Realism in the Desert

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Abstract. Quine's desert is generally contrasted with Meinong's jungle, as a sober ontological alternative to the exuberant luxuriance that comes with the latter. Here I focus instead on the desert as a sober metaphysical alternative to the Aristotelian garden, with its tidily organized varieties of flora and fauna neatly governed by fundamental laws that reflect the essence of things and the way they can be, or the way they must be. In the desert there are no "natural joints"; all the boundaries we find are lines we have drawn, artificial fencings that merely reflect of our own demarcations, our classifications, our desperate need to ward off the flux and meet an excusable but ungrounded demand for order and stability. The desert returns a picture of reality that is radically anti-realist. And yet the picture does not amount to a form of irrealism. The desert is out there and is what it is regardless of how we feel. And it is not completely structureless. It's just that the structure it has is very thin and does not correspond to the sort of structure that so-called metaphysical realists—and scientific realists alike—tend to attribute to it.

The Desert

The desert, of course, is Quine's: the simple world of spatiotemporal sand he advocated in his early ontological writings, beginning with 'On What There Is'.[1] Quine spoke of it as a sober alternative the McX's and Wyman's overpopulated universe, which is to say Meinong's jungle,[2] with all of its "rank luxuriance" of extraordinary creatures: unactualized *possibilia*, ideas in the mind, *abstracta*, things that do not quite exist in the good old sense of the term but that ought nonetheless to enjoy some form of being in order for what we say to be meaningful. Forget all that, said Quine. Perhaps a Fregean therapy of individual concepts might help us navigate through it all, but *à quoi bon*? We'd do much better simply to clear the slum and be done with it. Welcome to the desert.

I like the desert. It may not be beautiful, but at least it doesn't offend our aesthetic sense. It may not be comfortable, but at least it is safe. It is dry, clean, simple, quiet. It is as light as a place could be. And it is metaphysically extensional: in the desert, what you see is what you get. It is not, however, on the desert/jungle

opposition that I wish to focus here. Everybody has thought about it at length and has already made up their mind one way or the other, and I have learned from experience that it is very hard to produce arguments against the jungle people. It is like arguing against dialetheists: you can't win. You can only hope that your opponent will get tired of pretending to be serious about the content of their pronouncements. More importantly, I do not intend to dwell upon the contrast between the desert and the jungle because that contrast arises mainly—if not entirely—at the level of ontology, understood rather strictly as the doctrine of what there is. It's about ontological commitments, and more specifically about Platos's beard, Occam's razor, and whether the blade of the razor is sharp enough to do a good shaving job. Those are all important issues, and for a long time the debate on realism has in fact focused on them. But there is a different side to the debate, one that pertains to issues in the domain of genuine metaphysics, as opposed to mere ontology, and that in my opinion bites even deeper. That's the side I intend to focus on.

I am appealing, here, to a certain distinction between ontology and metapysics that I have tried to articulate and defend elsewhere.[3] I am aware of its limits and I know it is controversial, but in the present context it is not crucial to endorse it wholeheartedly. I'm just using it to set the stage. Intuitively, the idea is that ontology is concerned with the question of what there is, i.e., what entities exist, whereas metaphysics seeks to explain, of those entities, what they are and how they are organized—their nature, how they relate to one another, what laws govern them, and so on. Thus, if you like C. D. Broad's popular metaphor,[4] ontology is concerned with the task of drawing up a complete "inventory" of the world, of specifying its content, whereas metaphysics is concerned with the structure of that inventory, its internal organization, its foundations if you like. Or again, in the terminology of the scholastic tradition, ontology is concerned with *an sit* questions, whereas metaphysics deals primarily with *quid sit* questions. This distinction is, I think, intuitive and helpful—and relatively uncontroversial. It becomes controversial if you match it (as I would) with the claim that ontology comes first, i.e., that it is in some sense *prior* to metaphysics: one must first of all figure out what things exist or might exist; then one can attend to the further question of what they are, specify their nature, speculate on those features that make each thing the thing it is.[5] But this priority claim is not required for the distinction to make sense, and I don't need to rely on it. I only want to say that, just as we are bound to face questions of realism at the ontological level, in the good old sense of the term, so we are facing questions of realism at the metaphysical level, in the sense I have just explained: realism about the structure of the world, not about its content. And in

this connection the opposition is not between Quine and Meinong—between the desert and the jungle. It is between Quine and Aristotle, between the desert and the garden, so to speak—and I mean a natural garden, like the Garden of Eden, with its tidily organized varieties of flora and fauna neatly governed by natural laws that reflect the essence of things and the way they can be, or the way they must be. To the extent that you believe that the world *is* like a garden in this sense—that it comes structured into entities of various kinds and at various levels and that it is the task of philosophy, if not of science generally, to "bring to light" that structure—to that extent you are a realist. But if you think that the Edenic tree of the knowledge of good and evil is a fiction and that a great deal of the structure we are used to attribute to the world out there lies, on closer inspection, in our head, in our organizing practices, in the complex system of concepts and categories that underlie our representation of experience and our need to represent it that way— then, to that extent you are not a realist.

I realize this is all highly metaphorical, but I trust the picture is clear and familiar enough. I also hope it is obvious that you don't get to live in a metaphysical desert of this sort unless you already live in an ontological desert. That, however, is only a necessary condition, not a sufficient one. Your ontological desert could still have a lot of structure. For example, structure in terms of essences, laws of causation, unity, persistence through time, etc. Not so if you live in a metaphysical desert. So, in a way, when it comes to the metaphysical part of the story, Quine's notion of a desert—at least, the notion of a desert I am interested in here—goes back to Hume, not to Occam.[6]

Causation is perhaps the best example. For Hume, it is a paradigm example of a metaphysical "fiction", a concept that does not correspond to a genuine feature of reality.[7] There is nothing, in reality, necessarily connecting what we call "cause" and what we call "effect". Or rather, there is nothing we can observe in reality except for certain relations of succession, contiguity, and constant conjunction. Hence we cannot form any philosophically respectable concept of causation over and above that of a constant conjunction of like objects in like relations of succession and contiguity, *pace* our natural "propensity" to go for something bigger.

Likewise, consider Hume on identity, i.e., diachronic identity.[8] On the face of it, the thought that things persist through time underlies much of our everyday interaction with the world of ordinary experience. We readily suppose that an object may continue numerically the same, in spite of the fact that it may undergo several qualitative changes and for most of the times it is absent from the senses. Bananas ripen, houses deteriorate, people lose hair and gain weight. In this world of flux, persisting things are the only anchor we have, but the source of their persistence

is a puzzle that has been with us since the early days of philosophy. What grounds our belief that the things around us (and ourselves, too) may survive from day to day in spite of the many changes that affect them? How can we say that they are the same things, if they are no longer the same? The answer, for Hume, is that we can't. On the face of it, the identity relation can only apply to constant and unchangeable objects. It is only "the smooth passage of the imagination" along the ideas of resembling perceptions that makes us ascribe identity to variable or interrupted objects, it is our propensity to unite broken appearances of resembling perceptions that produces the "fiction" of a continued existence.

Ditto for personal identity, where again Hume is quite explicit in using the language of "fiction". And ditto for unity.[9] Here, too, Hume famously argued that we have a propensity to attribute existence to multiplicities, such as a school of fish, when strictly speaking existence in itself belongs only to unity—a fish. Strictly speaking, unity is never applicable to a multiplicity except on account of the "unites" of which that multiplicity is composed. Thus, again, when we give way to our propensity to say more, strictly speaking we engage in a mental construction, a pretense, a "fiction".

Now, to all this Quine would add that even the notion of an object, a material object, which is the most basic notion that we have when it comes to the world out there, is the result of some operation of the mind. Even that involves an intellectual or ideological construction of some sort. And one way of putting this claim, which is more typical of the later Quine,[10] is based on a consideration of how our experience of the world is shaped by our cognitive development. At the beginning there is just world (mass term). It's not all alike: here is mama, there is cold, over there—noise. Soon we begin to distinguish and to recognize: more mama, more cold, more noise! Yet initially these things appear to be all of a type. Each is just a history of sporadic encounter, a mere portion of all there is. Only with time does this fluid totality in which we are immersed begin to take shape. With time, objects begin to objectify; they begin to move, fall, break, disappear and reappear. Sensations acquire more definite contours, fade out and come back, resemble one another in our memories. Noises vary depending on the things around us. We begin to act and to predict. We lounch into giving names, using verbs, painting adjectives. Such marvelous unfolding is the subject of much inquiry by psychologists and biologists, and eventually by sociologists. But for a philosopher it is really the source of deep and bemusing bewilderment, if not a dilemma: Are we learning to make out the structure of the world, or are we endowing the world with a structure of our making? Is reality gradually revealing the mechanisms according to which it is organized, or is it we who progressively organize the amorphous and con-

tinuous flux of our experience? And the Quinean answer, or at least my Quinean answer, is—the latter. That's what it means to say that we live in a *metaphysical* desert.[11]

Boundaries in the Sand

In some of my writings, I have put this in terms of boundaries.[12] There are no boundaries, in the desert. More precisely, there may be lots of boundaries of various sort, but no natural boundaries, no "joints of reality". All the boundaries we find are lines we have drawn, artificial fencings that merely reflect of our own demarcations, our classifications, our organizing activity. We may have the feeling that in some cases such demarcations are grounded on natural discontinuities in the underlying reality. But look closely and you'll see that there are no discontinuities. It's just sand, and sand, and sand…

In the geopolitical domain, where the boundary metaphor finds its origin, this claim is only *prima facie* extravagant. *Prima facie*, the distinction between natural and artificial boundaries is perfectly intelligible, and we should be thankful to the British Viceroy of India, Lord Curzon of Kedleston, for having explained it so clearly in his celebrated Romanes Lecture of 1907.[13] Think of Ireland, Lake Maggiore, or the crater of Vesuvius versus Austria, Wyoming, Yellowstone Park, or a soccer field. In the latter cases, it is clear that we are dealing with entities whose boundaries are the expression of a collective intentionality that translates—peacefully or by warfare—into political, social, and legal agreements whereby it is determined where a certain territory begins and where it ends. Not so in the former cases, where the boundaries seem to have nothing to do with our organizing activity. We can stipulate that one part of Lake Maggiore belongs to Piedmont and the rest to Lombardy, and the dividing line will be an artifact. But the shoreline—the border of the whole lake—does not seem to depend on us. It's there regardless, it exists "on its own". Ditto for the boundaries of a vulcano, an island, or even a peninsula, such as Iberia, which although connected to the continent is separated from it by the "admirably fashioned" Pyrenean wall. The distinction between these two sorts of boundary is so compelling, intuitively, as to seem ineluctable. In a physical map we may omit all political boundaries; but a political map will perforce include all physical boundaries—at least, those physical boundaries that are visible at the relevant scale. And yet it doesn't take long to realize that the distinction is not as ontologically robust as it appears to be. As we fly over lake Maggiore we have the *impression* of seeing its shoreline, as opposed to the Piedmont/Lombardy boundary. But we all know that, as we go there, ground-level, things are quite dif-

ferent. What looked from the air like a sharp line turns out to be an intricate disarray of boardwalks, stones, cement blocks, musk sediments, marshy spots, decayed fish. Ditto for the celebrated borderline of the Irish island. It's not just a matter of our disrespect for Nature. Things would not be different if we took a close look at the coast of a virgin island in the middle of the ocean. We may locate the boundary of the island at the water/beach interface, but that boundary is constantly in flux and it is only by filtering it through our cognitive apparatus—it is only by interpolating objects and concepts—that a clear-cut line may emerge. And what goes for lakes and islands goes for all *prima facie* natural geographical or celestial entities: rivers, craters, mountain chains, continents, whole planets. The distinction between natural and artificial boundaries is by itself intelligible, and it may be extremely helpful in explaining our geopolitical behavior. (It is one thing to take up arms for the independence of the Irish *island*, quite another to sacrifice your life for the boundary of Wyoming.) Deep down, however, it is merely a rhetoric distinction: every boundary is, to some degree, the product of our own making.

Now, to say that we live in the desert is to say that this picture applies across the board, literally and metaphorically. For boundaries play a central role, not only in relation to the geographic world that we find depicted in ordinary maps and atlases, but at *any* level of representation of the world around us. The natural/artificial distinction is at work in articulating *every* aspect of the reality with which we have to deal—objects, events, kinds, properties, whatever. Thus, the spatial boundary separating my part of the desk from my colleague's, or my head from the rest of my body, would seem to be entirely artificial, whereas the boundary demarcating my whole body, or the interior of this apple from its exterior, would seem to be of the natural sort. The end of a soccer game or my turning 50 years old would be examples of artificial temporal boundaries, whereas my birth and death, or the change between rest and motion, would be obvious candidates for natural boundaries. The properties expressed by disjunctive predicates such as 'grue' and 'emerose',[14] or by phase sortals such as 'student' and 'jobless', would seem to have artificial*, de dicto* boundaries; those expressed by substance sortals and so-called natural kind terms, such as 'cat' or 'hydrogen', would have natural, *de re* boundaries. It is hard not to see the force of these distinctions. And as we see their force, it is a short step to draw all sorts of consequences in the spirit of a robust metaphysical realism. For if the boundaries that define a certain entity are artificial—if they reflect articulations effected through our human cognition and social practices, including mere linguistic conventions—then we are dealing with a *fiat* entity, a social or cognitive construction, a product of our worldmaking. But if those boundaries are of the natural sort, it is reasonable to suppose that the identity

and survival conditions of the corresponding entity do not depend on us—that it is a *bona fide* entity of its own. Well, on the Quinean-Humean view I hold, both such conditionals are true. But the latter is only vacuously true. For just as the natural/artificial opposition founders in the geographic case, so it founders across the board. Just as there literally are no natural boundaries in the Sahara, as Libya and Egypt know all too well, so too in the sandy world we live in. There ain't no natural joints.

Consider the case of material objects, such as this apple. A natural, mind-independent entity? We know very well that the apple is not the solid, spatially continuous thing that it seems to be. On closer look, it is just a smudgy swarm of hadrons and leptons whose boundary is no more settled than that of a school of fish, a swarm of bees, a stock of starlings. On closer look, the spatial boundary of this apple involves the same degree of arbitrariness as that of any mathematical graph smoothed out of scattered and inexact data, the same degree of idealization of a drawing obtained by "connecting the dots", the same degree of abstraction as the figures' contours in a Seurat painting. Whether we like it or not, no apple comes with a natural boundary of its own: if it has a surface at all, it is as good a Humean "fiction" as you'd ever meet. Nor is it just a matter of microscopes. Take me, which is to say my body—a paradigm example of a living creature, I presume, hence a good candidate to the status of a *bona fide* individual. Regardless of my subatomic structure, the question of what counts as *me*—what lies within the boundary of my body—has no clear, unprejudiced answer. When it was on the table, the apple was not part of me. But now I am eating it and I have a piece in my mouth—Is it part of me? Will it be part of me only after some chewing? Only when I swallow it? Only at the end of the digestive process? You tell me. Surely the stuff composing my body is not a product of your own making; yet *what* stuff counts as composing it—hence the identity and survival conditions of what you take to be my body—will obtain only relative to some stipulation or other concerning its boundary.

And what goes for objects goes for events. The boundary between rest and motion? Yes, it looks like a natural temporal boundary. On closer inspection, however, we know that a body's being at rest amounts to the fact that the vector sum of the motions of the zillions of restless particles of which the body is composed *averages* to zero. It makes no sense to speak of the *instant* at which a body begins to move, even less to speak of it as of a natural boundary. My birth and my death? Yes, they are excellent *prima facie* candidates of natural temporal boundaries; yet the controversies concerning abortion and euthanasia push in the opposite direction. Sometimes it *is* a matter of our deciding whether a person is still alive. *We*

decide whether her "vital" functions are still in force, and the criteria for such decisions give expression to our beliefs, our principles, our theories. Similarly, the initial boundary of a person's life is hardly fixed by Nature alone. Surely it does not coincide with the person's birth (by itself a rather intricate, messy process), except for the registry office. But neither is there an earlier "moment" that fits the bill easily. We can settle on the time of fertilization, or perhaps on the formation of the zygote, or the beginning of the implantation process, or some other time. The candidates are many and we can base our decision on as many factors as we like, including up-to-date scientific findings. But a decision it is. And if it is a matter of our (arbitrary or informed) decision, then the boundary is not genuinely *de re* and even a person's life becomes, to some extent at least, a Humean "fiction".

What about natural properties? Natural kinds? Natural taxa? Here the geographic metaphor is admittedly strained. And yet, again, it is a fact that on closer look our parochial concerns—historical and cultural circumstances, practical interests and limitations, theoretical priorities—play a much bigger role than we might want to admit. No one thinks that emeroses form a natural kind. But why should roses? Why settle on *Rosa chinensis*? No one thinks that quadrupeds form a natural kind. But it would be equally remarkable, to use Catherine Elgin's example,[15] if a taxonomy that draws the distinction between horses and zebras where we do aligned at all well with categories "fitting the cosmos" regardless of our human faculties and ends. Granted, the thought that biological taxa are mere conventions clashes with the certainty of some biologists concerning "the objective reality of evolution", as David Stamos has it.[16] Yet Darwin himself was adamant that the term 'species' is one "arbitrarily given for the sake of convenience to a set of individuals closely resembling each other".[17] And as we open the *Annual Review of Ecology and Systematics*, we should not be surprised to read that "taxa are human constructs" and "natural taxa are those that are natural to humans".[18] After all, there are horses and zebras, but also zorses and hebras. Didn't Locke even claim to have seen "the issue of a cat and a rat"?[19]

On closer look, even our best physical theories deliver microscopic categories that depend on a number of human contingencies. If we construe different isotopes as variants of the same type of atom, say hydrogen, it is because of certain reasonable interests that predominated in the development of those theories. One might as well construe deuterium and tritium as different chemical elements altogether, hence as "natural" kinds of their own. Again, the problem is not that there are no discontinuities in the physical world; the problem is that there are *too many* discontinuities. And to privilege some over the others is, once again, tantamount to drawing an artificial boundary—a boundary in the sand.

Realism

Now, the title of this paper says *realism* in the desert. Why "realism", if accepting this sort of picture amounts to giving up the thought that the world comes with a robust, obective structure of its own, a structure that is not a imposed by us but grounded in the very nature of things? Let me try to answer by refining the picture in four respects—the picture and what truly follows from it.[20]

First of all, the desert is real. It's out there and it is what it is regardless of how we feel. To be a Humean fictionalist, or even a social constructivist, is not to be a Berkeleyan idealist. Even assuming that all the "metaphysical" structure we tend to attribute to the world is a projection of our minds and of our organizing practices, and even assuming that it is cognitively biased, artificial, and wholly arbitrary (which is to say, in our *arbitrio*), it does not follow that the world itself is a projection of the mind. Indeed, the very notion of an artificial boundary is intelligible only to the extent that we acknowledge an appropriate real basis for the demarcations that are effected by our pencils and cookie cutters. That the underlying worldly material should itself be a cognitive construct of sort is a different, stronger thesis that I do not even understand (short of Cartesian skepticism). To put it differently, the view in question does not deny the objective reality of the entities that we carve out by *fiat*. As Frege put it, the objectivity of the North Sea "is not affected by the fact that it is a matter of our arbitrary choice which part of all the water on the earth's surface we mark off and elect to call the 'North Sea'".[21] The Humean fictionalist simply says that every portion of reality is equally objective as any other and that none has greater metaphysical value than any other.

In this sense, the desert picture, with all the boundary-drawing and world-making business that comes with it, is not to be mistaken with Goodmanian irrealism, either. For Goodman—and for Rorty—all we learn about the world is contained in right versions of it, and the world itself, bereft of these, is on the whole "a world well lost".[22] On the desert picture, the world is boneless, impoverished, almost bankrupt, but our love for it is not at stake. For Goodman, a world-version need not be a version *of* the world, just as a Pegasus-picture need not be a picture *of* Pegasus.[23] Not so on the desert view. The metaphysical structure is imposed by us, and therefore fictitious. You can even say that it is a narrative, a story. But it is a story about the world, and all the maps we draw are maps of one and the same reality.

Second, the desert is not *completely* boneless. It's just that the structure it has is very thin, and is not the sort of structure that traditional and contemporary metaphysical realists—and scientific realists alike—tend to attribute to it. It is, basi-

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cally, a purely geometric structure. More precisely, it is a mereological structure, the structure that comes with the part-whole relation: some portions of the desert are part of other, larger portions; some parts overlap, some do not; nothing is a proper part of itself, and nothing can have just one proper part; no two things can have the same proper parts; given any number of parts, no matter how scattered or gerrymandered, there is always something that is composed exactly of those parts; etc.[24] The desert is bound to be structured this way, and objectively so. It's not up to us to decide whether or under what conditions x is part of y, just as it is not up to us to decide whether x is the same as y. Similarly—and this is a realist claim that applies already at the ontological level—it is not up to us to decide which parts exist, or which mereological fusions exist. They all exist. What is up to us, if we live in the desert, is simply *which* parts will come to play a role in our lives, which portions of the desert will be selected and elected to special status by our cognitive and/or social cookie cutters.

In this sense, the desert picture differs from Goodman's irrealism as it differs from Putnam's brand of anti-realism. For Putnam, the "cookie cutter" metaphor founders on the question, "What are the 'parts' of the dough?".[25] No neutral description is available to compare, say, a Leśniewskian world (with x, y, and the mereological fusion of x and y) and a Carnapian world (with only x and y), and assigning a univocal meaning to the verb 'exists' is already "wandering in Cloud Cockoo Land".[26] For the desert theorist, the metaphor holds and 'exists' corresponds to the standard existential quantifier. Which existing entities we are going to select is up for grabs; but the parts of the dough, which is to say of the desert— those parts that provide the appropriate real basis for our carvings—they are whatever they are and the relevant mereology is a genuine piece of metaphysics. (As I mentioned, I personally think that composition is unrestricted, hence the mereology is Leśniewskian; so either Carnapians are not speaking with their quantifiers wide open, as when we say 'There is no beer' meaning 'There is no beer in the refrigerator', or else they are wrong.[27] On the other hand, perhaps they are right and I am the one who has it wrong. What is sure is that we can't be both right.)

Third, the desert need not be a boring place. If that is what worries us, it is certainly not a reason to forgo the desert for a garden of Eden, let alone a jungle. Here perhaps the "desert" metaphor is somewhat misleading. For it's not necessarily all grey. Just look around you. Some portions of reality are red, others are blue. Some are tasty, others insipid. Some are noisy, others—quiet. The parts of the whole are as colorful and multifarious as they seem to be. It's just that there is nothing in virtue of which they are as they are. The apple is red, but there is nothing in virtue of which it is red, on pain of Bradley's regress.[28] That was Quine's

point: McX is no better off, in point of explanatory power, for all the occult entities which he posits under such names as 'redness'.[29] Likewise, in the desert there are dogs and cats, and trees and flowers. It's just that those are not different kinds of thing, each with its own essence and persistence conditions. Simply, some portions of reality strike us as dogging while others as catting, or treeing, or flowering. In the desert you'll find Socrates, but not Pegasus, for there is a certain portion that strikes us as socratizing while none is pegasizing. In the desert you may see a white cat facing a dog and bristling, for somewhere it's catting whitely, bristlingly, and dogwardly.[30]

Of course, here the details depend on what exactly the desert is like. Some people think it is really made of sand—Democritean sand. In that case, to say that a certain portion is φ-ing is tantamount to saying that there is sand arranged φ-wise. Others think the deseret is mere *res extensa*, stuff, atomless gunk, in which case there is no sand after all; it's sand all the way down. Or perhaps the desert is entirely made up of tropes. Or it's the wave function playing itself out in configuration-space. I'm not sure. Depending on the truth, the details may vary. But whatever it is, the desert need not be a boring place. At least, it need not be boring just because the "structure" that we are used to attribute to it turns out to be, on closer inspection, a matter of our own artificial boundary-drawing. Manhattan is as artificial as something could ever be, but I've spent eigtheen years opf my life there and, trust me, I am not even beginning to get bored.

Last, but not least, it is for this very same reason that life on the desert need not amount to a Feyerabendian "anything goes",[31] where the difference between knowledge and belief collapses and truth itself becomes an empty notion. I can see how the worry arises. If all interesting structure were the product of our cognitive or social organizing activities, if the lines along which we "carve" the world depended entirely on our *cognitive* joints and on the categories that we employ in drawing up our maps, then our knowledge of the world would amount to neither more nor less than knowledge of those maps. The thesis according to which all the structure is artificial would take us straight to the brink of precipice, to that extreme form of cognitive or social constructivism according to which "there are no facts, just interpretations". That was Quine's own worry in his controversy with Goodman on the pages of *The New York Review of Books*.[32] But whence the worry? The boundaries of Wyoming are artificially drawn, yet that makes no difference to truth as long as we agree on where they are drawn. Either you are inside Wyoming, or you are outside; and if you believe that you are on one side when *in fact* you are on the other, then your belief is plain false. Truth and falsity work in the desert exactly as they are supposed to work in the garden of Eden. Every pred-

icate has an extension, artificial as it may be; every singular term as a referent, arbitrarily demarcated as it may be. And a subject-predicate sentence is true if and only if the referent of the subject falls within the extension of the predicate. There may be vagueness, of course: not all boundaries are traced with precision. But so be it: precisely because the boundaries are our own making, any such vagueness would be merely linguistic, or cognitive at large; it certainly isn't vagueness that bites ontologically.

Similarly, if the law forbids you from driving faster than a certain limit, and you do drive faster, than it is a fact that you broke the law and you deserve a fine. You can't argue that. It is not a natural law, but a law it is nonetheless. It is not fixed by Nature and it does not have the force of necessity, which is to say that if we wish to repeal it, or set a different speed limit, we may do so; yet, as long as it is in force, it rules things. That's another sense in which the desert is, as a matter of contingent fact, more like Manhattan than like the Sahara. Ferraris is right when he says that the view in question, just like pre-Kantian empiricism, obliterates any substantive differences between laws and train timetables:[33] both are in some sense conventional. But as I've tried to explain elsewhere, timetables are not drawn up at random.[34] They ensue from the necessity to *solve*, in a conventional but efficient way, coordination problems that can be extremely complex and that could seriously impair our daily deeds. If we come up with a timetable that works poorly, we change it. If a convention fails to measure up to our expectations, we replace it with a new, hopefully better one. Ditto with so-called laws of nature. For even in the desert, not all biological taxonomies (for instance) are on a par. Some are better than others, because they better support the "laws" that govern biology's coordination game (laws of variation, selection, organic evolution, population growth, etc.). One may object that this sort of pragmatic efficiency calls for more than arbitrary, artificial demarcations. But the burden of proof is on the objector. Linnaeus's *Systema Naturae*, the bible of all classical taxonomies, was soaked with essentialism—and the platypus didn't even fit in.

A Good Place to Be

Let me conclude with a couple of general remarks on why I think the desert view —and the modest realism that comes with it—is not only a tenable view, but a good one.

In a nutshell, I think it is a good view because it is honest. It acknowledges our parochial limits and our cognitive and cultural biases, along with our desperate need to ward off the flux and meet our demand for order and stability, without

camouflaging any of this as "natural". Of course, we all want our perspectives on things to be taken seriously and it is perfectly alright to act in conformity to the maps and laws that they elicit, especially when these appear to serve their purpose well. Just as it would be irrational to bet on the sun not rising tomorrow, so it would be irrational to act as though our most efficient scientific theories were on a par with gimcrack literary fiction. Hume himself was candid about this, as was Quine. But as we rely on our maps, we should not forget what they are and why we have them, on pain of self-deception. We should not think that they are meta-physically transparent and normatively unassailable simply because they help us navigate successfully, on pain of fallacy. It would be unfair to call 'dishonest' those philosophies that succumb to self-deception and incur the fallacy. But the desert view is honest precisely insofar as it doesn't.

More importantly perhaps, the desert view requires that *we* be honest. It's bad enough to mistake the rational for the real, much worse to sell our views as if they were the views of the world. Yet that is precisely what we tend to do—indeed, what we must do—whenever we act on the basis of a robust realist metaphysics that is meant to cut up the world "at its joints". Our history is full of horrible things that we did because we followed Plato's metaphor too blindly.[35] We stig-matized and persecuted as "bad butchers", hence "heretics", whoever held views that did not match ours. We enforced our rules and precepts upon others as if they came directly from the "tree of knowledge". We treated people like slaves, if not like animals, because we thought they were different from us *in kind*. We treated non-human animals as meat because of the privileged status we assign to our own kind. We discriminated human beings on the basis of their gender, race, and sexual orientation as though such features reflected deep metaphysical categories that cannot and ought not be transgressed. Even today it is common to hear that inter-racial or homosexual relations are "against nature". All of this is horrible and I do not need to say why. But philosophically it is horrible precisely because it rests on the worst possible form of cheating: to pretend the world is on our side. As I said, this can hardly be avoided if we think and act on the basis of a robust realist meta-physics. In the desert, however, this sort of cheating is not permitted: we are free to fight for the views that we find most attractive, but we can't spurn the alterna-tives as being against nature. In the desert we have to be honest and take full re-sponsibility for our actions.

This is more than enough, I think, to conclude that the desert is a good place to be. Not that I can say I'm optimistic. We are always going to make mistakes. We are always going to do bad things and pretend we are right. But it makes a big difference whether we do so because we have settled on the wrong criteria, on a

poorly drawn map of the world, or because we feel we have to do it, because the world itself drew the lines that way. It makes a big difference for the simple reason that in the first case we can change things and hopefully improve them. If the need arises, we can redraw the map. If a law doesn't work, we can revise it. It is up to us to do a good job, and it is our duty to try. For if we don't manage, there's no one else to blame but ourselves.

References

Bradley, F. H., 1893, *Appearance and Reality*, London: Swan Sonnenschein.

Broad, C. D, 1923, *Scientific Thought*, London, Routledge & Kegan Paul.

Curzon, G. N., 1907, *Frontiers*, Oxford, Clarendon Press.

Darwin, C., 1859, *On the Origin of Species by Means of Natural Selection*, London, Murray.

Davidson, D., 1979, 'Mental Events', in L. Foster and J. W. Swanson (eds.), *Experience and Theory*, London, Duckworth, pp. 79–101.

Elgin, C. Z., 1995, 'Unnatural Science', *Journal of Philosophy*, 92: 289–302.

Ferraris, M., 2004, *Goodbye Kant!*, Milano, Bompiani.

Feyerabend, P. K., 1972, *Against Method*, London, New Left Books.

Frege, G., 1884, *Die Grundlagen der Arithmetik*, Breslau, Köbner.

Goodman, N., 1955, *Fact, Fiction, and Forecast*, Cambridge (MA), Harvard University.

——, 1968, *Languages of Art*, Bobbs-Merrill, Indianapolis.

——, 1975, 'Words, Works, Worlds', *Erkenntnis*, 9: 57–73.

——, 1978, 'In Defense of Irrealism', *The New York Review of Books*, 25/20: 58.

Kneale, W. C., 1949, *Probability and Induction*, New York, Oxford University Press.

Putnam, H., 1987, *The Many Faces of Realism*, LaSalle (IL), Open Court.

——, 2004, *Ethics without Ontology*, Cambridge (MA), Harvard University Press.

Quine, W. V. O., 1948, 'On What There Is', *Review of Metaphysics*, 2: 21–38.

——, 1958, 'Speaking of Objects', *Proceedings and Addresses of the American Philosophical Association*, 31: 5–22.

——, 1978, 'Otherworldly', *The New York Review of Books*, 25/18: 25.

——, 1985, 'Events and Reification', in E. LePore and B. McLaughlin (eds.), *Actions and Events*, Basil Blackwell, New York, pp. 162–171.

Rorty, R., 1972, 'The World Well Lost', *Journal of Philosophy*, 69: 649–665.

Sokal, R. R., 1986, 'Phenetic Taxonomy: Theory and Methods', *Annual Review of Ecology and Systematics*, 17: 423–442.

Stamos, D. N., 2003, *The Species Problem*, Lanham (MD), Lexington Books.

Varzi, A. C., 2000, 'Mereological Commitments', *Dialectica*, 54: 283–305.

——, 2006, 'The Universe Among Other Things', *Ratio*, 19: 107–120.

——, 2010, *Il mondo messo a fuoco*, Rome, Laterza.

─, 2011a, 'Boundaries, Conventions, and Realism', in J. K. Campbell *et al.* (eds.), *Carving Nature at Its Joints*, Cambridge (MA), MIT Press.

─, 2011b, 'On Doing Ontology without Metaphysics', *Philosophical Perspectives*, 25: 407–423.

─, 2013a, 'Fictionalism in Ontology', in C. Barbero *et al.* (eds.), *From Fictionalism to Realism*, Newcastle (UK): Cambridge Scholars Publishing, pp. 133–151.

─, 2013b, 'Mereology', in E. Zalta (ed.), *The Stanford Encyclopedia of Philosophy*, Winter 2013 Edition.

─, 2014, 'Counting and Countenancing', in A. J. Cotnoir and D. L. M. Baxter (eds.), *Composition as Identity*, Oxford: Oxford University Press, forthcoming.

Notes

[1] Quine (1948), where the 'desert' metaphor appears for the first time (at p. 23).

[2] The term 'jungle' actually comes from Kneale (1949), p. 12.

[3] See Varzi (2011b).

[4] Broad (1923), at p. 242.

[5] The claim may already be found in Aristotle (*Met.*, II, 2, 89b34–35) and is explicitly endorsed by Aquinas (e.g., *S. Theol.*, I, q. 2, a. 2, ad 2). It was condemned by Duns Scotus (*Ord.* I, d. 3, 11 e 17) and eventually by Descartes, who said that putting the *an sit* before the *quid sit* would violate "the laws of true logic" (*Primæ resp.* 141).

[6] Here I draw on Varzi (2013a), §4.

[7] *Treatise*, I, iii, 6.

[8] *Ibid.* I, iv, 6.

[9] *Ibid.* I, ii, 2.

[10] Beginning with Quine (1958).

[11] I have tried to articulate this view and its ramifications in Varzi (2010). Here I will only be concerned with those aspects of the view that relate directly to the realism/antirealism debate.

[12] See e.g. *ibid.*, ch. 3, and Varzi (2011a). Much of what follows draws on this material.

[13] Curzon (1907).

[14] The first predicate comes from Goodman (1955), ch. 3: given an arbitrary but fixed time *t*, 'grue' applies to those things that have examined before *t* just in case they are green, and to other things just in case they are blue. The second predicate is from Davidson (1970) and is defined in a similar fashion from 'emerald' and 'rose'.

[15] Elgin (1995), at p. 297.

[16] Stamos (2003), at p. 131 (n. 35).

[17] Darwin (1859), at p. 52.

[18] Sokal (1986), at p. 424.

[19] *Essay*, III, vi, 23.

[20] Here again I draw on Varzi (2011a).

[21] Frege (1884), §26.

[22] Goodman (1975), at p. 60. Compare Rorty (1972).

[23] Goodman (1968), p. 21.

[24] On mereology I refer to Varzi (2013b).

[25] Putnam (1987), at p. 19.

[26] Putnam (2004), at p. 85.

[27] My personal views on this and related matters may be found in Varzi (2000, 2006, 2014).

[28] I mean the regress exposed in the famous argument of Bradley (1893), ch. III, §3.

[29] Quine (1948), at p. 30.

[30] This is the later Quine; see his (1985), at p. 169.

[31] The phrase is from Feyerabend (1972), at p. 23.

[32] See Quine (1978) (a review of *Ways of Worldmaking*), followed by the rejoinder in Goodman (1978).

[33] Ferraris (2004), at p. 17.

[34] See again the titles cited in n. 12.

[35] The recipe in the *Phaedrus*, 265[d], to the effect that we must "cut up the unity according to its species along its natural joints, and try not to splinter any part, as a bad butcher might do".