Matti Kamppinen and Antti Revonsuo

RELATIVISM AND COGNITIVISM

Synopsis

Part I discusses the old problem of relativism from the fresh viewpoint provided by cognitivism. First, the versions of relativism are listed, and their interrelations are studied. Then the particular problem of cultural relativism is presented as well as the various reactions it has generated. Cognitivism is argued to differ significantly from the other reactions.

Part II probes the question whether we are cognitively closed from the truth. It has been claimed that our own cognitive machinery restricts our access to the true and complete account of the world: we are cognitively closed from some aspects of reality. This means that neither our own, human type of mind, nor any other can ever have a complete, absolute access to the world. We are peering at reality from our special kind of cognitive peephole, but to claim that we can see further and better than those who are occupying different holes, is just to be anthropocentric. However, the implications of cognitive closure with respect to relativism have not been investigated previously. We will introduce "ultimate relativism," according to which we are forever caught in a prison of cognitive diversity. We can never have a common measure for incompatible and imperfect cognitive perspectives, which makes it a version of relativism, and we can never escape from our cognitive prison, which makes it, unfortunately, ultimate.

Part I: Can Cognitivism Exorcise the Ghost of Cultural Relativism?

The common problem that unites different versions of relativism is the following: there appear to exist mutually incompatible entities (beliefs, values, practices, moral codes, theories, etc.), for which we do not have a common measure. The versions of relativism differ from each other in telling us what the entities are and how they are incompatible. At first sight, we have the following varietes:
— descriptive cognitive relativism
— normative cognitive relativism
— descriptive ethical relativism
— normative ethical relativism
— ontological relativism
— axiological relativism
and as an eclectic mixture, we have:
— cultural relativism

Descriptive cognitive relativism consists of the factual claim that there are apparently incompatible beliefs about the world. The apparent incompatibility means that they cannot all be true, if there exists one reality. Anthropological literature is full of examples of this brand of relativism, and there are no good grounds for doubting it: it is an empirical fact. Descriptive cognitive relativism is the fundamental form of the many versions of relativism in the sense that the others can be seen more or less as its derivatives. In anthropology the empirical fact of descriptive cognitive relativism is the starting point of research.

There are weaker and stronger versions of descriptive cognitive relativism. The weakest version claims that there are incompatible beliefs only, but that the grounds and rules of reasoning are universal. For example, the belief documented among the Mestizos of the Peruvian Amazon concerning the causal relationships between envy, witchcraft and sharp pain is apparently incompatible with the explanation we are willing to provide in the case of bodily pain, but the methods of belief-formation are similar in both cultures. Both refer to medical authorities in explaining the symptoms, and assess the credibility of the authority on the basis of its consistency, etc. The stronger versions propose that the incompatibility goes deeper than that: the rules of reason and even the meta-standards of rationality can be different in distinct cultures.

Normative cognitive relativism claims that there are no reasonable or definitive grounds for deciding between different beliefs. Therefore we should not pass a judgement concerning the apparently incompatible beliefs. The different views make equal claims about the world, so be it. This version is also included in cultural relativism, as we shall see in a while.

Descriptive ethical relativism is another empirical claim; it holds that there are apparently incompatible moral attitudes or valuations among the human beings. As the times and places change, so change the views concerning the good and the right. The

apparent incompatibility here means that the respective valuations cannot be all satisfied in the same possible world.

Normative ethical relativism proposes, analogously with its cognitive counterpart, the conclusion that there are no good or sufficient grounds for putting the apparently incompatible valuations in order. Since we are without sufficient premises, we should not tell which of the multiple valuations are better than some others.

Ontological relativism is the metaphysical conclusion that can be drawn from the fact of descriptive cognitive relativism. It holds that the apparently incompatible beliefs are grounded upon a multitude of incompatible realities. In other words, the incompatible beliefs are about different worlds. Ontological relativism can be used to ground the other versions of relativism, but from the viewpoint of empirical science, it is far more far-fetched than descriptive cognitive relativism.

Axiological relativism is the metaphysical conclusion drawn from descriptive ethical relativism. It claims, to put it shortly, that there are multiple, mutually incompatible values out there, and the fact of apparently incompatible valuations can be understood against this background. The credibility of axiological relativism is on equal footing with that of ontological relativism.

Descriptive cognitive relativism can be seen as the most fundamental version of relativism, since ethical relativism can be at least partially reduced to the cognitive one, and the ontological as well as the axiological conclusions can be treated as conclusions drawn from descriptive cognitive relativism.

Cultural relativism and its limits

Descriptive relativism (both cognitive and ethical) can be characterized as claiming that the diversity and apparent incompatibility of beliefs is a fact. Normative relativism holds that we should not try to get rid of this incompatibility. Cultural relativism is a mixture of these two positions, and for that very rea-

son there is something wrong with it. We will substantiate the claim with an argument that consists of eight premises and a conclusion:

(1) Descriptive cognitive relativism is true.
(2) In cultural anthropology we should beware of culture-bound judgements, or, in other words, beware of ethnocentrism.
(3) Therefore, there are grounds for normative relativism.
(4) Cultural anthropology should be conducted scientifically. This means, in the least, that cultural traits should be contextualized, or placed in their functional roles.
(5) Contextualization brings about compatibility.
(6) Therefore, incompatibility is avoidable.
(7) Therefore, there are no grounds for normative relativism.
(8) Statements (3) and (7) jointly imply a slight contradiction.
(9) Therefore, there is something wrong with cultural relativism.

Several authors in cultural anthropology agree with the conclusion, but few have spotted the roots of difficulties. At first sight there is no solution readily available — in order to avoid ethnocentrism we should support normative relativism, but in order to do science, for example, by means of contextualizing cultural traits, we must assume some degree of compatibility. There are, however, some intelligible reactions to the problem of cultural relativism (see Rescher, 1988).

The reactions to the problem of cultural relativism can be divided into three groups: monistic, extreme relativistic, and cognitivist.

The monistic reactions reduce the apparent and irritating diversity of beliefs into a family of constitutive human properties, **U**, that can have diverse manifestations in different environments. Thus, whenever we encounter apparently incompatible beliefs, we can rest content with the assumption that the appearance does not coincide with reality; there is always available a family of universal properties **U** that can be used in reducing and explaining the diversity.

There are two styles of being a monist:

emergent and reductionist. Emergent monism claims that we can "illuminate" or "render intelligible" the apparent diversity by means of looking at it against the background provided by **U**. Reductionist monism claims that for every difference at the level of beliefs, practice and culture, there is a one and only one property in the family **U**. In both styles of monism, biological, psychological, social, and economical universals have been proposed as the candidate members of the family **P**.

Some versions of sociobiology are apt examples of biological (or rather genetical) monism. The invariants detected in belief systems, and in cultural systems in general, are reduced to a family of epigenetic rules (the nomic characteristics of belief systems, for example) which, in turn, are reduced to genetic laws.

Malinowskian cultural anthropology is another example. His view could be expressed by saying that the family of universals **U** contains the basic biological human needs, as well as the principles of economic psychology. The apparent diversity of beliefs and practices is construed as a rational response to biological needs.

Modern sociology of knowledge (or sociology of science) suggests that the lawful mechanisms of social groups go into the family **U**. Whatever the apparent diversity and incompatibility encountered, they maintain, the basic dynamics of group-formation and maintenance are always present.

So-called contextualization, or contextualism, is a tough case. It has been used as the primary tool of interpretation in studying apparently incompatible beliefs and practices. Moreover, it has been advertised as the anti-reductionist tool of cultural relativism. Anyway, contextualization, as far as it locates cultural items in their functional roles, is a version of monism. This is clear in the claims to the effect that two cultural traits are in some sense similar because they are parts of isomorphic systems. To look for isomorphisms between systems that contain apparently incompatible beliefs and practices is to look for uniformities which, in turn, is to

look for the family **P**. Two systems are isomorphic when they are similar in some respect, that is, when they share a common property.

The apparent anti-monism (and pro-cultural-relativism) of contextualization is mainly due to the fact that very few contextualists bother to tell their readers what sorts of isomorphisms they are looking for. Biological, sociological, and psychological theories are more explicit in this respect. They express clearly the variety of isomorphism they assume to find. Of course this makes them more vulnerable to critique than the obscure brand of contextualization.

There is no escape from monism: the cognitive systematization of our experience, as well as scientific understanding of phenomena, requires the monistic assumption that there is a family **P** of lawful properties by means of which the apparent diversity is systematized. Extreme relativism accepts the fact of descriptive cognitive relativism and draws the normative conclusion: since there are no good grounds for deciding between different views of what there is or what should be done, therefore we may as well be totally indifferent with respect to the whole question. Indifference follows from the fundamental incompatibility, the proponents of extreme relativism maintain, because "good ground" and "reason" are putatively universal notions that range over belief systems. Since there are no such universal concepts at all, there is no content to these notions either.

A powerful counterargument against extreme relativism has been presented by Nicholas Rescher (1988). He proposes what he calls "conceptual egocentrism." Its outlines are the following. It is not at all indifferent, at least not for us, what beliefs or practices or rules of reasoning we endorse. Quite the contrary, we prefer our own beliefs and practices, as well as our standards of reasoning, precisely because for them we have the best available reasons. We can provide reasons for our beliefs and practices, and by the same token, reasons for not using some other, apparently incompatible systems. Another counterargument against extreme relativism is that if its proponent throws away the notion of good ground or reason, we are not supposed to accept what he is saying, or, alternatively, he should tell us what he means by acceptability. Moreover, if he disregards all elementary logic, we are not supposed to even understand him, since the identification of speech acts requires the identification of mental states, which, in turn, requires some logic.

The above counterarguments at hand, it is relatively easy to get rid of extreme relativism.

Cognitivism is a version of monism. It claims that the family U of universal properties contains first and foremost those properties that are relevant in human information processing.

Although cognitivism is committed to the monistic reaction against the problem of relativism, it differs from the other monistic reactions in significant ways. Most importantly, the monistic versions listed above can be seen as committed to a profound contrast between the realms of rationality and causality, and accordingly between the domains of cognitive and causal explanations.

Cognitivism unifies the traditional dichotomy by claiming that cognitive processes are both rational and causal. We can use causal explanations to explain rational processes: both rationality and causality have their place in the cognitivist arsenal.

The roots of the cognitivist solution are in common-sense psychological explanation. If you ask, for example, a man standing in a bus, what precisely is he doing there, he will tell you a story about where he wants to go and why, and why he has come to believe that standing in this bus is a good way of realizing this plan. People explain their behavior by referring to their beliefs, desires and other mental states. These mental states are thought to be causally efficacious: beliefs and desires cause other beliefs, desires and also behaviour. And they are also thought to be rational: the person has some good reasons for having just the beliefs he has, and he behaves in ways that he believes to optimally satisfy his desires.

The connection of cognitivism with common sense is that cognitivist theories try to explain how it would be possible that there indeed are states in the brain corresponding to the common sense notions. To have a belief or a desire is to be related in a certain way to a mental representation. Representations and their transformations ("information processing") is pretty much what Cognitive Science is all about.

In sum, the cognitivist can point to the properties of human information processing and cognitive models as the common basis for the manifest diversity. And he can argue that this version of monism is superior to the others because it is not committed to the traditional dichotomy between causality and rationality.

Part II: Ultimate Relativism and the Cognitive Prisoners: Are We Cognitively Closed from the Truth?

The cognitive paradigm has been immensely successful in explaining some of our mental abilities. At the same time, however, a few cognitivists have claimed that what we now understand about the mind may have important implications to what we can ever understand about the world. That is, they are suggesting that our cognitive machinery constrains our access to a true and complete account of the world.

The first cognitivist to introduce this worry was linguist Noam Chomsky (1975). He distinguishes between problems, which human minds are in principle equipped to solve, and mysteries, which systematically elude our understanding. The reason for the existence of genuine mysteries is, according to him, that the very faculties of mind that make us good at some cognitive tasks may make us poor in others.

In 1983 Jerry Fodor exposed the same problem in his book The Modularity of Mind. His general aim in this book is to sketch a functional taxonomy of human cognitive architecture as follows: there are basically two different kinds of systems in the brain-mind:

modular input-systems and central systems. Modular systems are special-purpose computational mechanisms that are designed to solve only computational problems of a certain kind. If our mind consists of modular pieces like this, it is conceivable that our mental capacities have internal constraints. And because of this it might be that the best possible science or the true theory of the structure of the world is not among the theories we can understand.

Fodor (1983: 120) formulates a concept of epistemological boundedness: a psychological theory represents the mind as epistemologically bounded if it is a consequence of the theory that our cognitive organization imposes epistemically significant constrains on the beliefs that we can entertain.

Fodor thinks that we can treat cognitive systems as hypothesis confirming devices that must have access at least to (Fodor 1983: 121):

(a) A source of hypotheses to be (dis)-confirmed
(b) A data base
(c) A metric which can compute the confirmation level of a given hypothesis relative of a given data base

Fodor then considers how such a device might be so organized that it fails, in virtue of its organization, to pick the best hypothesis for the available data. Epistemic boundedness can be a result of our quantitative or qualitative cognitive limitations. Quantitative, or parametric, limitations are more or less trivial: the computations to be performed might be too long for the system to compute, or the critical data base too complex to represent. As Fodor (1983: 122) puts it:

> "Perhaps the riddle of the universe requires one more neuron than, *de facto*, anyone will ever have. Sad, of course, but surely not out of the question".

The qualitative limitations of hypothesis confirming devices are connected to what Fodor calls domain specificity. He suggests that our cognitive mechanisms are biased towards solving some kinds of problems to the

exclusion of others: the class of concepts accessible to us is endogenously constrained and, consequently, there are thoughts that we are unequipped to think.

Fodor tries to show that any possible cognitive theory cannot guarantee epistemological unboundedness but, even worse, must imply epistemological boundedness. Unboundedness would require that there should be no interesting endogenous constraints on the hypothesis accessible to intelligent problem solving. A psychology which guarantees our epistemic unboundedness would thus have to guarantee that, whatever subject domain the world turns out to be, somewhere in the space of hypotheses we are capable of entertaining there is the hypothesis that specifies the structure of the world. However, any psychology must attribute some endogenous structure to the mind and, according to Fodor (1983: 125) it is hard to see how, in the course of making such attributions of endogenous structure, the theory could fail to imply some constraints on the class of beliefs that the mind can entertain.

We accept epistemic boundedness unhesitatingly for every other species: we would presumably not be impressed by a priori arguments intended to prove (e.g.) that the true science must be accessible to spiders. This fact, in Fodor's (1983) opinion, makes it perhaps a little easier to accept boundedness also in our own case.

Recently, Colin McGinn has taken these ideas seriously and introduced the idea of cognitive closure (1989):

> "A type of mind **M** is cognitively closed with respect to a property **P** (or theory **T**) if and only if the concept-forming procedures at **M**'s disposal cannot extend to a grasp of **P** (or an understanding of **T**)."

He then argues that our minds, unfortunately, are suffering from cognitive closedness, and that there is at least one problem, namely the problem of consciousness (or the mind-body problem) that we are cognitively unequipped to deal with:

> "Conceiving minds come in different kinds, equipped with varying powers and limitations, biases and blindspots, so that properties (or theories) may be accessible to some minds but not to others. What is closed to the mind of a rat may be open to the mind of a monkey, and what is closed to us may be open to the monkey. Representational power is not all or nothing. Minds are biological products like bodies, and like bodies they come in different shapes and sizes, more or less capacious, more or less suited to certain cognitive tasks.(...) Total cognitive openness in not guaranteed for human beings and it should not be expected."

Monkey minds trying to grasp the concept of an electron or a 5-year-old child trying to understand Relativity Theory are examples of cognitive closure. So there are naturalistic scientific theories that are not accessible to these types of mind and the question arises whether there are some other true explanatory theories with respect to which the adult human mind is forever closed.

McGinn (1989) thinks that there is at least one problem that is unsolvable for any human mind just because of cognitive closure. This is the mind-body -problem or the problem of consciousness: the human mind is forever closed from a general mind-body - theory. Now, what exactly is "the mind-body" -problem and why does McGinn think that it is unsolvable? McGinn formulates the problem as follows: how is it possible for conscious states to depend upon brain states? What makes the bodily organ we call the brain so radically different from other bodily organs, say the kidneys - the body parts without a trace of consciousness? In solving the mind-body -problem, we would first and foremost like to take the magic out of the link between consciousness and the brain.

McGinn thinks, firstly, that there exists some property of the brain that accounts naturalistically for consciousness. That is, there exists some property **P** of the brain, in virtue of which the brain is the basis of consciousness. And secondly, there exists some theory **T**, referring to **P**, which fully explains

the dependence of conscious states on brain states. If we knew **T**, then we would have a constructive solution to the mind-body -problem. McGinn's central argument is that we are cognitively closed with respect to property **P**, and that we can never come to know **T**.

According to McGinn, we have two possible avenues to reveal the property **P**: neuroscience and introspection. He considers both of them as leading only to a dead end. He claims that neuroscience will not be helpful, because our perception of the brain constrains the concepts we can apply to it and the property of consciousness itself is not an observable or perceptible property of the brain. Conscious states are simply not potential objects of perception: they depend upon the brain but they cannot be observed by directing the senses onto the brain. Neither can any coherent method of concept introduction lead us to **P**. If our data, arrived at by the perception of the brain, do not include anything that brings in conscious states, then the theoretical properties we need to explain this data will not include conscious states either.

It seems to us that McGinn is ignoring some potentially useful methods in the search of the property **P**. Surely there are discliplines such as cognitive psychology and neuropsychology in addition to "intro-spection" and "neuroscience". And precisely in these fields interesting empirical findings (Young & DeHaan 1990) and theoretical constructions concerning consciousness (Baars 1988, Schacter 1990) have been made. So it is simply not true that we could not make any advance in developing theories of brain-consciousness relationships. On the contrary, it seems that it is exactly what has to be done in order to explain the experimental data. Granted, then, that at least we should *use* a concept of consciousness, is there still something that is left out of our theories?

Here marches in the worry about the irreducible subjectivity of conscious mental states (see Nagel 1974, 1979, 1986; Searle 1989.) Also McGinn (1989) pays attention

to this problem by reminding that we have restricted access to the concepts of consciousness: one cannot form concepts of consciousness unless one oneself instantiates those properties. The man born blind cannot fully grasp the concept of red and humans cannot conceive of the echolocatory experiences of bats.

McGinn argues that this subjectivity is a possibly unsurmountable obstacle on our way to a general solution of the mind-body problem. Suppose bats have experiences of type **B** and the explanatory property that links these experiences to the bat brain is **Pb**. By grasping **Pb** we could understand the link between bat brains and experiences — we would have solved the mind-body problem for bats. But how could we understand that theory without understanding the concept **B** that is in it? We constitutionally lack the concept-forming capacity to encompass all possible types of conscious state, and this obstructs our path to a general solution to the mind body problem. Even if we could solve it for our own case, we could not solve it for bats and Martians (McGinn 1989).

Is subjectivity in any conventional sense a proper object of knowledge at all? Some (e.g. Lewis 1983, 130—132; 1988; Nemirow 1990; Carruthers 1986, 144.) have argued it is not: knowing what it is like to experience a certain kind of conscious state (e.g. seeing green, tasting salt, smelling a rose, hearing the sound of harpsichord) is not factual knowledge at all, but, instead, it is a practical recognitional capacity or ability. And no amount of factual information about bat brains (for example) will give us any of the bat's capacities: we still cannot fly although we would know everything about bat flight; analoguously, we still cannot have the practical skill of recognising bat experiences without having practice in having those states.

This kind of reply only seems to beg the question. Aeronautics (or whatever you call the science of flying) doesn't have any deep metaphysical problems about the relationship between aircraft and flying, and it would be strange to claim that there is something we cannot understand about bat flight be-

cause we can't fly ourselves. Nevertheless, it seems there is something we do not understand about bat experiences just because we are not bats. If experiences were only practical abilities like flying, nobody in his right mind would ever have thought about there being a "mind-body", or "brain-consciousness" -problem. We have no comparable problems in the realm of other practical abilities — not many philosophical articles have been published lately around the "foot-kicking" or "scissors-cutting" -problems. In experiences there is a subjective component that practical abilities, like cutting or flying, lack, and claiming that experiences are simply practical abilities amounts only to denying this.

McGinn suggests that that the nature of the psychophysical connection has a full and non-mysterious explanation in a certain science, but that this science is inaccessible to us as a matter of principle. There is no intrinsic conceptual or metaphysical difficulty about how consciousness depends on the brain: the correct science does not have to postulate miracles. It is just that the correct science lies in the dark part of the world for us. There is, in reality, nothing mysterious about how the brain generates consciousness: the sense of miracle comes from us, not from the world.

He argues that we have a restricted access to the concepts of consciousness: one cannot form them unless one oneself instantiates them. The man born blind cannot fully grasp the concept of red and humans cannot conceive of the echolocatory experiences of bats. We constitutionally lack the concept-forming capacity to encompass all possible types of conscious state, and this obstructs our path to a general solution to the mind body problem. Even if we could solve it for our own case, we could not solve it for bats and Martians. (McGinn 1989.)

We have, then, at least one candidate theory that resists a general solution because our cognitive closure or epistemic boundedness: it is the General Theory of Experience. Types of experience different from human experience are difficult to conceptualize and impossible to understand: we are like blind men trying to build a theory of colours. Do we have any other domains closed from our cognitive capacities? Worth mentioning but out of the scope of this paper are e.g. quantum physics and paranormal phenomena. The quantum world seems to be utterly mysterious and a coherent and general interpretation of quantum phenomena has not emerged despite more than 50 years of intensive theorising. Paranormal phenomena, if they exist at all, seem to escape the grip of science time after time.

McGinn is arguing, in short, that the limits of our minds are just not the limits of reality — reality is not constrained by what the human mind can conceive. To insist the contrary would be the worst kind of anthropocentrism. To the philosophy of science, then, the bad news from cognitive science is that most likely we are some kind of cognitive prisoners, enjailed in the dungeons of our own construction. Exactly how constrained we are, we don't know yet, but anyway we should leave behind the hopes of omniscience or epistemological unboundedness.

Conclusions

Summarizing the good news and the bad news seems to take us, we are afraid, one step forward and two steps back. So, cognitivism helps us to solve some old problems arising from cultural relativism by pointing out a universal cognitive-model structure behind all those incompatible beliefs. The functioning of these models is both rational and causal, which saves cognitivism from a dangerous dichotomy.

However, this universal cognitive structure is based on the internal structure of the human mind, which restricts the class of beliefs and thoughts we are capable of entertaining: we are "epistemologically bounded" or "cognitively closed".

Thus, we end up with a new variety of relativism, which we have called ultimate relativism. There are minds that are equipped with apparently different kinds of cognitive

abilities, and every type of mind has some biases and restrictions in its representational powers. Thus, ultimate relativism seems to reside not in the differences between cultures but in the relation between our own construction and that of the real world. No type of mind has an absolute, complete access to the real world or to its properties or theories about it. The way the human mind grasps the world is only different from but not superior to the worlds of monkeys, dolphins, bats, or Martians. There are some things we can grasp but they can not, and vice versa. No mind's truth is The Complete Truth, and so we lack a common measure, as is typical for relativism. The reason, however, why this particular version deserves the sinister name ultimate is that there is no way we, the cognitive prisoners, could escape from the dungeons of our own construction.

Acknowledgements:

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Matti Kamppinen
Department of Comparative Religion
University of Turku
SF-20500 Turku
Finland

Antti Revonsuo
Department of Philosophy
University of Turku
SF-20500 Turku
Finland