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(Asian Studies + Anthropocene)[4]

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In his Jungian-inspired utopianism, Joseph Campbell (1988, 32) once declared that the famous "Blue Marble" shot of earth from space (see figure 1) could potentially become a symbol of a new mythology that celebrated our common humanity. Of course, much as Jung and other universalizing theorists have been laid to rest over the last quarter-century by poststructural, postmodern, and postcolonial thought, so too apparently has any new mythology of our common humanity (much less its actualization). Nevertheless, one can certainly wonder whether Campbell would not have interpreted the Anthropocene as the perfect myth for forging a new vision of our shared humanity.[1]

After all, much like any good religious narrative, it contains all kinds of issues related to both human knowledge and struggle, as well as moral turpitude, and, of course, a possible apocalypse. Moreover, as with any new myth, there are not only converts and dissenters, but also among the believers an array of doctrinal interpretations. Thus some—like the Dark Mountain Project—are stoically and creatively accepting of the coming annihilation of humanity. Others are taking a more hedonistic approach. And some are demanding action, which includes outfits ranging from the Intergovernmental Panel on Climate Change to the U.S. military.[2] And as has happened throughout history, there are also invariably those who completely reject the gospel, just as many dismiss the virgin birth and many others dismiss Darwinian evolution.

Many scholars, however, take the Anthropocene very seriously. For example, there are now three interdisciplinary journals dedicated to it,[3] the recent theme for the School of Social Sciences at the Institute for Advanced Study was the "Environmental Turn and

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[1]For a parallel idea, see Rosi Braidotti's (2013, 83–85) call for a new humanities that is "geo-centric" because the Anthropocene requires all of our thinking to be planetary.

[2]See Intergovernmental Panel on Climate Change (2014). On the U.S. military's assessment of climate change, see U.S. Department of Defense (2014); CNA Military Advisory Board (2014).

[3]*Anthropocene* publishes "works addressing the nature, scale, and extent of the influence that people have on Earth. The scope of the journal includes the effects of human activities on landscapes, oceans, the atmosphere, cryosphere, and ecosystems over a range of time and space scales – from global phenomena over geologic eras to single isolated events – including changes the linkages, couplings and feedbacks among the systems" (Elsevier 2014). *Elementa: Science of the Anthropocene* publishes "original research reporting on new knowledge of the Earth's physical, chemical, and biological systems; interactions between human and natural systems; and steps that can be taken to mitigate and adapt to global change" (BioOne 2014). *The Anthropocene Review* "is a trans-disciplinary journal . . . bringing together peer-reviewed articles on all aspects of research pertaining to the Anthropocene, from earth and environmental sciences, social sciences, material sciences, and humanities" (SAGE Publications 2014).

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Figure 1. "The Blue Marble," a photo taken by the Apollo 17 crew on December 7, 1972. Source: NASA.

the Human Sciences" (see Institute for Advanced Study 2014), and, of course, a range of scholars, from historians to literary critics to sociologists, are weighing in on the Anthropocene and its implications (see, e.g., Morton 2013; Parker 2013; Sassen 2014). Some scholars of Asia have also engaged the issue (see, e.g., Chakrabarty 2009; Chin 2013); however, judging by the panels at recent meetings of the Association for Asian Studies (AAS), articles in the *Journal of Asian Studies*, and recent dissertations,[4] the Anthropocene has not—for whatever reason(s)—generated a great deal of interest among scholars of Asia. Indeed, it was for this very reason that this roundtable was convened. And as such, the inevitable question is what can scholars of Asia, especially those in the humanities, offer to the current ongoing discussion of the Anthropocene? Obviously there are many answers to this question; nevertheless, herein I would like to suggest four broad possibilities that aim to problematize the conventional Western and industrial frameworks of the Anthropocene, namely, those of space, time, the ideological, and the institutional.

The Spatial

How scholars will engage with the Anthropocene and the questions they ask will invariably depend upon their own disciplinary and regional specializations. Nonetheless, it is possible to conjecture that some of these questions will probably revolve around the

[4]A May 28, 2014, search for "Anthropocene" on *Dissertation Reviews* (http://dissertationreviews.org), for example, resulted in not one hit.

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three issues that drive much of environmental history: (1) the history of human thought about the environment, (2) the influence of environmental factors on human history, and (3) the environmental changes caused by human actions and how they in turn affect human society (Hughes 2006, 3). By using such a template it is quite possible that anyone working on Asia—from Kabul to Tuva to Fiji—could potentially add something to the broader discussion about human thought and action in relation to the Anthropocene.

At the same time, however, academia is like a shark and is therefore always moving forward. Thus the questions and conceptual schemes shaping the field of environmental history have been evolving. John R. McNeill, for example, has argued that there are actually three types of environmental history: (1) material (e.g., soil, water), (2) intellectual, and (3) political (e.g., policies and their implementation) (McNeill 2003, 9). Verena Winiwater, on the other hand, has proposed a four-fold schema: the paradigm of toxicology, the paradigm of endangered ecological equilibrium, the paradigm of resource economy, and the paradigm of conviviality (Winiwater 2003, 6–8). And more recently, in an attempt to overcome the nature-society divide as well as a host of other social scientific and historiographical problems, Terje Tvedt has advocated a three-fold paradigm that focuses on water systems in terms of (1) a region's hydrology, (2) human modifications of said hydrology, and (3) the conceptual dimensions of these systems (Tvedt 2010, 147–48). While any or all of these models can inform the scholarship of those studying Asia, it is the last of these—"the conceptual dimension of these systems"—that requires us to reconceptualize Asia beyond national and regional paradigms and that seems to coincide best with recent developments within Asian studies itself.

Indeed, it was precisely this issue that informed the first of the *JAS* roundtables, which was anchored around Prasenjit Duara's "Asia Redux: Conceptualizing a Region for Our Times" (2010), a piece that both offered and generated much valuable theorizing about the currents and forces shaping Asia as both a reality and a field of inquiry. And in this regard one of the factors that Duara (2010, 976) highlighted was the regional "interdependence [that] arises from a common linked set of problems faced by the region in the realm of climate change, environmental degradation, water scarcity, and public health, among others." Yet, as Duara also pointed out, a fundamental issue underlying all of these other issues is the question of water, since almost half of the world's population lives in the watershed of the Tibetan plateau.[5] Building on Tvedt's work, one can therefore argue that Asia's hydrology is what makes it Asia.

Of course, the Anthropocene is a global phenomenon and thus it may seem problematic to break off a section of the globe—or one part of humanity—in our investigations of human-induced transformations of the natural world. Yet, by definition, that is what the AAS is meant to do, as is well captured by its logo, which is also an image from space focusing on the Asian landmass (see figure 2). For many, that is indeed Asia. Yet in this particular moment of intellectual oscillation between the local, national, regional, and global, the question of Asia invariably remains a work in progress. Yet, as such, it needs to be recognized that there are sound environmental reasons for this particular geographic

[5]For excellent coverage on Tibet and issues of water across Asia see the website www.thethirdpole.net. On the geopolitical implications of the issue see, for example, Chellany (2011).

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Figure 2. The AAS logo.

unit to be conceptualized as a distinct entity. Thus the study of Asia in terms of the Anthropocene should enable us not only to better conceptualize and theorize Asia, but also by doing so to bring Asia into dialogue with the broader discussions on the global realities of the Anthropocene.

The Temporal

Given the pervasive Eurocentrism of the modern academy, it goes without saying that Asia and its realities continually need to be brought into a host of conversations. In this regard, the Anthropocene is no different since for the most part an overwhelming portion of the scholarship—especially in the humanities—has focused on the Euro-American experience. A case in point is the field of environmental history, which although inherently global in scope, has until recently largely remained a Euro-American affair, in terms of not only its geographic and cultural foci, but also its temporal framing, which has made the year 1500 and thus European colonialism the hinge of world history (Grove and Damodaran 2009). While there are certainly valid reasons to make such linkages, by doing so other processes are invariably obscured. It is for this reason that Asianists have been not only pushing against the conventional Eurocentric temporal paradigms,[6]

[6]For an overview of the new periodizations promoted by environmental historians, especially those beyond the Marxist and Weberian-informed "early modern to modern," see Marks (2010). For recent reappraisals of the now long-standing debate on the value and limits of the "early modern" as a periodization in world history, see Goldstone (2012), Pomeranz (2012), and Wong (2012).

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but also advocating a new, non-Eurocentric model of "developmentalism" (Pomeranz 2009, 3–7). All of which is clearly of vital importance, and even more so in the context of the Anthropocene, since on account of the inevitable questions of where and when it all began the narrative has once again shifted back to Europe.

To a certain extent, this cannot be denied; however, it also needs to be kept in perspective in relation to the longer history of human interaction with the environment. Thus as the work of both Mark Elvin (2004) and Robert Marks (2012) on China make abundantly clear, the full-scale manipulation and destruction of the natural world is not a European prerogative. For example, "iron production reached 125,000 to 150,000 tons by the end of the Sung (AD 1070), which compares favorably with the total western and Russian European output of 145,000 to 180,000 tons at the beginning of the eighteenth century" (Williams 2002, 140). And as Elvin has noted, it was precisely such practices—along with others such as agricultural expansion—that shaped the general arc of Chinese environmental history, namely, that of "the great deforestation" (Elvin 2004, 19–85).

Yet, such processes were not exclusive to China. Rather, it was an Asian one, as evidenced in the case of agricultural expansion, water control, and ultimately environmental collapse in other regions of Asia. For example, in Indonesia, even though the upland valleys of Toba Batak and Minangkabau in Sumatra had irrigation systems that could purportedly sustain a million people (Reid 1995), it was also precisely such exploitative endeavors that ultimately caused these inland civilizations to collapse (Kathirithamby-Wells 1995, 33–34).

But such large-scale transformations of the environment were found not only in East and Southeast Asia, but also in South Asia. In fact, already in the second century the Ceylonese had invented both the cistern and piston sluice (Gunawardana 1984/87), and thus by controlling water flows more effectively, they were able to launch an unprecedented expansion of their irrigation systems, as witnessed in the Padaviya reservoir, built during the reign of King Mogollana (531–51 CE), the embankments of which contained about 453,000 cubic meters of earthwork. Similarly, the Minneri reservoir of the late third century (274–301 CE), which covered 4,670 acres and contained 87 million cubic meters of water, had an embankment a mile and a quarter long rising to a height of 44 feet (Gunawardana 1971, 6). Such large and innovative developments probably reached their apogee with the fifth-century Kala reservoir (455–73 CE), which provided water to the capital of Anuradhapura by means of a canal 87 kilometers long with a gradient of 10 centimeters per kilometer (Gunawardana 1984, 119).

There are no doubt many more examples from Asia's long and diverse history that can be added to this cursory list; however, to do so, clearly more work along these lines needs to be done. Indeed, as Peter Perdue pointed out during the roundtable's discussion, the Eurocentric framing of environmental history (or the Anthropocene, or academia more broadly) will not shift until Asianists begin bringing Asian materials into the broader dialogue. And while this project has certainly begun, as Mahesh Rangarajan (2009, 238) has noted, much of it unfortunately continues to perpetuate the Eurocentric paradigm by focusing on either the colonial encounter, or else an idealized past (see also Rangarajan and Sivaramakrishnan 2012, 1–6). Thus only by moving beyond these temporal frameworks will we better understand not only Asia, but also its role in the history of the Anthropocene.

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The Ideological

The classic Orientalist paradigm has it that the West is male, active, and practical, while the East is feminine, passive, and intuitive. And while this binary opposition was often utilized to explain and justify Western domination in both practice and theory, it was also the case that the dynamic of the framework could be flipped. The German Romantics and American Transcendentalists, for example, in their critique of modernity, turned the equation around and lauded Asian religions for being in tune with the natural world (Blum 2009). In turn, of course, this positive assessment was picked up by Asians, who used it not only to reconceptualize their own traditions, but also to critique Christianity and European colonialism. This intellectual move perhaps reached its most sophisticated elaboration in the hands of Japanese ultranationalists, who, emulating the Nazi fascination with the environment (Brüggemeier, Cioc, and Zeller 2005), promoted extensively the idea of an innate Japanese connection with nature (Thomas 2001). This idea has, in turn, famously been carried forward in an array of works ranging from D. T. Suzuki (1959) and Lynn White to E. F. Schumacher.[7] It is also an idea that has been roundly discredited by a quarter-century of scholarship. In fact, a recent United Nations survey has shown that the Japanese have supposedly the least "environmental concern and awareness" of the fourteen leading industrial nations. Moreover, "rather than seeking harmony, [the study] found that they 'placed far greater value on satisfactions derived from control and mastery over nature.' The desire to dominate and control nature was more pronounced than in Germany or the United States" (Kalland and Asquith 1997, 7).

Yet, curiously, the Orientalist notion persists, so much so that a recently published global history of the environment could blithely claim that a "second group of world systems originating in the ancient world [i.e., non-Western/Asian religions] taught the oneness of life, and an ethic based on respect for all living things, and therefore seem to have encouraged the preservation of nature" (Hughes 2001, 54). Moreover, in the recent *Encyclopedia of World Environmental History*, which was edited by some of the leading scholars in the field, one finds exactly the same rhetoric in the entry on Buddhism:

> The basic precepts and philosophy of Buddhism tend to encourage a sensitive approach to the environment. The whole approach of Buddhism is designed to eliminate suffering, and hence Buddhism discourages any action that might harm living things. Buddhists tend to be mindful of their actions in the natural world, and so would not thoughtlessly saw down a tree or pull up plants without very careful consideration. They would be equally thoughtful with regard to animals, and would tend not to use resources from the natural world without careful thought. Indeed, Buddhists would normally only wish to use resources to the extent required to sustain life. The excessive use of resources, particularly to make money, would be regarded as a form of greed

[7]Even though Lynn T. White's seminal "The Historical Roots of Our Ecological Crisis" (1967) was immediately refuted (Tuan 1968), his argument about an inherent Asian appreciation of nature was to have a profound impact on Euro-American understandings of Asia and its religious traditions. See, for example, Nash (1967) and Gatta (2004). On the influence of Schumacher's "economics," see Guha (2000, 75).

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> and desire. The Buddhist attitude would preclude excessive mining for minerals, the destruction of forests for building purposes, or the pollution of rivers with industrial waste. (Oliver 2004, 176)

Much research has shown there is little evidence to support such a claim (see, e.g., Clippard 2011; Harris 1995, 2002; Huber 1991, 1997; Swearer 2006). Moreover, as the editors well know, it is a general maxim of environmental history that all humans have used and exploited the environment for their own ends. So why is it that in so many cases Asians—and Buddhists in particular—still get a pass?

Whatever the case may be, the perpetuation of this Orientalist paradigm—which feeds into the Eurocentric problems articulated above—is clearly something that scholars of Asia need to engage in order to shape a better understanding of the Anthropocene. At the same time, however, it is also important that scholars of Asia be involved in not only tearing things down, but also constructively engaging the rich cultural, intellectual, philosophical, and religious traditions of Asia in terms of ongoing debates in relation to both the Anthropocene and the broader field of the post-humanities. Indeed, what does it mean to be human when one is no longer simply a social or biological agent, but a geological force? As Edward O. Wilson (2002, 131–34) has argued, this situation calls for "deep history" that demands a new critical self-understanding of humans as being a species among many. Or as Braidotti (2013, 85–86) has argued, we need a post-anthropocentric vision whereby life is understood as a flow of energies shaping both the human and nonhuman alike, as found in the monism of Spinoza and other Western thinkers. Yet, clearly parallel ideas can be found in Asia—especially in much Buddhist thought—and as has been evidenced in Korea, Taiwan, and Thailand, such ideas have already been put into practice (see, e.g., Cho 2013; Clippard 2012; Darlington 2012).

The Institutional

In the wake of the British conquest of the Kingdom of Kandy in 1815, the imperial machinery of surveying, mapping, and analyzing the new domains and its peoples was set in motion. And as colonial officials fanned out across the dry highland interior of Ceylon, they stumbled upon the remains of an incredibly immense system of irrigation. Yet, rather than recognizing it for what it was—the largest and most sophisticated irrigation system in the world for a thousand years—colonial officials instead proclaimed that it was "one of the most stupendous monuments of misapplied human labor" (Gunawardana 1993, 187). Indeed, enthralled by their own sense of superiority, especially in terms of dominating nature,[8] colonial officials not only denigrated this irrigation system, but

[8]"British colonial rule shared in many respects the ethos of domination over nature that marked the emergence of 'middle class government' in Britain. Shaped by the increasing influence of capitalist modes of thinking, many British leaders saw domination of nature, and its commodification, as both a critical measure of class power and a legitimizer of the British in India as a ruling community. As Michael Adas argues, Europeans often looked to their own 'vastly superior understanding of the workings of nature' – and their ability to turn nature to human use – as among the most powerful justifications for their 'monopolization of leadership and managerial roles in colonized societies.' Though it is doubtless a mistake to stress a single mode of thinking as a central explanation for a

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also set about dismantling the age-old village-based system that maintained it. To this end, they established a new, supposedly rational and centralized system that was meant to overcome the problems of both local power dynamics and what they saw as general Ceylonese incompetence. Much to their consternation, however, the new system was an abject failure. To explain this turn of events, the British invariably blamed the Ceylonese for their intransigence and launched instead a new state initiative to bring the irrigation system under control. It too was a failure (Roberts 1980). So much so in fact that when Edmund Leach conducted fieldwork in northern Sri Lanka in the 1950s, the maintenance and operating of the irrigation system had essentially reverted back to a model from the eleventh century. It was a local system of control and dispute resolution that Leach (1980) pointed out worked rather well.

Much obviously can be and has been said about this particular colonial encounter. Here, however, the point is to use it as an entry point into a discussion on the role of the state, which has obviously shaped much modern social and political theorizing. In the case of Asia, one of the more famous—if not infamous—of such theories is Karl Wittfogel's (1957) hydraulic theory of Oriental despotism, which essentially argued that Asian states were fundamentally and eternally autocratic because in order to maintain such massive irrigation projects as found in Sri Lanka and China the state needed to control and wield brutal state power.[9] To his credit, Wittfogel certainly created a powerful argument that shaped subsequent scholarly debates for decades; however, whether he was right is another question entirely.[10] In the study of South Asia, for example, many scholars over the decades have addressed it directly and argued against "Oriental despotism" by highlighting the archaeological and inscriptional evidence that points to the fact that most early irrigation systems were the product of local initiative and not state power. Thus in writing about the Mauryan empire, Romila Thapar (1984, 75) has noted the fact that while "irrigation was a significant variable in social change, that does not necessarily imply a link between irrigation and despotism but rather suggests a relation between water control and the sources of power among ruling elites." Indeed, as H. P. Ray has further noted,

> there is a need to comprehend the construction of knowledge of the ancient past in the colonial period in India when contemporary models, such as that of the state, were adopted to explain ancient phenomena. . . . This is crucial, since in absence of a discussion of the channels of communication and control, the

phenomenon as complex as the expansion of colonialism, the definition of the environment as a natural field to be dominated for productive use, and the definition of the British as a distinctive colonial ruling class over alien peoples, went hand in hand" (Gilmartin 1995, 210–11). See also Adas (1989, 205, 210–21).

[9]Although Wittfogel's theory was distinctive, it built on a long tradition of viewing Asian states as static and authoritarian that began in ancient Greece and subsequently shaped the thinking of European political thought from the Renaissance up through the nineteenth century, including Marx and Engels's "Asiatic Mode of Production." On this historiography and its implications on the conceptualization of South Asian states, see Sinopoli (2003, 38–62).

[10]Wittfogel was not only a German immigrant working in 1950s Cold War America, but also a former communist who had made it his life's mission to condemn the state socialism of Soviet Russia and the People's Republic of China. On the intellectual, specifically Marxist, genealogy of Wittfogel's theory and its lingering legacy, see Blaut (1993, 80–86).

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> general notion that has gained ground is the primacy of the state as an agent of change. This assumption needs re-examination, in view of the inadequate administrative apparatus of early Indian polities until the sixth-seventh centuries, as evident from inscriptions, further reinforced by the fact that many of the inscriptions themselves were inscribed not within royal centres but in the precincts of religious establishments. Thus, rather than assuming a priori the pivotal role of the state, issues such as the mobilization of a diverse range of resources need to be analysed. (Ray 2012, 67)

All of which is certainly true; however, in their critique of Wittfogel is it possible that both Thapar and Ray have gone too far in minimizing the role of the state (Myrdal 2003)? Of course, on one level such a question may only be of historiographical interest, but at the same time we also live in a time when the role, function, and even validity of the state are much debated. And as such, in terms of the Anthropocene and its very enormity, it seems as if the state cannot be excluded from the discussion; and thus the case of Asia seems to have much to offer.

Conclusion

During the question-and-answer session of this roundtable, one audience member asked what she should tell her young child who wants to study polar bears in the future? One possible response could be that we are still studying dinosaurs; however, that may be of little solace. Nevertheless, because some thinkers have deemed the human transformation of the earth as the most important moral issue currently facing humanity, one can certainly hope that she can honestly tell her child that some Asianists were in fact working on the Anthropocene.

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