

CARVING THE WORLD AS WE PLEASE

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ABSTRACT

Nelson Goodman defends the seemingly radical view that, in a certain sense, all facts depend on our perspective on the matter. We make the world, rather than merely find it. The aim of this contribution is three-fold: to make sense of Goodman's metaphysical perspectivalism, clearly explain how it differs from other branches of perspectivalism (epistemic and semantic), and put two issues on the agenda that deserve renewed attention.

1. Goodman's Anti-Realism

Let anti-realism be the view that reality or the world and whatever it contains depend on our perspective (our mental activities, conceptual scheme, etc.). Of course this view goes under various other names as well. In this paper I mainly speak of metaphysical anti-realism or perspectivalism (in order to keep it apart from non-metaphysical sorts to be identified later), but one might also speak of ontological or conceptual relativism or constructivism, or whatever, to refer to the view that reality depends in some interesting sense on us. This is no innocent view as it is meant to entail the following:

Different systems of representation represent, not a single, mind-independent reality in different ways, but different, mind-dependent realities. (Beebee & Dodd 2007: 100)

As we shall see soon, a main proponent of anti-realism thus defined is Nelson Goodman. By contrast, realism is the view that reality is (largely) independent from us. To be sure: certain things do depend on us and realists will not deny these. For example, everything on which we causally intervene depends on us (for instance, this paper depends on me in this sense). Also, items that enjoy a typical conventional status depend on us (e.g. social objects like workshops, clubs and money), for they are exactly such things that exist only because a group of people takes them to exist. Still, these are the trivial cases. Realism denies, where anti-realism maintains, that many other things depend on us as well, including stars and stereo systems (to list some of Goodman's examples). Let me cite Goodman's illustration of his anti-realism in full:

I sit in a cluttered waiting room, unaware of any stereo system. Gradually, I make out two speakers built into the bookcase, a receiver and turntable in a corner cabinet, and a remote control switch on the mantel. I find a system that was already there. But see what this finding involves: distinguishing the several components from the surroundings, categorizing them by function, and uniting them into a single whole. A good deal of making, with complex conceptual equipment, has gone into finding what is already there. Another visitor, fresh from a lifetime in the deepest jungle, will not find, because he has not the means of making, any stereo system in that room. Nor will he find books there; but in the books and plants I find he may find fuel and food that I do not. Not only does he not know that the stereo set is one; he does not recognize as a thing at all that which I know to be a stereo system – that is, he does not make out or make any such object. (1983: 103, 1984: 35)

So we make the things that we find, rather than merely find them. We put them in the world, so to speak, such that we can find them. This is Goodman's 'worldmaking'. At first glance, there is something to it: whatever we take to exist is undeniably shaped by our sensory and cognitive equipment. However, this does not entail that the things that exist themselves are shaped by us. Generally, there is a clear difference between *how we take things to be* and *how things are*. Moreover, worldmaking is obscure: people do make food and stereo systems, but not in Goodman's sense. Hence, what is this non-ordinary kind of making? Goodman provides several suggestions. To begin, this making is to be literal, yet mental:

We do not make stars as we make bricks; not all making is a matter of molding mud. The worldmaking mainly in question here is making not with hands but with minds, or rather with languages or other symbol systems. Yet when I say that worlds are made, I mean it literally. (1984: 42)

So we do not make stars as we make bricks. Similarly: we do not make stereo systems in a mental sense as we make them in a physical sense. Still, this does not clarify much: what is it to literally yet mentally make a stereo system as opposed to literally yet physically make one? Goodman's answer here is that we mentally make something "by putting its parts together and marking off its boundaries." (1984: 42) For example, there are stars and we mentally form constellations out of those parts. And there are speakers, tuners, cd players, etc. and we mentally form stereo systems out of those parts.

There are two further, apparent features of this non-ordinary kind of making. First, it is contingent: we might well fail to make the things we make. So Goodman's friend from the jungle, for instance, does not make a world with a stereo system, while we do. Second, this non-ordinary kind of making is meant as a global thesis, i.e. to apply across the board. We do not only make constellations and stereo systems, we also make

their parts (and the parts of the parts, and so on). As Goodman says: “We make a star as we make a constellation.” (1984: 42) We mentally make everything, that is, by putting their parts together and marking off their boundaries.

Let us return to anti-realism. Are there stars and stereo systems? According to Goodman’s view, it depends: there are stars if you mentally make them, and likewise for stereo systems. There is no single mind-independent reality, but there are different mind-dependent realities. In some of them, there are stars and stereo systems. In others, there are other things.

Of course the question is: why would we believe any such view? Why should it pose any significant challenge?

2. Argument from Disagreement

Goodman’s main motivation for his worldmaking view is *the argument from disagreement*. In brief the argument is that we make facts (rather than merely find them) whenever we deeply disagree with others.

This argument rests on the distinction between *normal* and *deep* disagreements. Normal disagreements are such that two parties accept conflicting claims about a certain issue and that one of them is mistaken. For example, if I disagree with you over whether Megrez is a star that belongs to the Big Dipper constellation, then we accept conflicting claims about this issue and one of us is mistaken. Deep disagreements are not like this. When people deeply disagree, then they do accept conflicting claims, but it does not seem to be the case that one of them is mistaken, or it is at least very hard to show who is.

I cannot provide a more precise criterion here which separates deep from normal disagreements, but I hope the following two classic

illustrations of a deep disagreement suffice.¹ First example ('call it Earth'):

That we can make stars dance, as Galileo and Bruno made the Earth move and the Sun stop, not by physical force but by verbal invention, is plain enough. (Goodman 1984: 34)

The disagreement is as follows: The Earth moves and revolves around the Sun vs. The Sun revolves around the not-moving Earth. In ordinary disagreements at least one of the parties gets the facts wrong. Yet, in such deep disagreements, Goodman says, it is not the case that at least one of the parties gets the facts wrong. On the contrary: all of them get the facts right. To be sure: the disputants cannot both be right about the same mind-independent facts, but they can both be right about different mind-dependent facts (i.e. the facts that they mentally make, rather than find). Second example (not Goodman's, call it 'Sum'):

Suppose [...] I believe that for every two particulars there is an object which is their sum [...] then I will find that the world of three individuals actually contains seven objects. (Putnam 1987: 70)

Putnam refers to the principle of Unrestricted Mereological Composition (UMC), i.e. the principle that any collections of items, no matter how disconnected spatiotemporally, compose a further object. So where A, B and C would ordinarily make up three items, by UMC they make up seven of them (A, B, C, A+B, A+C, B+C, A+B+C). The disagreement: There are three, not seven, objects vs. There are seven, not three, objects.

¹ Goodman himself (1983, 1984) defines deep disagreements as 'conflicting truths'. Ordinary disagreements, then, would be conflicting propositions among which at least one is a falsehood.

Again: Goodman's view entails that both parties get the facts right (again: they get different facts right, i.e. the facts that they mentally make).

Before moving to my main concern let me signal two quick worries about Goodman's view and motivation. First, Goodman's global position does not immediately follow from the argument just discussed. That is, from the fact that people mentally make facts in case of deep disagreements it does not follow that people make facts each and every time, i.e. that there are no facts that are not mentally made. Still, this problem may be fixed that assuming that deep disagreements are possible about everything. Indeed, if we can deeply disagree about movements and counts, then why would it not be possible to deeply disagree about the rest as well?

Second worry: Goodman's view suffers from the charge of incoherence. Here is a nice, recent formulation of the charge ('this world' refers to the world as we mentally construct it):

This world comprises a tortured assembly of Frankenstein facts or states of affairs. Water would, on this view, be both a continuous medium and a collection of discrete particles. Light would be both a classical wave entity and an excitation state of a field. Every apparent inconsistency between rival theories and models in a domain would be realized in empirical reality. (Chakravartty 2010: 411)

Goodman has a reply. To wit: scientists (and others who engage in deep disagreements) do not interact with a single conflicted world, but with multiple conflicting worlds. In some, the Earth moves. In others, the Sun does. In some, there are three objects. In others, there are seven. There is to be no single, Frankenstein world where all these facts obtain at once. To be sure, the term 'conflicting worlds' sounds obscure. But Goodman's proposal is this: any fact exists depending on, or relative to, how we put the parts together and draw the boundaries. If the latter is intelligible, as we shall try to see in the next section, the notion of 'conflicting worlds' should be intelligible as well.

Still, even if these two worries can be met, there is one objection to Goodman's argument from disagreement that is, I think, more persistent. The objection is that deep disagreement admits more sorts of diagnoses next to Goodman's. To see this, let us clearly distinguish between three levels: the *metaphysical* level of facts, the *epistemological* level of justification, and the *semantic* level of meaning. Goodman's treatment of deep disagreements is metaphysical of sort: his position is that all parties of such disagreements get the facts right. Yet, it is also possible to say that all parties are justified to stick to their position (the epistemic resolution), or that all parties must mean different things by the claims they make (the semantic resolution).

So, in fact deep disagreements may give rise to three quite different sorts of perspectivalism:²

Metaphysical perspectivalism

The facts that parties in deep disagreements talk about obtain only relative to perspectives.

Epistemic perspectivalism

The claims that parties in deep disagreements make are justified only relative to perspectives.

Semantic perspectivalism

The claims that parties in deep disagreements make have a definite meaning only relative to perspectives.

² There are at least two ways to see the connection between deep disagreements and perspectivalism: first, perspectivalism offers a *diagnosis* of deep disagreements: it tells us what the latter in fact are; or, second, the different perspectives are the *cause* of deep disagreements. In this paper I only assume the first connection.

Let us see how the latter two branches differ from the first in terms of the Earth and Sun cases listed earlier. Epistemic perspectivalism holds that in case of deep disagreements all parties are justified or entitled to their position relative to their own epistemic system. This view differs from its metaphysical counterpart for all parties may be entitled to their position, even if at least one of them gets the facts wrong. The Earth case: Galileo is justified to believe that the Earth revolves around the Sun relative to Observation (i.e. the epistemic principle which rules that you are justified to believe that p if you observe that p in appropriate conditions). By contrast, Bellarmine is justified to believe that the Sun revolves around the Earth relative to Revelation (i.e. the epistemic principle which rules that you are justified to believe that p whenever a holy scripture says that p).³ The Sun case: one is justified to believe that there are three objects relative to Common Sense (or some such), and one is justified to believe that there are seven objects relative to an epistemic system which acknowledges the UMC principle.

Semantic perspectivalism holds that in case of deep disagreements the parties are not really disagreeing due to equivocation. That is, even though they seem to accept conflicting claims, they in fact mean different things by the terms they use, and so do not accept claims that conflict after all. Moreover, they would misunderstand one another's claims if they take them to be conflicting. The Earth case might be undermined by a neutral description in terms of, as Goodman himself suggests, "variation of distance between objects at different times" (1984: 33). And the Sun case might be undermined by invoking two different meanings of the term 'object': there are three objects, if 'object' is understood in the common sense way, and there are seven objects, if 'object' is taken in the UMC way (cf. Boghossian 2006: 37).

³ For this analysis, cf. Boghossian (2006: 64, 69). For critical discussion cf. his (2006: 103-5).

This semantic perspectivalism differs from its epistemic (and metaphysical) counterpart because in the semantic case it is not said that all parties are entitled to their position (nor that all get the facts right). This view has been pioneered by Davidson's 'On the Very Idea of a Conceptual Scheme' (1974). This paper's main aim is to disprove metaphysical perspectivalism, i.e. the position that reality depends on conceptual schemes (cf. Beebee & Dodd 2007: 100ff). Yet, whether Davidson succeeds in this is controversial,⁴ and it seems more plausible to read him as making a case for semantic perspectivalism. He argued that if people appear to deeply disagree it is likely that they have misunderstood one another and that they are not disagreeing after all. Compare: "Charity is forced on us; whether we like it or not, if we want to understand others, we must count them right in most matters." (Davidson 1974: 19) And if we must count others right in most matters, we must not deeply disagree.

At this point three sorts of perspectivalism are at our disposal, and all three deliver an account of deep disagreements. The problem immediately follows: if deep disagreements admit three sorts of resolutions, then nothing follows from them *without further argumentation*. For instance, for Goodman the question is why to conclude to metaphysical perspectivalism rather than its epistemic or semantic counterpart. And the same holds for epistemic and semantic perspectivalism.

Moreover, the issue is especially pressing because one may wonder why deep disagreements should lead to *any* form of perspectivalism in the first place. Indeed: why not stick to the good-old assumption that whenever there is a disagreement (easy or difficult, normal or deep), at least one of the parties is wrong (and that, as the ancient sceptics would

⁴ Cf. e.g. Putnam (1987) who argues in response to Davidson that there can be deep disagreements even if all parties are able to fully understand each other. One of his examples is the Sum case discussed above.

add, everyone is to suspend belief as long as the matter has not been resolved, cf. Lammenranta 2008)?

Perhaps this is not surprising. After all, perspectivalism has an ambiguous relationship with disagreements. On the one hand, as we have seen, perspectivalism invokes disagreements (i.e. the deep ones) in order to make a case. On the other hand, it does not really respect them: it dissolves them. Specifically, metaphysical perspectivalists dissolve disagreements by saying that the disagreeing parties talk about different, mind-dependent facts. Epistemic perspectivalists dissolve them by saying that the parties are all entitled to their position (i.e. relative to their own epistemic framework). And semantic perspectivalists dissolve them by saying that the parties are talking past one another and concerned about different claims. Assuming that two parties disagree only if

- they are concerned about the same facts,
- at least one of them is not entitled to its position, and
- they are concerned about the same claims,

then perspectivalists can only coherently say that what *appear* to be disagreements (such as Earth and Sum) are *in fact* no disagreements.⁵

So far the argument from disagreement to perspectivalism, and some of its main problems. In the following section I will take one step back and ask: does Goodman's perspectivalism make sense in the first place? What does it mean to put parts together and mark off boundaries?

⁵ Unfortunately, no non-controversial definition of disagreements seems around. However, it is unlikely that none of these three conditions, if not all, should be included.

3. Carving Kinds vs. Individuals

From now on, when I speak of perspectivalism I refer to the metaphysical kind of Goodman. The general perspectivalist template is the following: The fact that p (to be replaced with a full declarative sentence) depends (at least partially) on a subject (or group of subjects) S , i.e. it is a result of S 's mental activities, conceptual scheme, perspective on the matter, etc. This template suggests a natural counterfactual reading: If S would not perform those mental activities, which is quite possible (e.g. if S dies), then it would not be the case that p . For example: If I would not mentally make a stereo system, which is quite possible, then it would not be the case that there is a stereo system in the room.

Realists, i.e. the perspectivalist opponents, subscribe in contrast to the following template: The fact that p does not depend (not even partially) on a subject S (or group of subjects). Counterfactually: If S would perform none of the relevant mental activities, which is possible, then it would still be the case that p . For example: If I would not mentally make a stereo system, then it would still be the case that there is a stereo system in the room.

These templates are fairly straightforward. Yet, it is not only important to distinguish them from the kind of claims that epistemic and semantic perspectivalists would make (as discussed in the previous section). It is similarly important to distinguish among two versions of the perspectivalist template, and these versions are easily conflated (for one, Goodman does not set them clearly apart). To recall, to mentally make something is to draw boundaries. To draw boundaries, to use Plato's celebrated phrase, is to cut or carve up the world.⁶ Yet the

⁶ "This in turn is to be able to cut up each kind according to its species along its natural joints, and to try not to splinter any part, as a bad butcher might do." (Plato, *Phaedrus* 265e)

question is: to carve the world into what? There are two main options: the world may be carved into kinds (such as stars and food) or into individuals (such as the Big Dipper or my stereo system). Or again: one might be constructivist about qualitative sameness, or about numerical sameness. Let me take up both versions in turn.

Carving kinds. Basically, to say that we carve out kinds is to say that the fact that several distinct items are members of the same kind depends on what kinds we recognize. The corresponding template is the following:

(CARVER-K) That x and y belong to the same kind K , or not, is constituted by the fact that S mentally and contingently carves out K .

Goodman's instance: That the stars Megrez and Alioth both belong to the Big Dipper constellation is constituted by the fact that I mentally and contingently carve out the Big Dipper (or constellations generally). Counterfactually: If I did not carve out the Big Dipper, which is possible, then Megrez and Alioth would not belong to the same kind of belonging to the Big Dipper. If this applies to kinds we are familiar with, it may also apply to strange, unfamiliar kinds. An example of a strange kind from Hirsch (1993: 22): K = being a carple. Anything which belongs to this kind is, in our language, either a car or an apple.⁷ In terms of the template: The fact that this apple and that car are both carples is constituted by the fact that S mentally and contingently carves out carples. Of course, any two things have all sorts of disjunctive properties in common. However, the suggestion or challenge is that CARVER-K applies across the board: it is meant to apply to constellations, carples, and indeed to stars, cars, and apples. So: that this and that thing are both

⁷ This and other disjunctive cases seem all to derive from Goodman's own grue-case (minus issues of temporality and induction): Goodman (1995: ch. 3).

apples, too, is constituted by the fact that S mentally and contingently carves out apples.

Moreover, it is not only to apply to everyday kinds (familiar and unfamiliar), it is to apply to scientific kinds as well. Take the biological kind of being a species. It seems that there are quite natural boundaries of what it takes to belong to the same species. Kitcher, for example, cites the following common definition of species which should track the natural boundaries quite well: “Species are clusters of populations that consist of freely interbreeding organisms, and that are reproductively isolated from populations in other such clusters.” (2001: 48) Still, as Kitcher points out, there are exceptions: “Botanists who deal with plants in which reproduction is asexual or in which hybridization is frequent usually appeal to morphological characteristics of their specimens.” (ibid) If this is right and the definition admits of exceptions, then maybe it does not track natural boundaries after all. Kitcher goes on to generalize the case for other scientific kinds such as diseases and even the chemical elements. For example, that this and that thing are both pieces of gold, too, is constituted by the fact that we mentally and contingently carve out the gold-kind (2001: 50-1).

Carving individuals. Basically, to say that we carve out individuals is to say that the fact that an individual is one single item which persists through time depends on what persistence conditions we use. The corresponding template is the following:

(CARVER-I) That x and y belong to the same individual I, or not, is constituted by the fact that S mentally and contingently carves out I.

Goodman’s instance: That this and that piece are the same stereo system is constituted by the fact that I mentally and contingently carve out those pieces as belonging to the same individual. Counterfactually: If I did not carve out that stereo system, which is possible, then those pieces would not belong to the same individual. If this applies to individuals we are

familiar with, it may also apply to strange, unfamiliar individuals. An example of a strange individual from Hirsch (1993: 24): x = my incar, and y = my outcar. In our language, an incar is a car that continues to exist only so long as it is located in a garage, whereas an outcar is a car that continues to exist only so long as it is located out of a garage. In terms of the template: The fact that this incar is not the same item as that outcar is constituted by the fact that S mentally and contingently carves them out as being numerically distinct. Again, the suggestion is that CARVER-I applies across the board (even to things which are not spatially connected, which incars and outcars might still be).

Now the question: do CARVER-K and CARVER-I apply across the board? That is: are there no constraints on carving out strange individuals and kinds? Goodman wrote: “Nothing dictates whether the skies shall be marked off into constellations or other objects.” (1983: 104, 1984: 36) Yet is he right that we may carve the world *as we please*? By many eyes, there are constraints on carving. Not all facts are (if only partly) constituted by how subjects mentally and contingently carve out the relevant individuals and kinds. Indeed, to say that there are no constraints on carving at all is to say that any fact exists just depending on the perspective that one arbitrarily chooses. However, if there are constraints, what are they? And also: what are the grounds of these constraints? That is, what does Goodman’s ‘nothing’ in the sentence just cited comprise: the world, our sensory and cognitive make-up, our practical interests, etc.?

Elder (2011) argued that there are at least utility constraints: not any way of carving the world is equally useful. Or as he puts it: it is false that any non-standard conceptual scheme whatever is as serviceable and empirically predictive as our actual scheme. Elder (2011: 609-13) proposes the following constraint on carving out strange kinds (which could be called ‘Disposition’): Using ‘cars’ and ‘apples’ rather than ‘carples’ allows us to speak about things which have several interesting dispositional features in common. For example, cars are drivable, apples

are edible, yet carples are neither. Furthermore, as long as we are interested in such dispositional features, we should not carve the world into carples. Elder (2011: 613-5) also proposes a constraint on carving out strange individuals (which could be called ‘Conservation’): Using ‘car’ rather than ‘incar’ and ‘outcar’ allows us to assume that a single object keeps much of the same accidental features (such as its scratches, its passengers, etc.). Again, as long as we are interested in such features, we should not carve the world into incars and outcars.

Nevertheless, even if these utility constraints are in place, one might wonder whether there are not any deeper constraints. It may be useful to carve the world into kinds where its members have interesting dispositional features in common, and useful to carve the world into individuals which keep much of the same accidental features. Yet, is there anything which grounds or explains this utility? For example, why do apples rather than carples have interesting dispositional features in common? Is the world, rather than we, not responsible for this?

When it comes to this question, those who are sympathetic to Goodman’s anti-realism remain remarkably vague. Kitcher, Varzi and others seem to agree that we may carve the world as we please, yet add that what we carve is, *in a certain sense*, already there. Here is Kitcher:

So, do we construct the world? [...] If the claim that the stars are a human construction is to mean anything remotely plausible, it can only be that there are alternative ways of dividing nature, that some of them would not recognize stars as objects, or would classify astronomical objects without using the category star. On that interpretation, to repeat, the stars are independent of us – and so too are the entities of an indefinite number of other schemes of classification. Like the statues in the marble, they are all already there, even before we draw their boundaries. (2001: 51)

Next, Varzi defends the view that there are no natural boundaries in the world. Just as the boundaries between countries and other countries is merely conventional, the boundaries between lands and seas (and indeed

between anything else) are to be mere conventions as well. That is, there is to be nothing to the world which would explain why we draw the boundaries that we in fact draw (or should draw). It is all up to us and our mental and social activities. Still, there is something which remains unconventional:

Such entities would only enjoy an individuality as a result of our cognitive and/or social practices, like the cookies carved out of the dough: their objectivity is independent, but their individuality – their being what they are, including their having the identity and survival conditions they have – depends on the baker’s action. (Varzi 2011: 137)

For both Kitcher and Varzi, the question is: what is it that we carve that is already there? What are Kitcher’s indefinite number of entities that we track by carving? What is Varzi’s objectivity to mean if identity and survival conditions are stripped from it? The problem, more generally, is that they want to reconcile our freedom of carving with serious, natural constraints. Or again: the issue is about the elusive nature of non-perspectival facts in a world full of facts which do depend on our perspective.⁸

4. Agenda

Let me take stock. We have a view, a number of distinctions, and two main issues on the agenda.

⁸ For a recent account, cf. Chakravartty (2011). The core idea: “Scientists are at liberty to call different groupings of properties kinds (for example, species) as best suits various and different scientific purposes, they are not at liberty to determine what groupings of properties there are, in reality.” (2011: 170)

The view is Goodman's anti-realism or perspectivalism: the world depends on our perspective of the matter. We mentally and contingently make the facts that we find, rather than merely find them.

The distinctions are two-fold. First, this metaphysical branch of perspectivalism is to be distinguished from its epistemic and semantic cousins: facts themselves are intended to be perspectival, not the justification or meaning of claims about those facts. Second, metaphysical perspectivalism divides into at least two main sorts: perspectivalism about qualitative sameness (carving kinds) and about numerical sameness (carving individuals).

Last, I raised two main issues. In Section 2, I looked into the motivation of metaphysical perspectivalism and in particular the argument from disagreement. By showing that epistemic and semantic perspectivalism employ the very same disagreements to make their own case, I argued that so far Goodman's perspectivalism remains undermotivated. The question is: why would deep disagreements entail that all parties get the facts right (rather than that all parties are justified, or that all mean different things by the claims they make)? In Section 3, I looked into the details of metaphysical perspectivalism (no matter its motivation) and argued that it should pay more attention to its constraints. The question is: to what extent are we free to carve up the world as we please? Two issues, I would say, which require renewed attention.

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REFERENCES

- Beebe, H. & J. Dodd (2007) Realism and Anti-Realism. In *Reading Metaphysics*. Oxford: Blackwell, pp. 100-45.
- Boghossian, P. A. (2006) *Fear of Knowledge. Against Relativism and Constructivism*. Oxford: OUP.
- Chakravartty, A. (2010) Perspectivism, Inconsistent Models, and Contrastive Explanation. *Studies in History and Philosophy of Science* **41**, pp. 405-12.
- Chakravartty, A. (2011) Scientific Realism and Ontological Relativity. *Monist* **94**, pp. 157-80.
- Davidson, D. (1974) On the Very Idea of a Conceptual Scheme. *Proceedings and Addresses of the American Philosophical Association* **47**, pp. 5-20.
- Elder, C. L. (2011) Carving Up a Reality In Which There Are No Joints. In S. D. Hales (Ed.), *A Companion to Relativism*. London: Blackwell, pp. 604-20.
- Goodman, N. (1955) The New Riddle of Induction. In *Fact, Fiction, and Forecast*. Cambridge, MA: HUP, ch. 3.
- Goodman, N. (1983) Notes on the Well-Made World. *Erkenntnis* **19**, pp. 99-107.
- Goodman, N. (1984) *Of Mind and Other Matters*. Cambridge, MA: HUP.
- Hirsch, E. (1993) *Dividing Reality*. Oxford: OUP.
- Kitcher, P. (2001) The World As We Make It. In *Science, Truth and Democracy*. Oxford: OUP, ch. 4.
- Lammenranta, M. (2008) The Pyrrhonian Problematic. In J. Greco (Ed.), *The Oxford Handbook of Skepticism*. Oxford: OUP, pp. 9-33.
- Plato. *Phaedrus*. Transl. A. Nehamas & P. Woodruff (1995). Indianapolis: Hackett.
- Putnam, H. (1987) Truth and Convention. On Davidson's Refutation of Conceptual Relativism. *Dialectica* **41**, pp. 69-77.
- Varzi, A. (2011) Boundaries, Conventions, and Realism. In J. K. Campbell et al. (Eds.), *Carving Nature at Its Joints*. Cambridge, MA: MIT, pp. 129-53.