

Research Article

An Ontological Turn for Psychology in the age of the Machine and Global Warming

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This essay pays homage to indigenous psychology by reiterating its central theme—decolonization—through a variant of the theme in the call for an ontological turn. Ontology refers to human’s basic commitments and assumptions about reality, namely what things are, and what they could be. It is argued that ontologies have consequences. The ontology of objects privileged in science facilitates the acquisition of objective knowledge in the physical world, but cannot improve our understanding of the culturally different other whose lives may be shaped by ontology of subjects. Ethnographic data from Southeast Asia are used as illustration of how ontology of subjects may fill a moral vacuum in value-neutral science, as well as give psychology better insights into the problems of advanced technology ranging from automatization to global warming.

SDG statement

This essay argues that a shift in orientation from ontology of objects, privileged in science, to ontology of subjects, prevalent in pre-industrial societies, can improve understanding and reduce prejudice toward the culturally different other, by filling a moral vacuum in value-neutral science, and giving psychology better insights into the problems of advanced technology ranging from automatization to global warming.

Indigenous psychology (IP) is a countervailing, intellectual movement across the globe against the hegemony of mainstream psychology (MP). Thus decolonization--the capacity to think critically about MP-- constitutes the backbone of IP (see recommended reading). This decolonization thrust is

reiterated in a recent development in IP-- the ontological turn. Ontology refers to human's basic commitments and assumptions about reality, namely what things are, and what they could be. The ontological turn refers to taking the culturally different other's reality seriously—indeed far more seriously than is possible in psychology so far. For instance, the anthropologist Paolo Heywood (2017) claims that multiculturalism has not gone far enough:

'Multiculturalism'... takes culture to be the relative answer to universal questions, questions to which we 'really' know the answer: your interlocutor may 'believe' the tree to be a spirit, and you may 'respect' this belief as much as you wish, but your own belief is probably not what you would consider to be a belief at all; it is what you would think of as 'knowledge'. You do not think of yourself as 'believing' it to be a tree, you know it to be so. (P. 9)

Will the psychologist who is not guilty of this charge please stand up?

The anthropologist Eduardo Viveiros de Castro writes emphatically that different societies do not see the same thing (or "world") in different ways, but rather they see ontologically "different things [or 'worlds']" (1998, p. 478). Thus the ontological turn is not a matter of changing our "perspectives" or "world views" in order to see the same world/reality differently. In this essay I argue that different ontologies not only entail different world/realities that we inhabit, but also have real consequences for our planet. For illustration, I compare the ontology of objects, privileged in science, with the ontology of subjects that allows us to see the tree as a spirit.

The Ontology of Objects and its Consequences

The ontology of objects defines reality in terms of objective knowledge about the physical world, in which everything can be reduced to objects, or machines for easy manipulation or assemblage. Needless to say, this is the ontology privileged by science. What are the consequences of this scientific ontology? I discuss some ramifications for psychology in general, and for theory of culture in particular.

The first consequence of the ontology of objects concerns theory and research in psychology. One manifestation of the objectifying gaze of science is the so called variable psychology which decomposes the phenomena into de-contextualized and disconnected variables for easy manipulation

and analysis. With the booming of data science, variable psychology should be in its glory. But ironically in the age of big data, psychology finds itself in the grips of a theory crisis.

Theory Crisis in Psychology

Theory crisis refers to the growing mechanization of the field in which psychologists become increasingly technicians of number crunching, instead of thinkers who ask critical questions about theory and practice to improve the science of psychology. As the philosopher Byung-Chul Han (2020) points out, one consequence of big data is that “*Knowledge is now produced mechanically*” (p. 81, emphasis in original). He explains: “The data-driven production of knowledge takes place without the involvement of the human subject or consciousness” (p. 81). This eliminates the need for (subjective) thinking: “Processors are faster than a human being precisely because they neither think nor understand; they only calculate” (p. 82). By eliminating subjective judgment, automatization of inference making advances the cause of objectivity, the holy grail of psychology. Ironically, however, this leads to a theory crisis in psychology.

According to Gigerenzer (2018), “the elimination of researchers’ judgment” (p. 202) in favor of automatization of inference making results in pseudo science or what he calls surrogate science. More specifically surrogate science refers to “the idol of automatic inference that does not require a judgment about the validity of the assumptions underlying each statistical test” (p. 203). Gigerenzer (2018) claims that this goes against the practice in good science in which leaders in statistics such as “Neyman and Pearson emphasized that the statistical part of inference has to be supplemented by a subjective part” (p. 203). In sum, informed subjective interpretation, rather than mechanistic, automatic inference making, of the data is the watershed between genuine and surrogate science of psychology. But subjective interpretations do not have a rightful place in the scientific ontology that privileges objectivity as the hallmark of truth.

Helicopter Research

A related issue is neutrality. Qualitative and subjective judgments of values necessarily fall outside the pale of the quantitative, objective science. In a phrase, science is value-neutral. It is along this line of scientific “neutrality” that Seligman (2002) poses the following question:

Imagine a sadomasochist who comes to savor serial killing and derives great pleasure from it. Imagine a hit man who derives enormous gratification from stalking and

slaying. Imagine a terrorist who, attached to al-Qaeda, flies a hijacked plane into the World Trade Center. Can these three people be said to have achieved the pleasant life, the good life, and the meaningful life, respectively? (p. 303, note 249)

And he answers his own question in the affirmative: “The answer is yes. I condemn their actions, of course, but on grounds independent of the theory in this book” (p. 303, note 249).

It was more than a decade ago that Sundararajan (2005) pointed out the moral vacuum in positive psychology. Since then the advancement in technology has rendered this moral vacuum in science ever so glaring. Under the auspice of objectivity and neutrality, as Han (2020) points out, “the human being itself is reduced to a data set, a variable that can be calculated and manipulated” (p. 82). From here it is only a short step for the predatory practice of strip mining in data collection to prevail in psychology.

The predatory type of data mining is referred to by the Indigenous environmental scientist Jessica Hernandez (2022) as “helicopter research” in which

... researchers from wealthy countries go to an impoverished country, conduct their research studies, and then return to their countries to analyze the data they collected and publish it, oftentimes not even including or consulting the local people of those countries. (p. 83).

She goes on to say, “researchers who conduct helicopter research are not interested in what they can offer or what the community might benefit from, as their main goal is to collect data and then publish it to advance their careers” (p. 84).

A Bare-Life Measure of Culture

The second consequence of the ontology of objects is degradation of culture. With knowledge of the physical world serving as our ticket to reality, variables pertaining to the bare life—the biological needs such as survival and reproduction—become the measure of culture and society. This does not do justice to the spiritual dimension of life which aspires to transcend the bare life. Csikszentmihalyi (1991) points out rightly:

Spiritual values, spiritual ideas, symbols, beliefs and instructions for action...point to possibilities to which our biological inheritance is not yet sensitive. The sensate deals with what is, the spiritual deals with what could be. (pp. 17–18)

The bare life measure of life also does not do justice to what Edward Sapir (1956) refers to as “genuine culture,” which is reflected in the energy set free for the pursuit of the remoter (noneconomic, nonutilitarian) ends, such as rituals, arts, and literature.

To make things worse, the moral vacuum of objective knowledge is filled by market values. A case in point is the aspirations of “the society of production, which aims at utility, performance and efficiency, and which declares bare life, survival, the continuation of a healthy life, to be an absolute value” (Han, 2020, p. 50). It is this neoliberal framework that privileges the “scientific” perception of a tree in terms of lumber over that of spirit; of wind in terms of energy over that of projection of the poet’s mood; and of humans in terms of resources over that of souls. Reiterating Heidegger’s critique of technology, Han (2020) points out that through this objectification and commodification of the world, we miss out other modes of relating to and revealing the world.

Cognitive Supremacy

The ontology that privileges objective knowledge and information as our ticket to reality tends to foster cognitive supremacy which underpins most evolutionary theories of culture. This view is well articulated by cultural theorist Patrik Lindenfors (2017) (for a critique, see Sundararajan, 2017). He claims that cultures need to pass the test of reality in order to survive. For instance, horoscopes, time travel, angels, and auras are beliefs that are just fantasies that die when meeting reality, so we are told. By contrast, “the scientific method has led to an accumulation of a mass of knowledge that is a better description of the world around us than any earlier” (p. 167), such that we become smarter than our predecessors. Lindenfors claims that a deficiency in knowledge and smartness can explain why certain cultures end up on the evolutionary scrapheap. For illustration, he gave an account of the disappearance of a small-scale society that kept losing knowledge and technology due to geographical isolation and small population size.

The Tasmanian aborigines were an isolated group between two and eight thousand in 1803, when the British came. Before they were killed off by the British, they had already forgotten how to make fire or clothes to protect themselves from cold. Having forgotten how to make fishing tools, they simply stopped eating fish— something strange for an island population, noted Lindenfors. However, even stranger than the impoverished knowledge and technology of this population, was their complete disappearance within 70 years of colonization. In fact, the Tasmanians were brutally wiped out by the British settlers. But genocide is a detail skipped by most cultural theorists, including Lindenfors. This

is understandable. After all, science is objective and value-neutral; it is concerned with nothing but the facts. And according to the doctrine of cognitive supremacy, the important facts about cultural extinction are small population size and impoverished knowledge and technology.

But this theory of cultural evolution is flawed. The fallacy of its cognitive supremacy premise is exposed by the undeniable fact that far from being outmoded and dispensable like the dinosaurs, the low tech Indigenous peoples around the world are essential to the survival of us all and our planet, as Hernandez (2022) points out that “they are able to sustain 80 percent of the world’s biodiversity despite only living within 25 percent of the land that is available globally” (p. 119).

Bringing Thinking back to Life and Research

One practical reason for the ontological turn is that it pays to take the reality of the culturally different other seriously. A case in point is the media’s impact on society. Anthropologists have been documenting for quite some time how modern technology is disruptive to the traditional values and social structure of Indigenous peoples (Theobald, 1961). This did not faze us--those societies are probably on their way to the evolutionary scrapheap anyway, so we thought. A rude awakening came with the Capitol riot, in the wake of which we begin to see a connection between mass media and the unraveling of social fabric as manifest in polarization, fake news, hate crimes, mass shooting, and so on. But how could this happen to us, the leader in technology, and a civilization at the apex of cultural evolution? But the media scholar Marshall McLuhan (2013) has warned us more than half a century ago:

Submerging natives with floods of concepts for which nothing has prepared them is the normal action of all our technology. But with electric media Western man [sic.] himself experiences exactly the same inundation as the remote native. (p. 17)

Had we taken more seriously the reality of the culturally different other, we might have been better prepared for the stiff price society has to pay for technology, imported or home grown. Beyond knowledge acquisition and problem solving, however, there is a deeper reason for the ontological turn. To take the ontological turn is to bring thinking back to life and research. Hannah Arendt (1978) draws a distinction between thinking and cognition —the former has to do with meaning making, whereas the latter, knowledge acquisition and problem solving (see also Brinkmann, 2022). Robin Holt (2020) explains that thinking engages us in the unanswerable questions of meaning “through which we

humans constitute ourselves first, as beings with a critical interest in how things are for their own sake, including ourselves, rather than in relation to other things to which they are means” (p. 587). How things are for their own sake is a question that gets to the core of the ontology of subjects.

Ontology of Subjects and its Ramifications

The ontology of subjects draws a sharp line between subject and object to make sure that the former cannot be reduced to the latter without committing a categorical error. For the subject to be subject, it is to be considered for its own sake such that the subject can never be used against its will for the purpose of something other than itself. The ontological status of the subject is marked by a special type of language use. When the self is approached as subject, its referent will shift from functional or utilitarian terms such as brains, social identity, and so on to holistic terms such as being or soul. Defying the possibility of decomposing into fragmentary variables, being and soul are terms that refer to existence that serves no other purpose than just be. When the tree is approached this way, similar terms would apply—being, soul, or spirit. When the self and the tree are approached the same way, we enter a world in which the principle of reciprocity governs all of our transactions. Hernandez (2022) explains the rules of such transactions: “We... have to ask our natural resources, both plant and animal relatives, for permission before we extract, hunt, or remove them from their environment” (p. 73). More specifically, “If something is taken, something is left in return. Given that it is a spirit we are removing, we must leave part of our spirits in its place” (p. 73).

A transactional model based on the ontology of subjects can curb the practice of strip mining of data in psychology. A case in point is the research ethics promoted by Ting and Sundararajan (2018). In conducting fieldwork on the Yi, an ethnic minority in Southwest China, the authors’ research team considered it their ethical obligation to give back to the community that provided data, by revisiting the participants multiple times to participate in their New Year celebrations after the fieldwork was complete, and to share with them the joy and pride when the book based on the research was in print.

An Indigenous approach to Global Warming

Addressing the problems of global warming has been difficult, due to both the abstract nature of its scientific explanations as well as the human tendency to focus on the here and now that limits the impact of future forecasts of environmental threats. A more effective approach to the problem may consist in shifting from the objective and physical causes of global warming to the subjective

experiences of our fellow beings, and from future forecasts to reality in the here and now. This can be accomplished by turning our attention to the accounts of global warming by Indigenous peoples, as Hernandez (2022) points out: “While climate change is often a discourse far removed to many, for Indigenous peoples our well-being and livelihoods are already being impacted because of climate change” (p. 12).

In the climate change discourse of Indigenous peoples, there is a shift from the isolatable, objective causes of things to the subjective, emotional account of global warming. Couched in terms that concern the way things are for themselves, so characteristic of thinking, “ecological grief” sums up this ontological approach to global warming. Hernandez (2022) writes, “Our first emotion when facing these impacts is ecological grief, and in the climate change discourse, emotions are oftentimes ignored or not acknowledged to the level they should be” (p. 61).

Ecological Grief

Ecological grief is a concept that stems from an embedded sense of being and existence. It goes beyond the bare life account of how our livelihoods--the objective, physical, economic reality--have been impacted by global warming. Hernandez (2022) points out that environmental scholars “only mention our livelihoods being impacted, but they fail to understand the ecological grief that is attached to our livelihoods being impacted” (p. 61). More specifically, this existential, ontological dimension of the impact of global warming is couched in relational terms: “This ecological grief is rooted in the relationships we hold with nature and our environments” (p. 58).

In the remainder of this essay, I present a tapestry of Indigenous accounts of ecological grief, based on two strands of ethnography. One strand comes from Hernandez’s (2022) studies of Indigenous peoples in Latin America; the other strand consists of excerpts (in *italics*) from interviews (Thong et al., 2022) with a hunter gatherer tribe of the Orang Asli in Malaysia. With a population estimate of 14,6412, the Orang Asli are the earliest dwellers of Peninsular Malaysia.

Deforestation

According to Hernandez (2022):

Deforestation results in the loss of plant and animal relatives and this is why when landscapes experience this clearing of trees and biodiversity to make space for large

agricultural companies, this is another way ecological grief manifests. (p. 58)

In Malaysia the international logging companies are destroying the forest, polluting the rivers, and driving the hungry elephants to the villages. This cause food insecurity when the elephants compete with humans for the crops the latter planted for food. For the Orang Asli, the damage goes far beyond the destruction of their livelihood. That deforestation is a damage inflicted on their being, soul, and spirit comes through loud and clear in a simple statement of ecological grief: *“The land was broken”* (T11).

Our heart is in the forest.

“Our heart is in the forest.. Not in the city, not in the towns.. We Orang Asli’s heart is in the forest” (T04); *“Love the forest. We love... because our ancestors they lived in the forest”* (T01); *“Our medicines are original. Like betel, we go and take it.. The plant. it grows.. we drink.. swallow. That’s what we love.. love.. love a lot...”* (T01); *“[for ceremonies]...we take leaves in the forest... Our fragrant things”* (T12); *“we love this land, it connects us.. our flowers.. which smell good.. even after wearing for a while”* (T01).

For the Orang Asli, ecological grief is manifest in grieving the forest that is no more, as well as in grieving their love that has lost its object.

Displacement

According to Hernandez (2022), “Displacement because of the loss of having our ancestral homelands near or the loss of being able to live on them is ecological grief” (p. 67). The Orang Asli can certainly identify with the experience of displacement.

“So we live in dependence. If we dig and plant, if the government wants the land for development, they move us to someplace else.They only pay compensation for the crops only” (T15); *“For us it’s like we wonder whether we really are living in Malaysia? Or are we Malaysian citizens or some other country? Where is our home?”* (T15); *“Life is uncertain... We feel we depend on the land of others.. We feel that our future and our children’s future don’t have a life”* (T04).

Hernandez (2022) writes that “Displacement impacts our Indigeneity because our identities are tied to our land and our ancestral homelands” (p. 66). The Orang Asli say the same: *“This place is indeed the*

place of my blood” (T06). Hernandez (2022) sums up by saying, “displacement impacts Indigenous peoples geographically, socially, and psychoculturally. I add that it also impacts us emotionally and spiritually because it manifests as ecological grief” (p. 67). This dense statement can be unpacked by the following narratives of the Orang Asli.

How we eat is how we live.

“How we eat is how we live. But now everything is gone” (C19). This statement is not simply about food insecurity although the latter is a pressing reality. What the Orang Asli are grieving is not just food shortage, but their traditional life style—how they eat.

“In the past we ate yams, planted yams scattered anywhere in the jungle.. all bloomed in the jungle” (C19); *“Back then it didn’t matter if we did not have money as long as our forest is there...”* (T08); *“I can find food in the forest it's all there... the forest is our supermarket. We go to the forest and we find vegetables,.. Catch fish or whatnot... we eat what we want”* (T08); *“we go to the forest. Take taro, take vegetables. Take whatnot. We return and eat. There's fish, frogs...”* (T11); *“Everyone will share the food together, we eat together, hunger together”* (T04); *“if we have the forest, we feel that we are okay with no money so long as we live in the forest”* (T08).

For the Orang Asli, losing the forest, their original habitat, is not simply a matter of losing material resources. It is tantamount to losing freedom: *“if we don't have the forests, then we don't live freely. We feel the hardship”* (T08). Losing the forest renders them dependent on the government for assistance. Thus how they eat and what they eat is not a discourse about food. Rather it is a quest for freedom and independence from the government: *“... that is what we eat, because we don't rely on the government [back then]”* (T12). Along with the life style in the forest comes a unique definition of what life is about: *“That person is happy lah! when he/she has finished eating... No need to be rich in order to have an easy life... An easy life in our thinking is spaciousness. We don't want development in order to be easy, no no... Orang Asli are not about wanting development. We think about ease.. Want to think about ease.. to feel like our lives have space, to feel... spacious”* (T04).

Suppose we were told about the diet of the Orang Asli:

We didn't eat rice... there was no rice.. We ate yams... yams from the forest.. That was our food... That was our life.. Now it is rice we eat.. Rice is very difficult.. because of the government.. if we

stayed like what we did in the past.. it would be a lot easier.. we can plant yams.. those yams.. it was all we ate.. more than that we didn't have.. that was our life.. No salt... no onions.. like this.. we ate a lot... we ate.. without oil. (T05)

We might infer that the Orang Asli would be thankful to the government for the introduction of rice, salt, and oil which must have improved their “primitive” diet in the forest. But nothing could be farther from the truth. For the cultural outsiders to understand that through the account of what and how they ate, this displaced population is grieving an enchanted world of ease and bountifulness in the forest-- nothing short of an ontological turn will do.

Summary and Conclusion

I have contextualized this essay for the Southeast Asian readers by using the data from Malaysia to show the importance and potential of IP research in that region. I made a constructive suggestion for the future development of IP by reiterating, through my treatment of the ontological turn, the ethos of decolonization (see recommended reading) that has been driving the IP movement globally ever since its inception in the seventies. To reiterate the critical thinking endemic to the IP movement will help psychology in general, and IP in particular, to shape a future practice that can make psychology as a science less mechanistic and more relevant to humans in the age of technology and the machine.

I have also contextualized my arguments for the general readers in psychology by critiquing the current model of science in mainstream psychology. In a nutshell, the ontology of objects privileged in science facilitates the acquisition of objective knowledge in the physical world, but cannot improve our understanding of the culturally different other whose lives may be shaped by ontology of subjects. I have demonstrated how ontology of subjects may fill a moral vacuum in value-neutral science, as well as give psychology better insights into the problems of advanced technology ranging from automatization to global warming.

By way of conclusion, I offer a checklist (see Table 1) to reiterate the central idea that the ontological turn rests squarely upon decolonization, without which we will not be able to hear the voice of IP. To drive home the urgency and need for the ontological turn, I urge the readers to use the checklist to find out for themselves the likelihood of the IP voice to be heard in each and every article published in the current issue of *IPP*.

| Voice of IP is likely to be heard | Indicators of Colonization (blank cells in this column) and de-colonization (shaded cells) | Voice of MP is likely to be heard |
|-----------------------------------|---|-----------------------------------|
| Yes (1) | <ul style="list-style-type: none"> Critical appraisal of MP theory and method (e.g., Ting et al., 2022). | No (0) |
| Yes (1) | <ul style="list-style-type: none"> Using local categories to challenge and interrogate MP theory and method (e.g., Sundararajan, 2015). | No (0) |
| Yes (1) | <ul style="list-style-type: none"> Investigating the ontological and epistemological underpinnings of non-WEIRD cultures (e.g., Sundararajan, 2020). | No (0) |
| No (0) | <ul style="list-style-type: none"> Uncritical application of MP theory and method to non-WEIRD populations. | Yes (-1) |
| No (0) | <ul style="list-style-type: none"> Using the yardsticks of economics and utilitarianism as the sole measure of a culture. | Yes (-1) |
| No (0) | <ul style="list-style-type: none"> Privileging problem solving over understanding in the investigation of a marginalized population. | Yes (-1) |

Table 1. For the voice of IP to be heard, de-colonization (i.e., the ontological turn) is necessary

Note. IP=indigenous psychology; MP=mainstream psychology; WEIRD= Western, educated, industrial, rich, and democratic (Henrich et al., 2010); Index of the likelihood of IP voice to be heard=summing the total scores in left and right columns (positive value means likely; 0 or negative value means not likely).

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Declarations

Funding: No specific funding was received for this work.

Potential competing interests: No potential competing interests to declare.