

# Counterconventional Conditionals

[Forthcoming in *Philosophical Studies*]

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## Abstract

Some philosophical positions maintain that some aspect of reality depends on human practices, cognitive attitudes or sentiments. This paper presents a framework for understanding such positions in a way that renders them immune to a number of natural but allegedly devastating objections.

Consider the following argument against ontological conventionalism, the view that what there is depends on how our conventional conceptual practices ‘carve up’ reality: Ontological conventionalism implies

(MOUNTAINS) Had our conventions been suitably different, then there would have been no mountains in Africa.

But this is absurd, as the way we speak and think has no influence whatever on Africa’s geography. Thus, by reductio, ontological conventionalism is false.<sup>1</sup>

This argument is an instance of a general refutation strategy against various forms of conventionalism: Assume that conventionalism with respect to some aspect *C* of reality is true.<sup>2</sup> Then how things stand *C*-wise systematically *covaries* with our conventions: Things would have stood differently *C*-wise had the relevant conventions been suitably different. But the claim that things would have stood differently *C*-wise, had our conventions been

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<sup>1</sup>Barry Stroud uses this example in his discussion of Carnap’s distinction between internal and external questions. See *The Significance of Philosophical Scepticism*, p. 193. Laurence Bonjour mentions a similar argument as the ‘most decisive objection of all to the linguistic convention view’ of a priori knowledge. See *In Defense of Pure Reason*, p. 56f

<sup>2</sup>‘*C*’ is meant to suggest that the aspect is thought of as dependent on *convention*.

suitably different, seems, just like MOUNTAINS above, absurd. Thus, conventionalism with respect to  $C$  is false.<sup>3</sup>

I take it that most people, including those sympathetic to conventionalism, would agree with the judgement that, on the ordinary reading, MOUNTAINS is absurd. However, ontological conventionalists maintain that *there is a sense* in which MOUNTAINS and similar claims are true. What sense? Pending clarification of *how* such claims are meant to be true, the conventionalist position will remain suspect. The aim of the present paper is to develop a set of conceptual tools with which conventionalists can clarify the sense in which they hold claims like MOUNTAINS to be true. I will show that if MOUNTAINS is cast in the terms suggested here, then the above argument-strategy against conventionalism fails.

Why should we try to make sense of conventionalism? Why should we bother to defend its *coherence* if in the end it is not *true*? First, although it may in the end turn out not to be tenable in the central domains of concern to conventionalists, it is quite likely true of *some* uncontroversial domains, and these would be vulnerable to the refutation-strategy as well. Second, to establish or refute a position, one must first be clear on what it involves.

I start by sketching what I take to be the picture of reality that motivates many, though possibly not all, conventionalists (§1). Against the background of this picture, I introduce a new conceptual apparatus based on two notions of possibility, one of which is meant to capture the contribution that, according to conventionalists, conventions make to how things stand with respect to the target area (§2 and §3). After a preliminary analysis of the refutation-strategy, I introduce a new type of conditional, the *counterconventional conditional* (§4). I then apply the apparatus introduced to show that the above refutation-strategy and various related objections to conventionalism fail (§5).

The framework developed here is useful for perspicuously formulating not only conventionalism but also other philosophical accounts which take some aspect of reality to depend on human practices, including constructivist, quasi-realist, projectivist, neo-Kantian and response-dependence accounts.

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<sup>3</sup>Structurally similar arguments can be mounted against several other philosophical accounts which take some aspect of reality to depend on human practices, such as projectivist accounts and accounts involving the notion of response-dependence.

## 1 The Conventionalist Picture of Reality

The conventionalist maintains that some aspects of reality depend on our conventions. The methodological picture in the background is roughly this: The world provides some material, the *substratum* (or *stuff*), which is neutral with respect to the features that are taken to be conventional. Onto this substratum, features of the kind in question can be conventionally imposed in many different ways. Call the features contributed by the world *s-features* and the features imposed by conventional conceptual practices *c-features*.

Potentially, there is a wide range of subject matters for which one may try to give a conventionalist account: Ontology, the structure of space-time, modal properties, aesthetic or moral features, etc. Since I wish to examine conventionalism in an abstract setting, I will adopt a strategy of *neutrality*, so I will not specify the category of either *s-* or *c-*features.

I want to stress that the conventionalist assumption that a substratum is *given* by the world is in the first instance a *methodological*, not a *metaphysical* assumption. Conventionalists aim to give an account of some aspect of reality and, in doing so, take the other aspects of reality as unproblematic. Some conventionalists may want to take, in addition to this methodological stance, a more metaphysical attitude to the substratum, considering it, say, as consisting of the *real* and intrinsic features of reality. But conventionalists *need* not take this stance.

1.1. *Substrata*. From a conventionalist perspective, the substratum of a world (actual or counterfactual) can be construed as the world as commonly conceived *minus* the features that are regarded as conventionally determined.<sup>4</sup> Depending on the conventionalism in question, the substratum might be phenomenal space and the *c-*features the physical objects; or the substratum might be the totality of physical particles distributed over space-time and the *c-*features the macro-objects; or the substratum might be actions with their physical and intentional properties and the *c-*features their moral properties. I will remain neutral with regard to the nature of the substratum and the precise procedure, say abstraction, mereological summation, conceptual grouping or set-formation, by which conventions impose

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<sup>4</sup>Thus, substrata need not be like Kantian *things-in-themselves*, a mysterious ‘stuff of the world’ which is accessible only through a (possibly distorting) conceptual veil. Most versions of conventionalism propose that *some*, not all aspects of reality depend on convention. They can take for granted (as part of the substratum) the aspects of reality which they don’t take to depend on convention. This is an ontological analogue of Neurath’s boat.

$c$ -features onto a substratum. Any particular conventionalist account of some aspect of reality will have to specify both the relevant substrata and the procedure by which conceptual practices impose structure.

1.2. *Carvings*. It is, the conventionalist claims, through our *conceptual practices* that we impose structure on the substratum. This raises a number of secondary questions which I wish to set aside, such as: What constitutes a conceptual practice? Which conceptual practices impose structure on the substratum? How much can two sets of conceptual practices differ and still impose the same structure? Whose conceptual practices are we referring to when we speak of *our* conventions? In the spirit of neutrality, I will introduce the theoretical concept of a *carving* which will serve as an abstraction from the conceptual practices that constitute conventions. Let's say that a carving *corresponds to* a set of conventional conceptual practices. We can think of a carving as a function, which yields the features regarded as conventional when applied to a substratum. For example, for the ontological conventionalist, who thinks that it is partly conventional what objects there are, a carving will yield a collection of objects when applied to a substratum. For the moral conventionalist, who thinks that moral facts are partly a matter of convention, a carving will yield a collection of moral facts when applied to a substratum.

## 2 Representing Conventional Possibilities

The conventionalist about some aspect of reality thinks that the substratum of the world might have been carved differently from how it is actually carved and that many choices of carving are legitimate.<sup>5</sup> I will now introduce some machinery for representing possible worlds, ways things might have been, that does justice to the conventionalist view of possibilities.

2.1. *Worlds*. Worlds are represented as substratum-carving pairs: The world represented by  $\langle s, c \rangle$  is the world with substratum  $s$  and carving  $c$ , where  $s$  is drawn from the collection  $S$  of relevant substrata and  $c$  is drawn from the collection  $C$  of relevant carvings.<sup>6</sup> The actual world,  $w_{@}$ , is represented by  $\langle s_{@}, c_{@} \rangle$ , the pair consisting of the actual substratum and the actual carving. When  $c_{@}$  is applied to  $s_{@}$  it yields all the actual  $c$ -features, that is, either

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<sup>5</sup>This is a rational reconstruction of conventionalism. I don't mean to claim that the conventionalist would state the position in terms of substrata and carvings.

<sup>6</sup>The *relevant* collections of substrata and carvings depend on the kind of conventionalism in question.

the actual objects, or the actual modal facts, or the actual moral facts, or the actual geometric facts, or the actual aesthetic facts, etc, depending on the kind of conventionalism in question.<sup>7</sup>

2.2. *Supporting a Feature and Carving a Feature.* Whether or not a world has a given conventional feature depends both on the world's substratum and its carving. A world may fail to have a given feature because either its substratum or its carving is lacking in some respect. It will be useful to have terminology to track this distinction.

**Definition** A carving  $c$  *carves* a  $c$ -feature  $F$  if and only if there is a substratum  $s$  such that  $c$  yields  $F$  when applied to  $s$ .

For example,  $c_{@}$ , the actual carving, carves mountains, since there is a substratum, namely  $s_{@}$ , the actual substratum, which yields mountains when  $c_{@}$  is applied to it.

**Definition** A substratum  $s$  *supports* a feature  $F$  if and only if there is a carving  $c$  such that  $\langle s, c \rangle$  has feature  $F$ .<sup>8</sup>

For example,  $s_{@}$  supports mountains. But note that not every possible world  $\langle s_{@}, c \rangle$  *contains* mountains, as the world's carving  $c$  may not *carve* mountains. Likewise,  $s_{@}$  supports the mereological sum of the Eiffel Tower and Alpha Centauri, but, on some views, the actual world does not contain the mereological sum of the Eiffel Tower and Alpha Centauri, as the actual carving does not carve arbitrary mereological sums.<sup>9</sup>

2.3. *Constraints on Carvings.* The conventionalist does not claim that the existence of mountains, witches and phlogiston is merely a matter of carving, that anything could have existed if only we had looked at the world through the right conventionalist lens. Rather, substrata are taken to place

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<sup>7</sup>It is possible to proceed by equating conventionalist possible worlds with substrata, and letting propositions (like MOUNTAINS) be true or false at a world *relative* to a carving. Analogues of all of the concepts I introduce in this paper can be introduced for this construal of conventionalist possible worlds and the accompanying relative notion of truth at a world. Therefore, nothing of substance hangs on the particular choice of representational primitives made here.

<sup>8</sup>Note the asymmetry between this and the previous definition. A substratum supports not merely the  $c$ -features that can be 'carved out' of it but also the  $s$ -features it directly determines and the features determined jointly by  $s$ - and  $c$ -features supported by it.

<sup>9</sup>The claim that there are arbitrary mereological sums says that for any two objects  $o_1$  and  $o_2$  there is a further object  $o_3$  which has  $o_1$  and  $o_2$  as parts and has no part which overlaps neither  $o_1$  nor  $o_2$ .

constraints on what features can and what features cannot be conventionally imposed on them. What the constraints are for a given conventional feature will depend on the conventionalism in question. For expository purposes, I will use the adjective ‘mountainous’ to refer to that cluster of properties (including, say, having high levels of elevation) of a substratum that allows but does not necessitate the imposition of mountains onto that substratum, and I will use ‘flat’ to refer to the absence of that cluster of properties.

### 3 Two Concepts of Possibility

In this section I will distinguish two concepts of possibility: *c*-possibility and *s*-possibility. This distinction will enable us to give a preliminary diagnosis of where the refutation-strategy against conventionalism goes wrong. In subsequent sections this diagnosis will be refined.

3.1. *C-possibility and S-possibility.* Corresponding to the two components, substrata and carvings, which jointly determine the *c*-features, there are two types of modality, two ways in which it is possible for a *c*-feature to obtain or to fail to obtain: On the one hand, it is possible that the *substratum* of world *w* is different while the carving remains the same. Imagine, for instance (in the case of conventionalism about what objects there are), the substratum of the actual world being different in, say, such a manner that all of the land-mass of Africa is flat. In this case, the actual carving would not carve out mountains in Africa (and neither would any other carving). And so, in the standard sense, there would be no mountains in Africa. On the other hand, it is possible that the substratum of world *w* is *carved* differently. Imagine, for instance, the substratum of the actual world (with its mountainous Africa) being carved by a carving that fails to carve out mountains. In that case, mountains would not be carved on the African continent and so there would be, in this alternative sense, no mountains in Africa.

To capture this distinction, let us introduce two sets of modal notions: On the one hand, we have the notions of *s*-possibility  $\diamond_s$ , *s*-necessity  $\square_s$  and *s*-contingency, which are sensitive solely to possible variations of the substratum. On the other hand, we have the notions of *c*-possibility  $\diamond_c$ , *c*-necessity  $\square_c$  and *c*-contingency, which are sensitive solely to possible variations of the carving.

The *s*-modal notions are defined as follows:

$\diamond_s\varphi$  is true at a world  $w = \langle s, c \rangle$  if and only if there is a substratum  $s'$  such

that  $\varphi$  is true at  $w' = \langle s', c \rangle$  (i.e. if and only if  $\varphi$  is true at some world that differs from  $w$  only in virtue of its substratum).

$\Box_s \varphi$  is true at a world  $w = \langle s, c \rangle$  if and only if for every substratum  $s'$ ,  $\varphi$  is true at  $w' = \langle s', c \rangle$  (i.e. if and only if  $\varphi$  is true at every world that differs from  $w$  only in virtue of its substratum).

What do  $s$  and  $c$  range over? This depends on the kind of conventionalism in question (ontological, geometric, modal, ...) and will have to be filled in for each particular conventionalist account. As an example, consider the claim that there are no mountains in Africa. It is  $s$ -possible, since there are substrata which do not support mountains. For example, a substratum in which all of the land-mass of Africa has the same elevation.

The  $c$ -modal notions are defined as follows:

$\Diamond_c \varphi$  is true at a world  $w = \langle s, c \rangle$  if and only if there is a carving  $c'$  such that  $\varphi$  is true at  $w' = \langle s, c' \rangle$  (i.e. if and only if  $\varphi$  is true at some world that differs from  $w$  only in virtue of its carving).

$\Box_c \varphi$  is true at a world  $w = \langle s, c \rangle$  if and only if for every carving  $c'$ ,  $\varphi$  is true at  $w' = \langle s, c' \rangle$  (i.e. if and only if  $\varphi$  is true at every world that differs from  $w$  only in virtue of its carving).

As an example, consider the claim that space-time is Euclidean. Against the background of the actual conceptual practices of modern mainstream physics, space-time is not Euclidean. But (arguably) it is  $c$ -possible that space-time is Euclidean, because physicists could have adopted a theoretical framework within which the geometry of space-time is Euclidean.

**3.2. Reducing Ordinary Modality to  $S$ -modality.** We judge metaphysical possibility against the background of our actual conceptual practices. Therefore, our ordinary modal notions can be construed as the special case of the  $s$ -modal notions in which the carving is fixed to be the actual carving. For concreteness, I will focus on the metaphysical modalities.<sup>10</sup> Metaphysical possibility can be defined in terms of the  $s$ -modal notions as follows:

<sup>10</sup>The following discussion can be generalized: Deontological modality can usefully be construed as a special case of  $s$ -modality for versions of conventionalism according to which the *normative* features of the world are (partially) determined by convention. Nomological modality can usefully be construed as a special case of  $s$ -modality for versions of conventionalism according to which the *laws of nature* are (partially) determined by convention. Metaphysical modality can usefully be construed as a special case of  $s$ -modality for versions of conventionalism according to which *ontology* or *essences* are (partially) determined by convention.

$\diamond\varphi$  is true at a world  $w = \langle s, c_{@} \rangle$  if and only if there is a substratum  $s'$  such that  $\varphi$  is true at  $w' = \langle s', c_{@} \rangle$

and likewise for metaphysical necessity and contingency. Here  $s$  ranges over substrata of the kind appropriate for the type of conventionalism in question and  $c_{@}$  is the actual carving of the relevant type.

The metaphysically possible worlds are the worlds represented by pairs  $\langle s, c_{@} \rangle$ , where  $c_{@}$  is the actual carving. This captures our intuitions concerning ordinary metaphysical modality, since worlds represented by pairs  $\langle s, c \rangle$ , where  $c$  is not the actual carving are in general not deemed metaphysically possible. For instance, assume conventionalism about abstract objects like numbers. According to a popular view regarding the nature of numbers, the following is true.

(NUMBERS)  $\Box$ (There are numbers)

Suppose that among the metaphysically possible worlds there were worlds whose ontologies are given by carvings different from the actual one. Then NUMBERS would be false, because there are, according to the conventionalist about abstract objects, carvings that do not carve numbers. And if  $c$  is such a carving, then ‘There are numbers’ is false at  $\langle s, c \rangle$  for any  $s$ . Only if we restrict the range of the ordinary modal operators ( $\Box$  and  $\diamond$ ) to worlds whose carving is the actual carving ( $c_{@}$ ), do we capture the ordinary notion of metaphysical possibility within our broader framework of conventionalist possible worlds.

*3.3. Analyzing the Refutation-Strategy: A First Pass.* We are now in a position to give a first analysis of where the refutation strategy against conventionalism goes wrong. According to the ontological conventionalist, there are two dimensions along which mountains can fail to exist in a world: First, the substratum may not support mountains, that is, it may not provide the material to carve out mountains (it’s all flat). Second, the carving may not carve out mountains even though the substratum supports mountains (it’s mountainous). The appearance of the absurdity of MOUNTAINS comes from understanding the conventionalist as claiming that a change of a certain aspect of the substratum (namely, how we speak and think) is sufficient to bring about a change of an entirely unrelated aspect of the substratum (namely, African geography). But all the conventionalist is committed to is that if a different *carving* were applied to the actual (mountainous) substratum, then the resulting world would differ from the actual one in its ontology (*not* in its mountainous substratum).

## 4 Counterconventional Conditionals

Based on the preliminary analysis of the refutation-strategy just given, I will, in this section, develop a semantics that allows us to contrast the conventionalist reading of conditionals like MOUNTAINS more sharply with the non-conventionalist reading of these conditionals. The core idea, developed in §4.1 to §4.3, is that there are two ways of conceiving of a change in our conventions, one from the perspective of substrata, the other from the perspective of carvings. As we will see in §5, this distinction provides the key to countering many of the familiar criticisms of conventionalism. Based on this distinction, I introduce, in §4.4, the notion of a *counterconventional conditional*, which is meant to capture the sense in which conventionalists hold claims like MOUNTAINS to be true. I then contrast this conditional with two other kinds of conditional. Finally, in §4.5, I explain why there is presumption against reading MOUNTAINS as a counterconventional conditional.

4.1. *Determining Carvings.* I introduced the notion of a carving as a theoretical counterpart to a set of conceptual practices, practices which impose structure on a substratum. The actual conceptual practices are constituted by how we actually think, speak and behave, and are themselves features of the actual world. Let us say that a substratum  $s$  *grounds* a carving  $c$ , if  $s$  supports the conceptual practices that  $c$  corresponds to. For example, the actual substratum supports us and our (the actual) conceptual practices, and so it grounds the actual carving. If we spoke and thought differently, the resulting substratum would support people with different conceptual practices and thus ground a different carving. We can introduce a function which, when applied to a substratum, gives us the carving that the substratum grounds:

**Definition** The *grounding*-function is a function from the collection of substrata to the collection of carvings. It maps every substratum  $s$  to the carving  $c_s$  that it grounds.

The carving  $c_{s_{\textcircled{a}}}$  will be referred to as  $c_{\textcircled{a}}$ .

There are some minor complications we need to address. First, conceptual practices vary across cultures and to some degree also across members of the same culture. So a substratum may potentially ground a multitude of carvings. In order to simplify matters, I consider substrata as *centered*: For any substratum  $s$ , one of the (conceptually homogeneous) communities  $s$  supports is privileged in that this community's conceptual practices deter-

mine which carving  $s$  grounds.<sup>11</sup> For example, it is *our* practices—that is, the community of analytic philosophers’ conceptual practices—which determine what carving the actual substratum grounds. The second complication arises from the fact that not every substratum grounds a carving, since in order for a substratum to ground a carving it has to support rational beings who engage in the appropriate conceptual practices. If a substratum supports no suitable community of concept-users, I stipulate that the substratum grounds the *null-carving*  $c_\emptyset$ , that is, the carving which yields *no* conventionally determined features when it is applied to an arbitrary substratum. For instance, in the context of conventionalism about objects,  $\langle s_\@, c_\emptyset \rangle$  does not contain any objects. I make the further simplifying assumption that every (centered) substratum determines a *unique* carving.<sup>12</sup>

4.2. *Carving Perspectives.* The conventionally determined features of a world are in principle independent of people’s conceptual practices *in that world*: For a world  $\langle s, c \rangle$  it need not be the case that  $c = c_s$ . Worlds, recall, are fully determined by substratum-carving pairs, and any pair  $\langle s, c \rangle$  represents a possible world. A world’s substratum may ground a carving that differs from the carving *associated* with that world. There are, in fact, three types of carving-perspective from which we may look at a substratum  $s$ . First, we may consider  $s$  from the perspective of the actual carving, that is, against the background of our actual conceptual practices. This is equivalent to considering the world  $\langle s, c_\@ \rangle$  and is, as I suggested above, the standard, non-conventionalist way of conceiving alternative possibilities. Second, we may consider  $s$  from the perspective of the carving it grounds. This perspective is equivalent to considering world  $\langle s, c_s \rangle$ . Call worlds of this form *diagonal worlds*. When assessing what is the case at such a world we put ourselves in the conceptual shoes of the relevant community of concept users at that world. In many cases, the worlds on the diagonal will not have any conventionally determined features, as many substrata do not support concept-users which are required to induce carvings. However, as we will see later in §5, diagonal worlds play a special role in some of the

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<sup>11</sup>Centered substrata are analogous to *centered worlds* often used in the characterization of the content of thoughts expressed by sentences containing indexicals. See, for instance, Quine, 1968, ‘Propositional Objects’, and Lewis, 1979, ‘Attitudes *de dicto* and *de se*’.

<sup>12</sup>One may think that what carving a given substratum supports is itself a matter of convention. For example, Quinean considerations concerning radical interpretation could lead one to this conclusion: Does the community whose conceptual practices I am investigating carve rabbits, rabbit-stages, undetached rabbit-parts or something else altogether? This could be accommodated in the present setting, but it would complicate matters and distract from the main points I wish to make here.

standard objection to conventionalism. Third, we may consider  $s$  from the perspective of a carving other than both the actual carving and the carving  $s$  grounds. Most conventionalist possible worlds are of this kind. The ones of most interest for conventionalist purposes are those representable by  $\langle s_{@}, c \rangle$ , for these represent the worlds that can be generated by bringing different conceptual practices to bear on the actual world's substratum.

In general, then, a world's carving need not be grounded in that world's substratum. Only in worlds  $\langle s, c_s \rangle$  are the conventionally determined features dependent on people's conceptual practices in that world. The actual world belongs to this small class of special worlds.

4.3. *Conventions and Covariance.* Recall that the critic of conventionalism pointed out that the conventionalist is committed to some form of systematic *covariance* between conventions and the features claimed to be conventionally determined. We have seen that there are two ways we may conceive of a possible world in which we have conventions different from the ones we actually have. First, we can conceive of a world  $\langle s, c_{@} \rangle$  whose *substratum*  $s$  differs from the actual substratum so as to ground a different carving (so  $c_s \neq c_{@}$ ). Second, we can conceive of a world  $\langle s_{@}, c \rangle$  whose *carving* differs from the actual carving. This means that there are two ways in which the conventionally determined features of the world may be claimed to covary with our conventions. First, they may be claimed to covary with changes of conventions conceived as changes in the *substratum*. Second, they may be claimed to covary with changes of conventions conceived as changes in the *carving*. The refutation-strategy against conventionalism assumes that the conventionalist intends to make the first kind of claim. But this is a mistake. The conventionalist has the second kind of convention-change in mind.

4.4. *Three Types of Counterfactuals.* As we have just seen, we can consider the possibility that we might have engaged in different conceptual practices either counter*conventionally*, or counter*factually*. When we conceive of the possibility that our conventions might have been different counter*conventionally*, we imagine different *carvings* being brought to bear on the actual substratum. When we conceive of the possibility that our conventions might have been different counter*factually*, we imagine a (non-actual) *substratum* that grounds different carvings. Making this explicit motivates to the following notions.

**Definition:** A counterconventional conditional  $P \rightarrow_{cc} Q$  is true at a world  $w = \langle s, c \rangle$  just in case  $Q$  is true at every world  $w' = \langle s, c' \rangle$  whose carv-

ing  $c'$  differs minimally from  $c$  so as to accommodate the conventions described by  $P$ .

That is, a counterconventional conditional  $P \rightarrow_{cc} Q$  is true if  $Q$  is true if we look at the world's substratum relative to the conceptual conventions described in  $P$ . For instance, consider

(MOUNTAINS) Had our conventions had been suitably different, then there would have been no mountains in Africa

Read as a counterconventional conditional, MOUNTAINS is true just in case there are conceptual practices such that against the background of these practices we would judge there not to be mountains in Africa. As a counterpart to the notion of a counterconventional conditional, we introduce the notion of a countersubstratum conditional:

**Definition:** A *countersubstratum conditional*  $P \rightarrow_{cs} Q$  is true at a world  $w = \langle s, c \rangle$  just in case  $Q$  is true at every world  $w' = \langle s', c \rangle$  whose substratum  $s'$  differs minimally from  $s$  so as to make  $P$  true.

The idea is that a countersubstratum conditional  $P \rightarrow_{cs} Q$  is true if  $Q$  is true at those possible worlds at which our conceptual practices are as described by  $P$ . For instance, MOUNTAINS is false when read as a countersubstratum conditional: Consider any possible set of conceptual practices. There is a possible world which differs from the actual world only in that we follow those conceptual practices at that world but at which there are nonetheless mountains in Africa. Just as ordinary modality is a special case of  $s$ -modality, counterfactual conditionals are a special case of countersubstratum conditionals, namely the special case in which the actual carving is held fixed.

There is a third type of counterfactual, a *diagonal conventional conditional*, which is a hybrid between the first two and which arises from the diagonal perspective on substrata:

**Definition:** A *diagonal conventional conditional*  $P \rightarrow_d Q$  is true at a world  $w = \langle s, c \rangle$  if and only if  $Q$  is true at every world  $w' = \langle s', c_{s'} \rangle$  whose substratum  $s'$  differs minimally from  $s$  so as to make  $P$  true at  $\langle s', c_{s'} \rangle$ .

The idea is that a diagonal conventional conditional  $P \rightarrow_d Q$  is true if  $Q$  is true at every world whose substratum grounds the conventions described in  $P$  and whose carving is grounded in its substratum.

Suppose, for instance, we read MOUNTAINS as a diagonal conventional conditional. To determine whether it is true we need to consider substrata  $s$

which ground a suitable carving  $c_s$  (namely, those that do not carve mountains) and apply that very carving  $c_s$  to the substratum  $s$ . Since  $c_s$  does not carve mountains, there are no mountains in  $\langle s, c_s \rangle$  no matter what  $s$  looks like. So, read as a diagonal conventional conditional, MOUNTAINS is true.

4.5. *Counterconventionals and Countercontextuals.* The *ordinary* reading of a conditional like MOUNTAINS is the countersubstratum reading, which fails to capture the sense in which the conventionalist claims certain aspects of reality to covary with conventions. The counterconventional reading does capture this sense, but it may seem unnatural. In this section I will explain why the counterconventional *reading* of conditionals like MOUNTAINS seems less natural, even though the truth conditions that such conditionals have on the proposed reading are satisfied.

It is instructive to compare the situation we encounter in the case of counterconventional conditionals with the case of conditionals involving indexicals, that is, expressions whose reference varies across contexts of utterance. A prominent conceptual approach to the semantics of languages involving indexicals employs a 2-dimensional framework.<sup>13</sup> Sentences of such a language are evaluated with respect to two parameters: (i) The world of utterance, which determines the referents of the indexical expressions and thus determines what proposition the utterance of the sentence expresses, and (ii) the world of evaluation relative to which the proposition expressed is evaluated.

Now consider the following argument, modeled on the refutation-strategy against conventionalism: The contextualist claims that the reference of the indexical ‘here’ depends on the context of utterance. So the reference of ‘here’ should systematically covary with the context of utterance: Suitable variation of the context of utterance should go hand in hand with changes of the reference of ‘here’. For example, I am actually in Cambridge, where, right now, it is sunny. It is actually raining in Chicago. Consider

(RAIN) If I had written this in Chicago, then it would now be raining here.

On the ordinary reading, RAIN is false: Even if I were writing in rainy Chicago it would still be sunny here in Cambridge, since my whereabouts have no effect on the weather in Cambridge. So, contrary to what the contextualist claims, the reference of ‘here’ does not depend on the context of utterance.

This argument, parallel to the argument considered in the opening of this paper, is clearly unsound. We realize that the antecedent of RAIN

<sup>13</sup>See, for instance, Robert Stalnaker, ‘Assertion’ or David Kaplan, ‘Demonstratives’.

fails to shift the parameter on which the reference of ‘here’ depends. The counterfactual assumption that the utterance is produced in Chicago does not shift the context of utterance, yet it is the context of utterance that needs shifting for the consequent of RAIN to be true.

The parallel to claims like MOUNTAINS is obvious. In both cases, the intended interpretation requires a particular parameter to be shifted and in both cases that shift fails on the ordinary reading. Instead, the other determining parameter is shifted, the world of evaluation in the one case, the substratum in the other. There is a second parallel. To be made true by the covariance of indexical reference with the context of utterance, RAIN must be read as a *countercontextual* conditional:

**Definition:** A *countercontextual conditional*  $P \rightarrow_{cx} Q$  is true at world  $w$  just in case  $Q$  is true at  $w$  when  $Q$  is interpreted with respect to the closest possible world which makes  $P$  true.<sup>14</sup>

This semantic rule would ensure that the correct parameter, namely the context of utterance, is shifted. If tokens of RAIN were to express countercontextual conditionals, they would be true under the climatic and locational assumptions made above.

David Kaplan calls expressions which shift the context of utterance *monsters*. He argues that English contains no such expressions and, furthermore, that none could be introduced into English.<sup>15</sup> It can be argued that just as there are no monsters—context-shifting expressions, there are no *c-monsters*—carving-shifting expressions. Indeed, Crispin Wright makes just this suggestion on behalf of the conventionalist: The conventionalist ought to maintain that English is governed by a ‘meta-convention’, *convention C*, according to which:

[w]hat it is true to say *of* a hypothetical state of affairs, and what it is true to say *in* a hypothetical state of affairs, is to be determined by reference to our actual linguistic conventions, even if those are not the conventions that would then obtain.<sup>16</sup>

The claim that there are no *c-monsters* in English, as well as the claim that convention *C* governs our counterfactual reasoning, is not at all implausible. We judge a situation, actual or counterfactual, against the conceptual background of our actual conceptual practices, simply because it is the deeply

<sup>14</sup>‘Closest’ in the sense of David Lewis’ (1973) account of causation.

<sup>15</sup>David Kaplan, ‘Demonstratives’, p. 510.

<sup>16</sup>Cf. Crispin Wright, ‘In Defense of Conventional Wisdom’, p. 190.

entrenched actual conceptual practices (of which we may or may not be aware) which inform our judgements. There is no mystery here.

We are used to reading claims like MOUNTAINS as countersubstratum conditionals and are ordinarily not aware of the availability of the counterconventional reading. We now have an explanation of why the intended reading of such claims is *prima facie* less natural than the countersubstratum reading. We also see that the fact that this reading is less natural in no way compromises the underlying truth these claims are trying to capture, namely the systematic covariance of various purportedly conventional features of reality with conventions.

## 5 Analyzing a Family of Objections

We now have the tools to give a more fine-grained analysis of the refutation-strategy and several related objections. First, I will examine the objection that the existence of people is a conventionalist *blindspot*, that is, that the existence of people cannot be a matter of convention. Second, I will consider the objection that contingent conventions cannot account for any necessities. Third, I will look at the objection that if there were no people, then none of the features deemed conventionally determined would obtain. Finally, I will return to the refutation-strategy laid out at the beginning of the paper.

5.1. *A Conventionalist Blindspot?* It is sometimes claimed that conventionalists cannot coherently take the existence of people to be a matter of convention.<sup>17</sup> The worry seems to be that if the existence of people were partly determined by convention, then

(NO PEOPLE) If our conventions had been suitably different, then there would have been no people

would be true. But, the critic asks, how *could* that be true? At a world that witnesses NO PEOPLE, there would have to be no people, yet at the same time there would have to be conventions which differ from our actual ones. But at no world at which there are no people are there *any* conventions. So a view that commits one to NO PEOPLE cannot be true.

Read as a counterconventional conditional, which is how it has to be read to do justice to the conventionalist position, NO PEOPLE has truth conditions different from those alleged by the critic: NO PEOPLE is true iff there is a

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<sup>17</sup>A version of this objection appears in Barry Stroud, *The Significance of Philosophical Scepticism*, p. 191.

carving which yields no people when applied to the actual substratum. For illustrative purposes, let's go through the process of determining whether there is such a carving. First, we look for substrata that support conceptual practices that correspond to carvings which, when applied to the actual substratum, yield no people. That is, we look for  $s$  such that

‘There are no people’ is true at  $\langle s_{@}, c_s \rangle$

Note that such a substratum  $s$  has to support people (since only substrata that support people can ground carvings), so the required  $s$  is such that both

‘There are no people’ is true at  $\langle s, c_s \rangle$

and ‘There are no people’ is false at  $\langle s, c_{@} \rangle$ .

Are there substrata which support such conceptual practices and thus ground the required carvings? Sure. We could, for example, have been extreme physicalists who conceptualize everything in their environment in terms of microscopic physical particles. Relative to that conceptual schema, there are no people. (How we'd go about our daily business if we were so conceptually narrow-minded is a different question.) Once we have identified a suitable substratum, say the one supporting the conceptually narrow-minded physicalist, we abstract the carving it grounds and apply it to the actual substratum. On the conventionalist reading, then, NO PEOPLE is not obviously unsatisfiable. So the critic has failed to identify a conventionalist blindspot.

5.2. *The contingency objection to conventionalism.* A classical objection to conventionalist construals of modal matters is that they violate the intuitive modal principle S4 according to which necessary propositions are necessarily necessary. The point has been made forcefully by Casimir Lewy:<sup>18</sup> If a certain necessary truth, say

(NUMBERS)  $\Box$ (There are numbers),<sup>19</sup>

depends on contingent truths about our actual conceptual practices, then presumably there is a suitable variation of our practices which together with some further contingent conditions, jointly described by  $C$ , would make it the case that NUMBERS had not been true. So

<sup>18</sup>See Casimir Lewy, *Meaning and Modality* and ‘Logical Necessity’; see also Wright, ‘In defense of conventional Wisdom’.

<sup>19</sup>Again, I assume here that according to the actual conceptual practices, numbers exist necessarily. Nothing hangs on my particular choice of example.

(ENTAILS)  $C$  entails that  $\neg\Box(\text{There are numbers})$

should be true. But this violates the modal principle S4: Suppose ENTAILS is true. Then there are worlds (those in which  $C$  is true) in which  $\neg\Box(\text{There are numbers})$  holds. On the other hand, our *actual* practices are supposed to entail  $\Box(\text{There are numbers})$ . It follows, by S4, that  $\Box\Box(\text{There are numbers})$  is true in the actual world. But then,  $\Box(\text{There are numbers})$  is true in every world accessible from the actual world, including worlds in which  $C$  holds. But in *these* worlds, ENTAILS claims,  $\neg\Box(\text{There are numbers})$  is true. To avoid the contradiction, the conventionalist would have to reject the modal principle S4—a very unattractive move. This is the contingency-objection to conventionalism about modality.

The distinctions drawn above allow us to diagnose Lewy’s criticism as resting on an equivocation between two kinds of modality. Conventionalists about abstract objects do not claim that since NUMBERS depends on contingent conventions

(NUMBERS $_{\diamond}$ )  $\diamond\neg\Box(\text{There are numbers})$

is true. Rather, they claim that, against the conceptual background of our *actual* practices, the existence of numbers is necessary. Had these practices been suitably different, they would have generated a different set of metaphysically possible worlds relative to which the existence of numbers would not have been necessary:

(NUMBERS $_{\diamond_c}$ )  $\diamond_c\neg\Box_s(\text{There are numbers})$ .

To capture the conventionalists’ intent, then, the ‘entails’ in ENTAILS ought to be read counterconventionally.

5.3. *No People, No Objects?* Another objection runs as follows: Conventionalists claim that carvings are determined by our conventions and thus ultimately by how we speak and think. Ontology, or aesthetics, or essences, or space-time geometry, or the laws of nature, conventionalists maintain, depend(s) on carvings. But then the worlds at which there are no rational beings that engage in carving-inducing conceptual practices lack the purportedly conventional aspects of reality. If there are no people at a world, then there are no conceptual practices, so there are no carvings, so there are no objects, no essences, no beauty, no laws of nature, which is absurd.

We have seen that the systematic covariance between conventions and certain aspects of the world claimed by the conventionalist does not carry commitment to

(NO OBJECTS) Had there been no people, there would have been no objects.

Once again, all that the ontological conventionalist is committed to is the existence of a set of conceptual practices, a carving, which yields no objects when applied to the substratum of the actual world (in which, the conventionalist concedes, there *are* objects relative to the actual carving). Where do the critics go wrong? Perhaps they read NO OBJECTS as a *diagonal conventional conditional*. At all *diagonal* worlds  $\langle s, c_s \rangle$  at which there are no people (relative to the actual conceptual practices), there are no objects, since the substratum  $s$  of such a world grounds the null-carving which yields no objects when applied to  $s$ . So if NO OBJECTS is read as a diagonal conventional conditional, then it comes out true.

5.4. *The Refutation Strategy: No Mountains in Africa?* In the refutation strategy outlined in the opening of this paper, the critic maintained that the conventionalist about what exists is committed to the truth of

(MOUNTAINS) Had our conventions been suitably different, then there would have been no mountains in Africa.

This, the critic continued, is false, and so conventionalism about what exists must be false.

The critic's fallacy consists in attributing to conventionalists a claim which they do not in fact make, namely the claim that the part of the substratum which supports mountains depends on the part of the substratum which supports us and our conventions. Again, what conventionalists *are* claiming is that against the background of a suitably different set of conceptual practices, we would judge there to be no mountains in Africa. The counterconventional but not the more familiar countersubstratum reading of MOUNTAINS captures this claim.

So the refutation-strategy misses its target: It appeals to the fact that the truth-conditions of MOUNTAINS read as a *countersubstratum* conditional are not satisfied, when what the conventionalist is committed to is that MOUNTAINS read as a *counterconventional* conditional is true. Thus, the conventionalist can maintain a dependence-claim without being committed to our speaking and thinking having an effect on Africa's geography.

## 6 Conclusion

My aim in this paper has been two-fold. The first aim has been *methodological*. I have argued that a certain short-shrift refutation-strategy against

various forms of conventionalism does not work as it neglects the particular way in which conventionalists take some range of facts to depend on convention. I have provided a framework to help clarify what that particular way amounts to. This clarification highlights what it takes to give a conventionalist account of some subject matter in a way which does not founder on the kind of objection outlined at the beginning of the paper. I have thereby provided a methodological framework within which accounts that take some aspect of reality to depend on human practices can be perspicuously formulated. The second, implicit, aim has been *metaphilosophical*. The framework paves the way for the resolution of certain philosophical disputes. For instance, disputes over the existence of arbitrary mereological sums, scattered objects, abstract objects of various sorts, over the ontological primacy of one ontological category over another, over values, over mereological essentialism and the identity of persons can be cast as disagreements not about the metaphysical facts, but about what conventions are most convenient for conceptualizing the target-area.<sup>20</sup>

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<sup>20</sup>I would like to thank Alex Byrne, Matti Eklund, Sally Haslanger, Peter Koellner, Bob Stalnaker, Ásta Sveinsdóttir Steve Yablo, as well as audiences at the Harvard/MIT Eminees-Workshop, Florida State University and the University of Colorado at Boulder for helpful discussion and an anonymous referee for constructive criticism.

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