# Finding the Bounds of Machery's Critique

## Mikio Akagi

BOOK SYMPOSIUM

Check for updates

# Finding the Bounds of Machery's Critique

Mikio Akagi

Texas Christian University, Fort Worth, TX, USA

## 1  General remarks

In *Philosophy within Its Proper Bounds*, Edouard Machery articulates a troubling methodological critique of contemporary philosophy in the Anglophone tradition. Machery's ultimate conclusion is scepticism about 'modally immodest' knowledge – knowledge about metaphysical necessities and possibilities (Machery 2017, 2–3, 16, 185), i.e. about the meanings of words, the contents of concepts, or the properties of philosophically important phenomena like knowledge, causation, right action, etc. The main plot of the book proceeds in two phases. The first phase, which will surely draw the most attention and commentary, is Machery's critique of the philosopher's method of arguing by appealing to verdicts about hypothetical cases, e.g. which option is permissible in a trolley case, whether a subject knows that *p* in a Gettier case, and so on. Machery articulates a trinity of inductive arguments – called Unreliability, Dogmatism, and Parochialism – in support of the conclusion that the method should be abandoned. The second phase of the book's main plot completes the argument for modal scepticism: the method of cases is the predominant way of arguing for modally immodest conclusions in philosophy, but neither it nor its alternatives can in fact support modally immodest conclusions. Thus, modally immodest knowledge cannot be acquired at all through philosophical inquiry. There is also a significant subplot in the book: Machery valorises the use of experimental methods in philosophy, and articulates a vision for an improved, empirically-informed version of conceptual analysis, which he calls 'conceptual analysis 2.0'.

Many of the considerations and argumentative strategies that Machery invokes will be familiar to those who have followed the debates of the last decade or so about intuition and experimental philosophy. However, Machery combines these familiar considerations with novel arguments, judiciously selected premises, and valuable analytical clarity. He also provides an extended review of the existing empirical literature on variations in verdicts about philosophical cases (Ch. 2) which is an excellent resource in

its own right. The result is the most compelling case I know of for a serious revision of philosophical methodology, a case that is well-informed by a wide range of literature in both philosophy and cognitive science. Notably, while Machery draws on the experimental philosophy literature to support his trinity of arguments (especially Unreliability), his is not the familiar story that the method of cases relies on suspicious attitudes called 'intuitions'. So Machery's view is not subject to familiar criticisms by Williamson (2007), Cappelen (2012) and others. Instead, he defends a more plausible 'minimalist' account on which verdicts are the results of ordinary processes of judgment (Ch. 1). However, Machery does not argue for a general scepticism about judgment. The problem with philosophical cases, he suggests, is that in order to be probative on philosophical questions they must be outlandish (they have what Machery calls 'disturbing characteristics'). In order to supply verdicts about whether these cases involve knowing, causing, acting rightly, etc., we must apply our faculties for judgment in domains where they cease to be reliable. While many will find various grounds for disagreement with Machery (many already have), his arguments merit reflective consideration by anyone who uses the method of cases or has been impressed by a use of the method, and should be of significant interest to anyone interested in metaphilosophy.

While I find the arguments in Machery's book generally compelling, I am mindful of their limits. After all, what concerns Machery is a tendency to overlearn from judgments made outside the domain where our cognitive abilities operate effectively. So I will offer some observations on the scope of Machery's discussion – on which uses of cases escape his critique, on his recommendations regarding 'conceptual analysis 2.0′, and on the unanswered question of how we as a profession should go about reform if he is right.

## 2 The bounds of the critique

Machery's critique is important and, if cogent, troubling. After all, the method of cases is common. On the other hand, the scope of the critique should not be overstated. Machery limits the strength of his conclusions in a number of ways. Obviously, Machery's critique does not implicate all philosophy. The method of cases is not a universal method; Machery suggests that more naturalistic research areas tend to rely on the method less (3), and even in areas like metaphysics, epistemology, and ethics, where the method is more prevalent, there are other argumentative techniques. In addition, 'the method of cases' as Machery means it refers only to appeals to verdicts in imaginative cases where those appeals carry argumentative weight. The use of cases to provoke thought or to illustrate a claim do not carry weight in this way, and are thus outside the scope of his critique.

Another limitation of Machery's critique, openly acknowledged, concerns his trinity of arguments against the method of cases. Each of the arguments is inductive. Cases that have been examined through empirical methods generally elicit unreliable verdicts, or engender disagreement about verdicts, or fail to isolate verdicts about a single concept; so we should expect that the use of cases is in general unreliable, dogmatic, or parochial. Since these arguments have only inductive strength, it is possible to accept Machery's premises and still believe that some instances of the method of cases are unobjectionable. Machery contends that if this is so, we cannot know which instances these are, but this claim is somewhat overstated. Machery's inductive arguments are based on overall patterns of deficiency in the cases examined by experimental philosophers, taken as a group (for discussion, see Drożdżowicz, Saint-Germier, and Schindler 2018). If some subset of those cases turns out to be reliable, or escape the worries of Dogmatism and Parochialism, then Machery's arguments do not tell against a version of the method of cases that is appropriately restricted. Machery is not optimistic that the method of cases can be reformed, but it is conceivable that we could find a way to identify and construct less 'disturbing' cases.

## 3 Conceptual analysis

In the final chapter of the book, Machery describes 'conceptual analysis 2.0′, a naturalized form of conceptual analysis that avoids the mistakes of the method of cases. He illustrates his proposal with a case study of previous work (Griffiths, Machery, and Linquist 2009), in which the lay concept of *innateness* is analysed using an 'additive factor' model. Lay judgments about whether a trait is innate are driven by judgments about whether the trait has various other features, e.g. whether it is typical, whether is hard to change, and whether it has a function. Griffiths and colleagues provided questionnaires to non-experts to assess the pattern of their judgments about innateness. They concluded that lay judgments about each of these three features contribute independently to judgements that a trait is innate, and they assessed the degree to which each feature is considered diagnostic for innatness – the 'weights' of each feature. While I would be delighted to see more work like this, Machery's prescription is more narrow than it has to be. To be clear, Machery does not claim that analysing concepts is the only legitimate work to be done in philosophy, nor that conceptual analysis 2.0 is the only acceptable method of analysing concepts, so I do not take myself to be disagreeing with him here. I am simply concerned to emphasise that, even if we accept Machery's critique, more options are available to the aspiring conceptual analyst than might be apparent to the casual reader of his book.

First of all, Machery's proposal is based closely on his own (2009) view of concepts in psychology as bodies of knowledge that are retrieved 'by default'. This view is controversial in several respects. For one, it is plausible that what psychologists refer to when they talk of 'concepts' is a different phenomenon from what philosophers typically refer to when using the same word, as Machery himself has argued (Machery 2009, Chs. 1–2; see also Löhr 2018). Even regarding the psychological concept of *concept*, Machery's view that default bodies of knowledge be retrieved in a context-invariant way is contentious (see e.g. Löhr 2017). Moreover, it is not clear how to operationalise the notion of 'retrieval by default' in empirical studies of the sort that Machery proposes; Machery's case study, for example, ignores this difficulty (243 n 29). I do not mean to criticise Machery's view of concepts; I only mean to point out that while Machery's proposal is one vision for a naturalised conceptual analysis, it is not the only one.

Machery's proposal for naturalised conceptual analysis is also narrow in its emphasis on experimental methods. The main way to overcome charges of unreliability, dogmatism, and parochialism in conceptual analysis is to examine the judgments of a sufficiently broad range of judges, being mindful of the variation in verdicts. Experimental methods (e.g. questionnaires or other tests) are an effective way to gather this information, but other methods can be probative, too. For example, when the concept of interest is a technical or theoretical concept, literature review may be sufficient for assessing the diversity of judgments (Machery 2017, 240; Akagi 2016, 16; for a concrete example of literature-driven conceptual analysis, see Boorse 1977). Another way to gather information on variation in judgments or ways of thinking is through 'philosophical fieldwork,' a proposal championed by Katrin Flikschuh (2014).

One might complain about methods like literature review or fieldwork that they do not necessarily overcome Parochialism – by examining attitudes of published professionals or other unrepresentative samples of people, we might broaden our horizons beyond the philosophical community but not by enough. There are two replies to such a worry. The first is that experimental methods are no guarantee of universality; most psychological research is done with unrepresentative samples of humanity (Henrich, Heine, and Norenzayan 2010), hence the familiar joke that psychology is the study of the behaviour of the American undergraduate student. The second reply is that not every project need aspire to universality – examinations of professionals, of people in postcolonial societies, etc., are not flawed because they are not universal. What Machery seems to urge, rather, is merely that we not claim our conclusions are universal when they are based on data from unrepresentative samples, and that we make a concerted effort not to ignore those who are physically or socially distant

from academe (the Geography of Philosophy project, of which Machery is a principal investigator, is an excellent example of such an effort).

Another possible complaint about non-experimental methods is that they provide qualitative rather than quantitative data. Machery's proposal, by contrast, emphasizes the importance of 'weights', like the weights attributed to the three factors in the Griffiths, Machery and Linquist model of the lay concept of *innateness*. That traditional conceptual analysis cannot help to determine weights is one of four fundamental drawbacks it is said to suffer from (237–238). But I would suggest that this emphasis is a third respect in which Machery's proposal suggests an artificially narrow view of acceptable conceptual analysis. Weights are elements of many models of concepts, including additive factor models like that of Griffiths and colleagues, and some other kinds of models (e.g. dimensional prototype models like that of Smith et al. 1988). But not all sophisticated conceptual models feature weighted elements. For example, many simple cluster models do not (e.g. Rosch and Mervis 1975; Buckner 2015), and Mark Wilson's (2006) 'patchwork' models of concepts do not. Nevertheless, none of these models are subject to Machery's critique, since none of them rely on the method of cases for justification.

## 4 Reform

After reading Machery's book, I am left to considering an outstanding question: if Machery's critique is cogent, what should we do? What would a reformed philosophical practice look like, in concrete terms? Perhaps, for example, papers that appeal to the method of cases should be rejected during peer review. This does not seem to be the solution that Machery has in mind, and anyway is probably too harsh and ham-fisted a solution. It's not as if philosophers have precise standards for which arguments are publishable to begin with, and it would be poor precedent to institute a methodological litmus test on this issue, especially while Machery's arguments remain so controversial within the discipline.

Perhaps instead reviewers and editors should demand that arguments based on the method of cases be supplemented somehow – for example, by other arguments that do not appeal to the method of cases, or by empirical studies, or at least by some explicit commentary about the limitations of the method. In spirit, such a demand might resemble a proposal now on the table in psychology and other sciences troubled by the replication crisis: Daniël Lakens and colleagues (Lakens et al. 2018) propose that empirical studies may use the current standard alpha (the cutoff for acceptably large p-values) of .05, or another alpha, but that researchers justify their alphas explicitly. However, in philosophy such a proposal would be far from radical. It is already common for appeals to cases to be accompanied by

more general arguments. Empirical investigations are slowly becoming more common in the philosophical literature, though most philosophers lack the expertise to perform such studies themselves. And philosophers already routinely qualify the strength of their conclusions.

At any rate, I think it is healthy for philosophers to have frank discussions about methodological rigor. After all, it is a demanding task to engage in responsible inquiry, and philosophy is a discipline that prides itself on explicitness and clarity. I am impressed by current movements aimed at methodological reform in the social sciences, like the scepticism of intuition-based methods in generative linguistics, and the many responses of psychologists to their present methodological crisis. By contrast, it is disappointing to witness stubborn resistance to reform, e.g. some reactions to criticism of 'magnitude-based inference' in sports science (Welsh and Knight 2015; Sainani 2018). I think there can be little doubt that philosophers too should seek a higher methodological standard, not because philosophy is lesser than other disciplines but because it is not greater. The method of cases in particular is ripe for the sort of critical attention it is presently receiving.

## Disclosure statement

## ORCID

Mikio Akagi 🆔 http://orcid.org/0000-0003-0996-487X

## References

Akagi, M. 2016. "Cognition in Practice: Conceptual Development and Disagreement in Cognitive Science." Doctoral diss., Department of Philosophy, University of Pittsburgh, Pittsburgh, PA.

Boorse, C. 1977. "Health as a Theoretical Concept." *Philosophy of Science* 44: 542–573. doi:10.1086/288768.

Buckner, C. 2015. "A Property Cluster Theory of Cognition." *Philosophical Psychology* 28: 307–336. doi:10.1080/09515089.2013.843274.

Cappelen, H. 2012. *Philosophy without Intuitions*. Oxford: Oxford University Press.

Drożdżowicz, A., P. Saint-Germier, and S. Schindler. 2018. "Must Philosophy Be Constrained?" *Metascience* 27: 469–475. doi:10.1007/s11016-018-0318-y.

Flikschuh, K. 2014. "The Idea of Philosophical Fieldwork: Global Justice, Moral Ignorance, and Intellectual Attitudes." *Journal of Political Philosophy* 22: 1–26. doi:10.1111/jopp.2014.22.issue-1.

Griffiths, P., E. Machery, and S. Linquist. 2009. "The Vernacular Concept of Innateness." *Mind and Language* 24: 605–630. doi:10.1111/j.1468-0017.2009.01376.x.

Henrich, J., S. J. Heine, and A. Norenzayan. 2010. "The Weirdest People in the World?" *Behavioral and Brain Sciences* 33: 61–83. doi:10.1017/S0140525X0999152X.

Lakens, D., F. G. Adolfi, C. J. Albers, F. Anvari, M. A. J. Apps, S. E. Argamon, T. Baguley, et al. 2018. "Justify Your Alpha." *Nature Human Behaviour* 2: 168–171. doi:10.1038/s41562-018-0311-x.

Löhr, G. 2017. "Abstract Concepts, Compositionality, and the Contextualism-Invariantism Debate." *Philosophical Psychology* 30: 689–710. doi:10.1080/09515089.2017.1296941.

Löhr, G. 2018. "Concepts and Categorization: Do Philosophers and Psychologists Theorize about Different Things?" *Synthese*. doi:10.1007/s11229-018-1798-4.

Machery, E. 2009. *Doing without Concepts*. Oxford: Oxford University Press.

Machery, E. 2017. *Philosophy within Its Proper Bounds*. Oxford: Oxford University Press.

Rosch, E., and C. B. Mervis. 1975. "Family Resemblance: Studies in the Internal Structure of Categories." *Cognitive Psychology* 7: 573–605. doi:10.1016/0010-0285(75)90024-9.

Sainani, K. L. 2018. "The Problem with 'magnitude-based Inference'." *Medicine & Science in Sports & Exercise* 50: 2166–2176. doi:10.1249/MSS.0000000000001645.

Smith, E. E., D. N. Osherson, L. J. Rips, and M. Keane. 1988. "Combining Concepts: A Selective Modification Model." *Cognitive Science* 12: 485–527. doi:10.1207/s15516709cog1204_1.

Welsh, A. H., and E. J. Knight. 2015. "'Magnitude-Based Inference': A Statistical Review." *Medicine & Science in Sports & Exercise* 47: 874–884. doi:10.1249/MSS.0000000000000451.

Williamson, T. 2007. *The Philosophy of Philosophy*. Oxford: Blackwell.

Wilson, M. 2006. *Wandering Significance: an Essay on Conceptual Behavior*. Oxford: Clarendon.