Conventionalism

by

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Abstract

Certain fundamental philosophical disputes, in contrast to disputes in the empirical sciences, are characterized by the persistence of disagreement. This has led some to endorse conventionalism, the view that the 'facts of the matter' partly depend on our conventions and that disagreements persist because both sides to the dispute employ different conventions. What does it mean to say that the facts of the matter partly *depend* on conventions? My thesis is concerned with this question. It has four parts.

Part I ('Convention, Dependence, Covariance') examines how some matters of fact may depend on convention. I argue that while versions of conventionalism which can be construed in terms of one of the familiar dependence-relations are intuitively plausible, most interesting versions of conventionalism (about, say, ontology, modality and morality) cannot be so construed. To maintain the claim that some range of facts depends on convention, conventionalists need to explain how the features they take to be conventionally determined systematically covary with conventions.

Part II ('A Framework for Conventionalist Reasoning') provides the *formal* tools to model conventionalist dependence-relations, tools that respect the methodological assumptions of conventionalists and reflect the logic of conventionalist discourse. The framework developed is also useful for perspicuously formulating other philosophical accounts that take some aspect of reality to depend on human practices, such as neo-Kantian, projectivist and response-dependence accounts.

Part III ('Facts by Convention') investigates how to make *philosophical* sense of the dependence-relations invoked by conventionalists. I critically examine several conventionalist accounts in the literature, and, employing the tools developed in part II, I propose various explications of how a range of facts may depend on convention.

Part IV ('Putting everything together') classifies conventionalist accounts according to what kind of dependence-relation they invoke and critically discusses the interest and plausibility of ontological conventionalism.

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Contents

One often reads claims to the effect that such and such a phenomenon depends on *convention*. Moral conventionalists claim that morality is established by agreed upon social norms. Ontological conventionalists claim that what there is depends on convention. Geometrical conventionalists claim that whether space is Euclidean or Riemannian is a matter of convention. Modal conventionalists claim that modal features are determined by convention.[1] An attractive feature of conventionalism is that it may help resolve certain philosophical disputes. For instance, against a conventionalist background, disputes over such issues as the existence of a abstract objects, the ontological primacy of one ontological category over another, values and the identity of persons can be recast as disagreements about what conventions are most convenient for conceptualizing the target-area. Most potentially interesting forms of conventionalism, such as conventionalism about ontology, modality and morality, are notoriously hard to make sense of. This essay is meant to shed some light on how a range of facts may plausibly be taken to depend on convention.

[1]Moral conventionalism can be traced back to David Hume (*A Treatise of Human Nature*, 1740). A version of ontological conventionalism can be attributed to Rudolf Carnap (*Empiricism, Semantics, Ontology*, 1956). Henri Poincaré held a variant of geometrical conventionalism (*Science and Hypothesis*, 1905). For a defense of modal conventionalism see Alan Sidelle's *Necessity, Essence and Individuation* (1989).

Chapter 1

Convention, Dependence, Covariation

For some subject matters, conventionalism is intuitively more plausible than for others. Few people would dispute, for instance, that meaning depends on convention: Nothing intrinsic about the word 'horse' makes it refer to horses. Had English speakers used the word very differently, it would have referred to something else or maybe not referred at all. Likewise, few would doubt the conventionality of what constitutes correct driving. In the United States, it is correct to drive on the right-hand side of the road while in the UK it is correct to drive on the left-hand side. The difference is due to the fact that in the two countries people have adopted different conventions with regard to driving. For other subject matters such as the moral, the modal and the ontological, on the other hand, conventionalism is highly controversial. It is hard to see, for instance, how the fact that there are properties, the fact that gratuitous killing is morally wrong or the fact that water is necessarily H_2O could depend on convention. Yet some philosophers have maintained these prima facie implausible claims.[1]

My aim in this chapter is twofold. First, I will explain the difference in intuitive plausibility between the various versions of conventionalism: Conventionalism about

[1]For instance, according to the social contract tradition in ethics, the source of moral facts are conventional agreements. Alan Sidelle believes that modal and ontological facts are rooted in convention.

an area is unproblematic to the extent that it involves one of the familiar dependence-relations like causal or constitutive dependence. The less plausible versions of conventionalism, in particular conventionalism about ontology, the modal, and the moral, cannot be construed in terms of one of these dependence relations. Second, I will show what is required for rendering these types of conventionalism more plausible. In subsequent chapters I investigate the resources available to conventionalists to meet these requirements.

1.1 Convention

A principle, a fact, a behavior, etc. is a matter of *convention* only if the way things actually are does not constrain us so as to make adoption of the principle or behavior, or acceptance of the fact inevitable. The adoption of a convention is, to some degree, a matter of *choice*. For instance, in English we use the word 'horse' so as to make it refer to horses, but we could have used it so as to refer to cars instead. Nothing either in the nature of the string 'horse' nor in the nature of horses constrains us to use the former to refer to the latter. The only constraint the demands of communication place on our use of the word 'horse' is that our referential intentions be systematically recoverable.[2] Thus, the reference of the word 'horse' is a matter of convention. Similarly, nothing either in the nature of roads nor in the nature of vehicles constrains us to drive on the right-hand side rather than the left-hand side of the road. The only constraint the demands of safety place on our driving is that we drive in a way that avoids accidents.

1.1.1. *Contractual and behavioral conventions.* We can distinguish between at least two notions of convention relevant for our purposes, which we may call the *contractual* and the *behavioral* notion, respectively.

I take it that when we ordinarily talk about conventions, what we have in mind is the *contractual* notion: According to this notion, conventions are principles or

[2]It isn't necessary that we all use the word in more or less the same way. We could imagine a working language in which, say, women used 'horse' to refer to horses while men used it to refer to cars. As long as this is mutual knowledge (and one can easily tell whether the producer of an utterance of 'horse' is male or female), this would not upset communication.

prescriptions that have been agreed upon and adopted by some group of people. The adoption of a convention may proceed by either explicit or implicit agreement to the prescription. Here, conventions are viewed as *contracts* to behave in a certain way, contracts with a normative force, which *ought* to be abided by but which may, for some reason or other, not be heeded. On the *behavioral* notion, a convention is not an agreement, a kind of contract to behave in a certain way, but rather the *behavioral pattern* itself that on the first notion arises from the heeded commitments to behave in a given way. This is the notion mainly used in social philosophy and adjacent areas like economics and law.[3] The behavioral patterns that count as conventions are often, yet not always, characterized in game-theoretic terms. There are various different such analyses according to which a convention is a behavioral pattern—or rather a combination of behavioral *strategies* of a group of actors which generates certain behavioral patterns—which meets some constraints. What exactly the constraints amount to differs across analyses. They all incorporate some features we intuitively regard as essential for a behavioral pattern to constitute a convention. First, the behavioral pattern has to be mutual knowledge, that is everyone has to know which behavioral strategy everyone typically follows and that everyone else knows this, too. For instance, I know that my interlocutor will typically use 'horse' to refer to horses and I know that she knows that I know this. So if she wants to communicate with me she is going to use the word accordingly. Another feature of behavioral patterns that constitute conventions is that for every individual who is party to the convention, it is more beneficial to behave in accordance with the pattern than to deviate from it. This makes for the pattern's relative stability, the mutual behavioral expectations of group-members, and hence the convention's normativity.

The behavioral and the contractual notion of convention are clearly related. Given a group with a combination of behavioral strategies together with common expectations about what behavioral strategies are followed by which members of the group, we can say that the members of the group tacitly agreed to the principles that cap-

[3]This notion of convention goes back to David Hume (1740) and has been taken up and developed by David Lewis (1969). See also Robert Sugden (1999).

ture the patterns which the combination of the behavioral strategies gives rise to. If, for example, everyone uses the word 'horse' to refer to horses, and everyone expects everyone else to use 'horse' to refer to horses, then we can say that everyone agreed to the principle that 'horse' refers to horses. Conversely, most everyday conventions have not been established nor are they maintained by *explicit* agreement to a kind of contract. Rather, if we want to use the contractual notion to describe everyday conventions we have to appeal to *tacit* agreements. But tacit agreements to abide by given set of conventional rules are arguably constituted by certain actual behavioral patterns, rather than, say, some kind of inner affirmation. An unheeded explicit agreement to abide by some rules would not, or would only derivatively be considered a convention, so the existence of a corresponding behavioral pattern is necessary.

As an example for the interplay between the two notions of convention consider the case of meaning-stipulations, that is, prescriptions that are meant to conventionally fix the meaning of an expression (or a whole class of expressions). For instance, we could try to stipulate the meaning of the expression 'nexiv' by uttering a sentence like

(1.1) A nexiv is a female fox.

How is this supposed to conventionally fix the meaning of 'nexiv'? If meant as a stipulation, an utterance of (1.1) has the force of

(1.2) Let 'nexiv' mean what it has to mean for 'A nexiv is a female fox' to be true.

In order to endow 'nexiv' with a meaning it is not sufficient to utter such a sentence intending it to stipulate the meaning of 'nexiv'. Nor is it sufficient that speakers in the community explicitly indicate agreement to the stipulation. Rather, the expression 'nexiv' will subsequently have to be *used* so as to make (1.1) true. The stipulation alone does not amount to a convention and neither does an act of agreement (some nodding, say).[4]

Even though the two notions of convention are tightly connected, there is nonetheless a useful conceptual distinction to be made, with the one notion focusing on the

[4]See also Paul Horwich (2000).

aspect of conventions as *commitments* and the other on the aspect of actual *behavior*.

1.1.2. *Conceptual conventions.* For some interesting types of conventionalism, the conventions upon which a range of phenomena is supposed to depend are conventions which govern the way we conceptualize or describe a subject matter. Not only can we commit ourselves to drive on the right hand side of the road or to use the word 'horse' to refer to horses. We can also commit ourselves to describe or conceptualize a given type of situation in a particular way. We may call a collection of conceptual conventions an *ideology*. For instance, we can conceptualize a situation in terms of macro-objects or in terms of sense-data, rabbits or rabbit-stages. We can make moral judgements and classify objects and people in various ways. By doing so, we tacitly posit a certain structure for our surroundings. For example, we posit the existence of concrete objects of a certain kind (such asfor instance mereological sums or objects with funny modal properties), of abstract objects, of states of affairs, 4-dimensional objects, etc. To be sure, it is not always clear what ideology, what conceptual conventions a particular way of speaking brings with itself, especially since many ways of speaking can be translated into each other preserving observable consequences. Nor is it clear what ontology a particular ideology commits us to. There is, nonetheless, something like a prima facie ideology and a prima facie ontology that come with a particular, conventional, way of speaking.

1.2 Dependence

Conventionalism with regard to a subject matter is the claim that how things stand with respect to that subject matter *depends on* or is *determined by* convention. What does *dependence* amount to in this case?

There are many ways in which one range of phenomena can depend on another range of phenomena and thus many roles that one range of phenomena can play in the determination of an other. For example, whether 'Boston is south of New York or Massachusetts is West of Oregon' is true logically depends on whether either 'Boston

is south of New York' is true or 'Massachusetts is West of Oregon' is true. Whether 'Massachusetts is West of Oregon' is true, in turn, depends on whether Massachusetts is West of Oregon. And the fact that the former depends on the latter depends on convention (specifically, semantic convention). The lung cancer in Sue causally depends on Sue's smoking. Ted's signaling a right turn depends constitutively on his extending his right arm. That Ted's signaling a right turn so depends is a matter of convention. The table constitutively depends on the matter it is composed of and causally on the carpenter who built it. Whether or not the sentence 'George is widowed' is true depends analytically on whether the sentence 'George's wife has died' is true. And so on.

Any kind of dependence involves some sort of systematic *covariation*: If some range of phenomena A depends on another range of phenomena B, then at the very least, a suitable change in B should result, ceteris paribus, in a change of the dependent phenomena: If the success of the meeting depends on your participation, then your failure to participate should result in a less successful meeting. If the number indicated on the measuring device depends on the temperature of the liquid, then a suitable change in the temperature should be accompanied by a change in the number indicated. Without some such relation of covariance, we can make no sense of the claim that phenomena of the one type depend on phenomena of the other. Systematic covariance ought to support counterfactuals, so we can give a counterfactual account of dependence. If we take, for now, the relata of dependence relations to be facts,[5] then

(DEPENDENCE) The fact that p depends on the fact that q iff (i) had q obtained then p would have obtained and (ii) had q not obtained then p would not have obtained.[6]

[5]I take facts here to be arbitrary (including non-obtaining) states of affairs. Dependence-relations between any other entities can be translated into dependence-relations between facts. For instance, if event e depends on event e', then the fact e occurs depends on the fact that e' occurs. If object o depends on object o' then the fact that o exists depends on the fact that o' exists. And so on.

[6]This is essentially Lewis' analysis of causal dependence. But it works equally well (and equally poorly) for other kinds of dependence-relation. See Lewis (1973). Note that clause (ii) is controversial. In the case of causal dependence, it may suggest that the failure of the effect to occur *causes* the non-occurrence of the cause. Here, clause (ii) is meant to capture the fact that

The first clause ensures that, everythig else being equal, the dependent fact (p) occurs if the fact it depends on (q) occurs. For example, if our going on an outing depends on whether the sun is shining and the sun is shining, then, all else being equal, we go on an outing. This alone, however, is not enough, for it makes necessary facts dependent on any contingent fact whatsoever. The second clause takes care of that: It ensures that necessary facts depend at most on other necessary facts, yet not on contingent ones.

As it stands, this does not distinguish between different types of dependence. For this, we need an analysis of the counterfactuals involved. Typically, counterfactuals are analyzed in terms of possible worlds. Let's abbreviate 'If q had obtained then p would have obtained' by $q \circ\!\!\rightarrow p$. The counterfactuals in DEPENDENCE may then further be analyzed as

(COUNTERFACTUAL) $q \circ\!\!\rightarrow p$ (in the actual world) iff (i) p obtains in the closest q-world.

The type of dependence-relation involved in an instance of DEPENDENCE can then be captured by using a particular kind of world-structure in the evaluation of the counterfactuals involved, where by a world-structure I mean a collection of possible worlds together with a closeness-metric.

In the case of logical dependence we could take as the collection of worlds the collection of interpretations of sentences of our language and let all worlds be equally close to the actual world (the actual interpretation of the language). Or we could take as the collection of worlds all possible worlds and let those be the closest in which sentences of our language receive interpretations in accordance with the rules of logic.

It is somewhat harder to determine the precise world structures appropriate to capture causal dependence. The possible worlds analysis of counterfactuals replaces the earlier metalinguistic analysis, which attempted to reduce counterfactual dependence to logical implication by adding in auxiliary hypothesis. The problem with this approach is that there is no satisfactory general way of generating the relevant auxiliary hypotheses. The possible worlds analysis replaces the need for auxiliary

hypotheses by appealing to the notion of closeness. Intuitively, the closeness of a world is determined by the degree to which it satisfies the auxiliary hypotheses of the earlier approach. One feature relatively close worlds in world structures appropriate for causal dependence have is that they satisfy the actual laws of nature. Beyond that, a general account for what makes for relative closeness in this case is just as hard to come by as a general account of the required auxiliary hypothesis is on the metalinguistic approach. Similar problems beset attempts to find precise constraints on the closeness relations needed to account for other types of dependence, but we have nonetheless an intuitive idea of what closeness amounts to in these cases. In the case of *constitutive* dependence, those worlds are relatively closer in which the constitutees do not come apart from the constituters. That is, if the table is constituted by a given lump of matter, then in the relatively close worlds, the table, if it exists, is constituted by the matter as well (though the matter need not constitute the table in all these worlds). In the case of *analytical* dependence, those worlds are relatively closer in which the actual meaning-relations between expressions of our language are preserved.

Even though no general account of how relative closeness is determined is in sight, the analysis provided gives a good first approximation to a theoretical account of dependence-relations. That is because we have a reasonably good idea what closeness (and what the corresponding auxiliary hypotheses) amounts to in *specific* cases. This generalizes to an intuitive idea of what, in general, closeness of worlds comes to, even though we lack a general account that generates precise closeness-metrics for the various types of dependence-relation.

To sum up, dependence-relations give rise to systematic covariation. How exactly the dependent phenomena covary with the phenomena they depend on differs across kinds of dependence, but, it appears, any kind of dependence-relation can be captured by a suitably construed counterfactual analysis.

1.3 Dependence on Convention

What kind of dependence-relation underlies the various types of coventionalism? In what way can features of reality depend on convention? Many things, especially artifacts and social institutions depend *causally* on convention: Cutlery, neckties, wedding-chapels, the fact that many perpetrators of capital crimes are imprisoned, etc. None of them would have existed, or would not have existed as abundantly, had it not been for our conventions. For instance, had our (Western European) conventions been suitably different there would have been no cutlery (we could all have eaten with chopsticks or used our fingers instead). Or take reference. Arguably, facts about reference are *constituted* by conventions considered behaviorally. For instance, the fact that 'horse' refers, in English, to horses is constituted by the fact that English-speakers use it to refer to horses, that they know and expect of each other to use the word in that way.[7] Similarly, the fact that by uttering, in a suitable situation, a particular sequence of phonemes amounts to the assertion that p, the command c, the threat t, or to nothing at all is a matter of convention. Had our conventions been different, the semantic facts would clearly have been different. It appears that what the uncontroversial forms of conventionalism have in common is that they all involve a familiar kind of dependence-relation like causal or constitutive dependence. These forms of conventionalism are easily defensible but philosophically not very interesting.

It appears that the more controversial, and potentially more interesting, forms of conventionalism, such as conventionalism about ontology, the modal and the moral cannot be construed in terms of one of the more familiar dependence relations.

Consider ontological conventionalism. As we have just seen, the existence of *some* particular objects does depend on convention. But ontological conventionalists usually have a much broader range of entities in mind. According to Nelson Goodman, for example, we, through our conventions "made" dinosaurs, and Stephen Schiffer argues that our conventional linguistic practices create abstract objects such as prop-

[7]On a popular theory of reference, referential relations are primarily causal relations that link an utterance of an expression to it's referent. Note, however, that these causal relations ride piggy-bag on the referential behavior of generations of speakers.

erties. It seems clear that our conventions cannot have *caused* these kind of entities to exist: Dinosaurs existed long before any human conventions were in place and they would have existed even if no rational beings had ever developed. Abstract objects don't have any causal contact with our practices, and, if there are properties at all, they would have existed even if humans didn't exist. Nor do our conventions *constitute* the existence of these objects. Again, dinosaurs existed long before any of our conventions did and would have existed even if human sand their conventions hadn't. Similarly for most abstract objects. Further, the existence of these objects does not depend *logically* on our conventions.

The same reasoning applies to conventionalism about the modal and the moral. Even had humans never existed, it would still have been a fact that water is necessarily H_2O. So it is hard to see how this and other modal facts could depend on our conventions. Certain of our conventions may well cause or constitute how actions, people and events are morally judged. But that would not amount to causing something to have a certain moral quality or constituting some thing's having that moral quality. Even if our conventions were in fact very different, causing us to judge, for instance, that gratuitous killing is morally acceptable, gratuitous killing would not in fact *be* morally acceptable.

Thus, in the case of controversial versions of conventionalism, there seems to be no direct logical, causal, or constitutive relation between the phenomena claimed to be conventional on the one hand and human conventions on the other. So conventionalists about these subject matters cannot successfully invoke any of the familiar dependence relations. What is more, it is hard to see how conventionalists could appeal to *any* proper dependence relation, because, as the examples suggest, our conventions could have been different in almost any way imaginable without upsetting the ontological, modal or moral facts in question.

1.4 Conclusion

We have seen that some subject matters allow for a conventionalism that involves causal or constitutive dependence. Such forms of conventionalism are uncontroversial. Many prima facie interesting forms of conventionalism, on the other hand, cannot be construed in terms of on of the more familiar dependence relations. Ontology, morality, modality depends on convention, if at all, in a way very different in which meaning or the existence of wedding-chapels depends on convention. The problem is that it is unclear what that way amounts to. The plan for the remaining chapters is to determine what the dependence-relations suitable for the controversial forms of conventionalism look like. In chapter 2, I will present a framework that helps us to formally model such dependence-relations. Chapter 3 examines particular instantiations of the framework.

Chapter 2

A framework for conventionalist reasoning

In the previous chapter we have seen that if a range of phenomena A *depends* on a range of phenomena B, then the A-phenomena and the B-phenomena covary systematically and hence counterfactuals typically are true which assert that had the B-phenomena been suitably different, then the A-phenomena would have differed.

2.0.1. *A challenge.* This makes for a major obstacle for the development of a conventionalist account in many subject areas. Consider, for instance, the following argument against ontological conventionalism, the view that ontology depends on convention: 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.[1]

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

[1]Barry Stroud uses this example in his discussion of Carnap's distinction between internal and external questions. See *The Significance of Philosophical Skepticism*, 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

reality is true,[2] that is matters concerning C *depend* on convention. As we have seen in (1), it follows that 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 suitably different, seems, just like MOUNTAINS above, absurd. Thus, conventionalism with respect to C is false.

2.0.2. *Preliminary analysis.* Arguments of this type, I will show in the present chapter, are faulty. They make the same mistake which a parallel argument against *contextualism* commits. Contextualism, the view that the reference of an indexical expression depends on the context of utterance, is widely accepted. A prominent conceptual approach to the semantics of languages involving indexicals employs a 2-dimensional framework.[3] 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.

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

[2]'C' is meant to suggest that the aspect is thought of as dependent on *convention*.

[3]See, for instance, Robert Stalnaker, 'Assertion', or David Kaplan, 'Demonstratives'.

the context of utterance.

Unlike in the case of conventionalism, we *know* that contextualism is true. So the argument must be faulty. And it is easy to spot the error: The antecedent of RAIN 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. I will show that just as in the case of RAIN, the antecedent of MOUNTAINS fails to shift the parameter that captures the dependence of ontology on conventions.

2.0.3. *Plan.* In order for the analysis of the error in the anti-contextualist argument to carry over into an analysis of the anti-conventionalist argument, we have to identify two parameters which play the same role in the interpretation of conventionalist claims that context of utterance and context of evaluation play in the case of contextualism. For that purpose, I develop a set of conceptual tools to model conventionalist dependence-relations. They will allow us to extend the possible worlds analysis of the familiar dependence-relations outlined in the previous chapter (§1.3) to the kinds of dependence-relations invoked by conventionalists.

To motivate my analysis, I will start by briefly looking at two examples of conventionalist accounts (§2.1). Then I will, in (§2.2), sketch what I take to be the picture of reality that underlies many, though possibly not all, conventionalist accounts. 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 (§2.3 and §2.4). After a preliminary analysis of the refutation-strategy, I introduce a new type of conditional, the *counterconventional conditional* (§2.5). I then apply the apparatus introduced to show that the above refutation-strategy and various related objections to conventionalism fail (§2.6).

2.1 Conventionalism: Two examples

Before analyzing the conventionalist position in an abstract setting, I want to give two examples of the kind of view I have in mind.[4] The first example concerns conventionalism about the geometry of space, associated with figures such as Henri Poincaré. The second example concerns conventionalism about ontology, in the spirit of Alan Sidelle.

2.1.1. *Conventionalism about the geometry of space.* A classical example for a conventionalist position is Henri Poincaré's view on the geometry of space.[5] Traditionally, it was believed, first, that space is Euclidean, and second, that we know the geometry of space a priori. Thus, it was inconceivable to most that the geometry of space could be empirically shown to be other than Euclidean. Doubts came when alternative geometries were discovered and physicists like Hermann von Helmholtz contended that the geometry of space was, after all, an empirical matter which could be settled by measurement. Poincaré disagreed. He argued that the geometry of space could never be a purely empirical matter. The outcome of any measurement, he noted, depends on two factors: The geometric features of the space measured and the state of the instruments employed in the measuring. If external forces operate on the state of the instruments (say gravitation or temperature), then the space-measurements are not indicative of the true geometry of space. Any set of measurements is evidence for space's having a particular geometry only against a number of substantial background assumptions (say, a theory of gravitation or thermodynamics). Since we have no way of reliably factoring the sources that led to our measurements into those pertaining to the "true" geometry of space and those pertaining to other factors, we have no way of telling which of various total theories is correct. Thus, according to Poincaré, axioms laying down geometric features of physical space are best regarded as laying down the meaning of geometrical terms, with the idea that there is an underlying 'true' geometry of space being dropped. Which geometric axioms we choose to characterize

[4] In chapter 3 I will discuss more examples in greater depth.

[5] See Poincaré, *Science and Hypothesis.*

space is a matter of convenience.[6]

On this view, it is, in a sense, a matter of convention whether space is flat or curved. And this sense is prima facie just as elusive as the sense in which the existence of mountains is supposed to depend on our conventions.

2.1.2 *Ontological conventionalism.* Ontological conventionalists believe that what objects there are is partly determined by our conceptual practices. Various different versions of this position can be envisaged. It is not implausible to attribute a version of this view to Rudolf Carnap who held that only relative to a set of conceptual practices can the question of what objects there are be meaningfully pursued and answered.[7] A more recent and more explicit version of this view can be attributed to Alan Sidelle. Assuming that something is an object only if it is subject to determinate identity- and individuation-conditions, Sidelle maintains that since the world simpliciter does not determine such conditions there are no objects completely independent of us. Rather, Sidelle thinks, our conceptual practices impose the required identity-conditions and thereby determine what objects there are.

For instance, on this view, the object in front of me, H, a Hibiscus, has its cross-temporal and cross-world identity conditions conditions in virtue of our conceptual practices. They happen to be such that H would survive if it lost a leaf, but H would not survive if it's trunk, branches and leaves were dried and woven into a basket. Further, this view has it that among a number of categorically coincident but modally divergent potential objects, our conceptual practices choose which ones *are* objects by imposing cross-world identity conditions in one way rather than another.[8] For instance, in addition to the Hibiscus in front of me, there could have been an object which is just like the Hibiscus except that it survives being dried and woven into a basket. Our conceptual practices are such that this potential object is *not* an object. But we can envisage a suitable (though admittedly not very practical) variation of our practices on which it would be an object.

[6]This is a gross oversimplification of Poincarés view but it suffices for present purposes.

[7]See Rudolf Carnap, 'Empiricism, Semantics, and Ontology'.

[8]An object's *categorical* properties are its non-modal properties. Two objects are *categorically coincident* if they share all their non-modal properties.

If our practices do indeed impose identity-conditions onto an "inarticulate" world in the way suggested by the Sidellian conventionalist, then there is a sense in which the existence of these entities depends on our conventions. Again, this prima facie not incoherent position is vulnerable to the refutation-strategy against conventionalism.

2.1.3. The two examples of conventionalist views have some philosophical appeal, even though many details need filling in. To be sure, the examples given differ in important ways both in their motivation and in the particular way in which they take an aspect of reality to depend on convention. Both, however, are vulnerable to the refutation strategy outlined above, and in both cases the refutation-strategy can be seen to miss the sense in which conventionalists take some aspect of reality to depend on convention.

2.2 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.

2.2.1. *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.[9] 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 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.

2.2.2. *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

[9]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.

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.

2.3 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.[10] I will now introduce some machinery for representing possible worlds, ways things might have been, that does justice to the conventionalist view of possibilities.

2.3.1. *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.[11] 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 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.[12]

[10]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.

[11]The *relevant* collections of substrata and carvings depend on the kind of conventionalism in question.

[12]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.
I will assume here that the substratum together with the carving determine a fully specified possible world.

2.3.2. *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.[13]

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.[14]

2.3.3. *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 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

[13]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. This definition requires that we impose constraints on what shape carving-functions can take for otherwise any substratum would support almost any feature. See 2.3.3 below.

[14]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.

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.

2.3.4. *Ordering Carvings.* For any particular version of the substratum-carving distinction, we can define various notions of ordering of carvings. (i) One carving c_1 can be a *refinement* of another carving c_2 in the sense that it extends the structure of c_2. For example, in the case of ontological conventionalism, we may say that a carving c_1 is a refinement c_2 iff for any substratum s, $c_2(s)$ is a subset of $c_1(s)$. If either c_1 extends c_2 or vice versa we say that c_1 and c_2 are *comparable.* (ii) Two carvings are be *compatible* if there is a carving that refines them both. For instance, in the case of ontological conventionalism, two carvings c_1 and c_2 are compatible if there is a third carving which, when applied to any substratum, subsumes the ontologies which c_1 and c_2 yield when applied to that substratum.

2.3.4. *Second-order conventionalism.* So far, we have considered versions of conventionalism with respect to some particular range of phenomena. It has been assumed that, in each case, it is (or can be made) relatively clear both what the substratum and what the carving is. However, there are more thoroughgoing versions of conventionalism which our model does not cover: One may be a *second-order*-conventionalist in the sense that one thinks that there is not a fixed range of fully objective facts which are fixed by how things stand with the stuff of the world. Rather, it is itself conventional what is taken to be the substratum and what features are considered conventional. Which features are regarded as s-features and which as c-features depends on one's current demands for explanation, and is thus itself conventional. In what follows, we will continue to focus on the first-order conventionalism outlined above.[15]

[15]Some of the problems associated with second-order conventionalism will surface in the discussion of Goodman's conventionalism in 3.1.

2.4 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.

2.4.1. *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 $\Box_s$ 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 $\Box_c$ 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 φ is true at $w' = \langle s', c\rangle$ (i.e. if and only if φ 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', φ is true at $w' = \langle s', c\rangle$ (i.e. if and only if φ 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 φ is true at $w' = \langle s, c'\rangle$ (i.e. if and only if φ 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', φ is true at $w' = \langle s, c'\rangle$ (i.e. if and only if φ 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.

2.4.2. *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.[16] Metaphysical possibility can be defined in terms of the s-modal notions as follows:

[16]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*

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

2.4.3. *Relative metaphysical modality.* We have just seen that metaphysical possibility is a special case of s-possibility, namely s-possibility relative to the actual carving. Worlds representable by pairs $\langle s, c \rangle$ with $c \neq c_@$ are not metaphysically possible. So we can straightforwardly *relativise* the notion of metaphysical possibility (and necessity) to carvings:

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.

(RELATIVE METAPHYSICAL POSSIBILITY) A proposition p is *metaphysically possible (necessary) relative to carving* c if p is true at some (every) world in $\{\langle s, c\rangle \mid s \text{ a substratum}\}$.

The propositions that are metaphysically possible relative to the actual carving, are the proposition that are metaphysically possible simpliciter. The space of actually metaphysically possible worlds is the collection $\{\langle s, c_@\rangle \mid s \text{ a substratum}\}$.

As an analogy to the notion of relative modality just introduced, consider the case of *nomological* necessity. A statement is nomologically necessary if it is true in all possible worlds in which the actual laws of nature hold, that is if it is true in every possible world in a specific subset of the collection of all possible worlds.[17] The laws of nature might have been different from what they actually are. Had the laws been different, then nomological necessity would have to be evaluated with respect to a different subset of the possible worlds. In this case some statements that are actually nomologically necessary would not have been nomologically necessary, and some statements that are not actually nomologically necessary would have been nomologically necessary. Thus, what statements are nomologically necessary is contingent upon the laws of nature. This amounts to proper contingency only if the contingency involved is not thought of as *nomological*, but as, for instance, logical or metaphysical, for a statement of the form $\Box_N$ S is nomologically contingent if there are nomologically possible worlds w_1 and w_2 such that $\Box_N$ S is true at w_1 and untrue at w_2.[18] But if $\Box_N$ S is untrue at a nomologically possible world, then there is a nomologically possible world in which S is untrue, so S is not nomologically necessary, contrary to assumption.

There are two points of analogy to the case of conventional metaphysical possibility I want to stress: First, what the contingency of nomological necessity comes to is

[17]Those worlds whose laws of nature are the same as in the actual world. Slightly different notions of nomological necessity are conceivable on which all that's required for a world w to be a nomological alternative to the actual world is that the actual laws of nature are true in that world, but neither do these laws have to be the only laws of nature in w, nor do they even have to be *laws* (they may just be empirical truths). For the present discussion we will focus on the more restrictive concept of nomological possibility. Whether it is the concept we actually use is irrelevant for what follows. All we need is that it is a coherent modal concept.

[18]Here, $\Box_N$ S is to be read as 'S is nomologically necessary'.

the relativisation of the evaluation procedure for statements of the form $\Diamond p$ and $\Box p$ to a *subset* of all (metaphysically or logically) possible worlds, the relevant subset being determined by a collection of laws (the relativiser). Similarly, the contingency of metaphysical necessity comes to the relativisation of the evaluation procedure for (*s*- or metaphysical) modal statements to a subset of all worlds (substratum-carving pairs, not all of which represent possible worlds), the relevant subset being determined by a collection of conventions. Second, the contingency of nomological necessity involves two types of modality: logical and nomological. The modality with respect to which a statement's necessity is contingent is of a different type than the modality with respect to which the statement is necessary. Similarly, the contingency of metaphysical necessity involves two types of modality: *s*- and *c*-modality. Which propositions are *s*-necessary or -possible is *c*-contingent. The initial hurdle to construing metaphysical modality along the lines of nomological modality is that we don't see what larger set of possibilities the metaphysically possible worlds could be a subset of. But the conventionalist has the resources to make sense of a larger set of worlds.

2.4.4. *S5-modal logic.* Note that, just like the ordinary modalities, $\Diamond_s$ is interdefinable with $\Box_s$ ($\Diamond_s \equiv \neg\Box_s\neg$), and similarly for $\Diamond_c$ and $\Box_c$. Furthermore, as defined, the logic of *s*-modality is S5 and so is the logic of *c*-modality. In particular, any sequence $\triangle_i \ldots \triangle_n\Box_s$ (with each $\triangle_i$ either $\Box_s$ or $\Diamond_s$) collapses to $\Box_s$, any sequence $\triangle_i \ldots \triangle_n\Diamond_s$ collapses to $\Diamond_s$, and similarly for iterated *c*-modal operators. Other notions of *c*-modality are conceivable on which the *c*-modal operators do not collapse. What *d*-features can (*c*-possibly) be imposed may depend on what *d*-features are actually imposed. For instance, given that physical objects are actually carved out, it may be a restriction on any acceptable carving that it carve out physical objects. Or there may be restrictions on what essences can be imposed on objects: It is *c*-possible that the essence imposed on some object deviate only in certain ways from the essence actually imposed on that object. Any such restrictions would be in need of justification which we can expect to flow from the metaphysical picture that motivates the conventionalist who wants to put them in place. We will stick to the *c*-modal

notions as introduced—they form the base case for all such more complex notions of c-modality.

2.4.5. *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).

2.5 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 §2.5.1 to §2.5.3, 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 §2.6, this distinction provides the key to countering many of the familiar criticisms of conventionalism. Based on this distinction, I introduce, in §2.5.4, 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 §2.5.5, I explain why there is presumption against reading MOUNTAINS as a counterconventional conditional.

2.5.1. *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 gives rise to 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:[19]

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 $c_{s_@}$ will be referred to as $c_@$.

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 determine which carving s grounds.[20] For example, it is *our* practices—that is, the community of analytic philosophers' conceptual

[19]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. I will assume here that what carving a substratum supports is determined relative to the actual carving.

[20]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*'.

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.

2.5.2. *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 §2.6, diagonal worlds play a special role in some of the 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.

2.5.3. *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.

2.5.4. *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* $P \rightsquigarrow_{cc} Q$ 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 carving c' differs minimally from c so as to accommodate the conventions described by P.

That is, a counterconventional conditional $P \rightsquigarrow_{cc} Q$ 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* $P \rightsquigarrow_{cs} Q$ 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 $P \rightsquigarrow_{cs} Q$ 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* $P \rightsquigarrow_{d} Q$ 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 $P \rightsquigarrow_d Q$ 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.

2.5.5. *Conventional dependence.* We can now extend the analysis of dependence-relations from §1.2 to conventional dependence relations:

(CONVENTIONAL DEPENDENCE) The fact that p depends on convention iff (i) p obtains and p would not have obtained if our conventions had been different or (ii) p does not obtain and p would have obtained had our conventions been different.

where the counterconventionals are interpreted as countercarving-conditionals.

2.5.6. *Counterconventionals and Countercontextuals.* We are now in a position to make good on the parallel I claimed to obtain between the argument against conventionalism and the argument against contextualism. Recall, the critic of contextualism argues that since

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

is false, contextualism is false. 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* $P \rightsquigarrow_{cx} Q$ 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.[21]

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.[22] 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.[23]

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 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

[21] 'Closest' in the sense of David Lewis' (1973) account of causation.
[22] David Kaplan, 'Demonstratives', p. 510.
[23] Cf. Crispin Wright, 'In Defense of Conventional Wisdom', p. 190.

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.

2.6 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 motivation-strategy laid out at the beginning of the paper.

2.6.1. *A Conventionalist Blindspot?* It is sometimes claimed that conventionalists cannot coherently take the existence of people to be a matter of convention.[24] 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

[24] A version of this objection appears in Barry Stroud, *The Significance of Philosophical Scepticism*, p. 191.

those alleged by the critic: NO PEOPLE is true iff there is a carving which yields no people when applied to the actual substratum. For illustrative purposes, let's go though 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.[25]

2.6.2. *The contingency objection to conventionalism.* A classical objection to

[25]David Chalmers makes a structurally similar point in answering a criticism of his position. According to Chalmers a thought's primary (narrow) content may give rise to different secondary (wide) contents, depending on which world is considered as actual: 'It is occasionally suggested that there is something odd about the idea of evaluating a thought in an actual-world candidate [(analogue of substrata)] that does not contain a copy of the thought itself [(analogue of carving-inducing concept-users)].' But, Chalmers continues, 'we have solid intuitions about how to ... describe actual-world candidates even when those candidates do not contain the relevant thoughts' ('The Components of Content').

conventionalist construals of modal matters is that they violate the intuitive modal principle S4 according to which necessary proposition are necessarily necessary. The point has been made forcefully by Casimir Lewy:[26] If a certain necessary truth, say

(NUMBERS) $\Box$(There are numbers),[27]

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

(ENTAILS) C entails that $\neg\Box$(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 $\neg\Box$(There are numbers) holds. On the other hand, our *actual* practices are supposed to entail $\Box$(There are numbers). It follows, by S4, that $\Box\Box$(There are numbers) is true in the actual world. But then, $\Box$(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, $\neg\Box$(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.

As we have seen in §2.4.4.3., metaphysical modality is, according to some versions of conventionalism, relative to carvings without thereby violating S4. The distinctions drawn so far 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$_\Diamond$) $\Diamond\neg\Box$(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

[26]See Casimir Lewy, *Meaning and Modality* and 'Logical Necessity'; see also Wright, 'In defense of conventional Wisdom'.

[27]Again, I assume here that according to the actual conceptual practices, numbers exist necessarily. Nothing hangs on my particular choice of example.

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$_{\Diamond_c}$) $\Diamond_c\neg\Box_s$(There are numbers).

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

2.6.3. *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, conventonalists 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.

2.6.4. *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 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.

2.7 Conclusion

In this chapter I have presented a framework to model conventionalist dependence-relations and applied it to the refutation of a number of objections to conventionalism. The framework 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.

The framework, however, provides a merely *formal* solution to the problem of understanding and motivating the kinds of dependence-relations conventionalists work with. We have yet to determine (i) whether the framework does justice to actual conventionalist accounts and (ii) whether the parameters (substrata and carvings)

can be satisfactorily implemented. This task will be taken up in the next chapter.

Chapter 3

Facts by Convention?

In the previous chapter I have proposed a general form a conventionalist account of some subject matter may take. The purpose of this chapter is first, to examine a number of conventionalist accounts to see whether the framework can accommodate them, and second, to investigate how we are understand the interaction between substrata and carvings and hence how we are to understand conventional dependence.

3.1 Goodman on Worldmaking

In a number of articles, Nelson Goodman presents the view that we build worlds, objects, properties of objects, relations between objects, and much besides with the help of symbols.[1] What symbols we use and how we use them is a matter of convention. In this section I examine *how* it is that according to Goodman we build worlds, objects and relations with symbols. The goal is to find a sense in which a range of phenomena (the existence of objects, their properties, etc.) may non-causally and non-constitutively depend on our conventional symbolic practices.

I will start by outlining Goodman's account (§3.1.1) and then set up what I take to be the major challenges a Goodmanian conventionalist needs to overcome (§3.1.2). In §3.1.3, I will present an account of the conventional construction of

[1] 'Wolds, Words, ...', 'Rightness of Rendering', both in *Ways of Worldmaking*; 'Notes on the well-made world', 'Some worldly worries', 'Reply to Israel Sheffler', in *Starmaking* [REF].

facts on behalf of Goodman which meets these challenges. Finally, in §3.1.4, I will discuss the application of the framework developed in chapter 2 to Goodmanian conventionalism.

3.1.1 Making worlds by making versions

Goodman's starting-point is the observation that many different theoretical, artistic and common-sense frameworks are useful for coming to grips with the world we live in. He calls such a framework a *version.*[2] Although often different true versions can be reconciled—an account of the Renaissance that emphasizes the artistic achievements of that period may well be a version of the same historical period as an account that emphasizes the political development during the same time-span—there are also, Goodman maintains, *true* versions that *contradict* each other: One version constructs points from lines, another version takes points as primitive. Since not both of a conflicting pair of versions can be true of the same world (points are either *really* primitive or *really* constructed, but not both), Goodman suggests, they are true of *different worlds.* What is more, different worlds are *built* by building different true versions: '[W]e make worlds by making versions.' These worlds 'are just the actual worlds made by and answering to true or right versions'.[3]

That is, in brief, the argument. It leaves many questions open. What exactly is a world? What makes a version true? How do true versions build worlds? Do only incompatible versions give us different worlds?

3.1.2 Rightness and Truth

1. *Truth and Facts.* How do true versions build worlds? According to Goodman, there are worlds *answering* to our true versions. Here, he seems to be appealing to the obvious relationship between the truth of a statement and the way the world is.

[2]It is not clear what exactly versions are supposed to be: Theories, collections of interpreted vocabulary, rules of description, principles of interpretation, etc. Goodman's imprecision on this point may be intended. Just as there are many versions, he may think, there are many types of versions.

[3]Nelson Goodman, *Ways of Worldmaking*, p.94.

For instance, if it is true that

(3.1) There are birds in Antarctica that cannot fly,

then the world is such that there are non-flying birds in Antarctica. Similarly, the idea seems to be, if a sentence like

(3.2) Points are ontologically primitive

occurs in a *true* version, then a world is such that it contains a suitable range of referents for 'point' and that kind of referent is, in that world, ontologically primitive. The truth of the version (3.2) occurs in goes hand in hand with the obtaining of certain ontological facts about points, just as the truth of (3.1) goes hand in hand with the obtaining of certain ornithological facts.

This goes some way toward explaining why true versions allow us to infer the obtaining of certain facts. But it doesn't help us understand how true versions *build* worlds. The order of determination is wrong. What makes (3.1) true is the obtaining of the relevant facts, not vice versa. So what makes (3.2) true in the first place?

2. *Rightness.* This leads to the natural objection that Goodman's account is circular: Only *true* versions can build worlds. But the notion of a *true* version presupposes something the version is true to, that is, it presupposes a world. Or rather, it presupposes that *the* world be as the version represents it. But then, the objection goes, that world is not *made* by the version. Goodman's reply comes in two parts.

First, since versions need not be verbal (van Gogh's artistic world view, which Goodman counts as a version, isn't), we ought to talk not of truth but of *rightness* or *fit*. The shift from truth to rightness or fit alone is not of much help as far as the objection is concerned. Rightness still requires something to be right of. The second part of Goodman's reply is meant to take care of that: A version's rightness consists not primarily in its representing or corresponding to the way the world is in this or that respect, but in its 'not offend[ing any] unyielding beliefs and none of its own precepts.' I believe that we have to regard versions as at least weakly *representational* because insofar as a version is suitable as an instrument for constructing a world is

has to be taken as representational in one way or other, otherwise it is not clear what *answering to* a version would come to. We have to take a version to be representing at the very least those features the version is meant to build. And this is where Goodman's view gives rise to tension: Criteria of rightness do not seem to amount to a notion of truth that is suitable for the constructivist purposes Goodman employs it for.

3. *From rightness to correspondence-truth.* It is a common strategy to shift the standards of truth in the course of arguments designed to derive ontological conclusions from premises about language and conceptual practice. Goodman's reasoning provides an example: The rightness of a version is secured by criteria of coherence, overall fit with accepted theory and selected other true versions, serviceability for some purpose and the like. Then it is claimed that there is a world, that there are facts, 'answering to' the right version. By this it is not meant that the criteria of rightness are satisfied by some world, for this would be merely to claim that the version is coherent, overall fitting and useful for some purpose—criteria which are already satisfiable over the "old" world, that is the world from which the version in question is supposed to build a new world. The claim that we make a world is expressly meant to go beyond the claim that we make a version which fits the "old" world, even though it is by doing the latter that we are supposed to bring about the former. So the claim appears to be that given a right version there is a world it *corresponds* to, a world it correctly *represents* (however indirectly). To be sure, Goodman rejects this kind of terminology, but no matter what we choose to call the relation that obtains between a correct version and the world it constructs, to say that we *construct* a world by way of its *answering* to a constructed right version requires a more robust 'answering'-relation than that provided by the criteria of rightness for the version. Otherwise saying that we make worlds is just saying, in a highly misleading way, that we make true versions, the latter being both unsurprising and uncontroversial.

Let's go through an example. Consider the sentence

(RED) a has the property of being red

We may agree that RED is true even if we don't believe that there are abstract objects such as properties. What in the world makes RED true is the fact that *a* is red, *not* the obtaining of an instantiation relation between *a* and an abstract object—the property red. Thus, RED *fits* the world, it is *right* of the world even though the world may not contain an abstract object which is the referent of 'the property of being red'. Goodman seems to want to argue that since RED satisfied suitable criteria of rightness, there is a world that answers to RED, a world that is *built* by a true version which includes RED. That cannot mean merely that the (original) world admits of being described by RED. A world without abstract objects admits of being described by RED, so more is needed to construct additional facts. The world constructed with the help of RED, I suggest, is supposed to be a world in which the individual *a does* stand in the instantiation relation to the abstract object which is the property of being red. So while the "original" world does not, we may assume, contain an abstract object which is the property red, the world constructed with the help of RED does contain that object.[4] But the mere satisfaction, by RED, of the relevant rightness-criteria does not warrant the conclusion that this abstract object exists (in any world) because 'the property of being red' is not, according to these criteria, truly referential.

There are other problems in the vicinity. The standards of what makes for representational correctness may differ across types of representation. Not only do different representations capture different features of reality (say physical or sociological or aesthetic features) they may also capture them in a different *way*. That is, the relationship between right representation R_1 and the bit of the world it is right of may be very different from the relationship between right representation R_2 and the bit of world *it* is about. Knowing that R_1 is *right* does thus not alone enable us to determine which features that bit of the world has which R_1 is about. Only if we know in addition what rightness-relation is appropriate for the version R_1 is part of, can we draw conclusions about the world (what does the world have to be like for R_1 to be right?).

[4]This is almost identical to the account Stephen Schiffer gives of how we "create" entities such as properties by the use of language. See 3.2.

Further, if truth is, as Goodman maintains, merely *rightness* or *fit*, it is not clear how true versions can *contradict* each other. For instance, a certain musical mood conveys sadness, so a melody with that mood may fit a situation insofar as it is sad. Another melody may convey happiness. Could it fit the same situation? Sure, there could be elements of both in the situation. For two right versions to be contradictory or otherwise exclusive, the relationship between right versions and the situation they are right of needs to be construed so as to allow for mutually exclusive versions, say by tying rightness to the capturing of some concrete features the situation possesses independently of versions. But then, only one of two mutually exclusive versions will fit the situation—namely the one that correctly captures the feature in question. Thus, the very feature that enables the construction of incompatible versions prevents the constructions of incompatible *right* versions!

4. *A challenge.* This dilemma is common to many philosophical accounts that attempt to draw ontological conclusions from premises concerning representational practices. The slogan that goes with these attempts is that *objectivity* is prior to *objects*. The idea is that we establish what the objective truths are without appeal to objects and *then* determine what the objects are by examining the objective truths.[5] In slightly more detail, the strategy is this: We start with a certain sort of disciplined representational or quasi-representational practice. A practice is said to be 'disciplined' if it is governed by fairly systematic criteria for rightness and wrongness.[6] On the basis of the criteria of discipline, we construct a truth-predicate (or 'rightness-predicate') true_D, allowing us to view the practice as giving rise to true_D representations. Then we take the true_D representations at face value by taking a realist attitude toward what on a correspondence-theoretic reading are the truth-makers of the representations. The problem with this strategy is that all we have established is the truth_D of the representations in question, where truth_D is *not* construed in correspondence-theoretic terms and so does, prima facie, not warrant the

[5]There is no need to restrict that strategy to the obtaining of *objects*. Other features of reality can potentially be induced in the same way.

[6]I borrow this terminology from Crispin Wright. See his *Truth and Objectivity*.

realist attitude we want to take.

3.1.3 Constructing worlds

1. *Two strategies.* In the face of the apparent gap between criteria of rightness (truth_D) for versions and the criteria that would have to be satisfied to warrant the conclusion that there are facts robustly corresponding to the representations, there are two options: Bridging the gap or arguing that the gap is merely apparent.

First, the constructivist may supply arguments that bridge this gap. That is, she may explain how the objective truth_D of a representation can be taken as conclusive or near conclusive *evidence* for the obtaining of a corresponding fact. Indispensability and inference-to-the-best-explanation arguments may be used as part of a strategy of the first kind: A representation fits, is explanatory and irreducible to other better integrated and/or ontologically more sparse representations—so we are urged to take its posits at face value, as a full-blooded correspondence-theoretic interpretation appears to provide the best explanation for the representation's success. This strategy will not always be available. Whether or not it is depends on the particular type of fitting and the status of the versions the version in question meshes with.

Alternatively, the constructivist may argue that, despite appearances, there is not much of a gap, that the corresponding fact *consists* (in some sense to be made precise) in the objective (non-correspondence) truth_D of the representation, or, slightly more cautiously, that there is nothing more to the fact than the truth_D of the representation. I take it that this is what Goodman and other constructivists have in mind, or at all events what they ought to have in mind. So I will focus on this kind of strategy.

2. *Lightweight facts.* Some critics of constructivist approaches complain that such approaches live off a confusion (either deliberate or accidental) between *representations* (theories, depictions, styles of representation, representational frameworks, versions) of facts and the facts (worlds) themselves. Michael Devitt and Kim Sterelny, for instance, complain that 'constructivists blur the crucial distinction between theories of the world and the world itself. This', they continue, 'is no accident: such plausibility

as constructivism has depends on the blurring'.[7]

The critic supposes that there is (or ought to be) a stark contrast between representations we construct and the facts which are "out there" independently of us and which our representations are intended to depict. It is on this (admittedly very natural) picture that the problem for the constructivist arises: If the facts are out there independently of us, waiting to be captured by our representations, then a crucial distinction is to be blurred if it is claimed that our representations make a difference to what the facts are.

The constructivist, I take it, has a different view of the facts to be captured by our representations. It goes something like this. 'The fact that p' is not a term that picks out a particular entity from a given fixed range of entities much like the term 'the rooster in the backyard' picks out an entity from a given fixed range of entities. Rather, we *carve out* facts from the goings-on in our surroundings: We confront an independent world which impinges on our senses in a multitude of ways. We systematize and structure that which appears to us as raw data so as to make sense of and orient ourselves in our surroundings. This process configures, patterns, carves out facts much like a sculptor carves out a statue from a block of marble. However, the process of configuring our surroundings into facts is far more constrained than the process of carving a statue out of marble. Systematization cannot produce just any range of facts, just like drawing vertices between a fixed number of points on a piece of paper cannot produce just any shape. There are many constraints on our systematization, constraints arising from the nature of the data, features of our sensory and cognitive apparatus, the nature of the interaction between the two, previous pertinent systematizations, etc. But these constraints do not determine a single correct systematization. Any single systematization, the constructivist believes, corresponds to a range of lightweight facts insofar as the systematization has configured the data into those facts.

With the light-weight conception of facts thus comes a lightweight conception of what it is to build a fact (or a world) which legitimizes the changing of standards of

[7] *Cf.* Devitt and Sterelny, *Language and Reality*, 2nd edition, pp.248 and 253

truth discussed in the previous section (§3.1.2): We assess the adequacy, the rightness, of a version relative to the actual world using a set of criteria which don't require there to be a tightly corresponding fact. For instance,

(RED) a has the property of being red

is right of the actual world because a is red and regardless of whether there is an abstract object, *red*, which is instantiated by a. So the rightness of RED does not allow us to infer that the world contains an abstract object picked out by 'the property of being red'. But we can, if we find theorizing about the world in terms of abstract objects such as RED useful, talk as if there were such objects. We create *new* facts (or a new 'world') by taking this talk at face value, explaining and predicting what goes on in the world by appeal to these facts.

The reason why some of our systematizations can carve the world into facts is thus two-fold: First, on the light-weight conception of facts, facts are those configurations that figure in coherent, objective and well-reflected systematizations which we use successfully to classify, explain and predict goings-on in our surroundings (for example, a theory in physics, chemistry, biology, ontology, economics, psychology, ethics, aesthetics, etc.). Second, there is no fixed, 'given' range of facts which are, as it were hard-wired into the world and which our systematizations aim at capturing. To be sure, there is something, the 'underlying world' as we may call it, which is independent of our conceptualizations. But insofar as the world is *our* world, it is structured into a multitude of, often incommensurable, high-level facts.

3. *Answering Objections.* This view, which I believe underlies the constructivist claim that we construct the world (or many worlds), can be opposed in various ways.

One may reject that light-weight conception of facts and maintain that only some of the putative facts (say, the physical facts) *are* facts. All the others are either, if properly analyzed, reducible to the real facts (and so are not facts in their own right), or they are to be eliminated and their appearance to be explained away. The problem with this objection is that many kinds of putative facts that some would like to classify into one of these two categories, have resisted both reduction and

elimination. We cannot see how their explanatory and predictive work could be done if we dispensed with them, nor even how to sort ranges of putative fact into those that amount to proper facts and those that don't. So it seems rather dogmatic to insist that only some of them are to be taken seriously. To be sure, not every theory which has shown some merit in the past is true, corresponds to facts. Many such theories do turn out to be false. That does not show that the notion of light-weight fact is useless. We typically acknowledge that there are physical facts even if we are, by and large, prepared to give up belief in any particular physical fact. But we believe that there are facts of the kind that physics provides a systematization of. Similarly, a Goodmanian conventionalist thinks, there are facts of the kind that aesthetics provides a systematization of.

Another objection to the constructivist view is based on what we may call a *plenitudinous* view of the world. On this view, it is accepted that all the putative facts (the configurations that figure in our successful systematizations) are proper facts. But it is maintained that our activities have nothing to do with the obtaining of these facts. Insofar as they are successful, they merely manage to capture these facts. There are various replies the constructivist can make in his defense. First, he could point out that it is metaphysically extravagant to believe that there are, independent of us, so to speak, hard-wired facts that correspond to all of the multifarious versions which we happen to find helpful in making sense of our surroundings. Second, he can appeal to the incompatibility of some acceptable versions. The version that takes points as primitive and the version that constructs points from lines are, we may assume, both equally useful. But it cannot be a fact both that points are primitive *and* that points are constructed (and so not primitive). Therefore, we may *construct* the world in one of two incompatible ways. And it is not inappropriate to regard the result of either construction as a world with facts that didn't obtain in the "original" world. Here, the plenitudinous critic may object that the versions are only superficially incompatible. They both appear to talk about a single kind of entity, points, and attribute mutually exclusive properties to it. Properly understood, the critic continues, the versions talk about different kinds of entities, points_1 and points_2,

which coexist having mutually exclusive properties. This, the constructivist will reply, is implausible. Both versions are meant to work from, to precisify, an earlier version which is neutral on the ontological status of points. If we extend our original version in one way, then points, the very things we talked about before, are ontologically primitive. If we extend our original version in the other way, then points, the very things we talked about before, are ontologically complex. On the plenitudinous view, we would be multiplying entities beyond necessity, because each time we precisify a version in one of several feasible ways we will be talking about a different range of entities.

None of the constructivist's moves amounts to a definitive argument for the claim that we build worlds, facts, objects, etc. through our symbolic activities. But it does make the claim that we do seem less implausible.

3.1.4 Conclusion: Applying the framework

On Goodman's account, the substratum of a world consists in an already versioned world, that is the world as conceptualized before the new concepts are applied. Versions, on the other hand, play the role of carvings. These are applied to versioned worlds, or, in our terminology, already carved substrata, to obtain new versioned worlds. 'Worldmaking as we know it', Goodman says, 'always starts from worlds already on hand; the making is a remaking.'[8]

Goodmanian conventionally possible worlds can be represented as pairs of the form $\langle\langle s, c'\rangle, c\rangle$ where c' represents the version structuring the "original" world (a world 'already at hand') and c represents the new version with whose help a new world is built. So Goodman's conventionally possible worlds are structured by two kinds of versions: The versions that structure the original world and a privileged version which, when applied to the original versioned world yields a new world.

The fact that substrata are *versioned* worlds, that is already carved substrata, requires some modifications to the basic framework. According to Goodman, not all versions are compatible. As not every carving can be applied to every substratum,

[8]Nelson Goodman, 'Worlds, Works, Words', p.6.

we have to constrain which substratum-carving pairs can represent conventionally possible worlds: Substratum $\langle s, c' \rangle$ can be paired with carving c to represent a possible world only if c is compatible with c', the carving that structures s. To model Goodman's conventionalism we thus have to consider the collection of carvings as ordered by a refinement-relation as suggested in §2.3.4.[9] The ordering on carvings then induces a partial ordering of the conventionally possible worlds.

A further modification to the basic framework is necessary: We assumed that all substrata constitute variations of any given substratum, so that all $\langle s', c \rangle$ (for s' a substratum) are possible s-alternatives of $\langle s, c \rangle$. In the present setting, the collection of s-alternatives to a given world is far more restricted.[10] But it is difficult to determine exactly how restricted, especially in the absence of a precise account of what versions are. Consider a world $\langle \langle s, c' \rangle, c \rangle$. What are its s-alternatives? Let's assume for a moment that there is a substantial unversioned substratum s left. Then it would seem that the s-alternatives to $\langle \langle s, c' \rangle, c \rangle$ are exactly the worlds $\langle \langle s', c' \rangle, c \rangle$ with s' an arbitrary substratum. The problem with that answer is that if versions are *theories* or other frameworks that require the substratum to have particular features to be true or applicable, then it could turn out that some of the $\langle s', c \rangle$ do not represent possible (versioned) substrata at all. So we cannot hold the versions that figure in the substratum fixed. What about all worlds $\langle \langle s', c'' \rangle, c \rangle$ with $\langle c''$ applicable to s and compatible with c? No, for that would amount to allowing changes in the carving, in addition to changes in the substratum. Maybe, then, all those worlds are to be considered as s-alternatives of a given world $\langle \langle s, c' \rangle, c \rangle$ which are metaphysically possible relative to $\langle s, c' \rangle$. This is little progress, since the question what (structured) substrata are metaphysically possible relative to a given (structured) substratum just is the question which substrata are s-alternatives relative to the latter.

It may seem that the reason we ran into a dead end is that substrata are themselves *versioned*, that is, already *carved* worlds. However the problem does not arise specifi-

[9]The refinement relation tells us not only which carvings are compatible, but also how compatible carvings can be amalgamated into a single carving. If we apply c to the structured substratum $\langle s, c' \rangle$ we obtain: $\langle s, c'' \rangle$ where c'' is the least carving that refines both c and c'.

[10]Substrata and carvings are no longer independent of each other. They constrain but do not determine each other.

cally for those kinds of conventionalism that take a world's substratum as structured by carvings prior to the application of the world's privileged carving. Rather, it is going to arise whenever we lack a precise specification of the nature of the relevant kind of substratum. The motivating examples in the discussion in chapter 2 worked with straightforward kinds of substrata. For instance, we assumed substrata to consist in a particular distribution of atomic particles over space-time. In this case it is easy to see that the *s*-alternatives of any given substratum are exactly the possible distributions of particles over space-time. Not every kind of conventionalism, however, is going to be able to specify the relevant kind of substratum in such a way that its range of variability falls out naturally. In §2.2.1 I have characterized the substratum of the world, for a given kind of conventionalism, as the world *minus* the features that kind of conventionalism takes to be conventionally determined. Now, regardless of whether we consider that as independent of our other practices or as partially structured by them, the question arises what changes to the world are mere substratum-changes. In most cases there will be no clearcut way of determining the substratum's range of variability. Defining that range for a given kind of conventionalism will therefore require many arbitrary decisions about what kind of change constitutes a variation of that which is assumed given (the substratum) and which changes involve applying a different collection of concepts (that is, a different carving).

So the framework fits fairly well at a high level of abstraction. But once we examine implementational details we run into problems. In particular, it turns out to be hard to make precise the abstract notion of *varying the substratum*. This, however, is not a fault of the framework. On the contrary. Analyzing Goodman's account with the tools developed in chapter 2 helps bring out its problems: We can make good sense of certain localized versions of conventionalism, versions in which the substratum and its range of variability are fairly well defined.[11] But as soon as there is no non-arbitrary way of specifying the relevant range of substrata, we lose our grip on how conventions and the world are supposed to interact to give rise to new features.

[11]This is not to say that these kinds of conventionalism are true.

3.2 Schiffer on language-created entities

In his paper 'Language-created, language-independent entities',[12] Stephen Schiffer offers an account of how one may conceive of certain entities as language-created. Some entities, such as properties and propositions, Schiffer thinks, are created by or result from our conceptual practices. What distinguishes, according to Schiffer, language-created entities (among which he counts fictional entities, properties and propositions) from ordinary entities such as tables, cherry-trees and clouds, and what therefore accounts for the determination of these former entities by our conceptual practices, are two features: First, the *discovery*-feature: It is necessary and sufficient for someone to know that there are entities of the type in question that he adopt a certain linguistic practice.[13] Second, the *nature determination* feature: The linguistic practice fully determines the nature of the entities it gives rise to. 'Whatever belongs to their essence can be read off the ... practice that posits them in our ontology.'[14] They have no extra-linguistic 'hidden and substantial nature[s] for a theory to uncover'.[15] Both the discovery- and the nature-determination-feature, Schiffer thinks, distinguish entities like fictional characters and properties from entities like trees and clouds, and are, presumably, what mark the former as language-created.

This section starts with an outline Schiffer's account (§3.2.1), then I will argue, in §3.2.2, that the discovery- and nature-determination-features do not support a principled distinction between what Schiffer calls 'language-created' entities and ordinary entities. Thus, to the extent that we find Schiffer's account of the creation of entities by conceptual practices plausible, we should think of all (or at least an unexpectedly wide range of) entities as being created by conceptual practice. Finally, in §3.2.3, I apply the framework developed in chapter 2 to Schiffer's account and examine whether that account provides a reasonable sense in which entities may depend on our conceptual practices.

[12] *Philosophical Topics* vol.24 No.1, Spring 1996.
[13] *ibid.*, p.158
[14] *ibid.*, p.161
[15] *ibid.*, p.161: Schiffer is quoting from Mark Johnston.

3.2.1 Schiffer's account

Schiffer thinks that properties and propositions are created by our linguistic practices in a way analogous to how fictional characters are created by our linguistic practices.

3.2.1.1. *Fictional entities.* In the case of fictional entities, the picture Schiffer has in mind is two-tiered: On the one hand, there is the *pretending use* of proper names. If we put a name to the pretending use, as we do when composing or reciting fiction, we talk *as if* there were some object we are referring to with the name when both we and our audience are aware that there really is no such object. Utterances containing names used in pretense are not meant to be and not understood as being literally true. Call a name that is being used in that way a *fictional name.* Once a name is in use as a fictional name, it can be put to what Schiffer calls the *hypostatizing use* of fictional names. For instance, we say that 'Sherlock Holmes was created by Sir Arthur Conan Doyle' and that 'Jonathan Pine isn't nearly as famous as James Bond'.[16] Sentences like these are meant to be and understood as being literally true. However, the fictional names cannot refer to the individuals that they were pretended to refer to in the fiction, namely, in our examples, real-life detectives. But, it seems, the names have to refer to something, for otherwise sentences in which fictional names are put to the hypostatizing use could not be literally true. A good hypothesis is that they refer to *fictional entities* that actually exist. And these fictional entities, Schiffer thinks, exist as a result of our manner of speaking.

According to Schiffer both the pretending and the hypostatizing use of fictional names contribute to the fact that there are fictional characters, but they contribute in very different ways, with the 'creation' itself being effected solely by the hypostatizing use. Without the pretending use of some particular fictional name there would be no corresponding fictional entity. On the other hand the pretending use alone is not sufficient for the existence of fictional entities either. If we had only the pretending but not the hypostatizing use of fictional names we would be 'ignorant of the existence of fictional entities'. Our practice of hypostatizing is therefore necessary for the existence

[16]These are Schiffer's examples. p. 155.

of fictional entities. Or rather, it is necessary for someone to recognize the existence of fictional entities, that he be engaging in the hypostatizing use of fictional names. Given a suitably minimalist notion of object and existence, that will both suffice and be necessary for the entities' existence.[17]

One interesting consequence of this picture, Schiffer points out, the following: When we consider possible worlds in which the inhabitants have the pretending, but not the hypostatizing use of proper names, it is still the case that in these worlds fictional entities exist, and they do so because of *our* hypostatizing use of fictional names. Thus fictional entities do exist in worlds in which the entity-positing practice (the hypostatizing use of fictional names) does not. All it takes at a world for there to be entities of the kind in question is that the conditions obtain under which *we actually* engage in the hypostatizing use of fictional names. Our actual engaging in that practice creates 'in a sense' the fictional entities in possible worlds in which the practice does not exist. So the entities' existence at a world is independent of whether or not the hypostatizing practice exists at that world. This answers a worry any view has to face which treats some entities on the one hand as brought about by linguistic or conceptual practice but on the other hand as independent of such practices: If the entities are brought about by linguistic practice, then how could they exist in situations in which the practice is absent?[18]

3.2.1.2. *Abstract entities.* So much for fictional entities. How does the story just told translate to the case of properties and propositions? Again, the picture here is two-tiered: On the first tier, we utter predicates and sentences which express properties and propositions respectively, but we do not pretend to be referring to properties or propositions, nor do we even pretend that there *are* properties or propositions. We simply say what things or (some portion of) the world are like. On the second tier, we nominalize predicates and sentences to obtain terms that do, on the face of it, purport to refer to properties and propositions. Thus from 'Mary is tall' we pass to the sentences 'Mary possess the property of tallness' and 'That Mary is tall is a true

[17]Schiffer doesn't put it quite as explicitly, but as far as I can see, that must be the argument.
[18]The framework set up in chapter 2 models precisely that feature.

proposition'. Call this the 'hypostatizing use' of predicates and sentences.[19] Due to the apparent equivalence between sentences on the second tier to sentences on the first tier we take (some) sentences involving the hypostatizing use of predicates to be true and thus to involve reference to properties. So we conclude that properties exist.

Here again it is the hypostatizing use of predicates that "creates" the entities (here: properties), because without this use we would not know about their existence. And again, the existence of the entities at a world is independent of whether or not the practice exists at that world. In fact, our actual hypostatizing practice licenses assertions such as 'Necessarily, everything either has or does not have the property P', so we get that properties exist necessarily, that is in *all* possible worlds and not only in those in which we engage in the hypostatizing, or even the ordinary use of predicates or even only in those in which rational beings exist.

3.2.2 Analysis: Which entities are language-created?

First note that Schiffer's account of how we create entities through our use of language faces the same problem we found to trouble Goodman's account of worldmaking: It is claimed that the statements generated by our hypostatizing practices are *true* and so the entities they appear to refer to exist. But as in the case of Goodman's account, no argument has been given for why these statements are true in a sense robust enough to infer the existence of the apparently referred to entities. I will set this problem aside here to focus on different issues.[20] First, I will examine Schiffer's claim that the *discovery-* and *nature-determination-* features mark a principled distinction between those entities he does and those he does not want to regard as language-created. I shall argue that these features fail to draw such a distinction. Second, I will investigate whether these features provide a reasonable criterion for being brought about by linguistic or conceptual practices.

[19]For the remainder of the discussion I'll consider only predicates and their 'non-linguistic shadows'—properties. Everything said should hold, mutatis mutandis, for sentences and propositions.

[20]See §3.1.2 and §3.1.3 for further discussion.

3.2.2.1. *The discovery feature.* Schiffer claims that the adoption of a certain practice is necessary for being able to discover certain types of entities. We could not know of the existence of fictional characters if we had not adopted the hypostatizing use of fictional names and we would not know that there are properties if we had not adopted the hypostatizing use of predicates. The reason is that without the relevant practice we would lack the *concept* of a fictional character and a property, respectively.[21] Let's grant that the practice and the concept go hand in hand.[22]

This feature is supposed to set language-created entities apart from ordinary entities, of which we don't think as created by language. The discovery of trees, for instance, does not require that a certain conceptual practice be in place. We just discover trees, form the concept of a tree and then introduce linguistic devices to refer to trees. Not so, Schiffer claims, with entities like fictional characters and properties. There is no way we could have discovered them without engaging in the relevant practice. However, it appears that, pace Schiffer, the same holds for 'ordinary' entities. To 'discover' any kind of entity, even empirical ones, we have to have the ability to pick out something as an entity of that kind against all sorts of background noise. And this requires a concept for that kind of thing. Even trees. Suppose we take M who still lacks the concept of a tree into the backyard, let him look at the cherry tree, the apple tree and the willow and tell him 'Those are trees'. Now, has M discovered trees? Suppose the following day M goes into the backyard, looks at the willow, which has in the meantime lost three leaves, and is confused about whether what he sees is a tree. Or he is at a loss when asked whether 'tree' applies to the apple tree in our neighbor's backyard. It appears that it would be a mistake to credit M with the discovery of trees.

Sensory exposure to an object of a particular kind does not guarantee that the agent exposed succeeds in forming a concept for that kind of thing. That is because exposure to objects of that kind is *also* exposure to objects of many other kinds. In order to discover, say, trees (rather than just being in a situation that may be

[21] *cf. ibid.*, p. 158

[22] This is obviously an oversimplification. Not every linguistic practice gives rise to a distinct set of concepts, let alone sortal concepts.

described as an encounter with a tree by people who already have the concept of a tree, and for whom this concept is salient in the given situation) one has to bring the right concept to bear. The need for a concept is certainly more easily felt in the case of abstract entities like fictional entities and properties, for we do not bump into them in ways that are most naturally described as our having some sort of interaction with entities of that kind. It is, however, no more far-fetched to describe someone who read his first Sherlock-Holmes story (and lacks the concept fictional entity) as having 'discovered' the fictional character Sherlock Holmes, than it is to describe someone who looks at his first tree (and lacks the concept tree) as having discovered a tree. Similarly with properties: Someone who bites into a lemon (but lacks the concept of property) may be described as discovering the property of being sour. Insofar as these descriptions are adequate, they are adequate to the same degree. They derive their adequacy from *our* concepts of fictional character, tree, and property and the fact that *we* find it useful to describe the situations employing these concepts. They are, on the other hand, inadequate if they are meant to capture the epistemic situation of the agents so described. Discovery of some type of entity is *never* a purely empirical achievement. It is an empirical achievement against a certain conceptual background. The discovery of armadillos was made against a background that included concepts like those of living organism and animal. We do take a lot of our conceptual background for granted, so it is easy to overlook. But nonetheless, the ability to discover an object of a particular empirical type requires the employment of some concept(s) in our background repertoire. If our conceptual practices were different, for instance, we would not have been able to discover trees, in the sense that none of our interactions with trees would be correctly describable as a discovery of trees (as opposed to, say, objects of a kind that have much in common with trees).

Could the difference between 'language-created' and 'ordinary' entities be that the former don't require any empirical component for their discovery. After all, it is part of the discovery-feature that to come to know that there is an entity of a the kind in question it is *sufficient* that one adopt the corresponding linguistic practice. So maybe discovery is a conceptual-empirical matter for ordinary entities and a purely

conceptual-apriori matter for language-created entities? No. The discovery of the fictional character Sherlock Holmes is empirical against a background including the concept of a fictional entity. When someone reads his first Doyle-story, he *discovers* that there is a certain fictional character about whose existence she didn't know before. Maybe, then, it is not discovery of particular fictional entities, but of the existence of fictional entities in general which is purely conceptual? No, for in a situation in which we did not use names pretendingly, there would not be any fictional characters. And if it turned out that all the novels, short stories, plays, etc. written so far were really true accounts of the doings of real people, we would revise our judgment that there are fictional entities. (We thought Sherlock Holmes was fictional - but he isn't!) Thus, our judgements concerning the existence of fictional entities are very much sensitive to empirical experience.

The situation is different with properties. Our discovery of many particular properties has an empirical component. I see a color I never saw before and 'discover' the property of having that color. I see an armadillo for the first time and 'discover' the property of being an armadillo. In some instances the empirical component may be necessary, because we wouldn't be able to form the concept of that particular property without either having undergone certain experiences or having our concept linked by suitable empirical chains to instances of the concept.[23] But many properties can, and many others have to be discovered without empirical input: The properties of being a prime number, a round square, a unicorn, younger that 47 but older than 36 or older than 87, etc. Granted, some language-created entities can be discovered by purely conceptual means, but it appears that this is not true of all such entities, only of purely abstract ones. Consider sets of ordinary concrete entities or complex mereological sums. These, I believe, ought to be classified into the same category as Schiffer's examples of language-created entities, properties and propositions as language-created. But the existence of such entities depends on the existence of certain ordinary objects. So they cannot be discovered by purely conceptual means, and therefore the former cannot be so discovered either. So it seems like, contrary

[23]Arguably, color concepts fall into that category.

to Schiffer's claim, the sufficiency-aspect of the discovery-feature fails to hold even for some of those entities which he would want to regard as language-created. It appears, then, that regarding discovery there is no *principled* distinction between language-created and 'ordinary' entities.

3.2.2.2. *The nature determination feature.* A further feature of language-created entities, according to Schiffer, is that their nature, their essence, is completely determined by the relevant practice, while the nature of ordinary objects, such as trees, is not so determined. The difference, he thinks, is seen clearly when considering how we go about investigating entities of the respective kinds: To find out about the nature of trees we dissect trees, while to find out about the nature of fictional characters or properties we dissect our hypostatizing practices. In the case of a fictional entity, our hypostatizing practice determines that both the 'existence and what we can say about [it] ... derives ... from a certain body of fiction'. Furthermore, the identity-conditions for fictional entities are determined by the practice: A and B are the same fictional entity, just in case our practices determine them to be identical.[24] Similarly, Schiffer claims, for properties. Our hypostatizing practice determines (i) that for every property P and object o, it is true that o has property P just in case P(a) obtains, and (ii) the conditions under which properties P_1 and P_2 are identical.

Does this really distinguish language-created entities from more ordinary entities in a principled way? It appears that it does not. In the sense in which our conceptual practices determine the essence of language-created entities they also determine the nature of trees. How so? To find out about the nature of trees we have to actually look at trees, not at our ways of speaking about them. But it is our concept of tree that determines that the 'existence and what we can say about ... [them] *derives* ... from a

[24]Schiffer asserts that our practices actually fail to determine in many cases whether fictional entities A and B are identical (e.g. Superman and Clark Kent). If this is so and the identity of these entities couldn't be determined by anything else, one may have doubts about whether fictional entities are properly regarded as objects at all, especially if one believes, as many philosophers do, that being an object requires being subject to determinate identity-conditions. If Schiffer is right about fictional entities, then not only do we not *know*, in many cases, what the identity-conditions for a given fictional character are. Rather, since our practices fail to determine any such conditions, there aren't any, and so the 'entities' in question lack determinate identity-conditions.

certain [body of facts about some portion of the natural world]'.[25] Similarly, we have to look at Doyle's stories to find out about the fictional character Sherlock Holmes and it is our hypostatizing practice that determines that we need to do so. Or take the case of water. How did we discover that it is *essential* to water that it is H_2O? Scientists discovered that (most of) the clear potable substance that flows in rivers and falls from the sky consist of H_2O. But it was through conceptual analysis that we discovered that water is *essentially* H_2O. That is, Kripke convinced us that our *concept* of water is such that what it picks out is essentially H_2O. So once again, the nature-determination-feature does not mark a principled distinction between ordinary entities and those entities Schiffer wants to regard as language-created.

I conclude that the distinctive features which Schiffer claims to characterize a small class of language-created entities in fact hold of a much wider variety of ordinary entities. So if we take the discovery-feature and the nature-determination-feature to jointly characterize what it is for a range of items to be 'created' by conventional linguistic or conceptual practices, then many ordinary items do turn out to be conventionally created.

3.2.3 Conclusion: Applying the framework

In this section I will examine how the framework developed in chapter 2 can be applied to Schiffer's view.

3.2.3.1 *Substrata and Carvings.* On Schiffer's account, new entities can be created given that certain *linguistic features* are in place. The substratum, it seems, is just the world minus the linguistically-created entities. To this substratum we apply our hypostatizing practices to carve out the entities in question. In the case of fictional entities, our hypostatizing practices, that is our hypostatizing use of names, carves out fictional entities from a substratum if that substratum features the pretending use of those same names. In the case of properties and propositions, our hypostatizing

[25] *ibid.*, p.161, my emphasis.

practices, that is our hypostatizing use of predicates and sentences, carve out properties and propositions from a substratum that features the ordinary use of predicates and sentences.

3.2.3.2 *Language-created entities?* How exactly is it that our hypostatizing practices give rise to (carve) new entities? On Schiffer's account these practices carve abstract entities by (i) determining the essences of these entities (nature determination) and (ii) mediating conceptual access to them (discovery). Our hypostatizing practices are claimed to place new objects in our world, that is the world as perceived and conceptualized by us, because without those practices the entities would neither be conceptually accessible to us, nor would they even exist as such.

The underlying mechanism appears to be similar to the one I earlier suggested to be at work in Goodman's version of conventionalism:[26] We assume a lightweight notion of object according to which the world itself does not determine identity- and individuation-conditions for any of the objects around us. Our hypostatizing practices determine the nature of that which some of our expressions apply to by imposing such conditions.[27] They thereby configure our surroundings into objects for us.[28] Schiffer focuses on only a few of our hypostatizing practices, namely those that posit abstract objects. But as I have argued above, there is no principled difference between the 'creation' of the entities Schiffer regards as language-created and other entities.

3.3 Sidelle on modal conventionalism

In his book, *Necessity, Essence and Individuation* Alan Sidelle develops an interesting proposal concerning the shape an acceptable modal conventionalism should take in

[26] See also the discussion of Sidelle's account in §2.1 and §3.3.1.

[27] At least this is the ideal. Our practices actually fall short of imposing fully determinate identity- and individuation criteria. They are sufficient for determining identity-conditions to track the objects posited throughout the counterfactual situations we are most likely to consider when reasoning about the posits. It is only when philosophers investigate the nature of the objects by running thought experiments involving extreme situations that the iniderminacy in the identity-conditions surfaces.

[28] 'For us', because that our surroundings are configured into objects in that way makes, by itself, no difference to creatures that lack the required conceptual resources. See the discussion of Hacking in chapter 3.4 for a discussion of how our linguistic practices can nonetheless make a difference to such creatures *indirectly*.

the light of the 'discovery' of necessary a posteriori truths.[29] Such truths are prima facie embarrassing for the modal conventionalist. The modal conventionalist holds that the truth of modal statements is grounded in our conventions, rather than in what Sidelle calls 'real necessity'—necessity that is a metaphysical feature of the world which is independent of our conceptual practices. If the modal conventionalist is right, then presumably all necessary truths would have to be a priori, because it is, after all, our conventions that determine their truth—all it should take to discover the necessary truths is reflection on the relevant conventions.

In this section, I will start by outlining Sidelle's conventionalist account of modality (§3.3.1). Then I will discuss the metaphysical picture underlying his account (§3.3.2) in terms of the framework from chapter 2. Next,§3.3.3 contains the discussion of an alternative realist metaphysics which is compatible with Sidelle's arguments in favor of conventionalism. The alternative is of interest largely because similar alternatives can be constructed for other conventionalist accounts.

3.3.1 Sidelle's modal conventionalism

Sidelle aims at showing (i) that there is a recognizably conventionalist position which is not committed to necessary truths being a priori and so cannot be easily refuted by appeal to necessary a posteriori truths (3.3.1.1), and (ii) that conventions play an essential role in the constitution of modal facts (3.3.1.2).

3.3.1.1 *Modal conventionalism is compatible with a posteriori necessities.* Sidelle draws attention to how we seem to determine necessary a posteriori truths on the basis of empirical truths: Given that water is actually H_2O (an empirical fact), water is necessarily H_2O. Given that Hesperus is actually identical to Phosphorus, they are necessarily identical. It is not inconceivable that scientists should discover that we have been in error concerning, say, the composition of water, and should it turn out that water was really xyz, then it would be (then it *is*) necessary that water is xyz.

[29] Alan Sidelle, *Necessity, Essence, and Individuation – A Defense of Conventionalism*, 1989, Cornell University Press

Thus, necessary a posteriori truths appear to be, in a peculiar way, contingent upon empirical truths. Against the background of this observation, Sidelle suggests that the conventional analytic principles from which the truth of modal statements is to flow should take *conditional* form. In general, such principles will have the form

(PROPERTIES) If x is of kind K, then if p is x's P-property, then x is necessarily p.

To illustrate, consider the following instance of PROPERTIES:

(SUBSTANCE) If x is a chemical substance and M is x's micro-structure, then x has M essentially.

The empirical contribution to the truth of a modal statement is packaged in the antecedent of the conditional. On the premise that the antecedent is satisfied, the convention applies and endows certain empirical facts (e.g. the fact that water is H_2O) with a special modal status. Whether or not the antecedent is satisfied is typically going to be an empirical matter. This accounts for the lack of apriority of necessary a posteriori truths while leaving open the possibility that conventions play a crucial role in determining modal facts.

3.3.1.2 *Conventional principles are required for grounding necessity.* Some details need filling in but the proposal outlined so far shows that in principle there is a recognizably conventionalist position available that is compatible with the existence of necessary a posteriori truths. The question is whether such principles are, as the conventionalist requires, *needed* to ground modal facts.

Sidelle gives two arguments to support the claim that to the extent that there are modal truths at all, they flow from our conventions. First, an *epistemological argument* which takes the form of a transcendental argument for the conclusion that as far as our knowledge of modal truths is concerned, modality is convention-based. Second, a *metaphysical argument* which is meant to show that modality could not be grounded in anything but convention, and in particular not in any supposedly real modal features as the modal realist claims.

3.3.1.2.1 *The epistemological argument.* Suppose that we do in fact have (or are able to arrive at) knowledge of modal truths. Empirical investigation, Sidelle points out, reveals at most what non-modal properties the objects of investigation have. If the modal realist is right and there really are modal features 'out there' which are entirely independent of us, then it is hard to see how we could possibly apprehend them. We have senses to detect the various empirical features of the world around us, but it is implausible to assume that we have a special 'modal sense' to detect any modal features.

In an attempt to bridge the modal gap, modal realist may appeal to imaginability: Item x is essentially P if we cannot imagine x to exist without it being P. The conventionalist can raise two problems with this. First, why should imaginability be any guide to an independent modal reality? If the modal features of reality are, in principle, independent of us, then, it seems, we have no guarantee that our imagination reliably tracks modal reality. Secondly, and related to the first point, we can, prima facie, very well imagine that items which supposedly have P essentially, lack P under some circumstances. For instance, we can imagine water not being H_2O or Margaret Truman not being Harry Truman's daughter. Wrong, the modal realist will reply, what you are imagining is not a case of water not being H_2O or a case of Margaret not being Harry's daughter. Rather, you are imagining a different substance altogether, and similarly for your alleged imagining of Margaret Truman. This reply, however, is available to the modal realist only if he can back it up by providing a principled and epistemically tractable sorting of imaginings into those that track modal variability and those that do not. Otherwise, the epistemological problem remains. But given that the realist takes modal variability to be determined by 'real' modal features in the world which are in principle independent of our modal reasoning, it is unlikely that he will be able to provide such an epistemically tractable sorting.

Sidelle argues that a conventionalist account along the lines traced above can not only close the modal gap between empirical findings and modal truths. It can also account for the role reason and the imagination play in metaphysical investigation. On the first count, the conditional principles allow us to pass from merely empiri-

cal findings ('Water is H_2O') to modal conclusions ('Water is essentially H_2O'): We know that water is essentially H_2O because (a) we know that water is, as a matter of empirical fact, H_2O, and (b) our conventions governing the concept *water* determine that water has its micro-structure essentially. On the second count, these same conventions can be conceived as informing our imaginability judgements: We find Kripkean counters to the alleged imaginability of water's not being H_2O convincing because our imagination of counterfactual cases involving water is constrained by the principle SUBSTANCE—nothing that fails to be H_2O in an imagined situation could be water because we resist application of the conventionally shaped concept *water*.

In summary, the argument is this: We do have knowledge of modal facts. On the assumption that modal realism is true it is mysterious how we could come to have that knowledge. Modal conventionalism can account for our modal knowledge. So modal conventionalism is true, that is modal facts 'flow from' or are partly constituted by conventions.

3.3.1.2.2 *The metaphysical argument.* The metaphysical argument is meant to establish that there is no *real* necessity, thus suggesting that all necessity is conventional. First, Sidelle observes that it is hard to see what real necessity *could* be, what it could be in virtue of which it is necessary that water is H_2O, and that Margaret Truman is the daughter of Harry Truman. As Sidelle acknowledges, this is not an *argument* against real necessity but a puzzle which may make one initially suspicious about real necessity. To establish that conventional necessity is all the necessity there could be, he proposes the following strategy: Real modal features would have to be such that it is in virtue of them that certain states of affairs are necessary (e.g. the states of affairs that Margaret is the daughter of Harry). If a state of affairs is necessary, Sidelle continues, then it cannot be imagined away. Therefore real modal features would have to be such that it is in virtue of them that certain states of affairs cannot be imagined away. So if we have found what it is in virtue of which certain states of affairs cannot be imagined away we will have found the real source of necessity.

This is how the strategy is put to work: Any state of affairs, Sidelle contends, can in principle be imagined away:[30] '[T]rue essential predications', such as 'Margaret Truman is the daughter of Harry Truman', do *not* rule out any states of affairs'.[31] Considered, 'from the point of view of the world',[32] 'non-verbally',[33] the state of affairs which we may describe as 'Margaret is not the daughter of Harry' is the same as the state of affairs we may describe as 'The person who has such-and-such Margaret-Trumanish properties is not the daughter of Harry'. Imagining the latter state of affairs just is imagining the former (modulo the verbal description). And since the latter is not ruled out by Margaret's essentially being Harry's daughter, the former isn't either. What we essentially have here, Sidelle claims, is two descriptions of the same state of affairs (considered 'non-verbally'). What is ruled out by Margaret's essentially being Harry's daughter is a certain *description* of that state of affairs, not the state of affairs itself. But, Sidelle continues, if a state of affairs was metaphysically necessary, in the sense that it had any *real* necessity attached to it, it would have to rule out some states of affairs simpliciter, such as the state of affairs described by 'Margaret is not the daughter of Harry'. Therefore, there is no real necessity that could make a state of affairs metaphysically necessary. Convention, on the other hand, *can* account for why we cannot imagine away necessary states of affairs (see above). So metaphysical necessity is a product of convention.

3.3.2 Applying the framework to the underlying metaphysical picture

In his metaphysical argument, Sidelle seems to aim at a two-tiered account of states of affairs: On the first tier, we find *pure* states of affairs, or states of affairs *simpliciter*, which are configurations of *real* features of the world. They are independent of our description or conceptualization and have no inherent modal features. On the second

[30] Note the apparent clash between this claim and the earlier claim that necessary states of affairs cannot be imagined away. I will discuss the underlying confusion in section 3.3.3.2.

[31] Sidelle (1989), p.117

[32] *ibid.*, p.118

[33] *ibid.*, p.118

tier, there are *conceptualized* states of affairs, which, insofar as they are conceptualized, depend on our conventions, and which do have modal features in virtue of these conventions. On this account, states of affairs *simpliciter* which lack, among other things, modal features, is all there *really* is. The states of affairs simpliciter cannot, all by themselves, constrain modal imagination, because they do not, all by themselves, have any determinate modal status. Rather, modal features are imposed on pure states of affairs by our conventions. This fits well with the framework developed in chapter 2: The *substratum* consists of the first-tier states of affairs. To this, the *carving*, constituted by our conventional principles, is applied to yield the second-tier states of affairs.

How are our conventions supposed to make it the case that real states of affairs take on certain modal features? How do they *carve* modal features from the substratum? On Sidelle's account, conventions impose modal facts indirectly by imposing an ontology. A plausible account of the notion of object has it that objects, the ordinary things we talk and think about, have to be subject to determinate cross-temporal and cross-world identity-conditions. That is, it needs to be determinate under what conditions an object can be re-identified, and what actual and hypothetical changes it can undergo and remain the same.[34] According to Sidelle,

> [t]he world ... is *inarticulate*; that is to say, it does not contain items with their own identity-conditions, which is to say that it does not, as such, contain individuated items, which are ... the sorts of things about which we regularly talk with our use of nouns.[35]

So nothing about the world simpliciter, the uncarved substratum, determines the identity-conditions required for objecthood: The world itself is just 'so much stuff'. It is our conceptual practices that impose identity-conditions and thereby determine what objects there are. What emerges here is conventionalism not merely with respect to modality but with respect to *ontology* as well: The world is taken to provide

[34]For a defense of this view of what it takes to be an object, see, for instance, E.J. Lowe, *Kinds of Being*, or David Wiggins, *Sameness and Substance*.

[35]Alan Sidelle, 'Identity and Identity-like', p.285/6

a not just modally but also ontologically unstructured *substratum*, onto which we conventionally impose entities of various sorts. How? According to Sidelle, conventional principles such as SUBSTANCE ought to be understood as (analytic) principles of *individuation* which impose identity-conditions on the stuff of the world. The conventional principle SUBSTANCE determines that the stuff picked out by our term 'water' (which is a chemical substance term) has its micro-structure necessarily. Similarly, a conventional principle governing our use of names for persons, determines that a personal name's referent necessarily emerged from the fertilized egg it actually emerged from. Consequently,

> the modal intuitions whereby we come about modal knowledge are reflections of how we have determined what it is that we are talking (thinking) about, and not of the thing thereby picked out.[36]

Note here, that principles of individuation like SUBSTANCE are *not* meant to pick out *independently* available referents. Rather, they

> play a metaphysically more robust role. ...[T]he conventions *articulate* (or create or construct [or *carve*]...) objects from the independently inarticulate world.[37]

On this account, to say that our conventions make it the case that water is essentially H_2O is somewhat misleading. It would be more accurate to say that our conventions determine that what the term 'water' picks out is essentially H_2O.

What distinguishes Sidellian modal (and ontological) conventionalism from the trivial semantic thesis that our conventions merely determine the meaning of our expressions is the additional metaphysical claim that the world itself does not contain ready-made referents for our expressions to pick out.[38] Unfortunately, Sidelle says little to argue for that metaphysical claim. Without this metaphysical background, however, the data adduced by Sidelle in support of conventionalism allow for a different, realist, explanation, to which I turn next.

[36]Sidelle (1989), p.110/1
[37]Sidelle (1992), p.284
[38]I will return to this point in chapter ??.

3.3.3 An alternative picture: Plenitude and selectionism

In this section I show that there is a form of modal realism that withstands Sidelle's challenges. The interest of this form of modal realism—plenitudinous modal realism—lies in the fact that analogous positions are major contenders to other forms of conventionalism.[39] If we find the conventionalist's arguments for their positions compelling but want to resist their conventionalist conclusions, we will be left with one of these alternatives.

3.3.3.1 MEETING THE EPISTEMOLOGICAL CHALLENGE. Is there a realist position that can meet the challenge presented by the epistemological argument? Here's an attempt on behalf of the modal realist: Simply augment the realist metaphysical story with a conventionalist account of modal *epistemology*. All Sidellian conventions do, the modal conventionalist may claim, is mediate epistemic access to an independently constituted modal reality. Prima facie, this may seem rather unsatisfactory. How is it that a collection of arbitrary conventions allow us to grasp modal facts which presumably concern an independently constituted reality?[40] Suppose the following was introduced as an analytic principle:

SUBSTANCE′ If x is a chemical substance and M is x's temperature, then x has M essentially.

Clearly, it does not mediate access to modal reality, as, for instance, the water in the glass before me is a chemical substance, but it does not have its actual temperature essentially. Thus, the conventional principles cannot, in general, be trusted to mediate epistemic access to independent modal reality. Whether or not a principle like SUBSTANCE and SUBSTANCE′ is true turns out to be itself a substantive metaphysical (or maybe mixed metaphysical-empirical) question which has to be settled before adoption of such a principle. But then these principles cannot play the epistemological role the reformed modal realist wants them to play.

[39] I briefly discussed the plenitudinous alternative to Goodman's account in §3.1.3.3.

[40] Arbitrary, in so far as in choosing conventions concerning modal reality we ought not to be guided, indeed (according to the epistemological argument) *cannot* be guided by independent features of modal reality.

In response, the modal realist can, once again, appeal to Sidellian considerations. Sidelle wants to view principles like SUBSTANCE and SUBSTANCE′ as analytic principles of individuation. If these principles are understood that way, then they run no risk of entailing false modal propositions. (W′), for instance, does not entail the false claim that water has its actual temperature essentially. Rather, it has the effect of fixing on a concept (expressed by 'chemical substance') which is such that its instances have their temperature essentially. The substance we refer to with the term 'water' does not fall under the concept expressed by 'chemical substance' as governed by convention (W′). On the proposed reading, then, arbitrary P-principles can be adopted conventionally and mediate access to an independent modal reality.

This solution to the epistemological problem comes at a metaphysical cost. The metaphysical realist picture one has to assume as underlying this account of conventions as individuation principles is one of ontological *plenitude*: In addition to the *water* in the glass in front of me there are infinitely many other substances, which share with this instance of water its categorical (i.e. actual non-modal) properties but which differ in their modal properties. Which of them I am referring to is determined by convention (W), which governs the use of the English term 'water'. If my use of the term 'water' was governed by a different convention instead, say by (W′), then I would not be referring to water but to a substance that has its actual temperature essentially. The reason the modal realist needs to assume ontological plenitude if he wants to use analytical principles of individuation to mediate epistemic access to an independently constituted modal reality is this: It cannot be a condition on the adoption of such a principle that it be established that the concept fixed by the principle applies to anything. Otherwise the principle could not serve its epistemic function. For instance, consider the principle

SUBSTANCE″ If x is twater and M is x's temperature, then x has M essentially.

It (partially) fixes the (new) concept *twater*, expressed by the (partially interpreted new) predicate 'twater'. Further, it is supposed to allow me to infer that the twater in the glass in front of me has its temperature essentially, thus giving me access to

a portion of modal reality. But what guarantees that there is indeed twater in the glass, a substance that has its temperature essentially? And what guarantees, for that matter, that there is *water* in the glass, a substance that has its micro-structure essentially? The modal realist who wishes to pears the epistemological strategy under review can only assume that as a matter of fact all these substances, and many more that differ only in their modal (and possibly their temporal) properties, exist. On this account, the analytic individuation principles *select* one of the many real kinds as the referent of the predicate they govern (e.g. 'twater'). The real kinds here are not, in principle, restricted to what are usually considered *natural* kinds and their modal variations. There are, in addition to the cup I am drinking out of, the cup_1 which is essentially chipped, the cup_2 which is essentially either white or filled with green tea, the cup_3 which could have been made of either wood or copper, etc. The combination of a conventionalist epistemology with a plenitudinous picture of ontology trivializes modal knowledge without deflating modal reality.[41]

3.3.3.2 MEETING THE METAPHYSICAL CHALLENGE. The *metaphysical argument* relies on the connection between modality and imaginability: Whatever is responsible for a state of affairs being necessary also has to account for our inability to imagine it away. Real necessity cannot account for the latter, conventional necessity can account for it, so conventional necessity is all the necessity there is.

Let us see whether that is compelling. As laid out in §3.3.2, Sidelle works with something like the following conception of states of affairs: A state of affairs consists of two component. First, a non-verbal component, the state of affairs simpliciter, the state of affairs considered 'from the point of view of the world', or, using the terminology introduced earlier, the contribution of the substratum to the state of affairs. Second, a descriptive or conceptual component, a carving which together with the non-verbal component constitutes an ontologically and modally fully articulate state of affairs. Two different states of affairs can share their non-verbal component and differ only in their descriptive or conceptual component. In his metaphysical

[41]Sidelle considers this ontological picture in a different setting under the label 'Picture 1' in section VII of his 'Identity and Identity-like', in: *Philosophical Topics*, vol.20. no.1. Spring 1992

argument for modal conventionalism Sidelle said first that a necessary state of affairs cannot be imagined away and subsequently that any state of affairs *can* be imagined away. Now it is clear how to understand these prima facie contradictory claims. With the two-tiered account of states of affairs come two kinds of imaginability. We can focus our imagination on the non-verbal components of states of affairs. In this case, Sidelle maintains, any state of affairs can be imagined otherwise; our imagination is unconstrained. Or we can focus our imagination on the complex consisting of the non-verbal component and the description, that is, the fully articulate state of affairs. In this case, Sidelle maintains, many states of affairs cannot be imagined away because the descriptive component constrains our imagination.

That leaves the realist some maneuvering room. The non-verbal component of the state of affairs *water is xyz* is perceptually indistinguishable from (and thus presumably identical with) the state of affairs *twater is xyz*. Sidelle must concede that we can imagine the non-verbal component of the state of affairs *water is xyz* (because imagining it is the same as imagining the non-verbal component of the state of affairs *twater is xyz*). Further, we can certainly imagine this non-verbal component being described either way: as 'Water is H_2O' or as 'Twater is *xyz*'. So the state of affairs *water is xyz* is "unimaginable" in the sense that we *dismiss* it as impossible, that is, we resist the description of the non-verbal component of *water is xyz* as 'Water is *xyz*'. Now, Sidelle maintains that if the non-verbal components of two states of affairs s_1 and s_2 are perceptually indistinguishable, then they can differ in modal status *only* in so far as their associated descriptions differ.[42] The reason is presumably that if there was an imperceptible difference (due to real necessity) in the non-verbal components of s_1 and s_2 on account of which they differ in modal status, then this difference could not account for the difference in their imaginability-status. This is the step the plenitudinous modal realist characterized above may resist. Suppose there *is* an imperceptible difference between the non-verbal components of s_1 and s_2 which is due to real necessity. Say, s_1 has real modal feature m_1 and is associated with description d_1, while s_2 has real modal feature m_2 and is associated with description d_2. Now the

[42] *ibid.*, p.120

modal realist can argue as follows: The description d_1 is associated with s_1 rather that s_2 because of an analytic principle of individuation. For instance, represent the states of affairs *water is xyz* and *twater is xyz* as $\langle\langle$watery-stuff, essentially $H_2O\rangle, xyz\rangle$ and $\langle\langle$watery-stuff, essentially xyz$\rangle, xyz\rangle$, respectively. Here, the first element of the first component ('watery-stuff') represents the perceptual component, the second element the real modal feature of the state of affairs, Then 'Water is H_2O' is the description associated with the former because the analytic principle governing 'water' fixes 'water' to actually pick out the substance, water, that has its actual micro-structure, H_2O, essentially. And it is the same analytical principle that renders s_1 unimaginable, or rather, that allows us to rule out s_1 as impossible: We cannot perceptually distinguish s_1 and s_2, but we know that the former is possible while the latter isn't because we know that d_1 is associated with a possible, d_2 with an impossible state of affairs. So on a plenitudinous realist picture (augmented with a conventionalist epistemology) it is due to linguistic conventions that certain states of affairs cannot be imagined away, while the source of these states' necessity is real modality, contrary to what Sidelle thinks.

Sidelle's arguments in support of modal conventionalism thus presuppose a form of ontological conventionalism for which he does not argue separately.

3.4 Hacking on making up people

In his 'Making up people', Ian Hacking argues for what he calls *dynamic nominalism*, the thesis that through our classification of human beings and human acts we 'make up people' and thereby literally create 'new realities'.[43] This type of creating new realities, he contends, applies only to human beings and human actions. We cannot in the same way make up non-human things.

I will argue that within the framework of dynamic nominalism, our classificatory practices 'make up' non-humans in much the same way as they make up the kinds

[43]Ian Hacking, 1986, 'Making up people', reprinted in: Edward Stein (ed.), 1992, *Forms of desire — sexual orientation and the social constructionist controversy.*

of people Hacking takes to be created by our classifications. However, Hacking's version of conventionalism adds an interesting additional aspect: It suggests that what carving we actually employ may have direct consequences for the world's substratum.

3.4.1 Hacking's dynamic nominalism

3.4.1.1 *The claim.* Dynamic nominalism is the view that many 'kinds of human beings and acts come into being hand in hand with our invention of the categories labeling them.'[44] There were, in a sense, no perverts, multiples (people suffering from multiple personality disorder) or homosexuals before we started to systematically classify people as such. Our labels 'create social reality' *by* creating ways for people to be. That is not to say that there weren't people exhibiting the kind psychological make-up or behavior on the basis of which we, given our current classificatory practices, categorize someone as pervert, multiple or homosexual. And indeed, after the classifications had been introduced, such people were retrospectively categorized as perverts, multiples or homosexuals.[45] But, Hacking claims, it would be mistaken to say that they indeed *were* perverts, multiples or homosexuals.

3.4.1.2 *Nominalism.* The reason, Hacking suggests, why there were, say, no 'same-sex people' before the late 19th century despite the fact that there was 'same-sex activity' is that intentional human action and human ways of being are actions and ways of being 'under a description' and 'if a description is not there, then intentional actions under that description cannot be there either'.[46] Thus, 'if new modes of description come into being, new possibilities for action come into being in consequence.'[47] That means that the space of possibility for personhood changes across time, communities and cultures. In this sense, Hacking thinks, we make up people in ways in which we cannot make up non-human things: What it is possible for a rock or horse to be or do does in no way depend on our modes of description but what it

[44] *ibid.*, p.87
[45] *ibid.*, p.71f.
[46] *ibid.*, p.80. Here, Hacking appeals to Elisabeth Anscombe's *Intention.*
[47] *ibid.*, p.81.

is possible for a person to be or do does depend on the available modes of description because deliberate action depends on the possibilities of description.

3.4.1.3 *Dynamism.* There is a further point Hacking draws attention to. Once a classification scheme is in place, oftentimes 'people spontaneously come to fit their categories' or are made to fit their categories.[48] For instance, after factory inspectors had drafted a report on workers in English mills, factory owners 'had a clear set of concepts about how to employ workers according to the ways in which [they were] obliged to classify them.' In addition, it is often the case that certain expectations, stereotypes and prejudices are associated with particular classificatory categories. These may have an impact both on how people thus categorized (and who are aware of being thus categorized) choose to act and perceive themselves and on how they are perceived and treated by others.[49]

In what follows, I will argue that our classificatory practices create new modes of description for both humans and non-humans. Further, both humans and non-humans come to 'dynamically' fit into the new classifications. To fit into most such categories, it is not necessary to act under the description made available by the classificatory practice.[50] Since the forming of intentions involving the classifications is not necessary for realizing one of the new possibilities "created" by the classificatory practices, these practices can in principle create possibilities for both humans and non-humans.

3.4.2 Possibilities for humans and non-humans

There are two key aspects to the doctrine of dynamic nominalism about a range of properties. First, it is a form of *nominalism.* It maintains, for a given property in that range, that there is no more to having the property than to be *labeled* or *named* in a particular way. That is, there is nothing, besides falling under the label, that the

[48] *ibid.*, p.70.

[49] Perception and action both by the person classified and by the people classifying may be either in conformity with the classification and everything it entails or in deliberate defiance thereof.

[50] For instance, in Hacking's example cited above, the factory workers need not be aware of the inspectors' classifications.

objects with that property have in common with each other and which differentiates them from everything else. Second, it maintains that not only does the existence of the label make it the case that some objects have the associated property, but in addition the very existence of the label dynamically 'draws in' further objects (or, as the case may be, 'repels' objects that initially fall under the label).

In this section, I will argue as far as the two key aspects of dynamic nominalism are concerned, our classificatory practices create possibilities for non-humans in much the same way as they create possibilities for humans.

3.4.2.1 *Creating properties.* First, let us see which properties our classificatory practices introduce and how they do this. Let a *grounding property* associated with label 'L' be the property on the basis of which individuals are classified as falling under the label L. Let P be the grounding property for the classification-induced property S an agent has if he is classified as L. For instance, L may be the label 'homosexual', S the property of being a homosexual and P the property of being predominantly attracted to members of the same sex.

STEP 1. The introduction of the classificatory label L for property P will in the first instance make P more *salient.* Recall, P may itself be a combination of a variety of properties $P_1 \ldots P_n, \ldots$. Before the label was introduced, we may typically not have been aware that $P_1 \ldots P_n, \ldots$ were ever co-instantiated. We may have thought of something that was actually P as (P_1 and (P_3 or P_{18})) but never as having all of P. Or, where P is not complex, we may have thought of something as P but not dwelled on it, simply because there is nothing distinguished about being P.

STEP 2. Making a property salient has the further effect of facilitating the development of a variety of *attitudes* toward it. Once attention is drawn to the (possibly complex) property P, people are more likely to attach, both consciously and unconsciously, expectations, stereotypes and prejudices to the property.

STEP 3. This creates, in effect, a new property, namely that of being P and E,

where E is the property something has if it is subject to the expectations, stereotypes and prejudices associated with P. In some extreme cases, E may be nothing more than the property of *being thought of as* P. While P was available for instantiation before the introduction of the label, this new property, $P + E$ becomes available only after the classification has been made. Given Hacking's discussion of the matter, it appears that S, e.g. the property of being a homosexual or the property of being a multiple, is best identified with $P + E$.

3.4.2.2 *Nominalism.* According to Hacking, our classificatory labels create social realities. By creating classificatory labels, new modes of description, Hacking says, we create new ways for people to be. Before our society started classifying people into heterosexuals and homosexuals you could be predominantly attracted to people of your own sex, engage in same-sex activity, but you could not be a homosexual, because being a homosexual, Hacking maintains, requires the existence of a particular mode of description.

If the availability of a *mode of description* is the key to whether or not the corresponding way of being is available, then Hacking's point applies to possibilities for non-humans as well. Suppose it is on the basis of the (possibly complex) property P that we classify people as homosexuals. Then either the fact that John is a homosexual is the same fact as the fact that John instantiates P or it isn't. If it is, then there is no basis for Hacking's claim that while it was always possible for people to instantiate P, it became possible only fairly recently for people to be homosexuals, because Hacking acknowledges that it was always possible to instantiate property P. So Hacking has to consider these two facts to be different, the difference stemming from the difference in mode of description. Then similarly, the fact that this tree has genetic property G is different from the fact that this tree is an oak. Being an oak is thus different from having genetic makeup G, and just as being a homosexual requires, besides instantiation of P, the existence of the appropriate mode of description, being an oak requires, besides instantiation of G, the existence of the appropriate mode of description. In the sense in which being a homosexuals was not a way for humans to

be before the relevant classificatory scheme was in place, being an oak was not a way for trees to be before we classified trees into oaks, elms, pines, and so on.

Step 3 points to another way how our classificatory practices can give rise to additional properties: Everything that satisfies the old property-complex P, satisfies E as well, that is the property of being classified on the basis of P and being subject to the expectations, stereotypes and prejudices newly associated with P. Again, this is not restricted to humans. A new mode of description can be introduced for a cluster of properties satisfiable and satisfied primarily by non-humans, so non-humans may come to take on the new property of being classified in a certain way (and being subject to expectations, etc) as well. If the existence of ways to be goes hand in hand with the existence of modes of description, then there appears to be no principled difference between possibilities for humans and possibilities for non-humans.

3.4.2.3 *Dynamism.* Let us call the facts describable prior the the introduction of the new mode of description *old* facts and those describable only after the introduction of the mode of description *new* facts. When new modes of description become available new realities are created in the weak sense that the additional facts are all new facts, while the old facts are pretty much the same after the introduction of the new mode of description. There were n people with property P before and there still are n people with property P after the introduction. There are m trees with genetic property G distributed over the forest thus and so before introduction of classification 'oak', and there are just as many trees with genetic property G and distributed thus and so after the introduction of the classification. The new realities, namely that there are homosexuals and oaks, are merely a conceptual matter.[51] This is what we considered so far. Now, Hacking is particularly interested in those modes of description which cause the *old* facts to change. People often come to fit or are made to fit their classifications after these have been introduced.[52] By making P more salient the introduction of the new mode of description, that is the new label, makes P more

[51] I should say, *at most* a conceptual matter, because it may be argued that a new label alone does not give rise to a new concept. This however, is controversial and depends, among other things, on how sensitive we want the individuation of concepts to be to cognitive significance.

[52] *ibid.*, p.70.

visible both as an option to be and as an option for letting others be. As a result of this salience, is is more likely that people take P into account when deciding what to do. Depending on what exactly P is, they may choose to realize it or to avoid it. So the salience of P gives rise not only to additional new facts, but also to additional old facts.

The same is true, however, for many classifications of non-humans. Not only humans come to fit new categories. By introducing new modes of description for non-humans meeting certain conditions we achieve the same salience effect: When first introduced in Europe, tomatoes, thought to be poisonous, were classified as decorative plants. A reclassification as food made a huge difference to the fate of tomatoes. Rats, once reclassified by some subcultures as pets, passed from being hunted down as disease-carrying rodents to being a welcome addition to the family (well, some families). The advertising industry takes advantage of this effect all the time: Introduce a flashy label for what is otherwise unremarkable, and have the thing thus labeled be desired and payed for by humans. For the salience-effect to work, as well as the subsequent formation of cognitive and behavioral attitudes, humans are still required, for only they are potentially sensitive to conceptual salience. But not only humans come to fit into categories introduced by our classificatory practices.

So far, then, it appears that there is no principled distinction between creating possibilities for humans and creating possibilities for non-humans. A potential difference arises when we consider possibilities for *intentional* action.

3.4.2.4 *Intentional action.* Human action, Hacking suggests, is action (and being) under a description in a way in which non-human action is not.[53] While after a mode of description becomes available both human and non-human action can be cast in a new descriptive light, only humans are capable of *deliberately* or *intentionally* acting under the new modes of description, and they can act so only if the mode of description is available to them (rather to the person doing the describing).

[53]Let 'action' be understood in the extremely wide sense in which an entity's being in some way is an action of the entity. Hacking seems to have such a wide sense in mind, as various of the examples he considers don't involve what we'd ordinarily classify as action.

How exactly is talk of *deliberate* action and being to be understood? Not, typically, in terms of *choice*: A possibility for action or being is a possibility the agent may *choose*, under the given description, to actualize. While in some cases an agent may choose to take on shed a property, this is not true for many of the properties Hacking focuses on. I take it that for most people typically classified as multiples there was never a deliberate choice to be made, at least not as far as the instantiation of the grounding property P is concerned. And similarly for most of Hacking's other primary examples. In these examples, the choice is typically between (i) suppressing either the outwardly perceptible instantiation of the grounding property in question, that is the property on the basis of which people are classified in the relevant respect (since in many cases the actual instantiation is largely beyond the control of the agent), (ii) not suppressing it but deliberately resisting the classificatory label ('pervert', 'multiple', 'heterosexual', 'homosexual') (iii) not suppressing it and embracing the classificatory label with all it entails, (iv) pretending to instantiate the grounding property and either rejecting or (more likely) embracing the classificatory label. Since deliberate choice is out of the question for many of Hacking's paradigmatic classifications that make up people, deliberate action or being should not require choice on part of the agent. Rather, we may say, the agent *consciously* classifies himself under that label or is at the very least *aware* that in instantiating the grounding properties, he is classifiable under a given label.

According to Hacking, then, we create ways of being for humans by creating classifications which humans can consciously fit into (either by deliberate choice or as passive but aware subject). This kind of possibility, of course, is absent for non-humans. Note, however, that creating new ways of being through classification is, in principle, no different from creating new ways of being by non-classificatory activity. I put up a sandwich stand in front of the office and thereby create the possibility for deliberately lunching on sandwiches right outside the office. I construct a new programming language, a new kind of vehicle, I write a poem, paint a picture, ... thereby creating new possibilities for deliberate human action.

Our classificatory action is thus *yet another* means to creating new ways for people to act deliberately. However, it operates on a different level than the other means just mentioned. The possibility to *intentionally* lunch on sandwiches outside the office, for instance, requires more than the mere existence of the right kind of venue in the right location. It also requires possession of the concepts necessary to form the relevant intention. Classificatory practices make these concepts available rather than provide the physical means required for intentional action under these concepts.

However, it appears that for most of the properties Hacking discusses, it is *not* a necessary condition for someone to have the property that he act *intentionally* so as to exhibit the property. Someone can *be* a child-molester and *correctly* classified as such, even if he is neither *intentionally* acting in ways that deviate from expected standards nor aware of these standards. According to our classificatory practices, neither intent nor awareness are necessary for being classified as a child-molester. So being a child-molester does not require the kind of *intentional* action which Hacking predicts. Similarly for the property of being a multiple or a pervert. The application-conditions for the labels in question (and the associated concepts) do not incorporate the condition that the individual act *intentionally*.

That is not to say that the properties aren't *socially constructed* and that the classificatory practice does not play a role in the construction: What is, arguably, true for such properties, and which one may want to appeal to in an argument to the effect that there were no child-molesters before we came to classify people as such, is that these properties can be had only by those embedded in particular ways in a certain social context. These properties consist partly in being so embedded. The existence of the classificatory practice may well part of the social context which defines a set of social norms and expectations. Against the backgrounds of these norms and expectations, instantiators of the grounding property may be perceived (and maybe treated) in a certain way. Arguably, it is only in this context that instantiators of the grounding property have the additional property of being, say, a child-molester.

Once intentionality is no longer regarded as essential for there to be a new 'way

of being' that people may instantiate, we have to conclude that *in general* our classificatory practices create kinds on non-human objects in more or less the same way in which they create kinds of being for people.

Chapter 4

Putting everything together

The aim of this concluding chapter is twofold. First, I will classify versions of conventionalism into different types according to how they take some range of features to depend on convention (§4.1 and §4.2). Second, in §4.3 I will assess the plausibility and interest of the kinds of conventionalism reviewed in chapter 3.

4.1 Types of conventionalism

4.1.1 *Linguistic and factual conventionalism.* Suppose S states some D-fact. For example S may be the statement 'There are objects', or 'Lying is immoral', or 'Water is necessarily H_2O'. Consider the metalinguistic claim

(M) Whether or not S is true is partly a matter of convention.

It is a platitude that whether or not a statement is true depends on two factors: First, on what the statement *means* and second, on what the world is like. The statement is true just in case the world is as it says it is. Accordingly, there are two types of reason you may appeal to for justifying your belief in (M). You could believe (M) because you believe that our conventions fix the meanings of some or all of the expressions occurring in S, so that in this sense, the truth of S is a matter of our conventions. Or you could believe in (M) because you think that our conceptual practices make a difference to what the facts are. I propose to call the first sort of view

linguistic conventionalism, and the second *factual conventionalism*. Someone who believes (M) *need* not make a commitment to either of the two tentative grounds we offered, but remain agnostic about why it is true. The motivation for such an attitude may come from the perceived difficulty of drawing a precise distinction between the contribution of meaning and the contribution of the facts to the truth of theories or a precise distinction between empirical and non-empirical content. Also, one may have doubts about the prospects for metaphysical debate about the status of the truth-making facts. One may think that all the opposing parties have to offer are suggestive metaphors whose precise content is unclear. We may call this position *quietist conventionalism*: It accepts a principle of tolerance with respect to theory choice (and is in this sense conventionalist), but remains agnostic as to the reasons which justify tolerance (and is in this sense quietist).

4.1.2 *Linguistic conventionalism.* Linguistic conventionalism about some subject matter reduces the supposed conventionality of how things stand with regard to that subject matter to the conventionality of the *language* in which assertions about the subject matter are made:

(*LC*) What our words mean is a matter of convention and thus what statements about *D* are true depends on our conventions.

This, we may safely suppose, is true. Clearly, (*LC*) does not compromise the independence of *D-facts*. Take, for instance, linguistic conventionalism about numbers which implies that

(N) Had our conventions been suitably different, then 'There are numbers' would not have been true.

This does not allow the further inference that, had our conventions been suitably different, then there would have been no numbers. It is only as long as our actual meaning-fixing conventions are assumed intact, that we can pass from the assumption of the truth of '*S*' (where *S* is a string that constitutes an indicative sentence in English) to the conclusion *that S*. Given that (on the linguistic conventionalist

reading) the *meaning-fixing* conventions in (N) are assumed to be different, we are not entitled to disquote the sentence in the consequent. Linguistic conventionalism has consequences for semantic-facts, not for the (non-semantic) facts concerning D (such as facts about numbers). It trivially yields global conventionalism, that is conventionalism with respect to *every* subject matter: Any theory about any subject matter has to be formulated in some language. Since meaning in any language is conventional, the truth of any theory depends on convention. So the reductive strategy of linguistic conventionalism renders the conventionalist attitude metaphysically innocuous and disappointingly trivial.

4.1.3 *Factual conventionalism.* A substantive conventionalism needs more than mere linguistic conventionalism. Rather, it would have to claim some degree of conventional control over the *facts*. There is an immediate obstacle for attempts to develop a form of conventionalism that goes appreciably beyond linguistic conventionalism. Peter van Inwagen gives expression to the widespread belief in the factual impotence and metaphysical inertness of conventions:

> Convention regulates behavior, including linguistic behavior, and regulating behavior has no ontological implications beyond implying the existence of regularities in behavior.[1]

Factual conventionalists deny this. According to them, conventions do regulate more than behavior. But how? The framework developed in chapter 2 allows us to distinguish two ways in which one may in principle hold a range of facts to be regulated by (depend on) convention. One way, which yields what we may call *direct conventionalism*, is to view the regulation of the facts in question as on a par, as of the same kind, with the conventional regulation of behavior. The other way, which yields what we may call *configurative conventionalism*, is to view the regulation of the facts in question as of a fundamentally different kind.

[1] van Inwagen, *Material Beings*, p.7. In the quote as well as in the passage the quote is taken from, van Inwagen talks specifically about conventionalism regarding what *exists*. But the conviction expressed in the quote is, I take it, no less widespread with regard to conventionalism about many other areas, such as the modal or moral.

Versions of *direct conventionalism* can help themselves to the familiar dependence-relations of causation and constitution. For a direct conventionalist the conventionally determined features are straightforwardly related to the behavioral regularities that constitute conventions on the level of the substratum. For example, on the analysis given in chapter 1, meaning depends directly (namely, constitutively) on conventions, while the existence of ties depends causally on our conventional dress-codes. Here, the regulation of behavioral patters leads directly to a regulation of the conventionally determined facts.

Configurative conventionalism, on the other hand, like like conventionalism about ontology, modality or morality, do not involve one of the familiar dependence-relations. Worse, as we have seen in chapter 1, it appears that there isn't *any* dependence-relation that these kinds of conventionalism could appeal to because the facts about the subject matters they construe as conventional don't seem to covary appropriately with convention. In chapter 2 I presented a rational reconstruction of configurative conventionalism which allows us to model conventionalist dependence-relations in a way analogous to how ordinary dependence-relations are modeled. The reconstruction employs the theoretical notions of substratum and carving and helps us make *formal* sense of conventionalist dependence relations. This is a step in the right direction for the conventionalist. To apply this analysis to the dependence-relation appealed to in a particular conventionalist account, we need to identify what, for this account, the range of substrata consists in, what carvings are and how substrata and carvings interact to yield the features considered conventionally determined. The plausibility of the version of conventionalism in question depends on whether these parameters can be filled in an a substantive way.

4.2 Configurative conventionalism

In chapter 3, we examined various configurative conventionalist accounts to see how to understand the interaction between substrata and carvings.

4.2.1. Configurative Conventionalists view the role of conventions as primarily *conceptual*. They assume that the world simpliciter lacks the features which we take the world to have and which conventionalists construe as dependent on convention. These features, they think, are imposed through our conceptual practices. That is not to say that the features are independent of the world. Rather, the world provides some of the ingredients—the substratum, in our terminology—which are assembled, through our conceptual practices, into the features in question.

How are our conceptual practices supposed to *carve* the conventionally determined features from the substratum? How are the worldly ingredient "assembled"? For the case of ontology, I offer the following as a rational reconstruction of the process by which our conceptual conventions act on the the world to yield objects: An idealized notion of object is assumed on which objects require determinate identity-conditions, conditions that allow us to track them not only through space and time but also through counterfactual situations.[2] For some kinds of objects it is further assumed that such conditions are not provided by the world itself. It is our treating certain configurations as objects, our tracking of configurations in a certain way that determines cross-temporal and cross-world identity-conditions, much like drawing connecting lines between the dots on a piece of paper gives rise to a figure. For example, conventionalists about abstract (but not about concrete) objects may believe that while the world simpliciter determines what concrete objects there are, abstract objects are an artifact of our individuation practices: Certain of our concepts (say property concepts, like *the property of being square* of number concepts, like *the number 46*) occupy a place in our conceptual scheme that confers relatively determinate identity-conditions on the apparent referents of these concepts. This is sufficient for our coherently thinking about the world as if there were objects that are the referents of these concepts. This, in turn, is sufficient for there *being* such objects, because there is no more to an object to being governed by determinate

[2]The reason objects are required to have determinate identity-conditions is this: The essential properties of an object are those properties the object could not be without, so essences determine and are determined by cross-world identity-conditions.

identity-conditions.[3]

4.2.2. Now, notice that this picture is at its most plausible in the case of whole sale ontological conventionalism, that is when it is maintained that the world simpliciter does not provide identity-conditions for any objects and that such conditions are imposed by our practices for all the objects there are. In this case it could be maintained that objects are not a feature of the world simpliciter but a feature of the world as conceptualized by *us*. If on the other hand, we want to maintain conventionalism about only part of our ontology we are faced with two different kinds of objects: On the one hand, those which are objects "all by themselves", that is, objects which are subject to determinate identity-conditions independently of us. And on the other hand those objects which depend on our individuative practices. Then we need an argument for why the "objects" resulting from our imposition of identity-conditions are to be regarded as objects at all. Consider the claim that arbitrary mereological sums are conventionally determined, i.e. that they are objects thanks to identity-conditions imposed by us. We know how they are supposed to be individuated and tracked through counterfactual situations, yet since they are claimed to be "assembled" into objects by us, it is not unreasonable to refuse accepting them as proper objects into our ontology. Talk about the world in terms of arbitrary mereological sums makes sense, we may believe, but is really (outside of intentional contexts) just a cumbersome way of expressing assertions about ordinary "real" objects. The objects there really are, it seems, are Big Ben and the meter stick in Paris while there is no object that is the referent of 'the mereological sum of Big Ben and the meter stick in Paris'. An argument is needed to establish that "imposed" objects, such as arbitrary mereological sums or any other kind of object which is claimed to be conventionally determined, are proper objects in addition to the objects provided by the world. But even if such argument is given, counting the conventionally determined "objects" as

[3]A similar story may be told about *facts*. Here, the idea is that facts are the kinds of configurations of the substratum that figure in our making sense of the world. Just as objecthood, 'factness' is not a feature of the world simpliciter. Rather, they are features of a *conceptualized* world. The existence of objects and the obtaining of facts are taken to reflect something about the way the world is. But they do so through our conceptualizations and thus also reflect features of our conceptual scheme.

objects will have the flavor of merely extending the usage of the word "object" to cover the things claimed to be conventionally determined.

Suppose, then, it has been established that objects are a feature of the world only as conceptualized by us, that the world simpliciter is not "carved" into objects. There are two conclusion we could draw: (i) Either, we bite the bullet and conclude that, contrary to common sense, there really are no objects. (ii) Or we conclude that there are objects, namely the ones imposed through our conceptual practices, and that objects are, contrary to what we might have thought, dependent on us. Is there reason to prefer one potential conclusion over the other? Yes, there is. A position that deviates less from common sense is to be preferred from alternatives that do serious violence to our pretheoretic intuitions. Our ordinary concept of object may be somewhat fuzzy around the edges, but it is certainly a core feature of this concept that it has lots of things falling under it. So a concept of object on which there really are no objects is unacceptable as a reconstruction of our concept of object. On the other hand, the counterintuitiveness of the consequence of (ii) that seemingly independent objects depend, in some sense, on our conceptual activity, can be mitigated by construing this dependence in the terms suggested in chapter 2. So *if* it can be shown that the world simpliciter does not contain objects (because nothing in the world simpliciter is subject to determinate identity-conditions) and we successfully conceptualize the world in terms of objects for which our practices provide individuation- and identity-conditions, then it is reasonable to assume that objects are a conventionally determined feature of the world.

4.3 Assessment

The above discussion leaves us with two questions. First, *is* there good reason to believe that the world simpliciter does not contain objects (or facts) independent of our conceptual activities? Second, if so, how substantive a form of conventionalism do we obtain from the picture outlined above?

4.3.1. None of the authors surveyed in chapter 3 has made a conclusive case for why the world simpliciter does not have the features they construe as conventionally determined. In fact, only Sidelle and Goodman give any arguments to that effect.

According to Sidelle, the reasons for why the world simpliciter has no modal features are primarily epistemological: If modal features were a determined by the world itself, he thinks, then we couldn't know about them. Further, examining the way we do find out modal facts, it appears that they are a conceptual matter. Thus, he concludes, our conceptual practices impose modal features on the world. The way we accomplish this, he suggests, is by imposing an ontology of modally determinate objects and kinds. As we have seen (§3.3.3), Sidelle's arguments fall short of establishing the claim that the world simpliciter does not determine either modal or ontological features. In fact, his arguments are compatible with a thoroughgoing plenitudinous realism. It is unclear how the dispute between the plenitudinous realist and the Sidellian conventionalist can be resolved. One consideration that puts Sidellian conventionalism slightly ahead of plenitudinous realism is the apparent metaphysical extravagance of the latter: Not only are there actually substances that are H_2O and have their micro-structure essentially, there are also substances that are that are H_2O and whose micro-structure covaries across worlds with the height of Mt.Whitney. The author of these lines, a person, overlaps temporally and modally with a multitude of other entities subject to rather odd persistence-conditions. On the conventionalist picture, on the other hand, these things *could* have existed (had our conceptual practices been suitably different) but don't actually exist.

Goodman gives another type of argument in favor of conventionalism: Some sets of conventional practices are such that they generate mutually exclusive objects of facts. If we adopt one set of conceptual practices, the facts it generates obtain or the objects it generates exist. We are free to adopt either the one or the other practice or may even adopt them both in different situations. While the one practice is in place a different collection of facts obtains (or a different collection of objects exist) than when the other practice is in place. Since the collections are incompatible, the plenitudinous realist position cannot be maintained and it has to be conceded that if

any one collection of objects exists then they have to be conventionally determined.

However, as suggested in 3.1.3, this line of argument can be resisted. Even if we concede that our practices *do* determine objects and facts, it is not at all clear that our practices really give rise to *mutually exclusive* objects or facts. One can always adopt the view that the apparently conflicting facts are not conflicting after all: Relative to one set of practices points are ontologically primitive, relative to another they are ontologically complex. But the conflict, it may be argued, is merely apparent. Within the two practices we employ different concepts of point which have different sets of objects falling under them. So there is no single kind of entity which according to one version is primitive and according to the other constructed. So the plenitudinous realist position is still a defensible alternative. As in the case of Sidelle, we have reached a standoff.

4.3.2. Suppose then we grant for the sake of argument that the world simpliciter lacks, say, ontological and modal features. Let's grant further that these features are imposed as claimed by configural conventionalists. How interesting a philosophical thesis does this amount to?

Note that *from a common-sense standpoint* it does not amount to much of a claim at all. Even by the configural conventionalist's own lights the claim that objects depend on our practices is, given our actual conceptual practices, false. That is because the alternatives relevant for the assessment of that claim are the possible worlds associated with the *actual* carving. Given this background carving, it is sufficient for the existence of objects of a given type that the substratum (the "world simpliciter") be thus and so. So even if configural conventionalism is true, this will not make for an overly surprising claim. It is of interest only as an alternative to extreme realist views according to which there are "hard-wired" metaphysical facts which underly reality as it appears to us and which it is the philosopher's task to uncover. Configural conventionalists reject the belief that there is a single well-determined structure independent of us which metaphysics aims at capturing as accurately as possible. Instead, they believe, the world admits of many different conceptualizations, some

of which may be more useful that others but none of which can lay claim on being *the* (or part of the) correct one. Further, the real world, *our* world, is the world as conceptualized by us rather than some more or less elusive underlying substratum. This position leaves room for developing a multitude of frameworks or carvings which help us to systematize the goings-on in the world without having to face the stifling question as to whether the framework in question captures the world as it really is.

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