

Practical Ontology

Worlds in STS and Anthropology¹

Christopher Gad

IT University of Copenhagen

Casper Bruun Jensen

University of Leicester

Brit Ross Winthereik

IT University of Copenhagen

An Ambitious Question

The following considerations are written in response to a debate among Danish anthropologists concerning the ontological question—whether we inhabit multiple worlds. On the one hand, as we argue below, this is an interesting and ethnographically consequential question. On the other hand, it is also a peculiar question, since it seems impossible to answer. It appears metaphysical, an issue that can be determined neither theoretically nor empirically. Thus, our response does not aim to ‘answer’ the question ‘Do we inhabit multiple worlds?’ either negatively or in the affirmative. Instead, we argue for the importance of (ethnographically and anthropologically) living with its undecideability.

Between 1910 and 1913, Alfred North Whitehead and Bertrand Russell published *Principia Mathematica*. Based on the assumption that there is one singular mathematical world, their aspiration was to define the principles that

¹ We are grateful to Antonia C. Walford for help with editing this text and for many illuminating discussions on the issues discussed herein.

would allow the determination of all other mathematical truths. In 1931, however, Kurt Gödel famously responded with his incompleteness theorems. These stated, first, that a formal system cannot simultaneously be consistent and complete, and, second, that no system can prove its own consistency (Gödel 1962). Deploying Gödel's response in an anthropological context, we assume that the question of whether we inhabit many multiple worlds cannot be answered in general. Anthropologists, we suggest, will also have to live with the fact that the question of multiple worlds is undecidable.

This argument, of course, is not exclusively determined by Gödel's 'deconstruction' of *Principia Mathematica*. Rather, it is informed by our position within a modern science and technology studies (STS). From this vantage point, the interest of posing the ontological question is not diminished. Yet, as we see it, the central issue is not to correctly 'answer' the question. Rather, the question is important because the possible answers create conceptual and empirical obligations and requirements for anthropological inquiry. Such engagement is not determined by what can be theoretically or formally 'proven'. Indeed, as we shall see below, different consequences might follow from seemingly identical answers, just as similar consequences might be drawn from what appear to be different views. But this variability itself suggests that the question of ontological multiplicity, and perhaps specifically its undecidability, is a productive entry point for considering important similarities and differences across anthropology and STS.

Worlds? Ontologies? Essences?

The concept of the 'world' has obviously been used in varied ways throughout the (Western) history of ideas. Its historical connotations range from Leibniz's (1985) argument that we live 'in the best of all possible worlds' to Heidegger's (1996 [1938]) discussion of anthropocentrism as a precondition for the emergence of the 'age of the world picture', and the cultural relativism of Nelson Goodman's *Ways of World-Making* (1978). Closely related to the latter, the interest in the concept of 'world' within anthropology is often bound up with attempts to uncover how different cultures interpret and conceptualize reality. Clifford Geertz (1973) and Fredrik Barth (1993), for example, offered quite different analyses of worlds as culturally bound(ed) universes, but were nevertheless alike in viewing worlds as constituted by processes of cultural meaning-making. Now, it is hardly possible to doubt that we 'inhabit different worlds' in the sense that people use different symbols and conceptual systems and understand reality in quite different ways.

This has been shown ethnographically over and over. But the question raised about multiple worlds takes on a different form when considered ontologically.

In philosophy, ontology refers to the study of being, existence and ultimate reality (cf. Palacek & Risjord 2012). Considered anthropologically, however, the notion of an ontological project may appear bizarre, naïve, or impossible. In particular, it contrasts sharply with the basic premise of modern anthropology, characterized by Eduardo Viveiros de Castro as ‘Kantian’. The deeply embedded Kantianism of modern anthropology manifests in the widely shared belief that ‘we cannot know the world in itself’, but only access experiences already formed by human categories. According to Viveiros de Castro this basic premise has led anthropology to focus excessively on the conditions of its own production of knowledge: ‘The most Kantian of disciplines, anthropology is practiced as if its paramount task were to explain how it comes to know (to represent) its object’ (Viveiros de Castro 2004: 483). In this context, to claim the possibility of studying ontology rather than epistemology—the world, rather than our knowledge of it—sounds, strangely, simultaneously pre-critical (pre-Kantian) *and* postmodern.

Faced with this peculiarity, it is not surprising that Kirsten Hastrup emphasizes what she views as the regressive implications of the thesis of multiple worlds—conceived as an upshot of the ‘turn to ontology’ (Henare *et al* 2007) that has recently been proposed by certain anthropologists. For, insofar as one speaks of ontology, does this not necessarily entail the ‘return of essentialism’? Hastrup does not mince words: ‘The notion of ontologically different worlds is based on a both logically and practically untenable premise: that the human communities explored by anthropologists are discrete entities—worlds—which can and ought to be seen as singular and whole. This re-installs the cultural and cognitive essentialism, which a generation of anthropologists...worked to discredit’ (Hastrup 2012).

The concept of ontology is seen by Hastrup as fulfilling the same function as the concept of culture after Franz Boas, who pluralized culture but, in the same movement, fortified the idea that human forms of life constitute closed unities (Hastrup 1999: 79). Indeed, the question of whether ‘ontology’, as presently used in anthropology, is simply synonymous with ‘culture’, was the point of discussion in the 2008 *Group for Debates of Anthropological Theory* (Carrithers *et al* 2010). And Hastrup’s view is clearly that the two are synonymous. Ontology is ‘nothing more’ than old wine in new bottles, the cultural emperor dressed in new ontological garb.

Even so, others, including Eduardo Viveiros de Castro, have forcefully argued that ontology does point to a way forward for the anthropological project. His studies of the Amerindian Araweté led him to argue for the necessity of leaving behind an epistemological multiculturalism and replacing it with an ontological multinaturalism. According to Viveiros de Castro, not only do the Araweté understand the world in ways drastically different from that of Euro-Americans, they ‘live in another world’. In a famous example, Viveiros de Castro explains how animals in the Amazon see themselves as human. But, having different bodies, they see things differently from one another. When, for example, a jaguar sees itself as human, it sees what the Araweté see as blood as manioc beer. Viveiros de Castro suggests that taking multinaturalism seriously requires a rethinking of the modern anthropological project: it poses the question what such a project would come to look like if it ceased being multicultural and perspectival.

Below we address the stakes of multinaturalism by relating Viveiros de Castro’s argument and extend it to amodern approaches within science and technology studies (Jensen 2012). A comparison of what ontology has come to mean in these domains helps both to articulate the point and radicality of Viveiros de Castro’s ontological proposal and to indicate how this proposal, in certain ways, remains premised on an anthropocentrism, which STS, as we see it, has done more to problematize.

For now, however, we simply note that the understanding of ontology advocated by Viveiros de Castro overlaps only to a limited extent with the classical philosophical interest in uncovering the final categories of being. Rather, ontology is rendered as an ethnographic tool, pointing us towards the singular and distinct (cf. Jensen 2011). As Viveiros de Castro and followers, such as Morten Pedersen, Morten Nielsen, and Martin Holbraad, see it, the central point is to enable ethnographers to find ‘otherness’ or ‘alterity’ in their fields.

Presumably this is precisely why ontology, *qua* anthropological theory and method, ‘must’ be pluralized. At the same time it is precisely this emphasis on multiple ontologies that suggests to critics that ontologies are bounded, perhaps even radically incommensurable, wholes. Thus, the question that must be addressed is whether the ontological turn does not entail an intensified relativism as well as a form of neo-essentialism?

Incommensurable Worlds?

The ontological turn can be seen to imply a radical relativism, insofar as it relies on the idea that worlds are singular and incommensurable. Not only do worlds

seem altogether different it appears that translation is not even possible between them. This would be a form of solipsism elevated to the status of cultural principle. And this is indeed the critical interpretation made by Hastrup, who argues that anthropology needs to maintain the possibility of ‘speaking across multiple differences, without either ignoring them or ontologizing them as culture’ (Hastrup 2012). The Danish anthropologist Christian Kordt Højbjerg makes a similar criticism, arguing that the ontological turn is based on a view of the ‘world as comprised of altogether distinct cultural ways of living and thinking, which cannot be reduced to any lowest common denominator; ways of living that, he says, make up a ‘mosaic of incommensurable units’ (Højbjerg 2012).

Indeed, one might say that the situation is even worse, since ontology is defined in contrast to the anthropological privileging of culture. If Viveiros de Castro is a relativist, he is not merely a cultural relativist but a natural one. Thus, different people and animals do ‘not share a common nature’, though they do, precisely, co-inhabit a universal culture. Where does this multinatural reversal leave Western anthropologists?

Certainly, Viveiros de Castro radicalizes what it is possible to view as relative, since the issue extends from being a matter of different cultural ‘perspectives’ on one, common, underlying world, to being a question of ‘worlds as such’. In the worst-case scenario, we are thus faced not with cultural solipsism, but a kind of ‘cosmological solipsism’. But does an ontologized anthropology really entail the impossibility of speaking about relations between worlds? Are such worlds really absolutely incommensurable? As we see it, the worry that ontology leads to ‘bounded incommensurable domains’ is related to the way in which anthropological proponents of the ontological turn have presented their case. They have tended to argue, we suggest below, in such a way that ontology is relatively difficult to distinguish from culture and meaning making. In particular this is because insufficient attention has been given to practices and material agency.

Our alternative to this interpretation of ontology is inspired by science and technology studies, not least actor-network theory (e.g. Latour 1988). And, by way of preliminary characterization, we can point to the two ‘code words’ just mentioned: practice and materiality. The Belgian philosopher of science Isabelle Stengers, for decades one of the central sources of inspiration for Bruno Latour, explores what she calls ‘ecologies of practice’. This concept, she says, implies:

no practice can be defined as any other, just as no living species is like any other. Approaching a practice then means approaching it as it diverges, that is, feeling its borders, experimenting with the questions

which practitioners may accept as relevant, even if they are not their own questions (2005: 184).

Two things are worth nothing about this quote. First, the analytical level indicated by Stengers is precisely practice. Second, her demand for the study of ecologies of practice resonates with the ontological turn, because it requires that no practice can be defined externally, but has to be specified ‘from within’, through its own specific mode of divergence. In other words, any practice must be studied with a view to the processes through which it is differentiated from other practices, and also its ongoing process of transforming itself.

The second code word, materiality, is closely related to the concept of practice. The question of materiality, in and for practice, has been central to actor-network theory, which is famous for its ‘general symmetry’ (Latour 1993), obliging the researcher to take seriously that *anything* (humans, but also ‘natural objects’ or technologies) is potentially an agent. (To short-circuit a conventional objection this does not mean that everything always *has* agency, but that everything may always acquire it.) Such ‘acting materialities’ constitute what can be called practical ontology (Jensen 2010: 1–19).

Before specifying the implications of this concept, in order to indicate what is lost when practice and materiality is insufficiently recognized, we return to the ontological turn in anthropology.

Worlds That Cannot Be Articulated

The Danish anthropologist Christian Kordt Højbjerg has argued that the ontological turn leads to senselessness. He describes situations from the extreme violence of the civil war in Sierra Leone, noting that: ‘the young men who committed this violence have only rarely been able to, or willing to, explain or justify their bestial actions as meaningful for a larger cause’ (2012). ‘In the absence of indigenous explanations’, when not even the local population is able to relate to their own actions, he argues, the analytical modus of the ontological turn is rendered impossible. The senselessness identified by Højbjerg, then, is an intellectual senselessness conditioned by an ethnographic situation, in which the informants are incapable of endowing their own actions with verbal meaning. If the ontological turn is obliged to describe the realities of informants, but these are senseless even to themselves, the consequence is that the ontological turn appears equally absurd as an intellectual program.

As will be clear, we do not think Højbjerg’s diagnosis is correct. Yet, it is worth dwelling on it, since it points to certain ambiguities in anthropological

ontology. Here we can refer to arguments made by Morten Nielsen. Nielsen refers to a conversation with an African witchdoctor, who, when asked whether he thought that we live in multiple worlds was told that: 'we live in the worlds our ancestors let us see'. This statement is used in an argument that explicitly relates the thesis of multiple worlds to a focus on 'alterity'. Closely following *Thinking Through Things* (Henare *et al* 2007), Nielsen wishes to free anthropology from culturalist forms of analysis that render alterity as a 'function of representation, rather than of the world as such.' The critique of culturalism is thus shared with Hastrup, but Nielsen argues that the 'solution' is precisely to turn to ontology. By focusing on the 'the world as such', anthropology will be able to leave its cultural iron cage. This project, states Nielsen, entails a 'radical essentialism', whereby 'local phenomena', 'so to speak dictate their own analyses'.

We are not so sure whether these phenomena in fact do dictate their own analyses. Nielsen himself seems more than a bit ambivalent when he refers to studies that emphasize 'controlled misunderstandings' (presumably from Viveiros de Castro 2004a, who speaks of 'controlled equivocations') in the meetings between different worlds. For surely controlled misunderstanding and unequivocal 'dictation' are rather different intellectual operations.

Yet, taking the suggestion seriously we might ponder the meaning of radical essentialism. In fact, if we take Nielsen's use of the witch doctor's statement at face value, Højbjerg's critique seems to have a point. After all, it is the witch doctor that determines, if not the analysis, then at least its starting point. So what would happen if the witch doctor, like the young men from Sierra Leone, had nothing to say? How then would one access his 'world as such'?

At this point it appears that proponents and critics interpret the thesis of multiple worlds in similar ways. Specifically, Højbjerg and Nielsen seem to agree that the central access point for an 'ontological level' is the discourse of informants. Insofar as informants are unable to characterize the world, their actions or motivations, it would seem that the anthropologist is confronted with an almost insurmountable problem.

The curious thing about this agreement is that it makes ontology sound quite epistemological and cultural. Perhaps Hastrup is on to *something*, when she claims that ontology simply re-essentializes culture. For whatever terminology we may use to describe the analytical modus advocated by Nielsen, the entry point seems to be discursive classification. We may, of course, choose to call this ontology, but it does not sound *worlds apart* from Marshall Sahlins: 'we have to do with cultural categories, abstract but fundamental conceptions, represented in persons' (1985: 93).

Morten Pedersen offers another kind of answer to Højbjerg's ethical critique. Paradoxically, however, it works by *de facto* suspension of the insistence by him and Nielsen (and *Thinking Through Things*) that local phenomena both can and must dictate their own analyses. Attempting to tackle a 'hard case,' Pedersen argues that ontological analysis enables anthropologist to take 'neo-fascists' even more seriously than they do themselves, while not for that matter abdicating a responsible anthropological ethics. His solution is to sharply distinguish between what is obliged by the ontological turn and 'going native.' Thus, Pedersen emphasizes that the study of neo-fascism can never result in a 'perverted replication of their extremist outpourings' in the 'holy name of tolerance'. Rather, ontological analysis will 'attempt to destabilize the conceptual foundation for such (and other) extremist essentialisms; only, such destabilization will not take the form of a critical deconstruction of such concepts, but rather of a kind of strategic "chipping" at them, with the purpose of making them irreversibly overflow their own foundation and thus implication' (Pedersen 2012).

However, the implications of this argument are themselves more than a bit fluid. Not least perplexing is the question of how, precisely, one distinguishes between problematic critical deconstructions and acceptable 'strategic "chippings"'. In any case, and regardless of such distinctions, it is obvious that we are miles from the idea that ontologies 'themselves' dictate their analysis.

Now from our amodern position, the ambition is neither to undermine the idea of an ontological turn, nor to diminish an interest in indigenous concepts. But we argue that the anthropological interpretation of ontology becomes problematic when, in spite of its stated ambitions, it remains predominantly epistemological and culturalist, and thus disinclined to deal seriously with practice and materiality.

The premises of the ontological turn are made particularly explicit in the introduction to *Thinking Through Things*, which, as indicated by the title, is emphatic about the importance of things. Aside from the introduction, however, the volume generally offers a picture of ontology in which 'thinking' is primary, while things, when they are presented, are exhibited in the form of more or less *passive media, through which* thinking unfolds.

Below we discuss some consequences of this passivity; a discussion that also allows us to offer an answer to Højbjerg's ethical dilemma. We further indicate that an increasing interest in practice and materiality does not entail a *diminished* interest in the concepts and categories of informants. These categories are simply not seen as the only possible access points to the worlds of informants.

Epistemologizing Ontology—Ontologizing Epistemology

It is noteworthy that arguments made both for and against the multiple worlds thesis draw on work done by various STS scholars: for example, Helen Verran, Annemarie Mol, and Bruno Latour. Nevertheless the ontological turn ‘in STS’ (including these thinkers) contrasts in important ways with the one in anthropology. Previously, we indicated that the ontological level identified by the proponents of many worlds is accessed via concepts and ideas. We might refer to this as an epistemologization of ontology.

Marshall Sahlins refers to a long tradition from Kant to Boas and Whorf, which has taught anthropology that:

the experience of human subjects, especially as communicated in discourse, involves an appropriation of events in the terms of *a priori* concepts. Reference to the world is an act of classification [...] We know the world as logical instances of cultural classes (Sahlins 1985: 145–6).

This Kantian baggage, also pinpointed by Viveiros de Castro, seems retained in the anthropological variant of the ontological turn, insofar as ontologies are primarily decoded through language. In contrast, the ontological turn in STS makes the reverse move: it ontologizes epistemology.

First of all this somewhat peculiar phrase indicates that, for researchers like Mol and Latour, action is primary. This renders ontology dynamic and variable. Thus, practical ontology does not assume that there are ultimate categories of being below, or abstract metaphysical principles *above*, world(s). Moreover, more than representing worlds is at stake when people and things act (and *thinking*, too, is an act). In effect, these actors are engaged in *constituting worlds*, and world-constituting, ontological, processes can therefore be studied ethnographically.

We continuously encounter ethnographic situations in which realities are practically and materially (not simply ‘socially’ or ‘discursively’) constructed by a *multiplicity of things*. Insofar as cultural meaning making is not prioritized *above everything else*, but is rather seen as located *among everything else*, the ontological turn in STS obliges us to pay attention to the *role of materialities* in enacting practical ontologies (Pickering 1995). This is the premise based on which John Bowers, following Donna Haraway (1991), extended an invitation to take the cyborg seriously as both analytical and empirical figure (Bowers 1992: 257). And one central aspect of the cyborg figure is precisely that everything, from metaphysical concepts to coffee makers, insofar as they act and thus exist, are relational, semiotic and material entities—all at once.

What are the analytical implications of accepting an invitation to the cyborg? Bowers argues that it entails a suspension of any *a priori* distinction

between the political and the technological. This entails that the object of study is invariably a composite of people and artifacts (Bowers 1992: 258), which, in conjunction, creates forms of politics. We are thus in the realm of *ontological politics* (Mol 1999). In this realm, the dynamic relations between people and materialities create emergent worlds, giving rise to new forms of politics, technology, and cosmology in continuously unfolding processes. This is why Hastrup's argument that the ontological turn places 'indigenous people' in a 'cultural straitjacket' (2012) is mistaken; her doubts about whether ontology is capable of thinking about change and transformation misplaced. The understanding of such transformations is at the very center of practical ontology.

Furthermore, practical ontology offers a vantage point from which to consider the fraught issue of incommensurability between worlds (Smith 1997). Nothing allows us to claim, in principle, that worlds are either commensurable or incommensurable. There may well be worlds that are mutually incompatible, whereas others can be compared or related with little problem. Indeed, many worlds *are* continuously related and compared. If contemporary Araweté people occasionally fly by airplane and cruise in motorboats, they are now effectively linked with Western networks and technologies in ways that change their modes of existence, regardless of the extent to which these experiences affect their mythical or cosmological universe (Gow 2001: 51–2, 80). The point is thus that incommensurability is neither an epistemological, cultural or cosmological question, but rather a question of practical ontology and ontological politics.

These observations can further be linked to the previously mentioned notion of radical essentialism. In *Thinking Through Things*, this idea denotes an approach that views 'meaning and thing as an identity' (Henare *et al* 2007: 3). But as we have mentioned, what is often relatively neglected is precisely the things, which, for example, are not active ingredients in the ontology manifested in the statements made by Nielsen's witchdoctor informant.

In any case, practical ontology implies no essentialism, radical or otherwise. Since the starting point is that ontologies emerge due to action and practice, transformation is implied in its very definition. With a Deleuzian inspiration (1994) it may be possible to argue that the essence of things is precisely their changeability. Yet, rather than strengthening the neo-essentialist case, this suggestion counteracts it. For after all, the rhetorical and argumentative force of essentialism lies precisely in its claim to be able to identify what is *unchanged*. This is also why Stengers emphasizes that the study of ecologies of practice never aims simply to describe any practice 'as it is', but rather to describe it as it 'may become'. Such description involves 'the

construction of new ‘practical identities’ for practices, that is, new possibilities for them to be present’ (Stengers 2005: 186) through experimentation with questions which are precisely not dictated by practice itself, but might *nevertheless* be accepted as relevant by informants.

It is quite likely that both proponents and critics of the ontological turn in anthropology will object to practical ontology as we have here outlined it. While, in all likelihood, a focus on practice and materiality will be seen as acceptable, such a focus is also likely to be perceived as working against the ambition of taking informants own conceptualizations sufficiently serious (see, e.g., Holbraad’s (2004) criticism of Latour). Everything, it may seem, becomes materiality, while meaning vanishes. Practical ontology, however, does not require the anthropologist to ignore the statements of the witchdoctor: the central point is that such statements are simply seen as parts of a heterogeneous practical ontology, situated *among many other parts*. This is the meaning of the perhaps rather counter-intuitive notion of ontologizing epistemology. We see concepts and epistemologies as some of the elements that, in conjunction with many other things, create world(s). Epistemologies, ideas, and concepts, too, are ontological building-blocks.

Dictating Analysis

While the cosmological ‘ethno-theories’ expressed by witchdoctors or scientists will always be important ingredients in an ontological analysis, it does not follow that any specific practical ontology is most adequately, not to say *uniquely* characterized by such expressions. In all fairness, neither is this claimed in *Thinking Through Things*. Yet, insofar as the ontological project claims to be about uncovering the identity between thing and meaning, this raises the question of whose meaning we are looking for. This issue crops up, for example, in Pedersen’s (2007) chapter, which begins with a discussion of Mongolian shamans, but ends up focusing almost exclusively on anthropological conceptualization.

Of course, it is hard to disagree with an ontological project, like Pedersen’s, which aims to take both ethnography and anthropological theory seriously. But as the argument unfolds, it seems that considerably more is at stake. Specifically, the claim is that ontology enables the anthropologist not only to take the world seriously, but to take ethnography ‘more seriously’ than other anthropologists (not to mention other social scientists). This added seriousness is directly related to the idea of ‘self-dictation’, which, as noted, requires the suspension of extant explanatory concepts and theories. Even if Pedersen (2012)

says that anthropologists have always taken their objects seriously, the implications is that an *intensified* seriousness is attainable via ontology.

Here is it possible to talk about a form of ‘strategic essentialism’ (Landry & Maclean 1996: 214). In contrast with the feminist writings of Gayatri Spivak, however, who used this term to describe the mobilization of positivist arguments *against positivism*, the notion of radical essentialism seems mainly to hold currency as a strategic provocation against interpretive anthropology. And yet the question remains: how, can such an intensified seriousness be concretely demonstrated? Here we find another marked difference from practical ontology.

We can return once again to Nielsen’s example, which nicely illustrates how to do serious ethnography: one listens carefully to what informants tell. Still, the shamanic cloak or the pebbles held by the witchdoctor do not speak alone, and thus their carriers come to speak on their behalf. If these human owners speak too loudly and the things are too quiet, we end up with an ontological turn that sounds conspicuously like cultural analysis. It may even turn out to have a psychological orientation, as when Pedersen argues that the Christian conversion of a Mongolian women meant that many of her previous relations disappeared, allowing him to then rediscover these same relations ‘virtually’ (through which ethnographic mode of inquiry, we wonder), in ‘the inner existential expanse of the Christian individual’ (Pedersen 2012a: 21). Or, similarly, when he defends the thesis of multiple worlds by emphasizing that the worlds inhabited by the aforementioned witchdoctor in Mozambique and a Danish mailman are not, *par tout*, more different, than of a group of debating Danish anthropologists.

It is possible that our ‘existential expanses’ are in principle equally ‘alter’ to one another. Yet, from the point of view of practical ontology it is more plausible to argue that Danish anthropologists share considerably more ontological baggage with one another than do an African witchdoctor with a Danish mailman. For the sake of argument we might assume that the Danish anthropologists (and the mailman) inhabit worlds consisting of things that include, for example, identity cards, publically funded infrastructure, functioning educational institutions, bicycle lanes, package tourism and pickled herring. And though each person may each conceptualize these ‘shared’ things differently, their orientations toward the world will have been shaped by these surrounding material-semiotic constellations.

We are not implying that the ontological turn in anthropology is facing an insurmountable problem. Henare *et al*, for example, are emphatic that the different worlds found ‘through things’ cannot be reduced to mental operations or discourse. Anthropological analysis, they say, has but little to do with ‘trying to

determine how other people think about the world' (2007: 15); indeed, this is why it must lead to the question of 'how 'we' must think in order to conceive the world the way they do' (15). Since everyone thinks 'through' things, this places on anthropologists the obligation to also think through things to understand what people think.

But what if *things do things to people and things*, quite independently of whether people think about it or not? What if we need to complement Austin's (1975) point that it is possible to *do things with words*, with the observation that it is also possible to do words with things (Latour 1991), or even to do persons, or other things, with things?

The Conceptual and the Empirical

The promotion of the ontological turn has not least been based on the argument that if one takes local phenomena more than usually seriously, then one is also enabled to be more conceptually innovative. The project, accordingly, is not only about how deal with people, but as much about thereby being helped to create 'a plethora of new concepts' (Henare *et al* 2007: 23), to 'generate a multiplicity of theories' (7).

This argument can be turned against other anthropologists as well social scientists in general. Pedersen, for instance, has written about 'the sociological fetish of connectivity' (2012a: 17), a fetish, he views as characteristic of actor-network theory among others. In *Thinking Through Things*, Henare *et al* likewise stress the differences between their project and the work of Latour who, rather than developing the aforementioned 'multiplicity of theories', is said to postulate a meta-theory. Bluntly stated, the critique is that actor-network theory is empirically deficient, yet still suffers from illusions of theoretical grandeur.

Even so, there are considerable commonalities between the ontological projects in anthropology and in STS. Indeed, it is not unlikely that the apparently strongly felt need to distance the former project from actor-network theory is due, precisely, to these similarities. Recall, for example, that the starting point for much science and technology studies was the suspension of the idea that science has 'privileged' access to the world 'as it really is'. In conjunction with the early laboratory studies (e.g. Knorr Cetina 1981), Latour and others began addressing the following question: if science, studied empirically, seems to have no access either to an absolutely objective, or rationally founded, truth about nature, what happens to the nature–culture dualism on which so much of Western social science is based? Clearly, it would have to be rethought fundamentally. One result of that rethinking is precisely

what we here refer to as practical ontology. This project cannot assume a purely theoretical vantage point on the world, just as it cannot attempt to ground its view on cultural representation. How, then, can the world be characterized? What are its elements? And how do they relate? All of these fundamental questions have been inspirational for the anthropological turn to ontology.

Is there, then, no substance to the anthropological critique of actor-network theory? It is certainly the case that Latour's (1987) *Science in Action*, read with a good dose of antipathy, might exemplify the sociological obsession with 'connections'. Yet it requires considerable exertion to carry through this interpretation, while failing to notice that the central point of ANT analyses is not simply that everything can be seen as actor-networks. If the vocabulary of actor-network theory is so general as to be almost empty, this is precisely because it guides the researcher towards recognizing, appreciating, and re-describing specific actions and relations.

Also, in contrast to what is implied by the critique of the 'sociological fetish', a modern STS is void of general normativity. In particular, neither actor-network theory nor practical ontology assumes that connections are inherently 'good'. Correctly stated, what these approaches do assume is nothing more or less than that relations and actors are 'mutually defined'. What those reciprocal definitions are cannot be known prior to empirical inquiry. Characterizing these relations entails conceptualization, which means that the empirical does not, and cannot, 'dictate' anything. To depict actor-network theory as a meta-theory is thus quite an astonishing misreading (Gad & Jensen 2010).

It is particularly instructive that Pedersen (2012) ends his discussion of post-relational anthropology by observing that if the relational turn were to be fully embraced and turned into anthropological common sense, the need for anthropologists to continuously talk about relations would be obviated. For in a sense this is precisely the situation in which practical ontology already finds itself. Since actors have always been assumed to be heterogeneous and capable of relating in radically different ways, it is no longer interesting to argue that point.

We might say with Bill Maurer (2006) that practical ontology obliges anthropologists to simultaneously describe and invent lateral relations between ethnographic observation, indigenous interpretation, and conceptual resources not found in the field. Perhaps the best example from classical ANT is Latour's study (1996) of the experimental train, Aramis, where the thing is given much room for expression, yet in no way can be said to talk 'by itself'. Here the question of who is the enunciator is, indeed, simultaneously 'controlled' and 'equivocal' (Viveiros de Castro 2004a).

One key contrast between ontology in its current anthropological and STS guises is thus that while anthropology's ontological proponents insist on their ability to let phenomena dictate their own analyses, this requirement seems both impossible and irrelevant from the point of view of STS-inspired practical ontology. Even as the latter retains the ambition to study phenomena as more than cultural representations, it dispenses with the impossible requirement to have things speak for themselves. If, therefore, practical ontology retains an obligation to 'save the phenomena', as Stengers (2008: 38) argues, this will have to be done 'in an openly artificial manner' (see also Jensen 2012a).

But how does this go together with an anthropological ethics?

Ontological Ethics

As mentioned, Højbjerg argued for the senselessness of the ontological turn, with reference to violence in Sierra Leone that remains unconceptualized even by those who commit it. From the point of view of practical ontology, we may note that this senselessness has clearly not prevented action. An ontological characterization of the situation would thus aim to articulate the combined set of relations that has produced this extreme situation. While we are obviously not experts in Sierra Leone's civil war, it is possible to surmise that such relations would involve a set of rather wildly heterogeneous actors, social groups, institutions, infrastructures, cosmologies, forms of kinship, economic issues, religious attachments, and technologies, including those used to commit the violence. The guiding question for practical ontology is how this complex set of relations has coalesced in order to produce the 'virtual' space of possibility for extreme violence, as well as its subsequent actualization.

Such an analysis would aim to show how these specific compositions of relations and actions have created a world in which certain kinds of previously unthinkable actions can routinely occur. It is not an insurmountable problem for this kind of ontological analysis that some of the central human actors remain silent, for the ontology is located neither in language nor in culture. Instead, it is *distributed* across the heterogeneous elements that make up the situation. This is why no actor has privileged access to ontology, even to his, her, or its own.

As this goes to show, the ontological turn is far from meaningless. Insofar as violence in Sierra Leone 'is' senseless, however, we can suggest that practical ontology facilitates the study even of *ontologies that produce senselessness*. Within this ontology, the silence of the young perpetrators may indeed be telling.

Among other things, it is telling of the fact that the ethnographer always remains co-responsible for what any actor gets to say.

What kind of ethics, then, does practical ontology imply? Clearly it is not a critical or normative approach; one that would take as its task to judge phenomena, people or political structures. Pedersen has referred to the ontological turn as non-skeptical. As a complementary suggestion we might offer Isabelle Stengers' notion 'a-critical'. A-critical is not synonymous with uncritical since, as we have argued, the researcher is invariably a co-producer of practical ontologies—a situation which means that neutrality is 'ontologically impossible'. Nevertheless, an a-critical stance entails a principled rejection of a traditional critical project that uses (Western) theoretical resources (such as moral philosophy) to judge, undermine or ratify the ontologies. As Stengers (2008) emphasizes, there is absolutely nothing (that is, no theoretical or ethical vocabulary) that has the power to determine what a phenomenon means, or should mean, to others.

Stengers referred to Leibniz, who defined *dic cur hic*, 'say why you are here' or 'say why you choose to say this', as his only ethical measure. This 'relativist' standpoint (defined by one of the major rationalists!) can be extended into practical ontology. Because we have no possibility of letting 'the field' dictate its own analysis, we are unable to avoid inventing it (Jensen 2012a, Jensen & Winthereik 2013). In this situation, *dic cur hic*, becomes a very strong obligation because there is nothing to hide behind. As Stengers puts it: 'Tell why you choose to say, or do, "this", on "this" precise occasion' and do so without protection from any 'general justifications that would block pragmatic imagination' (Stengers 2008: 29).

Practical ontology makes explicit that the existence of one or many worlds will be the effect of interactions between innumerable heterogeneous actors that either create unity, multiplicity, or something yet different. In this sense it is defined against the Kantianism that is said by Viveiros de Castro to 'possess' anthropology. Yet the 'kind' of break effectuated by anthropological and practical ontology is different.

When the ontological turn is defined by a requirement of radical essentialism, the aspiration is to put Kantianism within parentheses, if not actually to 'reach' things in themselves. According to this position, Kant was right that there are things in themselves, but wrong in assuming them inaccessible. By contrast, Kantianism is rejected by practical ontology based on the view that no thing exists in itself. This is not because they are defined by the hard-wired categories of the human mind but because all things are defined by their relations

with other things. From this position, the Kantian error was the initial positing of things in themselves. However, that obviously means he was right in arguing that things cannot be accessed as such, since the as such does not exist. For practical ontology the situation is thus neither post- nor pre-Kantian, but rather amodern and a-Kantian. This point extends to ethnographic practice, where description and analysis are also performative efforts to articulate and change worlds.

For practical ontology it is not *impossible* that there is only a single world. For that to be the case, however, it would necessarily have been produced by a stupendous work of co-ordination and stabilization, tying together the innumerable actors that inhabit it. Various ongoing and ‘heroic’ efforts to produce such a single world can indeed be located, in places like political forums, global enterprises, and also, sometimes, amidst social scientists.

In light of countless studies of differences in technology, kinship, economies, cosmologies, religions, and other forms of knowledge, however, we think it quite unlikely that everyone will ever reach agreement about what makes up the world. Indeed, even the capacity for making micro-worlds with quite limited reach must be seen as a significant accomplishment (Mol 2002: 55).

This is why anthropology must proceed *as if* there are many worlds. Studies of practical ontology can only move forward on the hypothesis that there are many worlds. Rather than making a choice between ‘multi-culture’ and ‘multi-nature’, such studies thrive on the exploration of never-finally-closed nature-cultures; the crystallization of specific ontological formations out of infinitely varied elements. Aiming to describe and conceptualize such formations, the ethnographer also, invariably, participates in their reinvention.

References

- Austin, J. L. 1975. *How to do things with words*. Oxford: Oxford University Press.
- Barth, F. 1993. *Balinese worlds*. Chicago, IL: Chicago University Press.
- Bowers, J. 1992. The politics of formalism. In *Contexts of computer-mediated communication* (ed.) M. Lea, 232–61. New York: Harvester/Wheatsheaf.
- Carrithers, M., M. Candea, K. Sykes, M. Holbraad & S. Venkatesan. 2010. Ontology is just another word for culture: motion tabled at the 2008 meeting of the group for debates in anthropological theory, University of Manchester. *Critique of Anthropology* **30: 2**, 152–200.
- Deleuze, G. 1994. *Difference and repetition*. New York: Columbia University Press.
- Gad, C. & C. B. Jensen. 2010. On the consequences of post-ANT. *Science, Technology and Human Values* **35: 1**, 55–80.

- Geertz, C. 1973. *The Interpretation of cultures: selected essays*. New York: Basic Books.
- Goodman, N. 1978. *Ways of world-making*. Indianapolis, IN: Hackett.
- Gow, P. 2001. *An Amazonian myth and its history*. Oxford: Clarendon Press.
- Gödel, K. 1962. *On formally undecidable propositions of Principia Mathematica and related systems*. New York: Basic Books.
- Haraway, D. J. 1991 *Simians, cyborgs and women: the reinvention of nature*. New York: Routledge.
- Hastrup, K. 1999. *Viljen til viden, en humanistisk grundbog*. København: Gyldendal.
- 2012. Vi bebor mangfoldige verdener—eller?. *Tidsskriftet Antropologi* **67**, 41–7.
- Heidegger, M. 1996. *Verdensbilledets tid*. Aarhus: institut for idehistorie, Aarhus University.
- Henare, A., S. Wastell & M. Holbraad (eds). 2007. *Thinking through things: theorising artefacts ethnographically*. Milton Park & New York, Routledge.
- Holbraad, M. 2004. Response to Bruno Latour's 'Thou shall not freeze-frame'. (<http://nansi.abaetenet.net/abaetextos/response-to-bruno-latours-thou-shall-not-freeze-frame-martin-holbraad>.)
- Højbjerg, C. K. 2012. Den 'ontologiske vending' utilstrækkelighed. *Tidsskriftet Antropologi* **67**, 29–35.
- Jensen, C. B. 2010. *Ontologies for developing things: building health care futures through technology*. Rotterdam: Sense Publishers.
- 2011. Introduction: contexts for a comparative relativism. *Common Knowledge* (special issue: *Comparative Relativism: Symposium on an Impossibility*) **17: 1**, 1–13.
- 2012. Anthropology as a following science: humanity and sociality in continuous variation. *NatureCulture* **1: 1**, 1–24. (http://natureculture.sakura.ne.jp/PDF-00-the_Human_and_the_Social.html.)
- 2012a. Motion: The task of anthropology is to invent relations. *Critique of Anthropology* **32: 1**, 47–53.
- Jensen, C. B. & B. R. Winthereik. 2013. *Monitoring movements: recursive partnerships and aid infrastructures*. Cambridge, MA: MIT Press.
- Knorr Cetina, K. 1994. Laboratory studies—the cultural approach to the study of science. In *Handbook of science and technology studies* (eds) S. Jasanoff, G. E. Markle, J. C. Petersen & T. Pinch, 140–66. London: SAGE Publications.
- Landry, D. & G. Maclean (eds). 1996. *The Spivak reader*. London: Routledge.
- Latour, B. 1987. *Science in action: how to follow scientists and engineers through society*. Cambridge, MA: Harvard University Press.

- 1988. Irreductions. In *The Pasteurization of France*, 152–238. Cambridge, MA: Harvard University Press.
- 1993. *We have never been modern*. New York: Harvester-Wheatsheaf.
- 1996. *Aramis, or the love of technology*. Cambridge, MA: Harvard University Press.
- 2001. The Berlin key, or, how to do things with words. In *Matter, Materiality and Modern Culture* (ed.) P. M. Graves-Brown, 10–21, London: Routledge.
- Leibniz, G. W. 1985. *Theodicy: essays on the goodness of God, the freedom of man, and the origin of evil*. Chicago & La Salle, IL: Open Court.
- Maurer, B. 2005. *Mutual life, limited Islamic banking, alternative currencies, lateral reason*. Princeton, NJ: Princeton University Press.
- Mol, A. 1999. Ontological politics. A word and some questions. In *Actor network theory and after* (eds) J. Law and J. Hassard, 74–90, Oxford: Blackwell Publishers.
- 2002. *The body multiple: ontology in medical practice*. Duke University Press.
- Nielsen, M. 2012. Vi bebor mangfoldige verdener. *Tidsskriftet Antropologi* **67**, 23–9.
- Palecek, M. & M. Risjord. 2012. Relativism and the ontological turn within anthropology. *Philosophy of the Social Sciences* **43:1**, 3–23.
- Pedersen, M. 2007. Talismans of thought: shamanist ontologies and extended cognition in northern Mongolia. In *Thinking through things: Theorising artefacts ethnographically* (eds) A. Henare, S. Wastell & M. Holbraad, 141–67, Milton Park & New York: Routledge.
- 2012. Vi bebor mangfoldige verdener. *Tidsskriftet Antropologi* **67**, 35–41.
- 2012a. The task of anthropology is to invent relations: proposing the motion. *Critique of Anthropology* **32: 1**, 59–65.
- Pickering, A. 1995. *The mangle of practice: time, agency and science*, Chicago, IL, Chicago University Press.
- Sahlins, M. 1985. *Islands of history*. Chicago, IL & London: University of Chicago Press.
- Smith, B. H. 1997. *Belief and resistance: dynamics of contemporary intellectual controversy*, Cambridge, MS, Harvard University Press.
- Stengers, I. 2005. Introductory notes on an ecology of practices. *Cultural Studies Review* **11: 1**, 184–96.
- 2008. Thinking with Deleuze and Whitehead: a double test. In *Deleuze, Whitehead, Bergson: rhizomatic connections* (ed.) K. Robinson, 28–45, London: Palgrave MacMillan.
- Viveiros de Castro, E. 2004. Exchanging perspectives: the transformation of objects into subjects in Amerindian ontologies. *Common Knowledge* **10: 3**, 463–84.

——— 2004a. Perspectival anthropology and the method of controlled equivocation. *Tipiti* **2: 1**, 3–22.

Whitehead, A. N. & B. Russell. 1910–1913. *Principia Mathematica* Vol. 1–3, Cambridge, Cambridge University Press.