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Asian Personal Epistemologies and Beyond: Overview and Some Reflections

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It is customary to cite Perry's (1970) pioneering work in the intellectual and ethical development of undergraduates as the initial spark for the now burgeoning field of research on personal epistemological beliefs. Treating epistemology as a set of psychological constructs and personal beliefs, Perry (1970) studied the development of personal epistemology among male Harvard students. His work subsequently inspired a number of qualitative studies that seems to have generated a stable developmental profile of personal epistemology among the participants, mainly from the West (e.g. Belenky, Clinchy, Goldberger, & Tarule, 1986; King & Kitchener, 1994). Perry's work also inspired Schommer (1990) and others to develop quantitative survey instruments to measure personal epistemology. These studies have helped to establish multiple connections between personal epistemology and important educational constructs such as problem solving, reading comprehension, and learning outcomes (see Hofer & Pintrich, 1997; Hofer, 2008). Over the years, research on personal epistemology and its implications on education, work, and professional development has grown in depth and complexity with the inclusion of multi-disciplinary, cross cultural area, and comparative studies. The efforts of scholars applying the concepts and methods of research on personal epistemology has helped to open up new and interesting pathways for the further development of the field that promises to

cut across cultures and time as well, since the study of cultural differences have brought to light the relevance or salience of the historical basis of cultural beliefs and attitudes.

Asian researchers started to conduct epistemological surveys among Asians around the turn of the century using Schommer's epistemological beliefs questionnaire initially. However, they encountered problems when they factor analyzed items based on Schommer's classification (Chan & Elliott, 2002; Bernardo, 2008; Youn, 2000). Chan and Elliott (2004) argued that epistemological beliefs may be influenced by culture. As Hofer (2008) has rightly pointed out, there is sufficient empirical evidence for researchers to question the suitability of using instruments and concepts developed in the West to study the epistemological beliefs and development of Asians (see for example, Bernardo, 2008; Chan & Elliott, 2002; 2004; Youn, 2000; Zhang, 1999). Furthermore, recent studies in Asia have detected differences in epistemological beliefs between sub-cultural groups, raising interesting and intriguing questions about the diversity of personal epistemological beliefs within cultures or within ethnic groups in societies that differ in terms of levels of economic development, historical evolution, cultural diversity, etc. (Chai, Hong & Teo, 2008). It is therefore both important and timely for researchers and scholars to engage more deeply and comprehensively in understanding the

nature and complexity of personal epistemology in the Asian context. This special issue is intended as a modest contribution to that effort.

This special issue has brought together researchers from Asia to report on their work in this field of study. In this regard, we have been able to document Asians' epistemological beliefs from China, Taiwan, Indonesia, the Philippines, Korea, and Singapore. In general, the authors in this issue have extended this field of research by a) validation of epistemological survey instruments that could be employed in various Asian contexts b) empirical studies among Asian personal epistemology within a specific cultural context; c) domain-specific studies on epistemic beliefs and d) exploration of possible ways of facilitating development of epistemological beliefs. Together with earlier work from Hong Kong (Wong et al., 2009; Chai et al., 2009; Chan, 2007) published in this journal, the state of development indicates that researchers are now better placed to understand the profile of epistemological beliefs among Asians. Studies in this issue also indicate that the factorial structure proposed by Chan and Elliott (2004) may be replicable in different Asian countries. As it extends the research of personal epistemology beyond the West, the survey of Asian epistemological beliefs has helped to enrich our understanding of the diverse ways of conceptualizing knowledge as well as the processes of knowledge production. As it stands now, it seems clear that more qualitative research of Asians' personal epistemology is desirable. Employing theoretical perspectives beyond those proposed by Perry (1970) or Schommer (1990) could bring about a fresh perspective on studies of personal epistemology in Asia. In particular, studies that employ the epistemological resource framework (Hammer & Elby, 2003) or the interpretive repertoire (Roth & Lucas, 1997) could serve to triangulate or challenge current findings reported in this issue. Further insights into the role that culture and tradition plays in shaping personal epistemological beliefs have helped us to conceive of future possibilities for the theoretical conceptualization and development of research in

the field. We will mention in brief some of the potential for development below.

The extant work on Asia, including the ones featured in this special issue, point to a gap in the cultural understanding of personal epistemological beliefs. Asian societies or many segments of the population within Asia continue to be socially conservative and religiously motivated. Thus, the element of religion cannot or should not altogether be ignored. Asia is also host to a rich variety of religions, including Buddhism, Daoism, Hinduism, Christianity, and Islam. This point about religion is also intended to call attention to the relation between philosophical analyses and the development of theological traditions. Philosophers have long noted an analytical strand in certain traditions of Indian philosophy and religion. It would be of great interest to find out whether or to what extent these philosophical aspects of religious traditions continue to influence or shape personal epistemological beliefs in India or among Indians residing outside of the Sub-continent. The same could be said of Aristotelianism (or neo-Aristotelianism) and Catholicism that may be of relevance to the Philippines, a country that is predominantly and deeply Catholic. In terms of epistemological beliefs, the role of religion should not be underestimated in generating sophisticated beliefs about knowledge or knowledge production.

The relevance of religion has been highlighted by studies such as the one conducted by Tabak and Weinstock (2008). In their research on school children in Israel, they observed that students studying in a science-immersion program and those studying in a religious-immersion conveyed similar characteristics of epistemological-socialization. Students in both these domains were for the most part disposed to a more absolutist epistemological orientation, a feature the researchers attributed to the fact that the domains in question were regarded with deference or held in a privileged position that was not likely to be questioned. But why would it be so difficult to see that in each case the students regarded the domain as revealing what is the truth about their conceptions of the world? That may have been the deeper reason why they were

disposed to regard their respective domains with deference. Moreover, this point of view does not necessarily undermine the development of a critical attitude. On the contrary it may be the ground for the development of a critical attitude towards *other* domains of knowledge. This may well explain why the same researchers observed that “the religious girls were absolutist only in the values domain and held multiplist positions in all other domains.” Such observations, we believe, are quite important as they seem to indicate that the constructivist orientation may at times prevent, and perhaps even distort, what researchers are trying to capture with respect to the beliefs about knowledge and knowing.

Religion is one historical dimension of culture, and the one benefit of cultural analysis is that it affirms the relevance of historical consciousness as a factor in personal epistemological beliefs. Take for example the following reflection about genetic research:

“Simply gathering data without having any specific question in mind is an approach to science that many people are doubtful about. Modern science is supposed to be mostly ‘hypothesis driven’—you have a hunch about how the world works, and do experiments that ask if your hunch is right. If it is, you can make predictions about how the world might work in other, similar situations. My studies of the worm lineage didn’t require me to ask a question (other than “What happens next?”). They were *pure observation, gathering data for the sake of seeing the whole picture*. Making a worm map would be the same. This is sometimes called ‘ignorance-driven’ or, more grandly, ‘Baconian science.’ The seventeenth-century philosopher Francis Bacon suggested a system for understanding the world that began with *the accumulation of sets of facts, based on observation*. Naturalists who collect and classify living species or astronomers who map the stars in the sky are examples of Baconian scientists. This kind of project suits me—it’s never bothered me that it doesn’t involve bold theories or sudden

leaps of understanding, or indeed that it doesn’t usually attract the same level of recognition as they do” (Sulston & Ferry 2003, pp. 58-59, emphasis added).

The scientist in question is John Sulston, a Nobel laureate, describing his work as a biologist. He is not in the least troubled by attributing his view of science to what would seem like an outmoded and simplistic seventeenth century perspective. Furthermore, he does not treat the entities he studies as stable fictions or constructs but as real entities. And it may well be that these rather traditional views of the world and science constitute parts of the underlying motivation for his scientific researches.

The point to be made here is not that the past is superior but that openness to the past helps to enrich and diversify our understanding and appreciation of the relevance of tradition to the development of sophisticated views about knowledge and knowledge production. Consider for example the frequent claim that the Chinese attitude towards authority and the expert transmission of knowledge are due to the Confucian heritage. This may be plausibly the effects of the development of the ancient Chinese imperial examination system that emphasized memorisation of the Confucian canons. Classical Confucianism, on the other hand, seemed to have been more student-centred and could be said to encourage individualised efforts to acquire knowledge, as evidenced by the following quote:

The Master said, “I never enlighten anyone who has not been driven to distraction by trying to understand the difficulty or who has not got into a frenzy for trying to put his ideas into words. When I have pointed out one corner of a square to anyone and he does not come back with the other three, I will not point it out to him a second time” (Confucius, n.d./1998, p.86).

And although traditional Chinese education may have emphasized memorization, studies of pre-modern education in the West have shown that the

development of memory skills was compatible with the cultivation of imagination and of the quest for original discoveries (Carruthers, 1992). In other words, a proper appreciation of the past can help us to review and challenge underlying assumptions regarding the traditional principles and practices about education and their relation to beliefs about knowledge and knowledge production.

As regards the modern concern with progress that partly drives the interest in personal epistemological beliefs, it is perhaps worth noting that classical Confucianism was not simply conservative: The Master said, “A man is worthy of being a teacher who gets to know what is new by keeping fresh in his mind what he is already familiar with” (Confucius, n.d./1998, p. 64). It could be said that in terms of knowledge and knowledge production, Classical Confucianism was animated by the concern to strike a balance between tradition and progress. The concern to confront the tendency to go to extremes and to find a right balance in the search for knowledge is also characteristic of the classical Socratic tradition of the West. In an account of the intellectual debates of his time, Xenophon observed: “among those who are anxious about the nature of all things, some are of the opinion that being is one thing only, and others that it is an infinite multitude; and some that everything is always moving, and others that nothing ever moves; and some that everything comes to be and perishes, and others that nothing ever comes to be or perishes” (Xenophon, 1994, p.4). This observation bears some relevance to the competing conceptions of knowledge—on whether it is simple or complex, or whether it is absolute or relative. And the truth may lie somewhere in between: some knowledge is certain and permanent, others are not. And so it is not naïve to hold that in some cases knowledge does not change. By the same token it is not necessarily a reflection of sophistication to hold that all knowledge is relative or changeable.

Another point we wish to offer for consideration has to do with the traditional understanding of epistemology that was derived from ancient Greek sources. The Greek term

episteme or science/knowledge has been used as a term to contrast it with *techne* or art/craft and *poiesis* or making/inventing/transforming. It has been appropriated in modern analytical philosophy to distinguish conceptual or propositional knowledge from procedural knowledge and knowledge related to skills and abilities. But in view of the increasingly important role that technology and design plays in shaping contemporary social and economic life, it may be worthwhile considering the possible review of the traditional conception of epistemology. It could be said that a more adequate grasp of epistemology today may have to incorporate elements of *techne* and *poiesis*.

The earliest evidence of the development of science and logic in ancient China is associated with the philosopher Mozi, whose school of thought would become one of the greatest rivals to classical Confucianism. It so happens that the Mohist school was also associated with the traditions of skilled craftsmen in ancient China, and they were also credited with a spirit of innovation in terms of the design and construction of defensive artifacts of war. In the context of the tumultuous political and military events in China’s early history, “innovation” is part of the tradition of crafts. The artisan attracts attention by having something new to offer—the most urgent attention if (like the Mohists and Kungshu Pan) he invents new engines of war” (Graham 1978, p.11). Following in that tradition, the later neo-Mohist school of thought regarded knowledge as skill. Hanson has shown that this aspect of neo-Mohist thought can be regarded as a form of practical epistemology in that knowing here relates to the ability to carry out a task successfully through application of a reliable skill and/or dispositional capacity (Hansen 1992). The Mohist and neo-Mohist precedents in China show that cultural traditions can be harnessed to promote a more inclusive and holistic perspective on epistemology that incorporates the roles that technology, innovation, and design can play in knowledge creation. Asian societies influenced by Confucianism may benefit from this awareness of Chinese classical tradition in their attempts to

reconcile educational initiatives aimed at promoting creativity and innovation with respect for traditional values. Our point of view is fairly congruent with Bereiter and Scardamalia's (2006) notion of school as a knowledge-building community. They propose that schools should not operate on the epistemology of verified truth alone. Given the emergence of knowledge society, they argue that schools should incorporate the epistemology of design. This could add a whole new dimension to the study of personal epistemology.

While not all the points here may turn out to be feasible for future research, they do indicate that the inclusion of culture has the potential to inspire new ideas that might spur the further development of research on personal epistemological beliefs. The role that tradition and history plays in the beliefs among Asians about the nature of knowledge and ways of knowing indicates that history and tradition may also play equally important roles in the conceptions of knowledge and knowledge production in the West. A more comprehensive understanding of the range of choices about the nature of knowledge and knowing opens opportunities to review and revise current conceptions in ways that might help educators to devise better strategies to facilitate teaching and learning that meets the needs of students with diverse interest, talents, and abilities. However, it is worth reiterating that this is just a beginning effort. To be sure, there are many possible ways to extend the understanding of personal epistemology, but it is hoped that some of these reflections may turn out to be useful to those seeking alternative ways to further the development of the field.

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The Epistemologies is a work oft attributed to Ajencis but more likely a redacted compilation drawn from his other works. Many consider The Epistemologies to be Ajencis's definitive philosophical statement on the nature of knowledge, but some argue that it distorts his position since it presents a unitary vision of views that actually evolved quite dramatically over the course of his life. Semantic Scholar extracted view of "Asian Personal Epistemologies and Beyond: Overview and Some Reflections" by Benjamin Koon Siak Wong et al. @inproceedings{Wong2010AsianPE, title={Asian Personal Epistemologies and Beyond: Overview and Some Reflections}, author={Benjamin Koon Siak Wong and Ching Sing Chai}, year={2010} }. Benjamin Koon Siak Wong, Ching Sing Chai. Published 2010. Asian Personal Epistemologies and Beyond: Overview and Some Reflections. February 2010 Â· The Asia-Pacific Education Researcher. Benjamin Wong.Â In the aftermath of the modern science world scientists are still searching for some kind of ontological and epistemological common ground. In this paper I try to show that we, by the aid of Michael Polanyiâ€™s concepts of knowledge, of personal as well as objective knowledge, and his descriptions of the tacit dimensions in the process of knowing, can take some substantial steps toward a better [Show full abstract] understanding of the contemporary scientific conduct.