論)

[7] 天地一指也,萬物一馬也(齊物論)

[8] 指窮於為薪,火傳也,不知其盡也(養生主)

which cannot be subject to purely economical analyses, due to the same ontological status equally enjoyed by man and nature. There is some intrinsic value in the farming practices that cannot be discarded in the pursuit of higher yield or profit. The implication of Zhuangzi's ontological view of man and nature thus fits well with Thompson's virtue-based agrarianism. Both see something intrinsically valuable in agriculture, but from different perspectives. Thompson's agrarianism highlights virtues generated through communal cooperation, whereas Zhuangzi's philosophy stresses an ontological connection between man and nature through farming activities.

This difference between Zhuangzi's philosophy and Thompson's agrarianism may allow the former to impose some constraints on the latter. To spell out this point, consider the following facts about man. Man is intelligent and adept in hands, and is thus able to invent machines and improve on techniques in a variety of situations which are devoted to exploiting natural resources with a high level of efficiency. How shall man's natural endowments like this be exercised in, say, farming? Thompson's agrarian position seems to have relatively little to say about it, because its focus is on the virtue-cultivating aspect of farming. How would Zhuangzi respond to this issue? Below is a story that tells a Zhuangzian view[9]:

> Tzu-kung traveled south to Ch'u, and on his way back through Chin, as he passed along the south bank of the Han, he saw an old man preparing his fields for planting. He had hollowed out an opening by which he entered the well and from which he emerged, lugging a pitcher, which he carried out to water the fields. Grunting and puffing, he used up a great deal of energy and produced very little result. "There is a machine for this sort of thing," said Tzu-kung. "In one day it can water a hundred fields, demanding very little effort .and producing excellent results. Wouldn't you like one?" The gardener raised his head and looked at Tzu-kung. "How does it work?" "It's a contraption made by shaping a piece of wood. The back end is heavy and the front end light and it raises the water as though it were pouring it out, so fast that it seems to boil right over! It's called a well sweep. "The gardener flushed with anger and then said with a laugh," I've heard my teacher say, where there are machines, there are bound to be machine worries; where there are machine worries, there are bound to be machine hearts. With a machine heart in your breast, you've spoiled what was pure and simple; and without the pure and simple, the life of the spirit knows no rest. Where the life of the spirit knows no rest, the Way will cease to buoy you up. It's not that I don't know about your machine – I would be ashamed to use it!". (tr. Watson 1968: Chapter on Heaven and Earth)

A Zhuangzian view expresses caution regarding how we exploit natural resources. If our use of machine is solely motivated by efficiency (i.e., possessing a "machine heart"), then we should be aware of the shortcomings and dangers by action fueled by such rationale. For it would "spoil what was pure and simple…, and the life of the spirit knows no rest", as was just quoted above. Man is easily overtaken by the lure of efficiency. If left unchecked, we are bound to be trapped in an endless hedonistic cycle.

[9] This quoted paragraph appears in outer chapters, which are likely to be written not by Zhuangzi himself, but by his followers. So instead of saying that this paragraph expresses Zhuangzi's idea, I describe it as stating a "Zhuangzian" view.

The "machine-heart" predicament has an actual case in the Western history of farming. Below is how Lynn While describes it:

> Early plows, drawn by two oxen, did not normally turns the sod by merely scratched it. Thus, cross-plowing was needed and fields tended to be squarish. In the fairly light soils and semiarid climates of the Near East and Mediterranean, this worked well. But such a plow was inappropriate to the wet climate and often sticky soils of northern Europe. By the latter part of the 7th century after Christ, however, following obscure beginnings, certain northern peasants were using an entirely new kind of plow, equipped with a vertical knife to cut the line of the furrow, a horizontal share to slice under the sod, and a moldboard to turn it over. The friction of this plow with the soil was so great that it normally required not two but eight oxen. It attacked the land with such violence that cross-plowing was not needed, and fields tended to be shaped in long strip. (1967, p. 3)

What was the impact of the new machine of plow on land and community? White continues to illustrates:

> In the days of the scratch-plow, fields were distributed generally in units capable of supporting a single family. Subsistence farming was the presupposition. But no peasant owned eight oxen: to use the new and more efficient plow, peasants pooled their oxen to form large plow-terms, originally receiving (it would appear) plowed strips in proportion to their contribution. Thus, distribution of land was based no longer on the needs of a family but, rather, on the capacity of a power machine to till the earth. Man's relation to the soil was profoundly changed. Formerly man had been part of nature; now he was the exploiter of nature. (1967, p. 3)

This case clearly demonstrates how an advanced machine may have a powerful tendency to take control over people's lives and change the way in which they are connected to nature. White's expression of caution about the use of machine echoes well with a Zhuangzian view, and the latter rests on an ontological ground. Given that Thompson's agrarianism is situated in an era of modern technology that appears to have at least part of it's root in the seventh century northern Europe, a Zhuangzian view can be of significant help to constrain the implementation of agrarianism.

10.4 Conclusion

Thompson's agrarian approach to resolve the issue of sustainability is well motivated, highly practical, and morally grounded. The kind of agriculture it promotes emphasizes a community-based form of practice, not one of the current industrial agriculture. It values virtues and moral characters cultivated through farming practices, not the maximization of profits or efficiency. This virtue-based version of agrarianism is undoubtedly a timely solution to our environmental crisis that makes sense and is promising to really work.

Thompson develops this agrarian view exclusively from a Western conceptual framework. This has some major drawbacks. Some aspects of the Greek tradition on which he exploits and relies appear to be in conflict with some other aspects of the same tradition which are no less salient and influential. A dualistic view of man and mechanistic conception of nature are among those ingredients that do not at all

cohere with Thompson's agrarian position. If we were to seek external conceptual resource from other traditions, such as Zhuangzi's philosophy, it would enrich Thompson's agrarian view by strengthening the way it deals with the ontological issue concerning the man-nature relationship. Such attempt would prove to be helpful in two respects. One is that it results in a Daoist version of agrarianism with a no-self thesis and a man-nature unity claim inserted in it, which can be more readily appreciated and implemented in Asian regions. Another is that for those who grow up in a Western tradition but are in search of an alternative Godless framework, this Daoist version offers itself as a viable subscription. All in all, Thompson's agrarianism can be strengthened by Zhuangzi's philosophy. Our environment can be better preserved as a result.

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Chapter 11
Food Ethics Based on Three Level Eco-holism

Tomosaburo Yamauchi

It is hardly an exaggeration to say that more confusion is caused, both in theoretical ethics and in practical ethics, by the neglect of this distinction (between two levels of moral thinking) than any other factor.

R. M. Hare

Given the success of the Japanese people in intensively and densely inhabiting a limited and fragile environment over many centuries without destroying either its beauty (albeit partly marred by the devastating postwar industrialization) or its productivity, they may be exceptionally well qualified to take the lead in conserving an analogously small and fragile planet.

J B. Callicott

Abstract The problem of how we eat is related to our view of nature, how we treat nature. And Eastern and Western views of nature for environmental ethics are different. In quest of an integral ethics, this paper contrasts, then combines, both traditions to develop new environmental and food ethics. In Edo-era Japan, farms, forest, wilderness, and mountains, were arranged in ways to keep the balance between nature and humanity. Proper distribution of the land and allocation of resources was arranged by a dedicated government, operating on an integral philosophy. The Edo people did not think that humanity was separate from Nature. This was their ethico-political background. By contrast, people today often feel unbalanced and cut off from nature. They suffer the threat of war, nuclear energy, and collapse of spiritual life. And, the problem of world hunger is just as urgent.

Western modernism and traditional Japanese thought differ in their views of nature; the former divides humans and Nature while latter considers them as one. This is Western dualism vs. Eastern holism, a *mechanistic* view of nature vs. an

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organismic view of nature. Hare's method of separating levels of moral thinking offers a way to make a hierarchy of moral principles. Adopting such a moral hierarchy, ecological principles and intuitions would set limits to utilitarian models of human-centered modernism. Were conflict to occur between the humanist and eco-centrist levels, one could move the argument to the eco-holist level, and make a moral decision in consideration of both human and natural welfare. After all, while one can briefly separate humans from nature, in the long run, human welfare and Earth wellness cannot be separated; for if the natural environment were to decay, humanity could not survive. Thus, our ultimate criterion must lie in the welfare of the Earth.

Keywords Animal liberation · Buddhism · Confucianism · Eco-centrism · Eco-holism · Edo-era · Human-centrism · Land ethic · Shintoism · Two-level utilitarianism

11.1 Introduction. Japanese Thought in the Edo-era

The problem of how we eat is deeply related to our views of nature, that is, how we treat nature. And our views of nature that must be clarified by today's environmental ethics are quite different between Eastern and Western traditions. Thus it is necessary is to compare both traditions. In search for an integral ethics, my trial in this paper is, to find a combination of both traditions of East and West in environmental and food ethics.

During the Edo era (江戸時代 1600–1867), Japan was a closed country; people lived self-sufficiently without foreign trade, though there existed exceptionally small scale trade with Dutch. In the early stage of Edo era, Christian missionaries visited the country and after a century of Christian influences, Christian missionaries were excised from the country. Although the government rejected the Christian religion, something about the Western cultures and scientific knowledge remained among the intellectuals. Because the country was closed, the country was an entire cosmos for them. People knew by experience that once the natural environment was destroyed, there would be no existence for them. In this society, modern Western types of individualism and human rights were not known to the people, and there were no corresponding words for them. If people think that Nature is a huge living being (i.e. an organism), then each individual would be considered something akin to a cell to be metabolized. Thus people could not thus enjoy freedom in the modern Western sense of the word and accordingly liberalism could not develop.

In old Japan, people were not individuals, but were members of a family, as parts of a body. The family was, in the similar way, only a part of the entire orgasmic country—the organismic whole that continued from century to century starting from Heaven- Earth-Nature(天地自然)and continued by our ancestors, later to be perpetuated from descendant to descendant. Such is our traditional religious belief of nature worship, by which people's, lifestyles, ethics, and politics were regulated and limited. In a word, people worshiped and loved Nature, and later they served for

and enriched Nature. In the ancient Nara-age, Buddhism, Confucianism, and Taoism were introduced to the country and they were mixed on the basis of Shinto.

In the Edo era, fish and small animals like rabbits were eaten. In Edo there was a bay called Edo-wan into which the rivers from mountains containing many nutrients poured as well as the drain water from people's everyday use. This made Edo-wan rich in plankton and which nourished fish and those fish attracted bigger fish like whales. A whale was thought of as a fish, not a mammal, and people ate whale meat caught by whalers, who were cautious not to kill too many, let alone risk the extinction of the species. All parts of whale body were used for various purposes, and the people would hold a burial service (ceremony) for the spirit of the dead whales. Horses were used for assistance in farming and for riding, and cows were also used in farming. When they died due to accident, their meat was sometimes eaten with gratitude as a gift from heaven.

The natural environment in Japan was well preserved and even enriched during the Edo era. People considered nature itself to be one inseparable whole that was worshipped as a living being (生物、活物)that has birthed all things and nourished them. Such an organismic view of nature was, for instance, expressed through family relations. According to such a view of nature, people's everyday meal would have been very simple and frugal, because humans are only a part of the whole and are strictly regulated by the products of Nature. People were vegetarians; but they ate fish so that they might be called *demi-vegetarians* in today's term. Meat eating had been prohibited for religious reasons from ancient times.

In the Edo era Japanese residences, farms, forest, wilderness, and mountains, were properly located so as maintain a balance. In some areas, wilderness was transformed into rice fields, in other areas they planted trees to make a forest. In some wet areas, the land was transformed into rice fields and many ponds were made to supply rich paddies with water. Proper distribution of parts of the land and optimal allocation of resources was possible through an integral, stable government, which again was supported by an integrative philosophy. People did not know humans as separated from Nature. All people were believers in the three syncretic but integrated teachings of Shinto, Buddhism and Confucianism, all of which shared a version of eco-holism (or eco-humanism) in the terms of today's environmental ethics.

Such was, I surmise, the ethico-political or ideological background that created the eco-society of the Edo period. Contrarily to the Edo society, we contemporary people are said to be suffering under the threat of war, the threat of nuclear destruction, and the collapse of spiritual life. (cf. Umehara 2013.) In today's aura of crisis, the problem of world hunger cannot be ignored, giving rise to the humanist ethics of food.

In the age of Western expansion towards Asian countries, after Japan opened the door to the West, modern civilization and Western ideas were introduced. However, people didn't change their minds from traditional thoughts to Western modernism entirely. Japanese leaders, retaining the traditional way of thinking, mainly combined Western modern cultured and social systems, creating somewhat syncretic systems of thought. It was during the postwar age that people discarded traditional way of thinking.

Considering the prevalent thoughts and actions in the world today, no one can imagine it possible to turn back the clock and restore the ecological lifestyle of Edo society. One can only use it as a philosophical paradigm. In Japan in the postwar age people have accepted Western modern life style and way of thinking, and drastically discarded traditional systems. Today's prime minister Mr. Abe Shinzô attempted to restore Japan, getting rid of the postwar regime, but there are few philosophers today who pay attention to the traditional thoughts. The Confucian philosophers in the Edo era were forgotten. People don't know even their names. It is hopeless to expect today's Japan to contribute or to take the lead in preserving the global environment.

The fundamental difference between Western modernism and traditional Japanese thought is in the respective views of nature: the former divides humans and nature while latter considers humans and nature as one. This is the so-called contrast between Western dualism and Eastern monism or holism: the former believes in a *mechanistic* view of nature while the latter believes in the *organismic* view of nature. For example, Western people, who believed in the Christian religion could not understand, Japanese Shinto, Confucianism, or Buddhism. (Rather they might have despised them as pagan religions or even felt that they deserved to perish as evil belief systems.)

In the1960s, people began to notice that the natural environment was being degraded and Mother Earth was in crisis. Philosophers in Western advanced countries started environmental ethics and philosophy. In their research, they had found that the origin of the crisis is in *Western modernism*. Philosophers had found that the main problem that promoted the environmental crisis was modern anthropocentrism; that is, the thought that allows humans to conquer, dominate, use, or misuse nature. People began looking back Eastern traditions seeking the environmental wisdom (Cf. Callicott 1994).

11.2 Singer's Animal Liberation and Vegetarianism

Western philosophers have started environmental ethics and philosophy in the 1960s as an attempt to move beyond the impasse into which Western modernism had fallen. One of the first environmental philosophies that appeared in advanced Western country is Professor Singer's animal liberationism and vegetarianism. According to Singer, pain is itself evil, regardless of whose pain it may be, even if it is the pain felt by animals. Thus, he breaks down the gap that separates humans and animals. He might, in this sense, be called the first attacker of Western modern anthropocentrism. Singer's animal liberation is an expansion of racism and sexism (discrimination against animals is sometimes called speciesism). Animals share with humans the desire to avoid pain. In Singer's version of utilitarianism, the common interest of humans is a state without pain or avoidance of pain, and this state is the same with other non-human animals, though they are different in lacking rational thinking, self-consciousness, the ability to imagine the future, and other various

respects. However, in the case of humans, though there may be infants or disabled people who are inferior in various respects to a normal healthy adult or even to an animal, they are still to be treated on an equal level with other people. In Singer's utilitarian principle one should extend more consideration to a larger interest, and less to a small interest. Humans and animal share an interest in avoiding pain equally. Therefore, one must treat animals equally in spite of all the differences in other respects.

According to Singer's Animal Liberationism,

> – the fundamental principle of equality, on which the equality of all human beings' rests, is the principle of equal consideration of interests. Only a basic moral principle of this kind can allow us to defend a form of equality that embraces all human beings, with all the differences that exist between them. I shall now contend that while the principle does prove an adequate basis for human equality, it provides a basis that cannot be limited to humans. In other words I shall suggest that, having accepted the principle of equality as a sound moral basis for relations with others of our own species, we are also committed to accepting it as a sound moral basis for relations with those outside our own species—the non-human animals. (Singer 1979, p.55)

Singer argues against factory farming of domestic animals, in addition to using animals for cruel experiments. In mechanically controlled factory farming, an enormous number of domesticated animals are suffering from incredibly cruel treatment; they are treated like machines that produce eggs, milk, and meat. Moreover, a huge amount of waste (or excreta) will pollute soil, and the belch from cows increases carbon dioxide in the air.

It is said, if people eat grain directly without using it for the meat industry, all of the poor people could be saved from starvation. Accordingly, we must all become vegetarians. The animal liberation movement is so successful that animal experiments were abolished world-wide; vegetarianism has become fashionable among the intellectual people and the vegetarian population has increased. It could be said safely that animal liberation movement has, contributed to change the world. Singer's writings on animal liberation were translated and introduced to the Japanese public. The vegetarian population has, however, not increased significantly in the old demi-vegetarian paradise of Japan. The reason for it might be, I surmise, that people were too much brain washed by Western modern anthropocentrism to return to the traditional way of thinking and lifestyle.

The problems relating to Singer's sentientism might be put as follows: Singer concentrates on the interest of human and other sentient beings (Singer 1979). That, I am afraid, resulted in neglect of the wellness of natural environment. In his mind, human interest outweighs natural welfare. Thus his views are not very useful for restoring nature in this age of global environmental crisis. Humans and Nature are basically interrelated, interdependent, and interpenetrating. He makes clear cut division between sentient and non-sentient beings, which is not accord with the ecological and psychological circumstances as given fact. He certainly breaks down the wall separating humans from nature, but he created a gap between sentient and non-sentient beings. He admits that where there is no alternative, meat eating is permissible; for example, an Eskimo can eat seals when there is no other food. He

also warms not to disturb the killing of animals with each other in the wilderness. His moral principle of vegetarianism cannot be generalized, because it has too many exceptions. These defects in his argument could, however, be saved when we separate levels of moral thinking following Hare's two-level utilitarianism, on which I shall argue shortly.

11.3 The Land Ethic and Confucian Views of Nature

Among Western modern philosophers, Aldo Leopold was probably the first philosopher to break down the wall separating human and nature, let alone the wall separating sentient and non-sentient beings. According to Leopold humans must change their role from conqueror of natural environment to members of nature. (see Zimmerman et al. 1993, p.97.) This motto was revolutionary for modern Western human-centered views in that he made environmental ethics closely tied to the Eastern traditions, especially traditional Japanese Confucianism.

Professor Callicott writes that "It is Leopold's opinion, and overall review of the prevailing traditions of Western ethics, both popular and philosophical, generally confirms that traditional Western systems of ethics have not accorded moral standing to non-human beings. Animals and plants, soil and water, which Leopold includes in his community of ethical beneficiaries, have traditionally enjoyed no moral standing, no rights, no respect, in sharp contrast to human persons whose rights and interests ideally must be fairly and equally considered if our actions are to be considered "ethical" or "moral." One fundamental and novel feature of the Leopold land ethic, therefore, is the extension of direct ethical considerability from people to nonhuman natural entities." (Zimmerman et al., 96).

> All ethics so far evolved rest upon a single premise: that the individual is a member of a community of interdependent parts… The land ethic simply enlarges the boundary of the community to include soils, waters, plants, and animals, or collectively: the land…. In short, a land ethic changes the role of Homo sapience from conqueror to plain member and citizen of it. It implies respect for fellow-members, and also respect for the community as such. (Callicott 1994.129f.)

Here humans are considered as *moral patients*; and are considered *moral agents* who consider the welfare of all humans and nature. Humans are considered moral agents, which distinguishes humans from animals; and at the same time, humans are, as the objects of moral considerations, like other natural beings. If one thinks of the welfare of natural beings excepting the welfare of humans, then this view might become similar to the so-called eco-centrism or eco-fascism.

In his paper entitled "The Conceptual Foundations of Land Ethic," Professor Callicott claims that according to William Aiken, who stands on a land ethics philosophy, "a massive human die back would be good. It is our duty to cause them. It is our specie's duty, relative to the whole, to eliminate 90 percent of our number." Based on this thought, Tom Regan criticized the land ethic as a clear case of environmental fascism. (Zimmerman et.al. 1993. 125f.). When we look back on

traditional Japanese Confucianism that looks like the land ethic, our interpretation may be different. Massive human dieback would not be necessary to restore nature. In Edo society Japan could nourish many people on rather small islands, because it did not degrade the natural environment, but enriched Nature as we saw earlier.

If only people in the across the globe would confront the breakdown of the global village squarely (a situation in which all villagers will necessarily perish), then, and only then, will people recognize that an environmental catastrophe is lethal for the village. Then, perhaps the villagers will be united or integrated and make the precept of saving the village override all other moral precepts (that prescribe the increase of human interests or natural welfare. That means that *the wellness and health of the global village should be a supreme categorical imperative for human kind.*

On the other hand, in traditional Western ethics (originating from human-centered views) there are aims promoting social happiness or the individual preferences of humans. Because they are human-centered, they often conflict with the newly emerging eco-holistic ethics such as land ethic. The dilemma of this conflict is not yet solved in the literature of environmental philosophy, as far as I know. Hence, the strange idea that land ethic is a form of eco-fascism. Before I proceed toward a solution to the dilemma, let me explain Hare's solution by distinguishing the levels of moral thinking.

11.4 Solving the Moral Dilemma: Hare's Two: Level Utilitarianism

Let us imagine a party of scientific investigators facing a disaster. Seven members of party were snowbound a few weeks in a remote, high mountain area as a result of an earthquake and avalanche. They had consumed all their food, and because they had no means of communication, they could not ask for help from the basecamp. They were starving and a member of the party had already died from hunger and cold. In this situation the only thing they could do was wait for death. Then, a self-sacrificing person of the party proposes to the leader that he would kill himself and offer his body for the rest of party to survive and report to the authority the fruit of their exploration. The leader considered that it would be better for the party someone to survive to convey the result of the exploration. He proposed that they sacrifice one member, decided by drawing lots, and then eat him. If all the members of the party agreed with the proposal, one would be eaten while five would survive; if they disagreed, then they will all die. This is an example of a moral conflict between two ethical precepts ('do not kill human being' and 'save lives'.) I shall explain my solution of this dilemma below, following Hare's separation of levels of moral thinking.

Hare distinguishes moral principles (or precepts) into two levels of *intuitive* and *critical* moral thinking, (Hare 1981). This theory is, though generally not well understood, the most important ethical theory; it seems revolutionary considering the long

history of Western moral philosophy. The following, as I understand it, is an outline of his two-level utilitarianism. (He writes that it originated from Plato and Aristotle and classical utilitarianism and also Rawls theory of two concepts of rules).

When Japan opened the door to the West and Western philosophies were introduced, three samurai philosophers represented by Katô Hiroyuki (1836–1916). appeared on the scene. They started modern Japanese philosophy attempting to combine Western modern and Japanese traditional thoughts. They were all deeply involved with Confucianism through their educations and they knew of Ogyu Sorai's ethical theory, which resembles Hare's two-level utilitarianism. (Yamaiuci 2012, 2014) With this foundation, they accepted the British utilitarianism of Bentham and J.S. Mill; and their trial was to accept Western thought and ethico—politics on the basis of Confucian views of nature. This maneuver was possible because they knew intuitively the division of levels of moral thinking of Sorai. My trial in this paper is, following their method, to combine the land ethic and Confucian views of nature with two-level utilitarian social ethics.

Following J. Mackie, Hare rejected the existence of supernatural objective values such as Platonic Forms or Christian God. Mackie started his *Ethics* by writing that "there is no objective value". (Mackie, *Ethics* 1977) According to Hare, the simple general moral principles such as 'don't tell a lie', 'be kind to your neighbors', 'respect your parents' and so forth, are considered to have made society happier and stable, if everybody obeys them. He considered even rights and substantial notions of justice not being as supernatural, objective values, but as artificial notions created for the happiness of people.

If one believes in some form of objective values, he may consider the general moral laws or precepts originating from them as universally applicable. However, when these laws or precepts encounter different moral thoughts and actions, they cannot help but provoke dilemmas and collisions. If one side wins it is often destructive to morals of other side.

In Kantian moral theory, as another example, moral law is thought to be universally applicable, but Kant could not solve the problem of moral conflict; for example, in order to help a person being chased by a murderer, one cannot help but tell a lie to the murderer. This means that the moral principle of being kind to other people, clashes with moral principle of being honest (Ewing 1965). Hare's solution to the dilemma is as follows: We can retain such general, simple moral principles (which are considered universally applicable) at *the intuitive level*, then by thinking critically, we can make our principles more specific. For example, 'tell a lie in order help the victim in such and such a situation', given the specification of appropriate situations, this precept could be universalizable. For Hare, general principles and specific principles are alike universalizable (Hare 1981). In cases of moral conflict, one must shelve the conflicting moral principles and, shift to *the critical level*. Making a judgment based on the critical reflection will lead to the best interest of all participants.

Such a maneuver is possible when we divide the levels of moral thinking into intuitive and critical. On the intuitive level, our moral duty is to obey the simple and general moral principles. On the other hand, when two moral principles clash, we must shift the level of moral thinking to the critical level and create a more specific

moral principle, apart from the simple and general moral principles. Hare's maneuver is to bring the supernatural, heavenly moral principles down to the earthly level of human happiness/interest.

The main views on practical food ethics today might be cannibalism, canivorism, demi-vegetarianism, vegetarianism, and vegan. They seem to be sharply opposing with each other. However, if we agree with Hare's two level theory, we would be integrate these views, thinking these views as Hare's simple general intuitive moral principle that should be located on the integral basic critical level.

The problem with utilitarianism is that the intuitive precepts based on human-oriented moral principles aimed at human happiness/interest-originated morality, often crash with precepts based on the land ethic aiming the wellness or health of the land community.

Returning to our snowbound party, my conclusion is that the proposal is ethically permissible when and only when all members agree with the lottery system and are prepared to be eaten, if the lot hits on one of them. The precept of sacrificing oneself for the whole could be universalized. Such attitude is seen sometimes in the activity of policeman, fire fighters, or army personnel. On the other hand, if someone does not agree with the lottery, they cannot force him into the lottery and they must all die. It doesn't mean that they throw away their conscience (their intuitive principles); it is just that they shelve them at that moment to be revived after the dilemma is solved. Then the intuitive principles become their conscience again.

Hare didn't think of the general simple moral principle as only *a prima facie* principle. He writes that these principles are necessary for moral education of our children, by which they learn to obey moral principle and by which they learn to have conscience. The moral character of people is gained by learning to obey simple moral principles. Today we cannot avoid having such ideologies involving human rights, equality, freedom, and so forth. They are necessary ingredients of our moral life, but they cannot be absolutized, because they often conflict with other moral precepts.

11.5 How to Synthesize Human-Centrism and Eco-Centrism

If we apply Hare's method of separating the levels of moral thinking to traditional Japanese Confucianism, the critical level would correspond with the eco-holistic moral thinking of Japanese Confucianism. Then one could locate on Hare's intuitive level such simple moral precepts as 'don't eat animal meat', 'lead simple lifestyle', 'don't kill animals wantonly', 'don't cut down trees', 'plant trees', or 'don't pollute water and air!', in addition to other humanistic precepts. We could thus create moral precepts regarding what to eat according to the various ecological and social circumstances. We can also create, on the basis of eco-holism, one's own personal moral precepts apart from social or customary morals. In Edo society it was much easier to teach people such moral precepts, because integrated oversight was based on the synthetic, eco-holistic philosophy.

Fig. 11.1 Two-level utilitarianism

Fig. 11.2 Japanese confucianism

Next, let me show the structures of ethical theories in the following figures:

Figure 11.1 represents Hare's two-level utilitarianism illustrating simple moral precepts. Figure 11.2 shows the basis of eco-holism, where there are also simple moral precepts located at the intuitive level.

For both Figures, IMP represents intuitive moral precepts. HI represents Human interest/happiness consistent with utilitarianisms' focus on maximal welfare. JC represents Japanese Confucianism: the wellness of land and people viewed as a whole.

However, today's circumstance is quite different from that of Edo society. If one looks squarely at the global environmental crisis, one will see that we human beings are in a critical situation. According to the newly emerging environmental ethics and philosophy, the crisis was caused by Western and modern traditions that often neglect consideration of the natural environment. The most radical, fundamental environmental philosophy that is critical of human-centered views is in the newly emergent eco-holist ethics such as the land ethic and the revival of traditional Eastern environmental thoughts. However, people entwined with modern Western thought will not change their course of action easily. And so the moral clash between traditional Western modernism and newly appeared environmental ethics occurred. This means that there is a moral conflict between the human-centered and eco-centered views that is occurring on a global scale. There is at least one way to solve the dilemma theoretically. My proposal is to apply Hare's method of separating the levels of moral thinking.

Let me now explain the method briefly as follows. From an *eco-holistic* view, which is different from *eco-centrism*, the consideration of both human happiness/interest and natural welfare are contained. Therefore, we must establish a new type of *eco-holistic (*or *eco-humanistic) level*, which is different from Hare's human-centered critical level. Then our moral thinking on social and environmental ethics could be distinguished into three levels: (1), the most basic level or *eco-holist level,* (2), *the separated level of humanistic, and* (3), *eco-centric ethics* (where both ethical humanism and eco-centered ethics would be located), and *the intuitive level* that consists of simple and general moral precepts (which correspond with Hare's intuitive level moral principles.) (Yamauchi 2012) This structure of ethics might be called 'eco-humanism' hypothesis, since it contains utilitarian social ethics and eco-holistic environmental ethics (of land ethic and Japanese Confucianism) at the same time.

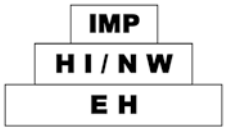

Fig. 11.3 The eco-humanism hypothesis

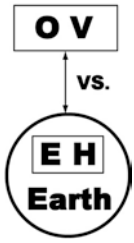

Fig. 11.4 Earth ethics

This idea is shown in Fig. 11.3. Here, HI represents human interests, and NW represents natural welfare. EH, or eco-humanism, reflects the welfare of humans and nature holistically. On the eco-humanistic level, humanistic morals, and eco-centric morals are not regarded separately, as they are at the middle level, which emerges on the basis of intuitive simple moral precepts. Figure 11.4 shows that the eco-holistic level is to be located, not on the level of objective values (OV) (such as Platonic Idea, Christian God, or Chu Hsi's Heavenly Principle), nor on the humanistic ideologies being apart from Nature (such as human rights, equality, freedom or so on) but together with Earth itself.

Given separated levels, one can create simple and general moral principles for everyday usage and for the moral education of our children that reflect humanism and eco-centrism, respectively. This can be accomplished with the goal of increasing happiness/interest of people on one hand, and at the same time, creating moral principles that increase the wellness of natural environment.

However, the problem is that, when one separates humans from nature, morals originating from both human-centered and eco-centered views often clash and conflict. But in line with the world federalist's motto of 'One World or None', humankind cannot survive without somehow unifying the camps of human-centered and eco-centered views.

My solution to the moral conflict is, following Hare's method, to locate separate level on the basis of eco-holistic (or eco-humanist) level. When conflict occurs between both humanism and eco-centrism, one could move the argument onto the eco-holist level, and make a decision from among alternative courses of action, using as a criterion the whole welfare of humans and nature. While one can separate humans and nature, partly and for a short period of time, in the long run, human welfare and Earth wellness cannot be separated at the global eco-holistic level, because if the natural environment decays, human cannot survive. Thus, our ultimate criterion must not be in human-centrism or in eco-holism, but [our final ultimate criterion must be] in the welfare of the Earth.

11.6 Conclusion

In today's world, nearly one tenth of the world population (0.85 billion people) are starving among the whole population of 7.2 billion people. According to the *Human Development Report*, in 1820 the fifth of world population living in the world richest countries collectively received three times the combined income of the fifth of the poorest world population. A century later this ratio had increased to 11 to 1. By 1960 it was 30 to 1; by 1990, 60 to 1; and by 1997, 74 to 1. (Singer 2002, p.81.) The ratio today is surmised to be more than 100 to 1. The answer to the problem of what we ought to eat depends, after all, on the answer to how ought we to live in an age of crisis. The most basic and urgent moral problem is the global environmental crisis. The ethical problem for us in rich affluent country is whether we continue to eat expensive and luxurious meals every day, or whether we change our meals to simple, frugal, ecology minded ones. While the former course will lead to the degradation of natural environment, the latter will contribute to restoring nature. The answer to this problem must be choosing the course of action that would contribute more to the survival of humanity (in the sense of humankind).

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Chapter 12
What Does "Soil Is Valuable" Mean? Institutional Design and Ethics for Sustainable Use of Soil Resources

Kazuhiko Ota, Tomoyoshi Murata, Toshiaki Ohkura, and Ryunosuke Hamada

Abstract This paper is intended to be a practical and ethical recommendation to policies surrounding soil and agriculture. It addresses how soil resources are in the process of transitioning from the base for food production to the base for ecosystem services in the past roughly 30 years.

The World Soil Charter adopted by FAO (Food and Agriculture organization) in 1982. It was amended, for the first time during 34 years, in the International Year of Soils 2015. In the previous edition, policies on food production were emphasized; however, in the new version, they have been relatively faded while importance has been placed on the preservation of several sorts of ecosystem services and soil conservation based on regional characteristics. Japanese soil degradation is not at a serious level. However under sectionalism, it is hard to say that soil resources are being used wisely.

Since the Meiji era, it can be seen that Japanese soil management continues to transition towards the use value of not only food supply but also the carbon adsorption of soil, among other things. Since the 1970s, agricultural ethics state agriculture is expected to go beyond thinking only about food supply by pursuing a better life in the region. In summary, wise use of soil resources in Japan can play a variety of

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functions that do not belong to food supply. Though it is not so clearly determined, the position of soil resources need to be determined. Furthermore, the use of new soil needs to be discovered based on regional conditions.

Currently needed is the mitigation of sectionalism, the enactment of the Basic Act to promote development, human resource development of data collection, and information systems for the "wise use" of soil. Even though soil is essential and limited natural resources for us, we were not aware of it comparing to forests and water. Therefore, inventory updates and human resource development has not been fully realized. It is hoped that this paper will contribute to a better understanding of a new relationship between people and soil.

Keywords Framework of soil conservation · World soil charter · Sustainable use of soil resources

12.1 Introduction

In September 2011, the "Global Soil Partnership" was established as a framework for international cooperation to conserve the earth's soil resources, initiated by the FAO. The soil is one of the world's most important natural resources and plays a central role in providing food security. Maintaining healthy soils is required for feeding the growing global population and meeting their increasing need for biomass, fiber, fodder, and other products. However, "soil resources are still seen as a second-tier priority (Global soil partnership 2011a)". In addition, knowledge and research results about soil are not being fully shared between or within each sector of the community. So, it cannot be expected that soil information has adequate recognition and weighting in the relevant decision-making processes, as for s the protection of good agricultural land from urban expansion, agricultural and forestry productivity, and food security, protection from disasters and drought.

For many people, the soil is just a given and not considered a subject of interest, not to mention a pressing concern. However, in recent years, World Soil Day (December 5: to commemorate the birthday of the King of Thailand Bumipon) and the International Soil Year 2015[1] prompted people to hold a variety of educational activities in order to emphasize the importance of soil, which resulted in the

[1] United Nations General Assembly Sixty-eighth session 71st plenary meeting on 20 December 2013 (A/RES/68/232) declared the International Year of Soils 2015 (IYS 2015) and Would Soil Day. The FAO (2013) establishes the specific objectives of the IYS 2015 as follows: Raise full awareness among civil society and decision makers about the profound importance of soil for human life. Educate the public about the crucial role soil plays in food security, climate change adaptation and mitigation, essential ecosystem services, poverty alleviation and sustainable development. Support effective policies and actions for the sustainable management and protection of soil resources. Promote investment in sustainable soil management activities to develop and maintain healthy soils for different land users and population groups. Strengthen initiatives in connection with the SDG process (Sustainable Development Goals) and Post-2015 agenda. Advocate for rapid capacity enhancement for soil information collection and monitoring at all levels (global, regional and national).

dissemination of pertinent information all over the world. In Japan in particular a special traveling exhibition was sponsored, and lectures on soil were presented for non-professionals in many places.[2]

In the future, such soil efforts in Japan should not be limited to educational activities, but be should highlighted in coordination with related concerns, such as environmental conservation activities and country town revitalization efforts so as to avoid a fragmentation of efforts for soil conservation promotion. However, Japan has not yet enacted a national legal framework for conserving soil nationwide, so jurisdiction remains split among various government offices. And, the subjects related to soil in Japan's compulsory primary and secondary education system are very few and far between. For the realization of sustainable development, it is imperative for us to think deeply and reconsider the relationship between soil and man, and to rebuild the entire socio-economic system accordingly. We believe that the Japanese challenge in this regard has the potential to be a model case for Southeast Asian as well as East Asian countries to take as a benchmark to emulate.

This paper aims, therefore, to bridge environmental thought with soil conservation concepts and activities. Specifically, in developing the research for this study, we first organized a framework of soil conservation on the global scale. As a result, it became clear to us that the principles of soil conservation in use at the present time are quite different from those that were used during the earlier period when food supply was still an urgent issue. Further, taking the example of one country, we summarized changes in in the soil management system in Postwar Japan. Consequently, we saw that, as has been the case in other countries and Japan itself, the felt urgency of food supply is closely linked to the objectives of soil management. Moreover, comparisons of Japanese and American soil institutions (as reconstructed for this study) reveals that soil management systems reflect national and regional values and geopolitical concepts as well as local soil characteristics. We elaborate on these issues and concerns below.

12.2 Changes in the Framework of Soil Conservation of the World

12.2.1 Establish the Global Soil Partnership

Agenda 21, adopted at the UN Earth Summit in 1992, mentioned as one of its primary goals prevention of land degradation. This concern emerged along with growing social concern about global environmental issues and food security, both of which are closely connected with the necessity of sustainable soil use and effective

[2] The Saitama Prefectural Museum of River, co-sponsored by the Japanese Society of Soil Science and the Plant Nutrition and the Japanese Society of Pedology, conducted soil monoliths exhibition tour "Do you know what is the soil?" at nine local museums in Japan. Also, the web sites such as "International Year of Soil 2015 Support Portal" and "Soil Survey Inventory Forum" are also created and provide information by volunteers.

soil conservation measures. During the 20+ years since United Nations Conference on Sustainable Development (Rio + 20) was held, however, the soil conservation goals have not yet been met. In particular, we have not managed to halt the soil degradation in tropical countries, and moreover even in more stable temperate regions soil fertility and productivity have deceased.

Consequently, as mentioned above, the United Nations Food and Agriculture Organization (FAO) has (1) reevaluated the importance of soil management, (2) established the Global Soil Partnership (GSP) to promote the rekindling of our scientific knowledge inheritance and soil investigation activities, (3) promoted the establishment of regional partnerships (such as the Asia Soil Partnership), (4) and begun to work on the promotion of human resource development and outreach activities. Whereas FAO had focused on soil conservation before, the concepts and framework of soil conservation have changed around the world.

How soil conservation policy worldwide has changed during the past two decades is reflected as well in the revision of the World Soil Charter. The original World soil charter that was approved by the FAO in 1981 was revised by the 21st General Assembly during the international soil year in 2015. By comparing the old and new versions of World Soil Charter, we can begin to grasp the evolving soil issues *vis-a-vis* changes in the evolving ideological background of the soil conservation. On that basis, we can seek relevant data for discussing the fundamental relationship between people and soil. The following section is based entirely on research conducted by co-author Tomoyosi Murata.

12.2.2 Comparison of the Old and New Versions of the World Soil Charter

The social background and challenges of 1981 are discussed in the Preamble to the old version of the charter: the need for rapid production increases to keep up with population growth, the need to overcome hunger and malnutrition in developing countries, etc. However, there is a limit to the area of cultivatable land (the area of arable land had not increased since around 1960). Although yield per unit area had been increased as of 1981, cropland soil had been fully cultivated.

The productivity of the land has a limit. Based on consideration of the behavioral plan resolved at several international conferences, the optimal use of land resources of the world, and potential productivity improvements, the FAO issued a recommendation articulated in 13 basic principles concerning soil conservation for future generations (the recommendation is not legally binding). Prior to World Soil Charter, the EU had already been announced EU Soil Charter (1972). Also, Japan promulgated the Cultivated Soil Amelioration Law (1952), Act to Prevent Soil Contamination on Agricultural Land (1970), the Soil Fertility Promotion Law (1984), etc., all of which have been enforced. However, the World Soil Charter expresses the first of the soil guide lines to secure worldwide agreement.

The Preamble to the World Soil Charter (FAO 1982) is tightly reasoned and limited in expression, focusing strictly on issues of food production and eradication of hunger.

Human demand for food from the natural resources that sustain human existence has increased enormously in recent years. FAO's projection in "Agriculture: Toward 2000" reveals that 50 percent more food will have to be grown by the end of this century just to meet present nutritional levels; yet additional supplies will be needed to conquer famine and malnutrition. However, the ability of land to produce the human food supply is limited. The limits of production are set by soil and climatic conditions and by the land management applied. Any exploitation of the land beyond these limits results inexorably in land degradation and decreased productivity.

In particular, measures for maintaining and strengthening food production capabilities in developing countries is important. Specifically, such measure cover the following matters: "Land resources inventories, assessment of degradation hazards, evaluation of production capacity, improvement of soil fertility, combating desertification, land reclamation, integrated land-use planning, training and institution building." Accordingly, the World Soil Charter (1982) was strongly associated with soil conservation and food production.

The new version World Soil Charter (FAO 2015) has a statement from the Intergovernmental Technical Panel on Soils (ITPS) before the preamble, describing the history of the revisions made. That is, due to a new recognition of the need for proper soil management in fields other than agriculture, it was necessary to evaluate and review the old Charter in that light.

> The 13 principles listed in the charter are still valid, but need to be updated and revised in light of new scientific knowledge gained over the past 30 years, especially with respect to new issues that emerged or were exacerbated during the last decades, like soil pollution and its consequences for the environment, climate change adaptation and mitigation and urban sprawl impacts on soil availability and functions.

In summary, the original strong focus on land use planning and land evaluation has been adjusted; recent key references and concepts such as the framework of ecosystem services are now reflected therein.

In the Principles and Guidelines for action of the 1982 edition, the words "Earth" and "Global" were not used. The focus was decidedly on food production capacity. Also, in the earlier version, "wise use" of land and soil as supporting factors for production had been stressed as an important element. By contrast, the 2015 edition takes "ecosystem services" as its point of departure, regarding land and soil as key factors for mitigating climate change and maintaining biodiversity. Furthermore, the 2015 version stresses that more importance should be given to regional activity whereas the focus thus far had been limited to national level activity.

In summary, the understanding of soil resources is in transition from source of food production to source of ecosystem services. And, this transition affects today's soil conservation concepts as well as practical and ethical proposals regarding soil and agriculture. Increased importance, as will be outlined below, must be assigned to the task of overcoming sectionalism in soil management.

12.3 Institutional Design and Ethics for Sustainable Use of Soil Resources in Japan

12.3.1 Necessary for Transfer of Sectionalism in Japan

In the activities plan of the GPS, soil management, investment, research, soil information, are all duly noted in the following five pillars of standardization.

1. Promote sustainable management of soil resources for soil protection, conservation, and sustainable productivity.
2. Encourage investment, technical cooperation, policy, education awareness and extension in soil.
3. Promote targeted soil research and development focusing on identified gaps and priorities and synergies with related productive, environmental and social development actions.
4. Enhance the quantity and quality of soil data and information: data collection (generation), analysis, validation, reporting, monitoring and integration with other disciplines.
5. Harmonization of methods, measurements, and indicators for the sustainable management and protection of soil resources (Global Soil Partnership 2011b).

As mentioned in the second pillar of the GSP, to promote investment in research activities, it is essential to organize our soil conservation so as to conduce to preserving the living environment. Also, as mentioned in the third pillar, to obtain better interactions with activities in other areas, it is necessary to know the principles of and the long-term outlook for soil conservation. Realization of these pillars will require sincere cooperation among national, public institutions, international organizations, individuals, private organizations, as well as among private companies and corporations. Above all, the government must set the standard and take the lead.

> II. Strive to create socio-economic and institutional conditions favorable to sustainable soil management by removal of obstacles. Ways and means should be pursued to overcome obstacles to the adoption of sustainable soil management associated with land tenure, the rights of users, access to financial services and educational programs.
>
> V. Incorporate the principles and practices of sustainable soil management into policy guidance and legislation at all levels of government, ideally leading to the development of a national soil policy. (Food and Agriculture Organization 2014)

However, the obstructions encountered by soil conservation activities in each country are often different. In the case of Japan, a major obstacle is sectionalism. Although the government's official view regarding soil degradation in Japan is to minimize it, it is hard to say that we utilize soil resources as wisely as possible. Strong sectionalism in post-war Japan has frequently been a barrier to the general development of national resources (Sugiyama 1949). For example, the legal system of each government ministry jurisdiction, such as the Ministry of Agriculture, Forestry and Fisheries (MAFF), the Ministry of the Environment (ME) and the Ministry of Land, Infrastructure and Tourism (MLIT), addresses soil conservation issues in a different perspective, as shown in Fig. 12.1

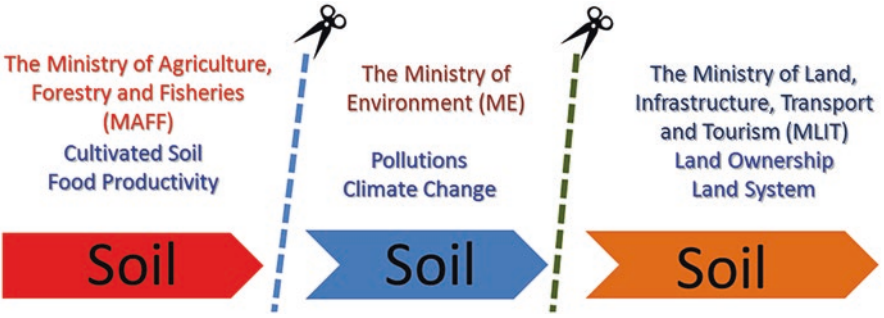

Fig. 12.1 Sectionalism of soil management in Japan

Also, Japan has some relevant laws about soil. However, there is no comprehensive act or single rule governing soil conservation activities beyond the above-mentioned bureaucratic sectionalism.

For example, MAFF has jurisdiction over the cultivated soil and crop production. The relevant laws are: Food, Agriculture and Rural Areas Basic Act (1999) and Soil Fertility Promotion Law (1984) (Cultivated Soil Amelioration Law: 1952–1984). The Soil Fertility Promotion Law is for guiding the improvement of soil productivity but covers only cultivated lands which are at least ca. 50,000 km^2 (only 13% of the land area). However, the concept behind this act may be most similar to the basic idea of the "Soil Conservation Basic Act"(provisional title).

ME has jurisdiction over pollution and climate change. It is charged with directing of environmental policies on both global and regional scales, especially for human health. The following are relevant laws: Basic Environment Law (1993), Act to Prevent Soil Contamination on Agricultural Land (1970), Soil Contamination Countermeasures Act (2002): it is only for preventing pollution. MLIT supports scientifically evaluating the state of land for land development, conservation, and enhancement of the land use. The following are relevant laws: Basic Act for Land (1989). National Land Survey Law (1951).

To overcome this sectionalism, the drafting of the "Soil Conservation Basic Act" (provisional title) has been prepared by a voluntary group that received support from a private foundation in Japan. A basic law is often regarded as an ideological banner, which seldom mandates specific projects; however, its cross-agency scope is aimed at overcoming the obstructive bureaucratic sectionalism. The Basic Act could be effective after all (Shiono 2008). Once the "Soil Conservation Basic Act" is enacted, it is expected that Japan's basic policies for national soil conservation in the administrative sections will be harmonized and systematized. It was also essential to undertake a review of the history of soil conservation public works in Japan while drafting the Basic Act. Therefore, we review, in the next section, the transition of the soil survey activity and the discussions on agricultural ethics in Japan following World War II.

12.3.2 Changes of Soil Conservation Research Projects in Postwar Japan

Examination of the history of soil management policy in post-war Japan reveals that the Soil Conservation Basic Act in Japan, like the World Soil Charter, should not limit the purpose of soil conservation to food production. (This, of course, does not reduce the importance of food production in Japan. We are discussing under what kinds of concepts soil resources should be conserved). In the present study, we shall focus on the transition of the conduct of soil surveys in Japan. Investigation is the basis for any significant endeavor. Based on the acquired data, modeling and simulation is performed, with simulation acting as guide to optimal means of control and management. The following discussion is entirely based on the research of co-author Toshiaki Ohkura.

The history of the public soil survey in Japan exhibited the five following stages: (1) Geological Soil Survey by the government (1879–1948). (2) Reconnaissance Soil Survey as a part of Natural Resources Survey by the GHQ (General Headquarters) of the Allied Occupation Forces (1945–1951). (3) Fundamental Survey for Soil Fertility Conservation (1959–1978). (4) Basic Survey for Soil Environment (1979–1998) (5) Soil Function Monitoring Survey (1998–2005).

1. After conducting a survey of domestic mineral resources, the Meiji government conducted soil surveys intended to gain an understanding of the national land components. In 1885, a soil map of the "Kai Province (one: hundred thousand)" was published, the first of modern soil map in Japan and one of the oldest modern soil maps in the world. Three years after WW II, in 1948, the publication of the soil map of Mutsu Province completed of the national soil survey project. In this 63 year span, maps were created of not only domestic Japanese soil but also Korean and Taiwanese soil. (In 2006, the National Institute for Agro-Environmental Sciences in Japan donated the Taiwan soil property chart to the Taiwan Agricultural Research Institute Soil Museum that did not possess the original).
2. A soil survey which exhibited a strong impact on the Japanese soil investigation project after World War II was carried out by GHQ as a part of its survey of natural resources in Japan. The main purpose of GHQ survey was to gain an estimate of domestic food production capacity to help smooth the progress of the occupation. In September 1945, the USDA (United States Department Agriculture) dispatched soil survey staff to Japan, which started the survey by dividing Japan into six blocks. This US-style soil survey classification technique has since been applied in Japan.
   Under GHQ governance, the investigation of soil in land suitable for settlement was initiated to encourage Japanese settlers who had withdrawn from Manchuria, Taiwan, Korea and so on to resettle in Japan, and soil survey staff were allotted to investigate low productivity areas. Through research they found that improvement of low-fertility soil was needed to increase crop pro-

duction. In 1952, the Cultivated Soil Amelioration Law was enacted, and the cultivated soil amelioration project was carried out.

3. In 1959, Fundamental Survey for Soil Fertility Conservation was started. This is attributable to the increase of food demand; exhaustive surveys of soil types in all agricultural lands and development of the improved soil guidance were carried out. Soil grade was classified in four levels for prioritization of land improvement. This form of survey was continued until 1978.

4, 5. In the 1970s, the pressure for increasing food production weakened, and with new factors, such as the rice acreage reduction policy and fertilizer prices soaring as result of the oil shock, measures of enhancing productivity started to be proposed. It is against this overall background that the significant decrease in the farming population must be understood.[3] From 1979 to 1998, "Agricultural Experiment Stations" conducted a sentinel survey of fields at about 20,000 locations in Japan. From 1999 to 2003 soil function monitoring surveys with notably reduced study site numbers and survey items were performed.

Sentinel survey activity subsequently moved from the national to the prefectural level, and gradually the number of points was decreased due to a reduction of the national and prefectural budgets. Under the Trinity reforms[4] enacted by the Koizumi administration in 2007 continuation of soil monitoring was left to municipal discretion. As a result, the sentinel surveys conducted by a number of municipalities were stopped.

At the same time, from 2008, activities based on the Kyoto Protocol adopted by the United Nations Framework Convention on Climate Change (UNFCCC) started. Japan utilizes forest as main source for CO2 absorption while also expecting farmland soil to function as another source of carbon reduction. Soil has come to be anticipated as a key factor in enhancing environmental conservation and material circulation. The Ministry of Agriculture, Forestry and Fisheries restarted the national soil survey project and commenced soil carbon monitoring for the purpose of accumulation of scientific findings based on the Kyoto Protocol from 2009. This project ended in March 2013.

The above changes indicate that the function of soil conservation and research projects in postwar Japan gradually was no longer limited to the issue of increasing food production. This trend is certainly in line with that exhibited in the 2015 revision of the World Soil Charter mentioned above. The functions not only of soil

[3] The percentage of the population engaged in agriculture in Japan has been 19.3% of the workforce in 1972, falling to about 2% by 2002.

[4] In 2004, Prime Minister Junichiro Koizumi decided a transfer of power from the central government to local governments. This transfer would be accompanied by a transfer of tax revenue to the local decision-making bodies, and major reduction of subsidies. Giving the local governments more autonomy would have two positive impacts: First, it would reduce the expenditures of the central government. Second, it would allow the local governments freedom to decide how tax revenues ought to be spent. The negative impact is that such a transfer would place the burden for providing public services on the local government. The decentralization policy, so-called "the trinity reform (sanmi ittai no kaikaku)", being carried out through 2006.

conservation but of agriculture itself are no longer limited to the increase of food production in Japan. A parallel transition in the basic literature on Japanese agricultural ethics also reflects this.

12.3.3 Changes of Agricultural Ethics in Postwar Japan

To discuss fully the transition of post-war Japan's agricultural ethics would require us to provide a volume of discussion. Here, we limit ourselves to briefly comparing the agricultural ethics of times when there was a clear need to increase food production with that of times when the need for food production increase had lessened. This section is entirely based on the research of Soda (2006) and Akitsu (2010).

Sukekata Kashiwa, the founder of Kyoto University's "Philosophy of Agricultural Science" chair, occupied this chair from 1952 to 1971, as did his successor Keiichi Sakamoto from 1971 to 1989. Comparing the main concepts of the two professors philosophical systems, Soda described Kashiwa's version as 'the agricultural science of production' (Soda 2006, 39), and his own version as 'the agricultural science of life' (Ibid, 45).

Kashiwa defined agriculture as human activities intended to realize higher economic value through cultivation and breading of crop and livestock (Kashiwa 1962–1987, 150). Thus Kashiwa placed the realization of economic value at the core of his theory. Soda states that Kashiwa's standpoint accurately reflected the role expected of agricultural science at that time.[5]

In contrast to this, Sakamoto tried to establish a system of values for the restoration of agriculture in opposition to the system of the industrialized society. The context of his challenge was the serious pollution problems that had appeared in many areas of Japan. He defined agricultural science as the systematical accumulation of scientific knowledge and skill acquired through experience for the purpose of realization of a better life for humans (Sakamoto 1994, 82). Sakamoto viewed agriculture to be an activity of not only food production but also furthering human well-being and acquiring resources and information.

Soda holds that Sakamoto's core concept of "life" could be extended to an ethical standard for those engaged in all fields of agricultural production (Soda 2006, 212). This point of Soda's is especially significant because Soda was chairman of the Rural Society Section in the governmental committee discussing the problems of food, agriculture, and rural areas. The committee established The Basic Act of Food, Agriculture & Rural Areas in 1999, which is the first basic legislative act of the post-productivist era.

[5] However, Kashiwa notes that the character of agriculture as an industry is different from the manufacturing industry in several aspects. For example, activities of agriculture need a seasonal work and must obey biological cycles that crops and livestock intrinsically involve. For that reason, the farm working is difficult to be organized formally and rationally (Kashiwa 1987, 261).

Tachikawa (2005) noted that the 1990s in Japanese rural society marked a clear turning point from the productivist- to the post-productivist era. As an example for this, Akitsu (2010) noted that the first policy of agri-tourism, which since has been called Green Tourism in Japanese administrative terms, was introduced in 1992 by the Ministry of Agriculture, Forestry, and Fisheries. And consumer’s eyes started to be directed to the agricultural life itself. The first magazine to guide readers into rural life started in 1987, and TV programs affirmatively presenting rural life increased in the late 1990s.

Ever since the Meiji era, it can be seen that Japanese soil management policy has continued to transition towards the use value of not only food supply but also the carbon adsorption of soil, among other things. Since the 1970s, agricultural ethics maintain that agriculture is expected to go beyond thinking only about food supply by stressing the pursuit of a better life in the region. In summary, wise use of soil resources in Japan can play a variety of functions that do not belong solely to food supply concerns. As the issue of the value of soul itself still remains undetermined, the position of soil resources needs to be analyzed and determined. Furthermore, the uses of new soil need to be discovered based on regional conditions.

12.4 Requirements for Soil Conservation Systems in Different Countries: A Comparison of Japan and the United States

The importance of requirements for soil conservation systems is described in the principles of the Revised World Soil Charter as follows,

> 6. The implementation of soil management decisions is typically made locally and occurs within widely differing socio-economic contexts. The development of specific measures appropriate for adoption by local decision-makers often requires multi-level, interdisciplinary initiatives by many stakeholders. A strong commitment to including local and indigenous knowledge is critical.

In general, many more types of soil exist than had been imagined in the past, and their properties are equally diverse, as well. It is important that soil conservation efforts match the soil properties of each region. However, the framework of soil conservation must differ not only among regions but also countries. As we already mentioned, in the early postwar period soil policy in Japan was heavily influenced by the United States. The same applies with respect to Japan’s resource management systems (Sato 2011). But, as the socio-economic background of soil management policy in the United States and Japan differed greatly, the policy approaches applied in each respective country cannot be expected to be the same.

To start with a very simple example, the territory of the United States is about 26 times that of Japan’s. For that reason, soil conservation is regulated not only by federal, but also by state legislatures. David Smith and Thomas Reinsch of Soil

Science Division of NRCS (Natural Resources Conservation Service) said the following: The 50 states do not like to be compelled by the federal government. Each state has its own laws, regulations, and plans for the conservation of its natural resources. Each state has hired its own staff, and the federal government has an office in each state. State staff and federal staff work in the same building in order to work with farmers and ranchers.

Both federal and state staff in the conservation programs put an emphasis on the free will (voluntary) of farmers. There is no law that all farmers must comply, no punishment for failing to be a good steward. Each farmer's profit and self-esteem become his or her incentives for conservation. (This stands in stark contrast to the severe penalties set on culpable soil pollution). We can still find a strong tradition of stewardship among the United States farmers.

The historical background of soil conservation policy in the US also greatly differs from that in Japan. The prototype of current soil conservation policy in the United States originated in the 1930s (Montgomery 2007). This bears the imprint of the "Dust bowl," an era of the ferocious dust storms that hit the Midwest down to Oklahoma and Texas back then. The Dust Bowl was caused by a record drought and improper and excessive production. The relationship between the Dust Bowl and American soil conservation efforts has been expressed quite dramatically by Dan Barber (2014), who refers to Timothy Egan (2006).

> One of the largest of the storms hit in the spring of 1935 – Black Sunday. It didn't die in the prairie but moved east, gathering strength as it went.
>
> The following Friday, a scientist named Hugh Bennett stood on the floor of the U.S. Senate, arguing for the creation of a permanent Soil Conservation Service. Even though photos of Black Sunday had appeared in newspapers around the country the same morning, most senators believed they had already done enough for the people of the prairie. Just as Bennett was wrapping up his plea, an aide appeared at the podium and whispered in his ear. "Keep it up", he said. "It's coming." Bennett kept talking. A few minutes later, he stopped talking. The chamber turned dark. A giant copper dust cloud blew through Washington for an hour.
>
> "This, gentleman, is what I'm talking about." Bennett said, pointing to the windows. "There goes Oklahoma." Eight days later, Congress signed the Soil Conservation Act into law. Some call the incident the beginning of the environmental movement in America. (Barber 2014, 47)

New Deal policies also affected the soil conservation measures. To cope with the Great Depression that had started in 1929, The President Franklin Roosevelt introduced various unemployment policies. In these were also included soil conservation measures. In addition, a policy of reducing acreage under cultivation based on the Agricultural Adjustment Act executed to protect the fertility of agricultural land succeeded in suppressing the abuse of farmland. In the period from the end of World War I until then, according to Donald Worster (1992), the United States Midwest grain economy had become inseparable from other sectors of the industrial economy, such as the railroads, milling, and others, and had grown out of control.

This contrast may strongly reflect the differences of the industrial significance of agriculture between the two countries: the US is a food exporting country – and

Japan is a food importing country. The US is the world’s largest agricultural exporter. For the US, agricultural products have been and still are important strategic goods. With such a political background (and supporting spiritual backgrounds), production is taken to be the sole norm for evaluating agriculture. For soil conservation activists in the US, it is of great importance to take a stand against “productionists” who keep proposing large yields of crops regardless of resulting soil degradation and hold that a great output is always better.

Thompson (1995) notes that the “productionist” world view is represented by such slogans as Earl Butz’s “plant fencerow to fencerow,” and “get big or get out.” Productionists define farming as a production platform that should be evaluated in terms of fecundity and total yield. Many North American farm producers and agricultural scientists are putting forward arguments for “feeding the world” that stress the need for new seed varieties and chemical technologies to continuously increase the total output of world agriculture. These arguments are complemented by Christian theological traditions which celebrate the virtue of industrious self-reliance, the doctrine of grace, and the myth of the garden.

From the above, the motivation for soil conservation policy in the United States can be understood in terms of the important role played by productionism as a spiritual factor, the memories of the Dust Bowl and Great Depression, in addition to many other traditional values. These traditional backgrounds were not shared by twentieth century Japan. Therefore, the spiritual foundation of American soil management is difficult to export and share with Japan. In order to create a common framework of soil conservation of the state, we need to consider the socio-cultural experience and agricultural practices of each nation.

12.5 Conclusion

From the above discussions and observations, we may conclude that any practical as well as ethical proposal for soil conservation and agricultural ethics must take into account that the treatment of national resources during the past 30 years has been in a state of transition from being based on food production to being based on ecosystem services. This of course does not disparage the role of soil as the basis of food supply. Nonetheless, we must take care that given the many the soil ecosystem services now recognized, the vital food supply service not be undervalued or neglected.

Also, as was shown through comparison of soil conservation policy in Japan and the United States, the requirements for soil conservation differ from country to country and region to region. At the same time, soil conservation remains a global issue. It needs to be kept in mind that there are mobile and immobile natural resources, and soil is a relatively immobile resource. It is therefore important that soil conservation activity be conducted in connection with regional life, living environment, and enhancement of what Amartya Sen (1985) termed “capability”.

Today, new uses for soil resources must be sought and found in each region. The general value of the soil, produced from the soil consists of the amount and price of crops, water purification function, storage function for chemical substances, support of buildings, and the like. However, these evaluating factors presuppose certain soil use methods. If methods of soil use are limited, soil management becomes easier, but at the same time the specific significance that soil holds in each region tends to be overlooked. Not until we accept that soil is a multi-functional and as such undetermined entity to be re-evaluated in each region again and again can we truly say that "soil is valuable".

Currently needed action is the mitigation of sectionalism, the enactment of the Basic Act to promote development, human resource development of data collection, and information systems for the "wise use" of soil. Even though soil is important and finite natural resources, we have not paid as much attention to it as compared to forests and water. Therefore, inventory updates and human resource development has not been fully realized. It is hoped that this paper will contribute to a better understanding of a new relationship between people and soil.

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Chapter 13
Food, Technology, and Identity

Soraj Hongladarom

Abstract Technology has become indispensable in all the processes of food and agriculture, whether we like it or not. This has created a tension between what we would like as 'being natural' and the reality of technology. Furthermore, food is intimately connected with identity; thus when technology comes in to play its role in changing the sense of identity with regards to food is an interesting phenomenon. I argue that technology does not have to destroy food identity as some scholars have claimed. On the contrary we can use technology even to enhance our identity, but there are many necessary conditions that have to be met before that can become a reality.

Keywords Food · Identity · Asia · Eating · Culture · Technology

Food and technology have become much intertwined. In fact the use of technology has been around in food production for as long as there is agriculture. However, it is in recent years that technology has become so much involved in all stages of food production that we could say that ours is an era where food has become a kind of fully technological and industrial product, where the sophisticated processes of using technology is very much involved in the agriculture and in the very stuff of food—the process that I call 'technologization' of food. Not only is the process of food production is imbued with everything technological, starting from the use of machines in agriculture to industry farming of livestock, but even the very stuff of the food we eat has very much become a product of sophisticated technology. We have a lot of processed food that comes in convenient packaging, has long shelf life, is very consistent in taste and texture, and we also use technology to transform the very core of life, the DNA, so as to suit our preferences and needs in agriculture. Genetically modified organisms have made their way in much of the food that we eat everyday. The technology has been virtually inconceivable only some decades ago. Instead of changing the genes of the plants and animals that we eat through

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selective breeding, which takes a long time over generations of the organisms, we now have the ability to edit the very stuff, the blueprint, of life itself. It is very easy to see that in the future the trend of technologization of food will only increase in intensity.

What I would like to do in this paper is to reflect on the role that technologization of food on identity. This is pertinent in the context of Asia because agriculture is a mainstay of many Asian economies and also because much of the technology involved in food production is imported from the West. This is important because when the technology comes from outside, a conflict then arises between what the people take to be their traditional identity and what they take to be their new identity. As food is much tied up with the people's sense of who they really are, technogization of food thus has a tendency to create a stronger impact on the people's sense of identity than with other types of technology. I would like to reflect on this interplay between food, technology and identity and to show that there is a set of ethical problems involved. One of these problems is that as technology plays more and more role in food and agriculture, we seem to run the risk of losing the sense of who we are. I will show how this is in fact a problem. Furthermore, I will show also that this does not mean that we should value our traditional way of life more than the technological one. That would certainly be an unrealistic nostalgia, but on the other hand it does not mean that we should rush impatiently into the future either. In short, we need to find a balance, and how to find such a balance in the context of Asia is the main topic of this paper.

Food is much connected with identity and culture. Ohnuki-Tierney, for example, argues that rice is so important to the Japanese culture that they define themselves and their collective identity through the crop (Ohnuki-Tierney 1993; see also Bray 2014). When people are asked about their opinion about food, their answers usually come in the form of the national cuisines, such as Italian, Thai, Chinese, or Japanese. It is as if food is naturally divided by cultures as people are and gets its identity through identification with a culture. Restaurants advertise their offerings in cultural and national terms. There are Indian, Italian, French and Chinese restaurants. One also tends to get attached to the food one grows up with. It is well known among Thai people that Thai athletes usually complain that the food they eat in athletes' villages outside of their country is not 'filling.' Although the calories count are the same as the food they are accustomed to, the athletes still complain that they feel hungry inside after eating the foreign food. It is as if eating foreign food still leaves them empty inside. This is strange, because once the food is broken down inside the stomach there should not be any difference between Thai food or Western food, but still the athletes report that they still remain hungry after eating bread or pasta, while they feel that they are filled up and comfortable when they eat rice. But rice, bread and pasta is just carbohydrate. The athletes, it seems, cannot part from their identity by eating foreign food. Thai people living abroad almost always search for ways to get their familiar spicy food. And when they are asked why they do this, they usually answer that it is because they are Thais. The presupposition, of course, is that all Thais eat Thai food, so eating non-Thai food somehow makes one non-Thai. Food is intimately connected with cultural identity.

In a much cited article (Fischler 1988), Fischler claims that food and identity are connected in several ways. Quoting Douglas (1966), Fischler claims "not only does the eater incorporate the properties of food, but, systematically, it can be said that the absorption of food incorporates the eater into a culinary system and therefore into the group which practices it, unless it irremediably excludes him. But this is not all: any culinary system is attached to, or part of, a world-view, a cosmology (Douglas 1966, quoted in Fischler 1988). Man eats, so to speak, within a culture, and this culture orders the world in a way that is specific to itself" (Fischler 1988). Thus, the Thai athlete who claims that eating a lot of Western food is not filling is living in a particular cultural universe, one where one gets one's fill of food only through the food that belongs to that universe. Rice plays a very significant role in the Thai cultural universe; many rituals are devoted to rice and to the rice goddess, who protects the crop and gives life to the farmers and indeed everyone else. Living firmly in this cultural universe, the Thai athlete cannot imagine himself eating any else but the familiar Thai food, and he fully believes that his prowess as an athlete is derived from the Thai food that he eats. Many Thai teams when competing abroad then bring nutritionists and cooks with them who try their best to cook authentic Thai food for their athletes.

Fischler also touches upon the topic that we are concerned with here: impact of modernity on food identity. For him modern food, or more precisely what I call technologized food, is devoid of culture and identity. It is merely a technological product based on no locality in particular. Hence it is on a par with such technological products as the tractor or the railway or the computer. The cultural universe that it inhabits, if there is one, is the one permeated by the logic of efficiency and sanitized veneer which is nowhere and everywhere at the same time. In his words,

> I have analysed elsewhere (Fischler 1979, 1983, 1985) how, in the contemporary relation to food as it appears in industrialized societies, the two-fold identificatory function of cookery (identification of food and construction or sanctioning of the subject's identity) is disturbed by the recent expansion of the agro-industry and industrialised food production. Food identification is now problematic, particularly for the following reasons, presented in summary form:
>
> 1. The modern eater has become a "pure consumer:" an increasing proportion of the population consumes food of whose production, history and origins it knows nothing.
> 2. The work of preparing and concocting food is increasingly performed before it arrives in the household and the kitchen, particularly in factories, I.i. remote from the eyes and knowledge of the eater.
> 3. The socio-cultural frameworks (the culinary system in the sense in which I have previously defined it) which traditionally governed and constrained food have been considerably eroded by economic and technical changes and changes in life-style. This has opened up a gap or crisis in the socially recognized criteria regulating eating habits, which are increasingly abandoned to individual choice.
> 4. Modern food is less and less identifiable by its consistency, flavours, smell and texture. It is processed, packaged, "presented," as it were dematerialized, stripped of its sensory characters, reduced to appearances and signs.
> 5. Moreover, food technology is becoming increasingly powerful, in the sense that it now uses more and more sophisticated processes tending to mask, imitate ad transform "natural" or "traditional" products: reconstituted proteins, artificial flavours, preserving techniques, etc. Quite literally, we know less and less what we are really eating. (Fischler 1988, p. 289)

This is a strong indictment of modern technology. Moreover, another criticism of the role that technology and modern cosmopolitan life play in food and eating is that it creates what Fischler himself and also Michael Pollan call the omnivore's dilemma (Fischler 1988; Pollan 2006). The omnivore, as the word says, can eat everything, but that creates a dilemma of what to choose to eat. Technology has created a great abundance of choice but it also creates a difficulty in choosing what to eat. Modernity has uprooted people (many of whom Americans as Pollan says, but not always so) from their tradition of eating, so, without the tradition acting as a guide, people are at a loss as to what to choose to eat each day. This makes them vulnerable to commercials presented to them everyday and everywhere by food companies. Thus, in other words, the omnivore's dilemma can be regarded as an ethical problem: Without traditional culture acting as a guide, the subjective feeling of being overwhelmed by too many choices creates a space for an ethical conundrum, and this conundrum has a strong connection with liberalism and its emphasis on the ability of the individual to make their own ethical decisions without effective guidance from the past. In any case, this ethical conundrum depends very much on culture and identity. That is, without the culture and identity, one feels that one is at a loss, but if there is going to be a way to compromise culture, tradition and identity on the one side, and technology and efficiency on the other, then perhaps the compromise should rather be the way to do.

An objection to Fischler's argument would be that modern technology arises as a result of the needs of modern society. When the population greatly increases, there is obviously a need for increased productivity in food production, which cannot be achieved through traditional agriculture alone. The rise of technology in food production parallels that in other fields, and it can be said that technology has permeated all aspects of our lives, from the smart phones almost everyone is using, to sophisticated biomedical technologies that regulate how patients live and die. An ethical aspect of this certainly has to do with the strong impact it has created with our values. We humans are deeply attached to traditions; we are a creature that do things by habit; we tend to believe that the way of our forefathers is the best one and should not be changed unless absolutely necessary. Many then feel that their lives are being encroached upon by technology. As identity is deeply connected with tradition and custom, the encroachment of technology tends to shake up this sense of identity, giving rise to the feeling that one is "let loose" from one's own community and locale by participating in it. To go back to our Thai athlete, when the logic of winning inevitably dictates that he change his food from the traditional one that he loves to the more "scientific" food prepared by nutritionists who employ the latest technologies, there is a sense in which he is leaving his traditional home behind and is now on the verge of becoming a member of the modern, technological world where efficiency and hard competition rule, and where everything in his life has to bend to this demand. In other words, he seems to lose his identity as a Thai athlete rooted in the Thai cultural universe and become instead a modern athlete where his nationality is no more but a string of letters on his shirt and his national flag.

So technology tends to obliterate identity, but then there is a way out. Fischler's paper, as well as Pollan's book, appears to be too harshly critical of technology. That

is, they do not seem to see the possibility that technology could be used to foster identity too. Fischler's presupposition in the paper appears to be that of the critical theorist, such as Marcuse (1964) or Ellul (1964), who views technology in a highly determinate way as an all powerful force that destroys cultural differences. However, the view, technological determinism, has been under attack by scholars and theorists who see that technology is more a function of society in their quest for values and goals rather than technology operating as an independent force. Andrew Feenberg (1999, 2002), for example, is well known for his view on social construction of technology, where technology can be controlled and its force negotiated by society and culture. In this way, the technologization of food can also be contained. What can happen at a less abstract level is that the increased use of technology in food production does not have to result in loss of identity. On the contrary, it could even foster the reverse. In other words, identity could be supported and enhanced by technology.

An example would be that, for our Thai athlete who loves his spicy home made cooking, a blend of the traditional flavor and modern, sophisticated nutrition fit for a world class athlete could perhaps be achieved. Thus the modern food that Fischler decries does not have to be bland or "cultureless." On the contrary the taste and the cultural identity of the food could indeed be supported and enhanced in the technologized food. Suppose that he loves sticky rice and fermented fish, the staple of the people from northeastern Thailand, technology could produce rice and fish in such a way that it fits with the requirement of the athlete in his field. Certainly the rice and the fish cannot be absolutely the same as what he is accustomed to back home. The requirement of the nutritionist has to be followed after all, but at least the texture and some of the flavor of the original food can be retained. As for identity, we are then talking of hybrid identity where the new and the old are blended together. Traditionalists would perhaps abhor such a vision. For them the hybrid food and hybrid identity is nothing but an impostor, a chimera pretending to be the real thing, something even worse that the bland, featureless food that they have been criticizing. However, as technology can recreate a version of ethnic food, so too can it recreate a version of identity. By eating the technologized food, the athlete participates in a new form of cultural universe, one that is thoroughly modern and permeated by technology. In fact most of us in the modern, cosmopolitan world are already inhabitants of this cultural universe. It is the culture of those who carry the iPhone, MacBooks, and often travel to foreign lands for tourism or work.

If this is the case, then the dichotomy is between the cosmopolitan middle class or the Thai athletes who eat technologized food on the one hand, and those who are left behind and are still living in the traditional world on the other. This is where the most serious ethical conundrum lies. Those who are on the other side from the cosmopolitan middle class also include those who are left out of the benefits that globalization has promised to bring. After decades of economic growth, Thailand and many other countries in Asia (and elsewhere in the developing world) still have large pockets of poor people who have to earn their living on a day by day basis. They cannot enjoy the iPhone, or any other amenities that modern, technologized and globalized life promises to bring. On the contrary they mostly live in the

traditional cultural universe where they are often bereft of the benefits of technology. In Thailand, these people are the ones who still listen to traditional Thai country music, go to the temples as their ancestors have always done. Their sons comprise a very large majority of Buddhist monks because becoming a monk is the only way for them to get educated. It is then unethical to allow this situation to continue, and policies have to be devised so that they can be helped out of poverty. Technology can certainly help, but then what has happened seemed to be that technology is used to benefit those who can afford it instead.

This is not to say that technology is always the culprit. On the contrary, technology has been used to help a countless number of poor people so that they can enjoy food security and life up their standard of living. The Green Revolution is nothing if not the use of technology in agriculture to increase output dramatically without which it is hardly conceivable how humankind could have survived for this long. However, an ethical problem arises when the technology is tied up with the capitalist regime whose arsenal includes the use of intellectual property rights to monopolize ownership of technologies in such a way that the poor farmers find it very hard to break away from their dependence to these patent holders. Thus, while technology and the Green Revolution has achieved greatly in alleviating hunger and ensured food security, the pattern of dependence that farmers have suffered for a long time has not seemed to ease up. Instead of depending on the feudal landlords as they were in the past, now farmers are dependent on patent rights holders, who are vastly more powerful. It is the power of sophisticated technologies owned by these rights holders that has resulted in farmers having to rely on them if they are to survive. In this case there is a vast difference between the rich farmers in the West who own huge plots of land and who employs a whole host of technological devices on the one hand, and the poor subsistent farmers in the developing world who are lucky if they could get their hands on a piece of the technology. To illustrate, the difference is between the rich farmers in the West and those in the developing world who still rely on traditional techniques that are thousands of years old. Many of the technologies that have been developed, such as genetically modified organisms, are geared mostly for the former while it is difficult for the latter to buy GM seeds for their fields. Since GM seeds are generally more efficient and productive than the local variety, farmers relying on the latter are at a disadvantage since their cost per unit is higher than their GM counterparts. If technologies, such as those in the Green Revolution and in GMO's, are to actually help the poor and to empower them, they need to put their needs into consideration in the design from the beginning. For example, one of the goals of research and development should be to find a specific solution to the problems faced by farmers in a particular region in the developing world, such as drought resistance. Moreover, an effective system also needs to be in place to ensure that the poor farmers in the developing countries are able to afford the product of these technologies as well as to use them as a means to develop their economic independence.

So our ethical problems, in a nutshell, are the following: How could we ensure that the poor who have not benefited fully from globalization actually do benefit

from it? A solution has to start from the realization that technological design and development has to be put the well-being of everyone in the world as the first priority. In fact when design and development are geared toward creating a more equitable world, everyone then benefits, as the world will be a less divisive place. This problem is closely related to the second ethical problem, which is whether Asians are losing their identities as a result of the technologization of food. We have seen that identity needs not be an all or nothing concept. A Thai, for example, does not have to stop being a Thai when she participates in global technological universe. Moreover, identity is a fluid concept, thus the boundary separating the inside and outside of identity is very porous and fuzzy. Sophisticated technology can indeed be used to enhance the quality of ethnic Thai food. Thais eating this high-tech concoction do not have to lose their Thainess, even though technology is essentially culture blind. A purist might object that this is little different from the athlete who belongs to her nation and her culture solely because she wears the national flag on her shirt, but as identity is fluid, there is nothing wrong in stressing the athlete's national identity in this way. People still separate themselves according to their nationalities in international sporting events such as the Olympics. These people may all be using the same smart phones, wear the same designer jeans, or eat at fancy ethnic restaurants nearby, but they fervently separate themselves from one another when they root for their teams. It is difficult to see where national identity is more pronounced than in the sporting arenas. Nevertheless, we have to concede the purist's point in that the identity of the athletes or their supporters is a superficial one. It is only the identity one has when one carries one's national flag, but there is little content on the inside. Maybe this is the price that we have to pay for the benefits of globalized technology.

The solution to the first problem would be to find ways in which the fruits of technology and globalization fall to the poor, the marginalized and the disadvantaged as much as possible. Single countries cannot accomplish this, so the task requires collaboration of everyone in the world. There are huge obstacles against realizing this vision, as everyone knows, because obliterating poverty has been the most important policy goals in international development for a long time but so far there has been little progress. Nonetheless we cannot let up. The alternative would be far worse, as inequality will create instabilities not only in a single country, but throughout the world. One of the key factors in solving the problem would be for the developing countries to be able to develop their own, homegrown, technologies that could achieve the needed results (Hongladarom 2004). This will undercut the argument that modern high technology belongs to the large multinational corporations hence using it will only give them more power. The knowledge and expertise behind these new technologies need to belong to the developing world too. For example, the emerging trend about 'open science' can be applied this situation where farmers work closely with professional scientists and members of the public to develop solutions that are best for their local areas. Open science goes hand in hand with 'open access' and 'open source.' Instead of creating a proprietary product aiming at maximizing profit, local firms can work with other stakeholders in the area to create

new technologies that specifically target particular problems in their community and area. Knowledge and expertise gained from this kind of collaboration then can spread out through the open access system to other areas and communities, creating a web of sharing of ideas and practices. In any case, this working together is only one possible solution; everyone has to realize that inequality among groups of people is a gross violation of ethical principles, something that the global community cannot tolerate. Right now we are not even at this first step, so the task of philosophers and ethicists in pointing this out is a very important one.

As for the second problem, the one that concerns identity, I have said that identity is a fluid concept, so any charge of loss of identity has to take this into consideration. Nonetheless, the charge is a real one, and loss of identity could be a serious problem if what results from it is a kind of world that is nameless and faceless. Food, technology and identity are closely related. As Fischler has stated, food is intimately connected with identity, and he also shows that technology in food production results in food losing its identity. Nonetheless, the biggest problem in this area facing Asians is not purely their loss of identity. Asians typically do not think much about identity; this may be because they are so confident of their own traditions that they do not conceive how it is possible that they might lose their identity forever. What they care, on the contrary, is security and economic prosperity. As for security, technology can be of tremendous help, and we cannot deny the very important contribution technology has made in the Green Revolution. There is, however, a way in which security could be obtained without loss of cultural identity. We have seen how cultural identity and technology are interrelated with each other, and since identity is fluid, then technology can help promote identity. In fact it is only in this way that technology and the force of capitalism could empower the global poor so that they remain independent and can retain their identity amidst all the change. When the poor are empowered, through such means as enhanced economic well-being and education and political participation, then they will be powerful enough to retain their chosen identity. As regards to food, then they can choose what food to eat without having to eat anything given to them by the government or the multinational corporations. In more concrete terms, this means, for example, that the poor can eat what they like. If they do not like food containing GMO's, then they can choose not to eat it, in the same way as the consumers in the European Union are able to do at the moment. Eradicating poverty is a better way to ensure food security and retain cultural identity than any other alternatives.

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