Chapter 4
Hilary Putnam on Perspectivism and Naturalism

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Abstract In this chapter, I analyze the different views that Hilary Putnam developed during the seven decades of his brilliant philosophical career in order to address the question of realism (metaphysical realism, internal realism, quietism, and liberal naturalism). I also argue that the view Putnam defended at the end of his career was the most solid and consistent, and that such view could offer a useful inspiration to the advocates of perspectivism.

Keywords Hilary Putnam · Realism · Liberal naturalism · Perspectivism

4.1 Preamble

When Michela Massimi invited me to participate in the Edinburgh conference on perspectivism from which this volume derives, she asked me to give a talk about Hilary Putnam's "internal realism" (which was the conception that he defended between 1976 and 1990). Michela's supposition, which she wanted to test, was that "internal realism" can be seen as an early version of perspectivism, and a very interesting one. I agreed with her supposition, but I added that perspectivists should be more interested in "liberal naturalism", the view adopted by Putnam in his last years, since the latter view—granted it preserves the important perspectivist insights of internal realism—was preferable to internal realism for a number of independent reasons. In this chapter, I will develop and defend this interpretation of Putnam's work.

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4.2   For and against Metaphysical Realism

At the very beginning of his career, Putnam defended a form of physicalist monism, by articulating the logical-positivist thesis of the 'Unity of Science' (Oppenheim & Putnam 1958). He did so by claiming the (in principle) reducibility of the concepts and laws of higher-level sciences to the concepts and laws of the lower-level sciences—where microphysics represented the most fundamental level to which the others were in principle reducible. Much later, Putnam (2016b, 126) wrote that according to that view,

> Every phenomenon that can be explained by 'higher-level' sciences such as psychology and sociology could in principle be explained by 'lower-level' sciences, and ultimately by physics.

Putnam and Oppenheim did not claim that that thesis was justified *a priori*. Rather, they claimed that it was inspired by "a pervasive trend within scientific enquiry … notwithstanding the simultaneous existence (and, of course, legitimacy) of other, even incompatible trends" (Oppenheim and Putnam 1958, 4). Thus, already in his early physicalist years Putnam put the analysis of the concrete scientific practice at the centre of his philosophical project—an early sign of his dedication to the spirit and themes of the pragmatist tradition.

Shortly after that work, and until his death in 2016, Putnam changed deeply his philosophical attitude. More specifically, he began to criticize strongly *metaphysical realism*, a conception of which his early 'Unity of Science' article was a particular version.[1] According to metaphysical realism, only one true and complete description of the world exists, which is typically regarded as being offered by the natural sciences, especially physics (for a defence of this view, in different fashions, please see Smart 1978; Field 1992; Papineau 1996; Kim 2005; Stoljar 2010). A contemporary version of the view is offered by Alex Rosenberg (2013, p. 19):

> What is the world really like? It's fermions and bosons, and everything that can be made up of them, and nothing that can't be made up of them. All the facts about fermions and bosons determine or 'fix' all the other facts about reality and what exists in this universe or any other if, as physics may end up showing, there are other ones. In effect, scientism's metaphysics is, to more than a first approximation, given by what physics tell us about the universe. The reason we trust physics to be scientism's metaphysics is its track record of fantastically powerful explanation, prediction and technological application. If what physics says about reality doesn't go, that track record would be a totally inexplicable mystery or coincidence.[2]

For the rest of his career, Putnam saw metaphysical realism as a dogmatic and philosophically pernicious conception and developed several arguments against it.

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[1] In a lecture delivered at Oxford in 1960, and published as (1975a), Putnam offered another defence of the basic principles of metaphysical realism.

[2] It is interesting that, in order to describe his view, Rosenberg employs the term 'scientism', which is normally used with derogatory connotations.

The first attack was in the 1960s, when Putnam developed 'Computational Functionalism,' an extremely influential conception of the mind-body problem, which was pluralist in ontology, since he accepted the existence of irreducible mentalistic properties. According to that view, mental functions are 'hardwired' in the brains of the speakers so that the relation between the mind and the brain is analogous to the relation between the software and the hardware. In this framework, mental properties depend for their existence on physical properties, but could not be reduced to them; consequently, one cannot investigate mental properties only by appealing to the conceptual tools offered by physics or by any of the natural sciences. Expanding on this doctrine, during this period Putnam explicitly rejected the Unity of Science and developed (at the same time as Jerry Fodor in 1965, but independently from him) a pluralistic view that Ned Block (1997, 108) would later call the 'Many Levels Doctrine'.[3] From this perspective, "nature has joints at many different levels, so at each level there can be genuine sciences with their own conceptual apparatus, laws and explanations" (Block 1997, 108). An example that clarified that view was offered by Putnam in his influential article "Reductionism and the Nature of Psychology" (Putnam 1973). Why does a solid rigid round peg, which is a little less than 1 inch in diameter, fit through a round square of 1 inch in diameter but does not fit in a square hole with a diagonal of 1 inch? The correct answer to this question, according to Putnam, cannot be given by appealing to the physical (lowerlevel) properties of the peg and holes, but only to the geometrical (high-level) properties; this shows that different levels of reality are composed by different and mutually irreducible properties. At this stage of his career, therefore, Putnam began to believe in the irreducibility of the mental to the physical—a cornerstone of the common-sense view of the world—and, more generally, he saw several reasons for thinking that physics does not delimit the boundary of reality and knowledge, and that conceptual, epistemological and ontological pluralism is in order.

Throughout most of his career Putnam thought that the language of physics cannot account for everything existing since some real features of the world cannot be described, even less explained, with the conceptual tools of that science. As Putnam (65) wrote:

> The world cannot be completely described in the language game of theoretical physics, not because there are regions in which physics is false, but because, to use Aristotelian language, the world has many levels of forms, and there is no realistic possibility of reducing them all to the level of fundamental physics.

What are the "levels of forms" that are not reducible to the level of fundamental physics, then? One of Putnam's favourite examples was literary criticism: how could the natural sciences render the sense of the kind of understanding that is offered to us when a critic interprets, say, a play by Shakespeare: "what exactly does it mean to 'apply' the supposed 'methods of the natural sciences' to Julius Caesar?"

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[3] See the essays collected in Putnam (1975b).

(Putnam 2015, 312). Putnam offered a number of other examples from spirituality,[4] mathematics,[5] and ethics.[6]

In his late years, Putnam was a strong advocate of pluralism at the conceptual, the epistemological, and the ontological level. In this light, he developed various versions of realism that simultaneously accepted the approximate and revisable truth of the different views of the world offered by the natural, social and human sciences, common sense, and the arts. More specifically, Putnam articulated his pluralism in two ways. First, he described a phenomenon that he called 'conceptual relativity', for which some theories can be cognitively equivalent, even if *prima facie* they appear incompatible. (It would have been better if this phenomenon had been called 'cognitive equivalence', since Putnam's original term may suggest a connection with relativism and antirealism that is entirely inappropriate). An example of conceptual relativity frequently offered by Putnam concerns mereological sums: a world of three individuals could also be seen as composed by seven objects: the three individuals and all their possible sums. However, Putnam also offers less convoluted examples of conceptual relativity. In fact, he wrote, in some scientific fields, such as mathematical physics, this phenomenon is ubiquitous:

> To take an example from a paper with the title 'Bosonization as Duality' that appeared in *Nuclear Physics* B some years ago, there are quantum mechanical schemes some of whose representations depict the particles in a system as bosons while others depict them as fermions. As their use of the term 'representations' indicates, real live physicists—not philosophers with any particular philosophical axe to grind—do not regard this as a case of ignorance. In their view, the 'bosons' and 'fermions' are simple artifacts of the representation used. But the system is mind-independently real, for all that, and each of its states is a mind independently real condition that can be represented in each of these different ways. And that is exactly the conclusion I advocate…. [These] descriptions are both answerable to the very same aspect of reality… they are 'equivalent descriptions'. (Putnam 2012a, 63–64).

The second pluralistic issue that Putnam (2005/2012, 64–65) stressed concerned another (more meaningful) phenomenon, that of 'conceptual pluralism', i.e., the fact that for understanding the different levels of reality we need a plurality of mutually irreducible but not incompatible conceptual systems. A favorite example by Putnam was that, depending on our interests, we can correctly and usefully describe a chair in the alternative languages of carpentry, furniture design, geometry, and etiquette. Let's give another example. A person had a heart attack, and one has to explain what happened: this can be done in different ways. One can offer a physiological explanation or refer to the dietary habits of the person or to the fact that she

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[4] Unsurprisingly, considering his readiness to change intellectual positions, Putnam's views about religion went through different phases. After an atheist period, starting in the 1980's he went through a theistic phase, to conclude with a more nuanced view, in which spirituality was disconnected from the supernatural (see Putnam 2008).

[5] See Putnam (2012, part II).

[6] Putnam (2004). Putnam could not disagree more with attempts to naturalize mathematics, such as Maddy (1997), or to show that its statements are false since mathematics cannot be naturalized, such as Field (1980, 1989).

did not exercise enough or that ate bad food; moreover, a geneticist could talk about the person's family predispositions, a chemist of the reactions that produced the heart attack, and so on. Each of those explanations is legitimate and can be useful in its specific way (depending on which kind of explanation we are looking for), without being reducible to the others nor incompatible with them; so to speak, there is no fundamental and unifying theory of what being a chair is or why a heart attack can happen. And this is true of a vast amount of entities and situations (possibly all of them, with the exception of the entities of microphysics), since they can be described in different ways not just because of conceptual relativity, but also because things have different properties that belong to different ontological regions.

This view is at odds with the Quinean idea, which has inspired legions of naturalistically-inclined philosophers, that only our 'first-grade conceptual system' (that is, the view offered by the natural sciences) can offer a truthful description of the world. Putnam wrote:

> The heart of my own conceptual pluralism is the insistence that the various sorts of statements that are regarded as less than fully rational discourse, as somehow of merely "heuristic" significance, by one or another of the "naturalists" (whether these statements be ethical statements or statements about meaning and reference, or counterfactuals and statements about causality, or mathematical statements, or what ever) are bona fide statements, "as fully governed by norms of truth and validity as any other statements", as James Conant has put it (Putnam 2012, 112).

4.3 Internal Realism

With the exception of his early metaphysical-realist years, during his entire philosophical career Putnam tried to develop a satisfying meta-philosophical conception that could give unity to the aforementioned pluralistic insights. The first complete attempt, on which he worked between 1976 and 1990, was the so-called "internal realism". During this period, under the inspiration of Immanuel Kant, C.S. Peirce, and Michael Dummett, Putnam thought, and argued forcefully, that the only satisfying way of responding to metaphysical realism without appealing to supernatural entities and explanations was to adopt an epistemic view of truth—that is, a view in which truth is intended as warranted assertibility in idealized epistemic conditions (Putnam 1981).

One of the main rationales for internal realism was an argument Putnam first offered in 1977, when he delivered a talk to the Association for Symbolic Logic entitled "Models and Reality" (Putnam 1980). In that talk, he presented the so-called "model-theoretic argument" against metaphysical realism. By appealing to the Löwenheim–Skolem theorem, the argument aimed at showing that a metaphysical realist cannot fix the intended interpretation of his theory of the world (the only way to do it, he argued, would be by using supernatural powers). This is how, in an article written shortly before his death, he reconstructed his view of that period:

> According to the position I defended in "Models and Reality", … [the idea of] truth (about things outside my brain/mind) as *correspondence to the way things are* is empty (empty

because, to use [Charles] Travis's words, there is no unique set of facts as to what, without the boundary, instances what). But we could save the notion of truth, I claimed: truth is (idealized) "rational acceptability". But rational acceptability was supposed to mean acceptability relative to all the facts available to the subject's brain/mind about the subject's own *sense data* (Putnam forthcoming).

From this perspective, the correspondence theory of truth was doomed. Thus, he adopted the view according to which truth is verifiability in ideal epistemic conditions. But how "ideal" should the ideal epistemic conditions be? On this topic, Putnam changed his mind and that was one of the reasons why eventually, in 1990, he abandoned internal realism. In Putnam (1982, 55) he had given a very idealized interpretation to that notion:

> 'Epistemically ideal conditions' … are like 'frictionless planes': we cannot really attain epistemically ideal conditions, or even be absolutely certain that we have come sufficiently close to them. But frictionless planes cannot really be attained either, and yet talk of frictionless planes has 'cash value' because we can approximate them to a very high degree of approximation.

However, in Putnam (1990, vii), his attitude had deeply changed and the interpretation of the "ideal" conditions was much closer to common sense:

> If I say 'There is a chair in my study", an ideal epistemic situation would be to be in my study with the lights on or with daylight streaming through the window, with nothing wrong with my eye-sight, with an unfocused mind, without having taken drugs or been subjected to hypnosis, and so forth, and to look and see if there is a chair there.

The time was ripe for abandoning internal realism. Adopting such a commonsensical interpretation of the ideal epistemic conditions opened in fact the way to some striking counterexamples to the idea that truth coincides with verifiability in ideal epistemic conditions. Putnam's favorite example of why truth is not epistemically constrained is the conjecture "There is no life outside the earth" – which may well be true but, in case it is, would be unverifiable even in ideal epistemic conditions. In abandoning the epistemic view of truth, however, Putnam realized that he did not need to go antirealist in order to refuse the dogmatic view that he had called "metaphysical realism". His new aim was in fact to develop "a modest non-metaphysical realism squarely in touch with the results of science" (Putnam 2004, 286, n. 1).

4.4 Beyond Internal Realism

Between the end of the 1980's and the 1990's Putnam had additional reasons for abandoning internal realism. One such reason was the so called "no-miracles argument", which he had developed in 1973, but whose relevance he fully appreciated only later (Putnam 1975a, 2012b). This argument is based on the idea that the only way of explicating the great explanatory and predictive success of the best theories of modern science is to acknowledge that these theories are true (or approximately true) in regard to the natural world and refer to real entities, even when those are

unobservable. From the point of view of antirealism, on the contrary, the fact that science works so well in offering comprehensive explanations and extremely precise predictions of observable phenomena does seem a sheer miracle. Consequently, according to Putnam, we should take our best scientific theories as true or approximately true and the entities those theories refer to as real – even though, of course, that does not mean that our theories cannot be false (Putnam always defended fallibilism with great conviction).

At first, Putnam insisted that the no-miracles argument was compatible with internal realism. The reason was that in his earlier view that was seen by Putnam as supporting entity-realism, not theory-realism. So one could accept the existence of atoms without endorsing the idea that our atomistic theories (which cannot be directly verified) are true: they should be taken merely as useful heuristic tools, as the instrumentalist have always done. In the 1990's, however, Putnam started to see this point of view as unsatisfying: why should we accept as granted the existence of atoms which we derive from our theories, while thinking that those same theories cannot be true? Indeed the reason for that, he thought, was simply the mistaken assumption that only internal reason could offer a feasible alternative to metaphysical realism. However, scientific realism does *not* imply metaphysical realism: one can believe in the truth of our best physical theories (and in the existence of the entities whose existence they presuppose) without endorsing the other, much stronger thesis that physics can in principle account for everything existing. In that light, scientific realism can be (and, according to Putnam after 1990, should be) reconciled with conceptual, epistemic, and ontological pluralism.

Another reason why Putnam abandoned internal realism was that he did not think anymore that the aforementioned argument he had offered in "Models and Reality" was correct. As said, the argument tried to reconcile two views: the epistemic conception of truth and the thesis—defended via the Löwenheim–Skolem theorem—that there is no unique set of facts to which our thoughts can be said to refer. And in this, as Putnam (forthcoming) noticed later, internal realism collapsed on solipsism, a very suspicious philosophical view:

> … rational acceptability was supposed to mean acceptability relative to all the facts available to the subject's brain/mind about the subject's own *sense data*. But this is solipsism! [And in] *Reason, Truth and History* I tried to avoid solipsism with the aid of a counterfactual: truth is *what would be rationally acceptable if epistemic conditions were ideal!* But in "Models and Reality" I pulled the rug out from under myself (without noticing that I did), when I pointed out that counterfactuals are no help here. Thus appeal to counterfactuals cannot rule out any models at all unless the interpretation of the counterfactual idiom itself is *already* fixed by something beyond operational and theoretical constraints.

In another article written in his later years, Putnam (2012a, 80), summarized this criticism to internal realism:

> *Moral*: My "internal realism", far from being an intelligible alternative to a supposedly unintelligible Metaphysical Realism, can itself possess no *public* intelligibility. And the situation may be worse: Dummett is right to worry whether a verificationist account of understanding does not commit one to antirealism about the past. If it does, then, … even methodological solipsism collapses into hopeless paradoxes. The best way to show that the

realist position isn't just one of two equally tenable positions is to show that the verificationist account entails solipsism (and probably even entails a self-refuting antirealism about the past). If this is right, then it clearly becomes vital to give an account of our capacity to understand and use language that 'fits' with realism.

Seeing that internal realism implied solipsism gave Putnam another excellent reason to give it up. This new reason was that in the early 1970s he had developed an externalist semantics, whose fatal consequences for internal realism he realized only later.[7] Putnam appealed to the famous Twin Earth thought experiment in order to justify the idea that thoughts are supposed to refer to unobservable entities (an idea that involves the revolutionary thesis that, *contra* Frege, intensions do not determine references—see Putnam 2016c, 208–209). In order for our words to have meaning we *have* to refer to the external world—and even to the parts of the external world that we are not able to access: solipsism was therefore proven wrong, and internal realism with it.

Finally, also Putnam's views about the mind-body problem took Putnam toward a more realistic direction, when he abandoned 'computational functionalism' (according to which mental functions are hardwired in the brain of a speaker), in favor of a view that he called 'long-armed functionalism'. This is a view of the mind as a system of object-involving abilities that involve, from the start, the natural and social environment in which a speaker is located. Several things have to be noted in this respect. First, the fundamental reason as to why Putnam abandoned computational functionalism was that he realized it was incompatible with his semantic externalism, according to which the relation between the thinkers and the environment they inhabit is necessary for constituting the content of at least some of their thoughts. In this regard, Putnam wrote:

> I had to give up 'functionalism', … that is, the doctrine that our mental states are just our *computational* states (as implicitly defined by a 'program' that our brains are hard-wired to 'run'), because that view is incompatible with the semantic externalism that years of thinking about the topic of reference had eventually led me to develop. If, as I said in 'The Meaning of 'Meaning', our intentional mental states aren't in our heads, but are rather to be thought of *as world-involving abilities*, abilities identified by the sorts of transactions with our environment that they facilitate, then they aren't identified simply by the 'software' of the brain (Putnam 2005/2012, 58).

Then, with regard to long-armed functionalism, he wrote:

> [it] is an antireductionist but naturalist successor to the original, reductionist, functionalist program. For a liberalized functionalist, there is no difficulty in conceiving of ourselves as organisms whose functions are, as Dewey might have put it, 'transactional', that is environment-involving, from the start (Putnam 2012).

Also in the philosophy of mind, then, Putnam (by abandoning the idea that the mind is the sum of the computational states running on brain states) came to abandon the idea of the primacy of the internal. In his new view the mind was, so to say, a set of

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[7]The classic account of semantic externalism is offered in Putnam (1975c); see also Putnam (2016c) for an account of the development of his views about externalism.

capacities that necessarily involve our transactions with the external world: also in this field, externalism had won its battle with internalism.

4.5   Liberal Naturalism

Internal realism had then to be abandoned. What kind of conception could incorporate Putnam's old anti-metaphysical views (conceptual pluralism, conceptual relativity, epistemic pluralism and ontological pluralism) with his new realist claims?

Putnam made two attempts to unify these views. First, in the 1990s he developed a form of Wittgensteinian quietism—that is, a skeptical attitude toward metaphysical problems (which should be 'dissolved' more than 'solved', since they are based on conceptual confusions). In this period, Putnam was influenced by Austin's direct realism and by McDowell's insistence on the conceptual independence of the 'realm of reason' from the 'realm of law'. However, as usual, also some pragmatists and perspectivist themes worked in the background of this phase of Putnam's philosophical development. Let us consider some of them.

The first pragmatist/perspectivist theme that inspired Putnam during that phase (and also later) was the idea that causality is an essentially intentional notion, since it is inextricably connected with our explanatory practices. In this respect, after approving John Haldane's saying that "there are as many kinds of causes as there are senses of 'because'",[8] Putnam wrote that "[c]ausality depends on the interests at stake when one asks the question: 'What is the cause of that?'".[9] It should be noted that with the term 'senses of 'because'', Putnam means, in the spirit of pragmatism and perspectivism, "our ever expanding repertoire of explanatory practices" (Putnam 1999, 150; also Putnam & Putnam 2017). In this light, the combination of pluralism about explanation, on the one hand, and the conceptual link between explanation and causation, on the other hand, generates pluralism about causation.

In line with this thesis, Putnam claimed that the so-called 'principle of the physical causal closure of the world' should be rejected, as long as one takes it in one of its classic formulations: "If x is a physical event and y is a cause or effect of x, then y, too, must be a physical event" (Putnam 1999, 215). Given Putnam's pluralist and non-reductionist ontological attitude, physical events can indeed be caused by non-physical events that are irreducible to physical events—which is a form of downward causation. (It should be noted, however, that this does not mean that at the same time events cannot have physical causes as well). The crucial point, for Putnam, is that different causal explanations generalize to different classes of cases: and whether we are interested in an event as a member of one or another class is a completely context-relative question. For example, we can be interested in the physiological chain of events that ended in the movement of my hand; but we can

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[8] Putnam (1999, 201, n. 17) writes that neither him nor Haldane could remember where the latter wrote the quoted phrase.

[9] Quoted in Putnam (1999, 77); also ibid. 137, and 149–150.

also be interested in the reasons for which I intentionally moved it. Neither of these causal chains have priority on the other since their respective interests are context-relative.

In this period, Putnam also explored in depth his old idea that between factual and evaluative statements there is no conceptual *dichotomy*, since between them there is only a (sometimes useful) *distinction*.[10] This is because, according to Putnam, values and normativity are ubiquitous: even scientists appeal to values—which can be epistemic or even aesthetic—in order to choose between cognitively equivalent theories. Going back to Galileo, for example, it should be remembered that his main reason for accepting the Copernican system was an aesthetic one.[11]

The last of Putnam's later views that we can mention here is *liberal naturalism*, which he saw as the general framework of most of the ideas he had held in his last years.

> I very much like the term 'liberal naturalism' which I first encountered in an important collection of essays edited by Mario De Caro and David Macarthur [2012] titled *Naturalism in Question*.… In their introduction to *Naturalism in Question*, De Caro and Macarthur emphasized that the liberal naturalism they advocate doesn't regard normative utterances as somehow 'second grade' or merely 'expressive', but neither does it countenance a Platonic realm of normative facts independent of human practices and needs. At the same time, it does not countenance Moorean quasi-mystical faculties of moral intuition. All this I like very much (Putnam 2015, 312–313).

Liberal naturalism is a metaphilosophy that advocates a pluralistic attitude both in ontology and epistemology on the basis of the ideas that not all the real features of the world can be reduced to the scientifically describable features and that the natural sciences are not the only genuine source of knowledge to which all the other apparent sources should hand over their epistemic pretensions. Still, a liberal naturalist cannot accept any entity in her ontology or any view in her epistemology that would contradict the current scientific worldview.[12]

Putnam's liberal naturalism seems to be a very promising perspective. As with any serious philosophical view, however, it faces several problems, which can be considered as parts of a big metaproblem, which can be called 'The Reconciliation Problem': what kind of relation is there between the accounts of the world offered by the natural sciences and those offered by the social sciences, common-sense, the arts, and spirituality? To be more specific: what is the relationship between the ontological realm studied by the natural sciences and the other ontological regions? Is that a relation of *supervenience* (and in this case, of which kind?), *emergence*,

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[10] Putnam (1982, 2002, and 2011)

[11] "[The Ptolemaic system was] a monstrous chimera composed of mutually disproportionate members, incompatible as a whole. Thus however well the astronomer might be satisfied merely as a *calculator*, there was no satisfaction and peace for the astronomer as a *scientist*. And since he very well understood that although the appearances might be saved by means of assumptions essentially false in nature, it would be very much better if he could derive them from true suppositions" (Galilei 1632, 341; emphasis added).

[12] Putnam contributed to both De Caro and Macarthur (2004, 2010), which advocated liberal naturalism, and defended the latter view also in Putnam (2016a e 2016b).

grounding, *incommensurability*, or something else? Putnam was happy with global supervenience (according to which any world physically identical to ours would have the same non-physical properties of our world), but this is a controversial issue. And connected with this difficulty, another one immediately raises: what about the traditional problems of causal over-determination and the violation of the closure of the physical world?

These problems have to be addressed by the philosophers who want to legitimise the common-sense features of the world. In fact, they have the unavoidable task of showing how Sellars's manifest and scientific images of the world can co-exist when they are both taken as fully legitimate and non-hierarchically related (De Caro 2015). Despite these difficult problems, in his last years Putnam thought that liberal naturalism was the preferable view since, without appealing to any supernatural feature, it is much less revisionistic than the scientist views mentioned at the beginning of this chapter regarding the features of the world that can be grasped by other forms of understanding, such as literature or common sense.

4.6   Perspectivism and Liberal Naturalism

Perspectivism is an attempt—explicitly inspired by Kant, Kuhnian relativism, and Putnam's internal realism—at finding a middle ground between scientific realism and antirealism. Michela Massimi (2016, 2017) offers excellent general introductions to this view, and so do many of the papers of this collection; thus, I will be brief on the details of this view and go directly to an evaluation.

Ronald Giere, one of the leading advocates of this view, claims that scientific observation, measurement, modelling, theorizing are all perspectival (that is, they depend on the human point of view) and therefore scientific knowledge as such is unavoidably contingent. Giere writes about truth as follows: "Truth claims are always relative to a perspective", since no theory "provides us with a complete and literally correct picture of the world itself" (2006, 81). He also adds:

> Full objectivist realism ("absolute objectivism") remains out of reach, even as an ideal. The inescapable, even if banal, fact is that scientific instruments and theories are human creations. We simply cannot transcend our human perspective (Giere 2006, 14–15).

It is unclear to me why, granting fallibilism (for which each empirical claim, individually taken, could be false), one could not accept the idea that in some fields our theories could reach the objective truth: in that case, of course, we could not be absolutely sure of the truth of those theories; however, they would still be objectively true. I therefore agree with Michela Massimi's view that Giere's perspectivalism fails to find a solid middle ground between realism and antirealism, since it is too unbalanced toward a form of antirealism. In particular, besides all the other objections against that family of views, Giere's view is also exposed to another criticism: is not there a risk that under Giere's view the objective external world becomes a new version of Kant's noumenal (and hence unknowable) world?

Massimi's version of perspectival realism is, in my view, a much more balanced view then Giere's, since, besides incorporating what one could get by, by buying into some forms of antirealism (that is, epistemic pluralism), it also does justice to the main realist intuitions. In my view, Massimi's perspectivism is (i) a legitimate form of realist naturalism; (ii) it's neutral (for what I know) between strict and liberal naturalism; and (iii) it's closer to the late Putnam's liberal naturalist realism than to his internal realism. One interesting passage in Massimi (2017, 170) on the issue is the following, where she criticizes:

> The tendency to understand the rejection of scientific objectivity (qua God's eye view on nature) as tantamount to a much stronger (and non sequitur) claim about worldly states of affairs being relative to scientific perspectives.

I take this critical reference to "God's eye view on nature" as analogous to Putnam's "metaphysical realism", and I agree entirely that this is a dogmatic view that should be abandoned. Other analogies between Massimi's views and the late Putnam's views are:

1. The refusal of the antirealist view of truth;
2. The idea of a mind-independent (and perspective-independent) world;
3. A realist semantic tenet about a literal construal of the language of science—i.e., entity realism (which Putnam's based on his own semantic externalism);
4. The idea that (*contra* van Fraassen and the other antirealists and semirealists) accepting a theory implies the belief that the theory is true – i.e., theory realism.

As the late Putnam and Massimi have argued, I don't see any reason to embrace antirealism only because one finds metaphysical realism untenable. A middle-ground view can and should be shaped. The price to pay for that is the abandonment of epistemic monism. At any rate, from the refusal of epistemic monism, Putnam also concluded in favor of non-antinaturalistic ontological pluralism, causal pluralism, and the refusal of the fact-value dichotomy. The main open question here is how monistic one can remain in ontology once one embraces epistemic pluralism—not very much, in my view. In conclusion, if one had to write the history of perspectivism, I would add a section on Putnam's liberal naturalism, as one of the best attempts at overcoming metaphysical realism without abandoning the philosophical realist attitude.

Bibliography

Block, N. (1997). Anti-reductionism slaps back. *Philosophical Perspectives, 11*, 107–133.

De Caro, M. (2015). Realism, common sense, and science. *The Monist, 98*(1), 197–214.

De Caro, M. (2016). Introduction: Putnam's philosophy and metaphilosophy (pp. 1–18). In Putnam (2016).

De Caro, M., & Macarthur, D. (Eds.). (2004). *Naturalism in question*. Cambridge, MA: Harvard University Press.

De Caro, M., & Macarthur, D. (Eds.) (2010). *Normativity and naturalism*. New York: Columbia University Press.

De Caro, M. & Macarthur, D. (2012). *Hilary Putnam: Artisanal polymath of philosophy* (pp. 1-38). In Putnam (2012c).

Field, H. (1980). *Science without numbers*. New York: Blackwell.

Field, H. (1989). *Realism, mathematics, and modality*. New York: Blackwell.

Field, H. (1992). 'Physicalism', in J. Earman (ed.), *Inference, Explanations, and Other Frustrations: Essays in the Philosophy of Science* (pp. 271-291). Berkeley: University of California Press.

Galilei G. (1632). *Dialogo sopra i due massimi sistemi del mondo*. Engl trans. by S. Drake, *Dialogue Concerning the Two Chief World Systems: Ptolemaic and Copernican*. Berkeley: University of California Press 1967.

Giere, R. (2006). *Scientific perspectivism*. Chicago: Chicago University Press.

Kim, J. (2005). *Physicalism, or something near enough*. Princeton: Princeton University Press.

Maddy, P. (1997). *Naturalism in mathematics*. Oxford: Oxford University Press.

Massimi, M. (2016). Four kinds of perspectival truth. *Philosophy and Phenomenological Research, 96*(2), 342–359.

Massimi, M. (2017). Perspectivism. In J. Saatsi (Ed.), *The Routledge handbook of scientific realism* (pp. 163-175). London: Routledge.

Oppenheim, P., & Putnam, H. (1958). Unity of science as a working hypothesis. In H. Feigl, M. Scriven, & G. Maxwell (Eds.), *Minnesota studies in the philosophy of science*, Vol. II (pp. 3–36). Minneapolis: University of Minnesota Press.

Papineau, D. (1996). *Philosophical naturalism*. Oxford: Blackwell.

Putnam, H. (1973). "Reductionism and the Nature of Psychology." Reprinted in *Words and Life*, ed. by J. Conant (pp. 428-440). Cambridge (MA): Harvard University Press 1994.

Putnam, H. (1975a). Do true assertions correspond to reality? In Putnam 1975b, 70–84.

Putnam, H. (1975b). *Philosophical papers*. Vol. I, *Mathematics, matter and method*. Cambridge: Cambridge University Press.

Putnam, H. (1975c). The meaning of meaning. In Putnam, *Philosophical papers*. Vol. II, *Mind, language and reality* (pp. 215–271). Cambridge: Cambridge University Press.

Putnam, H. (1980). Models and reality. *The Journal of Symbolic Logic, 45*(3), 464–482.

Putnam, H. (1981). *Reason, truth, and history*. Cambridge: Cambridge University Press.

Putnam, H. (1982). The place of facts in a world of values (pp. 142-162). Reprinted in Putnam (1990) 135–141.

Putnam, H. (1990). *Realism with a human face*, ed. by James Conant. Cambridge, MA: Harvard University Press.

Putnam, H. (1999). *The threefold cord. Mind, body, and world*. New York: Columbia University Press.

Putnam, H. (2002). *The collapse of the fact/value dichotomy and other essays*. Cambridge, MA: Harvard University Press.

Putnam, H. (2004). *Ethics without ontology*. Cambridge, MA: Harvard University Press.

Putnam, H. (2005). A philosopher looks at quantum mechanics (again). Reprinted in Putnam 2012c, 126–147.

Putnam, H. (2008). *Jewish philosophy as a guide to life. Rosenzweig, Buber, Levinas, Wittgenstein*. Bloomington: Indiana University Press.

Putnam, H. (2011). The fact/value dichotomy and its critics. Reprinted in Putnam (2012c), 283-298.

Putnam, H. (2012a). Corresponding to reality. In Putnam (2012c), 72–90.

Putnam, H. (2012b). On not writing off scientific realism. Reprinted in Putnam (2012c), 142–162.

Putnam, H. (2012c). *Philosophy in an age of science*, ed. by M. De Caro and D. Macarthur. Cambridge, MA.: Harvard University Press.

Putnam, H. (2015). Naturalism, realism, and normativity. *Journal of the American Philosophical Association, 1*(2), 312–328.

Putnam, H. (2016a). *Naturalism, realism, and normativity*, ed. by M. De Caro. Cambridge, MA: Harvard University Press.

Putnam, H. (2016b). Realism. *Philosophy and Social Criticism, 42*(2), 117–131.

Putnam, H. (2016c). The development of externalist semantics. Reprinted in Putnam (2016a), 199–212.

Putnam, H. (forthcoming). Comment on Charles Travis's 'overflowing bounds' and 'Laudatio'. In W. K. Essler, D. Føllesdal, & M. Frauchiger (Eds.), *Themes from Putnam* (Lauener Library of Analytical Philosophy). Berlin: De Gruyter.

Putnam, H., & Putnam, R. A. (2017). *Pragmatism as a way of life. The lasting legacy of William James and John Dewey*. Cambridge, MA: Harvard University Press.

Rosenberg, A. (2013). Disenchanted naturalism. In B. Bashour & H. Muller (Eds.), *Contemporary philosophical naturalism and its implications* (pp. 17–36). London: Routledge.

Smart, J. J. C. (1978). The content of physicalism. *The Philosophical Quarterly, 28*, 239–241.

Stoljar, D. (2010). *Physicalism*. New York: Routledge.