



Liberal Naturalism and Non-epistemic Values

Ricardo F. Crespo^{1,2}

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Abstract

The ‘value-free ideal’ has been called into question for several reasons. It does not include “epistemic values”—viewed as characteristic of ‘good science’—and rejects the so-called ‘contextual’, ‘non-cognitive’ or ‘non-epistemic’ values—all of them personal, moral, or political values. This paper analyzes a possible complementary argument about the dubitable validity of the value-free ideal, specifically focusing on social sciences, with a two-fold strategy. First, it will consider that values are natural facts in a broad or ‘liberal naturalist’ sense and, thus, a legitimate part of those sciences. Second, the paper will not reject the value-free ideal; rather, it will construe this ideal in a special way, not casting values aside in sciences, but bringing them to the table and rationally discussing them. Today’s predominant naturalistic view has tended to ‘naturalize’ values by looking for physicalist explanations for them—a move resisted by defenders of normativism in social sciences. At the same time, a contending ‘liberal naturalist’ stream has emerged, claiming that not all natural entities can be explained by the methods and concepts of physical sciences, and favors a non-materialist naturalism which includes mind, consciousness, meaning and value as fundamental parts of nature that cannot be reduced to matter. Hence, it may be posited that non-epistemic values could be ‘naturally’ included in the field of human sciences.

Keywords Values in science · Liberal naturalism · Values in economics

1 Introduction

The ‘value-free ideal’, a requirement for science correctness with a long tradition dating back to the eighteenth century, has been called into question for several reasons. This requirement does not include “epistemic values” (cognitive or constitutive values), such as explanatory and unifying power, simplicity, consistency, and predictive accuracy, which are generally considered as characteristic of ‘good science.’ It also rejects the so-called

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✉ Ricardo F. Crespo
RCrespo@iae.edu.ar

¹ IAE (Universidad Austral) and CONICET, Buenos Aires, Argentina

² Universidad Nacional de Cuyo, Mendoza, Argentina

‘contextual’, ‘non-cognitive’ or ‘non-epistemic’ values—all of them personal, moral, or political values.¹

Several heterogeneous arguments dispute the value-free ideal, drawing from different philosophical traditions. This paper presents a complementary argument that does not question the ‘value-free ideal’. Like Alison Wylie and Lynn Hankinson Nelson (2007, 78), I think that

[t]he problem we face, if we are committed to understanding and improving scientific practice, is no longer that of cleansing science of intrusive values but, rather, that of determining what kinds of contextual factors, under what circumstances, are likely to advance the cause of science.

Given that, as I will indicate, values are an essential—natural—part of the subject of social sciences, my approach will regard that ideal as the effort to impartially and rationally discover and discuss values—i.e., the role of practical reason. I also want to clarify that I agree with the position holding that, hard as it may be, we should try to avoid introducing personal biases stemming from private interests and from political or ideological stances into scientific processes and findings.

Delving deeper into this topic implies answering some difficult questions. First, some ontological questions stand out: do values really exist as something different from physical reality? In other words, is it possible to maintain an ontological, non-reductivist position on values? If values exist as different from and irreducible to physical reality, what are they, and can they be included in a naturalist ontological approach? (This would imply that nature encompasses more than just physical entities).

Assuming that values do exist, some epistemological questions arise: can values be discovered (or known) and explained with specific methods, considering their irreducible character, or should they be explained by ‘scientific natural’ methods—meaning the methods of physical or biological sciences? Are these methods ‘natural’ or not? That is, is it possible to consider an epistemic broader naturalism, a ‘liberal naturalism’ as John McDowell calls it, that can explain this kind of entities—values? Finally, is this ‘liberal naturalist’ explanation scientific or a-scientific? The answer to this last question depends on the meaning of science.

In this paper, it would prove impossible to extensively address all these taxing topics. However, it is necessary to adopt a position about them in order to accomplish the goal of the paper: to propose an argument defending the insertion of values in science based on the liberal naturalist stance. Subsequent research could develop more extensively the topics tackled in the paper. First, I will outline the key arguments for the involvement of values in science, or against the free-value ideal. Second, I will analyze the meaning and different versions of naturalism, in order to provide an adequate framework to answer the aforementioned questions. Then, I will deal with the topic of values, their existence and nature. Next, I will establish whether the liberal naturalist perspective is scientific or not, depending on the notion of science adopted. Finally, I will outline some conclusions.

¹ These different denominations of epistemic and non-epistemic values correspond to some differences in the characterization of them. See for example Rolin (1998) for the difference between McMullin (1983) and Longino’s (1990) characterizations. However, the very distinction between epistemic and non-epistemic values is debatable (on this, see Lacey (2017) and Rooney (2017)).

2 Values in Science: Mapping Key Arguments

As Reiss and Sprenger (2014, 7) explain, values may bear an impact on science at four instances:

- i) the choice of a scientific research problem; ii) the gathering of information; iii) the acceptance of the scientific hypothesis or theory as an adequate answer to the problem based on the evidence, and iv) the proliferation and application of scientific research results.

Most science philosophers concur on the influence of contextual values in i) and iv). Accordingly, Reiss and Sprenger define the value-free ideal as follows (2014, 9), ‘Scientists should strive to minimize the influence of contextual values on scientific reasoning,’ e.g., in gathering evidence and assessing/accepting scientific theories’—that is, in steps ii) and iii). Reiss and Sprenger also posit the ‘value-neutrality thesis,’ asserting that the value-free ideal is attainable, as well as its counterpart, the ‘value-laden thesis,’ which argues that it is not possible to evade values in those steps. These two last theses are descriptive, while the first—the value-free ideal—is normative.²

Kincaid, Dupré and Wylie (2007, 14; henceforth, ‘Kincaid et al.’) describe three types of arguments for the value-laden thesis (thus, against the value-free ideal): (1) arguments denying the distinction between fact and value, (2) arguments based on under-determination, and (3) arguments drawing from the social processes of science. My argument falls within the first category: basically, I will argue that values are natural facts in the context of a broad view of nature.

1. Arguments denying the distinction between fact and value:

To explain these arguments, first we have to understand where this distinction comes from. The value-free ideal is connected with the idea that values are not facts and that science deals only with facts, leading to a ‘fact-value dichotomy’ that dates back to Hume’s dichotomy between ‘is’ and ‘ought’ judgments (Kincaid et al. 2007, 5). As Putnam (2002, 14ff.) explains, this dichotomy stems from Hume’s division between ‘matters of facts’ and ‘relations of ideas’, stating that ‘Hume’s metaphysics of “matters of facts” constitutes the whole ground of the underivability of “oughts” from “ises” (2002, 15)’. This ‘metaphysics’ is conditioned by what Putnam calls a ‘pictorial semantics’: ideas are pictorial. There are no matters of facts about virtue or vice because these cannot be envisioned like an apple, and, therefore, they are sentiments. Thus, values are not facts but something subjective that escapes science.

² This is a bit of a paradox, as, given that the source of normativity is value, the value-free ideal is itself a value—albeit an epistemic one. For Chang (2013, 2) and ‘value-centrist’ advocates, values are the direct ‘key’ to normativity. In the editor’s introduction to his book on normativity and naturalism, Mark Risjord notes, ‘contributors to this volume do not distinguish systematically between norms and values. Henceforth, the qualifier “... and values” will be dropped’ (2016b, 7). For Joseph Raz, values recognized by people are reasons and become normative (Raz 2010, 22)—i.e., Raz regards values as indirect sources of normativity. He asserts: ‘Values whose existence does not depend on the culture of rational creatures are values and have instances, whether or not people are able to perceive and respond to them as values. Our rational capacities enable us to recognize and respond to reason-constituting facts; as reflective powers, they enable us to improve our understanding of what makes those facts what they are, and how best to identify them for what they are’ (2010, 22).

Putnam (2002, 2 and *passim*) considers that the fact-value dichotomy depends on the separation between analytic and synthetic propositions and relies on Willard van Orman Quine's (1951) challenge to this distinction. Facts become not only verifiable propositions but also theoretical terms in the context of a scientific theory where values also matter.

Simultaneously, Putnam revisits classical pragmatists' ideas on the links between facts and values; for them, value and normativity permeate all experiences. Putnam (2017a, b) refers to John Dewey's position about facts and values and looks at the notions presented by Ruth Anna Putnam (2017a, b) with William James and C.S. Peirce on the same subject, returning to Dewey once again. In short, these authors regard fact and value statements as intertwined, and we can reason about values.

For Putnam, facts and values become entangled because the notions dubbed as 'thick' ethical concepts by the metaethical literature—terms with descriptive and normative content—are used in science. He illustrates his point with the example of the word 'cruel,' while Dupré (2007) provides other examples, such as the concepts of rape in evolutionary psychology and inflation in economics, arguing that, in topics that concern us, the use of both normative and factual notions combined proves unavoidable and necessary. The human or social relevance of some topics necessarily forces the consideration of values. For Dupré (2007), value-free situations appear in uninteresting cases, whereas hypotheses and conclusions that matter to us are not value-free and include thick ethical terms.

While I regard Richard Rudner (1953)—probably the most cited author when it comes to values in science—as part of the second category of arguments, his views on the presence of values in science also hinges on the importance of the subject under analysis. Also heeding the relevance of research topics, Carla Bagnoli's (2017) recent 'constructivist' position revolves around the idea that emotions and reason shape facts, bringing what matters into view. She states that '[t]o some important extent, then, the facts are not fully separable from the concerns of the agents in their perspective' (2017, 137).

Elizabeth Anderson can also be considered as partaking in this category of arguments. Her 'pragmatic account of how we can objectively justify our value judgments' (1993, 91) is achievable by appealing to reasons—that is, there is no room for skepticism or subjectivism. What is valuable is not a mere liking (take Facebook or Instagram...) but the object of a rational argument. For Anderson, this does not mean that values can be everywhere in science, as 'a bias in relation to the object of inquiry is inevitable' (2004, 19). However, 'a bias in relation to hypotheses is illegitimate. If a hypothesis is to be tested, the research design must leave open a fair possibility that evidence will disconfirm it (2004, 19)'. Values are facts and can be known, but they do not replace empirical evidence.

Constructivist approaches like Christine Korsgaard's can also be included in this group. While Kantian, she also draws from Aristotle, Wittgenstein and Rawls. Human beings' reflexive nature drives their personal identity, which provides reasons for acting appropriately. She states,

A human being is an animal who needs a practical conception of her own identity, a conception of who she is that is normative for her. Otherwise she could have no reasons to act, and since she is reflective she needs reasons to act (1992, 92).

Human nature is a value in itself, and it is 'open' to different possible identities: 'a human being is an animal whose nature it is to construct a practical identity that is normative for her' (1992, 105). Practical identity, Korsgaard argues, 'is better understood as a description under which you value yourself, a description under which you find your life worth living and your actions to be worth undertaking' (1992, 83). Practical identity bears strong

ties to other human beings and animals, because, she states, ‘human beings are social animals in a deep way’ (1992, 101).

Summing up, most authors in this category refute the value free ideal by arguing that values are facts that can be rationally known and therefore have a legitimate role in science, which does not replace but, rather, complements data and theoretical reasoning.

2. Arguments from under-determination

Kincaid et al. (2007, 15) take into account both data-based theory under-determination (multiple hypotheses can prove compatible with data) and theory choice under-determination based on epistemic values (different scientists may weigh the various epistemic values differently and, as result, choose different hypotheses).

While Rudner’s (1953) argument does not come from under-determination as defined above but from the impossibility of a complete empirical induction, his above-mentioned paper proves useful here as well.³ For Rudner, accepting or rejecting a hypothesis always implies a mistake risk, since it will never be completely verified, due to the intrinsic imperfection of inductive inferences. Then, scientists must judge how much evidence is enough to accept or reject a hypothesis, and this depends on their assessment of the ethical seriousness of the possible mistake, which entails a value judgment (1953, 2–3)—the acceptance or rejection of a hypothesis involves an ethical decision, because it can be mistaken.

Douglas (2009, 2017) also highlights the role of inductive risk in the context of the current authority of science in our culture (2000, 563). She notes that values are recognized as relevant in these steps: problem selection, knowledge utilization, and methodology limitations. Yet, she also points out, “where the weighing of inductive risk requires the consideration of non-epistemic consequences, non-epistemic values have a legitimate role to play in the internal stages of science” (2000, 565). She holds that this role is indirect, as it involves considering the consequences of the possible error. With low uncertainty, it is not necessary to consider these potential outcomes (2000, 577).

Douglas (2016) discusses three challenges for the value free ideal. First, she considers the descriptive challenge, which was originally raised by feminist critics, who noted the presence of value-laden presuppositions even in the gathering of empirical evidence. Douglas’ argument rests on under-determination: the evidence available allows for all plausible theories and assumptions. There is a gap between theory and evidence that should be filled by value judgments. Second, the ‘boundary challenge’ stems from the lack of a clear distinction between epistemic and contextual values (an argument explored by Longino 1990, see next sub-section). Third comes the normative. Uncertainty brings about inductive gaps and risks, and establishing evidential sufficiency proves necessary. Longino makes a distinction between the direct (choice of topic, method and application) and indirect roles of values in science (evidence sufficiency). Epistemic values reveal the degree of uncertainty at play, while non-epistemic values indirectly appraise whether the evidence suffices or not.

³ Anderson (2004) also refers to the incompleteness of induction when she states, ‘Even if we grant that no substantive value judgment logically follows from any conjunction of factual statements, this merely puts value judgments on a logical par with scientific hypotheses. For it is equally true that there is no deductively valid inference from statements of evidence alone to theoretical statements. Theories always logically go beyond the evidence adduced in support of them. The question of neutrality is not whether factual judgments logically entail value judgments, but whether they can stand in evidentiary relations to them’ (2004, 5).

However, she also points out that epistemic values, such as simplicity or elegance, sometimes do not apply or suit our complex social world.

In addition, Douglas notes, values are embedded in the language we use in science, in the construction and testing of some models, and in the use and dissemination of science. All these considerations highlight the need to take into account the impact of science in society (see also Douglas 2009). She states, ‘With values openly on the table as part of the scientific process, scientists and policy-makers can include both evidence and values, in their legitimate roles, as part of the public discussion’ (2014, 181). These considerations take Douglas’ arguments into the next category.

Hesse (1980) carefully develops the under-determination of theories via the factual argument. In the case of social sciences, she speaks about a second type of value judgments that do not apply in natural sciences (where the ‘pragmatic criterion’—predictability— can filter out a first type of ‘basic’ value-judgments) and that establish *value goals* as the criterion to overcome under-determination (1980, 195).

Longino also upholds the under-determination argument, referring to a gap:

This gap, created by the difference in descriptive terms used in the description of data and in the expression of hypotheses, means that evidential relations cannot be formally specified and that data cannot support one theory or hypothesis to the exclusion of all alternatives. Instead, such relations are mediated by background assumptions (...) the only check against the arbitrary dominance of subjective (metaphysical, political aesthetic) preference in such cases is critical interaction among the members of the scientific community or among members of different communities (2015, 11).

Indeed, this makes Longino a suitable participant for the next category as well.

3. Arguments from the social processes of science

Several arguments stem from the social processes of science. Longino questioned the division between epistemic and non-epistemic values, because, as she sees it, epistemic values are embedded in social and political perspectives. In turn, these outlooks, also ingrained in scientific research, lead to no differences between cognitive and non-cognitive elements in science (2004, 128). Nonetheless, she argues that this embeddedness does not imply denying objectivity but understanding it as built-in a social context. Longino views objectivity as ‘a characteristic of a community’s practice of science’ (1990, 179). She states,

[S]cientific knowledge is, therefore, social knowledge. It is produced by processes that are intrinsically social, and once a theory, hypothesis, or set of data has been accepted by a community, it becomes a public resource. It is available to use in support of other theories and hypotheses and as a basis of action. Scientific knowledge is social both in the ways it is created and in the uses it serves (1990, 180).

Thus, individual values are sifted out, and values become good for science (2004, 127). Moreover, Longino stresses, ‘the objectives of the value-free ideal are better achieved if the constructive role of values is appreciated and the community structured to permit their critical examination’ (2004, 140). In a nutshell, she thinks that values do not prevent objectivity when they are socially discussed and set.

While thinking that values do not affect the acceptance of data, hypotheses and theories, Hugh Lacey found a place of the scientific process in which they ‘often play indispensable roles’ (2003, 209): the ‘adoption of strategy’. He added that most modern sciences

adopt ‘materialist strategies’ that cast other possible strategies aside—for example, ‘agro-ecological strategies’ include ecological and social categories typically neglected by ordinary materialist strategies. He stated, ‘the value judgments that are part of the grounds for adopting a strategy play a causal role in enabling the conditions under which factual judgments can be made, but they are not part of the evidence’ (2003, 217). He suggested relying on multiple strategies according to different values and researching them empirically (2002).

Philip Kitcher’s reflections on values and science are deeply associated with the need to link scientific topics and development with social requirements and values established via public discussion. He introduces ‘an ideal of “well-ordered science”, intended to capture what inquiry is to aim at if it is to serve the collective good’ (2001, xii; also see chapter 10). For Kitcher, the categories used to characterize reality are ‘consequential’—i.e., they play a causal role. Science cannot turn a blind eye to its consequences; ‘because I believe no such conception can be found, I take moral and social values to be intrinsic to the practice of the science’ (2001, 65). We should take into account the relevant issues for society when designing the categories used: ‘the aim of the sciences’, he states, ‘is to address the issues that are significant for people at a particular stage in the evolution of human culture’ (2001, 59). Hence, moral and social values are intrinsic to the practice of science (2001, 65), but Kitcher believes that the presence of values in science does not challenge the objectivity of reality (2001, 53 and 66). He argues that ‘value-judgments are deeply embedded in the practice of science’ (2011, 34), while he ‘resist[s] the suspicion that the incursion of values inevitably undermines scientific authority’ (2011, 40).

The argument presented here will be linked to a form of ‘naturalism’ called ‘liberal naturalism’. Thus, the next section briefly describes the major naturalistic stances prevailing today, while the subsequent section will introduce ‘liberal naturalism’ itself

3 Naturalisms

Terence W. Irwin wrote his three-volume (more than 3000 pages) book on the history of ethics (2007–2011), comprising moral thinking from Socrates to Rawls and building on different authors’ views on Aristotelian naturalism. Irwin refers to Aristotle and his naturalism in the following manner:

He defends an account of the human good as happiness (*Eudaimonia*), consisting in the fulfilment of human nature, expressed in the various human virtues. His position is teleological, in so far as it seeks the basic guide for action in an ultimate end; eudaemonist, in so far as it identifies the ultimate end with happiness, and naturalist, in so far as it identifies virtue and happiness in a life that fulfils the nature and capacities of rational human nature (2011, Volume I, 4). [...] The naturalist claim asserts that A’s good is determined by what A is, by A’s actual characteristics, rather by what A wants (2011, Volume III, 886).

Irwin’s work reviews the Aristotelian, non-Aristotelian and anti-Aristotelian ethical theories that have emerged during the history of moral thinking. The book shows how the name ‘naturalism’ has been used in very different ways. Currently, the notion of naturalism has absolutely shifted, nearly coming to mean physicalism or materialism. We have to make some distinctions within modern ‘naturalism’: as an ontological subject and as a methodological or epistemic doctrine. On the one hand, ontological naturalism asserts

that: (1) there is no room for supernatural entities—‘reality has no place for “supernatural” or “spooky” kinds of entities’ (Papineau 2015, 1; cf. Stroud 1996, 44) and (2) all that exists is material.⁴ Also, ontological naturalism supports a ‘causal closure’ in the physical realm ‘according to which all physical effects have fully physical causes’ (Papineau 2015, 4; Papineau refers to this as the ‘completeness’ of physics, cf. 2001, 7). On the other hand, methodological or epistemic naturalism equates all sciences to ‘natural science’—physics, biology—and upholds that the methods used by natural sciences are applicable to explain any reality. Thus, things that cannot be explained by these methods do not exist. This claim actually slides into a reduction of all that is natural to a physical realm: in fact, it implies an ontological naturalism. As Georg Gasser points out, ‘[a] consequence of the explanatory closure is that all entities reside within the spatiotemporal world as well’ (Gasser 2007, 5). Linking ontological and methodological naturalism, he also states (2007, 4) that

each entity within the spatiotemporal world owes its existence, continuity, and end to the operation of causal forces within the spatiotemporal world. We never go outside the spatiotemporal world for explaining anything which takes place within it.

Papineau also recognizes that ‘contemporary physicalism is an ontological rather than a methodological doctrine. It claims that everything is physically constituted, not that everything should be studied by the methods used in physical science’ (2001, 3).⁵

Let us take a critical look at ontological and methodological naturalism. Concerning the former, it should be noted, first, that there is no reason to affirm or to deny the existence of supernatural entities. Supernatural entities (if they exist) are, by definition, outside nature, and, consequently, they cannot be reached by natural science methods. The most we can assert is that, if they exist, they cannot be known by our recognized scientific methods.⁶

Second, ontological naturalism cannot be equated with physicalism because we can ascertain the existence of non-physical natural realities. For example, though supported by matter, structures, forms, actions, and thoughts are non-material things, but they are natural—i.e., we can adopt a non-reductive position about these kinds of realities. Naturalists tend to reject this stance or, at least, to uphold that all these realities can be explained by the methods of natural sciences.

Concerning methodological naturalism, the idea that all explanations will finally be reduced to physics is a mere manifesto or just wishful thinking. In fact, the history of

⁴ Rouse (2008) argues that, more than anti-supernaturalist, this kind of naturalism is anti-humanist.

⁵ We must distinguish between reductive and non-reductive naturalism. In its several forms, including eliminative naturalism and identity theory, reductive naturalism posits that all that exists is or can ultimately be reduced to (and explained in terms of) material stuff. The latter, instead, tries to recognize an independent status to mental realities, relying on theories like emergentism or the idea of supervenience. However, given that these theories regard mental realities as stemming from the physical realm, it remains unclear whether they are really non-reductive (see Gasser and Stefan 2007, 175), or if, underscoring independence, they are dualist. The position held in this paper—natural liberalism—is more akin to a theory like Aristotelian hylomorphism. FitzPatrick (2008, 197–202) outlines an interesting approach, viewing supervenience in the context of the existence of moral values and assigning a metaphysical value-laden character to natural empirical facts associated with them. Thus, supervenient values do not stem only from a physical reality because a value element stands at their very metaphysical root. Corradini’s (2017) proposal of an ‘essentialist theory of nonnatural normative supervenience’, which considers the nexus between the subvenient and the supervenient as determined by the essence of the latter, may also prove interesting. I cannot delve into these difficult topics here. I have discussed them more extensively in my article 2017a.

⁶ As Timothy Williamson asserts, ‘it is not self-evident that there cannot be things only discoverable by nonscientific means, or not discoverable at all’ (2014, 29).

science shows that, regardless of the successful role played by physical explanations, a plethora of different approaches have led to scientific discoveries. Science is a social undertaking that involves luck, social interaction, intellectual intuition—even analogies have sometimes proven instrumental for scientific breakthroughs. The notion that all realities can and will be explained by physics is more a matter of faith than of science. Reductive naturalists must have the burden of the proof (see Gasser 2007, 9). Moreover, as Gasser and Stefan (2007, p. 177) assert,

To refer to a future point in science's progress (when the program of reduction finally will be carried out) runs a risk of becoming a mere strategy of immunization in the face of unsuccessful attempts of reduction. The same holds for the claim that reduction is possible in principle but cannot be executed in practice because the entities which are to be reduced are too complex.

Additionally, some voices have claimed that the methods and concepts of physical sciences cannot explain all natural entities or processes—especially human and biological ones (Dupré 2001; Nagel 2012). Some of them can be gathered under the label of 'liberal naturalists', explained below.

4 Liberal Naturalism

John McDowell (2004, originally 1999) coined the term 'liberal naturalism', and other scholars have used this or other expressions to refer to the idea that there are human realities that, while though ontologically belonging to the realm of nature, do not fall under the materialistic version of naturalism and cannot be addressed and explained by the natural science methods.⁷ These realities include—in a somewhat rough classification—the mind, thinking, knowing, reasons and meaning; followed by the realm of values, practical reason and normativity; and finally the so-called 'first person perspective', or agency, self-subjectivity, common sense psychology and free will.

McDowell's liberal naturalism deals with the first two reality types: mind and normativity. For him (2002, 2004, 92), modern natural science has evolved as a mechanistic approach to natural processes—'a disenchanting conception of the natural world' (2002, 174)—in which the knowing subject (the human being) threatens to withdraw from the natural world. It is tempting to identify nature with the subject matter of modern natural sciences (2004, 92), but McDowell views this as a mistake. He makes a distinction between a 'restrictive naturalism'—or 'bald naturalism' (1996, 73ff.)—that intends 'to naturalize the concepts of thinking and knowing by forcing the conceptual structure in which they belong into the framework of the realm of law [as opposed to the realm of reason, expressions taken from Sellars (1956)]' (2004, 95), and a 'liberal naturalism' that does not require to integrate our capacities of thinking into this narrow scientific framework—'our capacities to acquire knowledge are natural powers' (2004, 95). McDowell also refers to it as 'relaxed naturalism' (1996, 89). For him, 'knowledge and intentions can be in view only in the framework of the space of reasons' (2004, 93). Hence, 'we can bring practical reason

⁷ Jennifer Hornsby (who calls it 'naïve naturalism', 1997), Barry Stroud ('a more open-minded or expansive naturalism', 1996, 54), Peter Strawson ('liberal', 'Catholic' or 'soft' naturalism, 1985, 1 and 42), Johannes Brandl ('a modest form of naturalism', 2007, 256) and James Griffin ('an expansive naturalism', 1988, 51).

back into nature' (2002, 184). In other words, nature provides for more than what natural sciences consider: it leaves room for practical reason—the human ability to rationally choose ends. McDowell also calls liberal naturalism 'a naturalism of second nature' (1996, 86). He takes the expression from Aristotle's account of the 'construction' (my term; McDowell uses the German word *Bildung*) of an ethical character. An ethical upbringing creates thinking and action habits—i.e., practical wisdom—which are 'second nature' (see McDowell 1996, 84, 2002, 184): 'one's formed practical intellect [-...] just is an aspect of one's nature as it has become' (2002, 185). For McDowell, this internal state has a normative force (see McGinn 2014, 68). Scientific or 'restrictive naturalism', as it is often called, 'interprets the natural strictly in terms of the scientific image of the world, narrowly or broadly conceived, whereas Liberal Naturalism—or some versions of it—offers a broader, more expansive conception of nature that makes room for a class of nonscientific, but nonetheless non-supernatural, entities' (De Caro and Macarthur 2010a, b, 3–4).

Nagel (2012, 8) favors 'a pervasive conception of natural order,' in which the mind has its place. He states (2012, 8):

The great advances in the physical and biological sciences were made possible by excluding the mind from the physical world. This has permitted a quantitative understanding of that world, expressed in timeless, mathematically formulated physical laws. But at some point, it will be necessary to make a new start on a more comprehensive understanding that includes the mind.

As mentioned earlier and as construed by McDowell, practical reason is a topic that needs a liberal naturalist approach. From a reductive materialist naturalism—i.e., what is called by McDowell 'restrictive or scientific naturalism'—standpoint, the adequate rationality to explain human action is instrumental rationality, because it is a specific rationality that fits with the supposedly deterministic work of the physical world. Actions come as a result of a chain of physical efficient causes. 'Liberal naturalism', instead, makes use of both instrumental and practical rationality, considering reasons or ends—including values—as final causes. With this approach, this 'liberal' non-materialist naturalism, teleology, practical reason and freedom are intrinsically linked.⁸

Similarly, the 'first person perspective' cannot be grasped by a restricted naturalism, and it justifies the use of a liberal naturalism standpoint. Typically, liberal naturalism upholds that some things are evidently shown by our everyday experience,⁹ from a first person or 'common sense' perspective, and cannot be reached by the methods of natural sciences, a 'third-person' perspective.¹⁰ As Sellars (1963, 6ff.) puts it, the conception of human beings underlying liberal naturalism is the 'manifest image' of ourselves as rational, sentient persons, accountable to norms, different but probably not incompatible with the 'scientific image'—i.e., a scientific representation of our nature. Reasons for action, which are not considered by the third-person view, actually explain them at a level that is different from causal efficient physical explanations. We act for specific reasons. The neurochemical

⁸ On teleology and practical reason in social sciences, see my paper 2016. Here I drew on some material from my book 2017b.

⁹ Though her argument follows a different path, I think that the following passage by Christine Korsgaard conveys this attitude quite eloquently: 'For it is the most familiar fact of human life that the world contains entities that can tell us what to do and make us do it' (1992, 108).

¹⁰ Baker (2014) argues why a 'robust first person perspective' ('the ability to refer to oneself as oneself') cannot be described by natural sciences, which are entirely formulated in third-personal terms.

reactions that supposedly underlie these reasons and actions provide a partial explanation of them at most. Reductivist non-normativists claim that reasons can be reduced to non-normative objects or relations, while liberal naturalists believe that there are ‘mundane, ordinary facts, essential to our self-understanding as agents who can perform actions on the basis of reasons within the natural world’ (Christias 2015, 149), which are irreducible to ‘scientific naturalist’ explanations.¹¹ These facts amount to our *ordinary* concept of ‘nature’ (see Christias 2015, 147). Some authors (for example, MacIntyre, Foot and Bedau) regard this common-sense knowledge as a rebirth of classical metaphysics. The next section takes another look at the authors who consider that the two last categories fall under liberal naturalism—the realm of normativity and values, and the first-person perspective.

It should finally be noted that the defense of a liberal naturalism does not necessarily imply a rejection of a ‘hard’ scientific study of human behavior. I think that Brandl (2007, 256) elaborates on this quite effectively:

Modest naturalism, as I understand it, is a pluralistic doctrine according to which knowledge can arise from many different sources. There are the sources that can be explained in terms of chemical or biological processes, but there are other sources as well that are therefore no less ‘natural’. The first task for a modest naturalist, therefore, is to introduce a broader notion of what it means to be ‘natural’ that is not tied to the perspective of the natural sciences.

However, natural sciences fail to grasp some essential features of human beings and their actions—like mind, thinking, knowing, intentionality, agency, freedom, practical reason, normativity and values. In a nutshell, the thesis supported here and standing at the core of this section, is that methodological naturalism distinction between a scientific or restrictive naturalism and a liberal naturalism leaves room, within the latter, for freedom and practical reason at a methodological level, also implying the ontological existence of values.

One implication of this conclusion is that the thesis here sustained goes against the ‘unity of the science ideal’ as understood by logical empiricists or positivists in a

¹¹ There is a debate between normativists and non-normativists. Here I do not automatically identify normativists with liberal naturalists, because, as described by Turner (2010), for most non-normativists, normativists are anti-naturalists (referring to scientific naturalists). ‘Normativity’, Turner (2010, 5) asserts, ‘is the name for the non-natural’. Risjord (2016b, 9, my italics) explains: ‘Normativists – or at least some of them – claim to have a *non-natural* motivator that actually accounts for action...’ Liberal naturalists, instead, follow another ‘strategy,’ broadening the scope of naturalism. I think that this strategy is better because it does not leave values in a mysterious limbo. A non-normativist, Turner argues that, for normativists, ‘[values] exist, if they exist, in a special nether world’ (Turner 2010, 191). However, normativists and liberal naturalists share their opposition to scientific naturalism as an exclusive means to explain human reality and as the belief that the physical realm encompasses all of reality. Yet, when normativist Joseph Rouse speaks about ‘practices’—‘in which human organisms and discursively articulated environments are formed together through an ongoing, mutually interactive reconfiguration’ (2016, 38)—as ‘ends’ or ‘energeia’ in the context of a naturalist position, he is in a certain way enlarging the scope of naturalism, going beyond what is merely physical. For Karsten Steuber, facts are not intrinsically normative but become normatively relevant in social contexts. Associating his proposal with Adam Smith’s notion of the ‘impartial spectator,’ he asserts that ‘normative reasons are not queer facts or queer properties. Rather, they are rather ordinary facts and properties (...) that are grasped from within the impartial spectator perspective as considerations that speak for adopting certain attitudes’ (2016, 109). This view may be linked to McDowell’s notion of ‘second nature’. Most normativists tend to consider that normativity stems from social relations (see for example Okrent 2016; Risjord 2016a). However, some norms could also stem from the very human nature.

reductionist way.¹² Another implication refers to the debate about the relation between natural and social sciences, where this thesis supports the ontological and methodological difference between them. While upholding that the subject of social sciences belongs to the realm of nature, I consider that there are different ontological realities within nature that call for distinctive scientific methods.

5 Do Values Exist?

My answer is ‘yes,’ and I posit, in the vein of liberal naturalism, that nature includes values as something different from and irreducible to physical or biological reality. This contemplates values of all types, including specifically moral values and goods.¹³ Conversely, for famous British ethicist George Edward Moore, ‘good’ is undefinable and it is not a natural object (1903, 12–13—n. 12). Given that good is non-natural, it has to be grasped by a mysterious form of intuition (1903, 59—n. 36; see Irwin 2011, Volume III, 647–649; Mackie 1977, 38). For Moore, nature is ‘that which is the subject-matter of the natural sciences and also of psychology’—all the objects that exist in time (1903, 40–41—n. 26; see Wiggins 2006, 333 and Irwin 2011, Volume III, 859–860).¹⁴ ‘Good’ does not fulfill these conditions, but, as Irwin asserts, ‘we ought to question narrow scientific criteria for objectivity, not the claims of morality’ (2011, Volume III, 862; and see 863).

For John Mackie, who follows Moore—to mention a renowned ethical non-cognitivist—, values are metaphysically absurd properties (1977, 38ff.).¹⁵ Thus, to attribute them to something is a mistake—an ‘error theory’—(Mackie 1977, 35). For non-cognitivists, either ethical values are not facts—‘they are not part of the fabric of the world’ (Mackie 1977, 15)—or they are facts inasmuch as they have been reduced to physical facts (a position called ‘metaphysical naturalism’ by Rouse 2007, 66, and see Risjord 2016b, 3).

Putnam believes that the problem lies in the modern notion of fact. He asserts that ‘the logical positivist fact/value dichotomy was defended on the basis of a narrowly scientific picture of what a “fact” is—something empirical—, just as the Humean ancestor of that distinction was defended upon the basis of a narrow empiricist psychology of “ideas” and “impressions”’ (2002, 26). Yet, virtues and vices are not facts but sentiments, feelings (and no true or false judgments apply to feelings, which means that values are not objective but subjective). Thus, setting values away from nature, ‘regrettably’, Putnam elaborates, naturalism has become synonymous to materialism. He adds: ‘something is wrong here, but it is reductionism (*alias* “naturalism”) that is wrong and not value-talk’ (2002, 131–132). Putnam calls Mackie ‘a metaphysical materialist’ or a ‘reductive materialist’.

¹² Along the history there have been different versions of the ideal of the unity of science, and we can also distinguish analytically different concepts of it. For a review of this topic see Jordi Cat (2017). Here I refer to the version corresponding to the subjects dealt with in this paper. For a criticism of the unity of science ideal from an analysis of the naturalist position see Gasser and Stefan (2007, pp. 166–7).

¹³ Values can be moral or not—aesthetic, intellectual, cultural values, for example. For a recent essay on values, see Rescher (2017).

¹⁴ According to Rescher (2017, 12), ‘G.E. Moore did not serve the interests of philosophical clarity at all well in adopting the contrast terms “natural/non-natural” to characterize a distinction for which, on his own principles, the less question-begging contrast *sensory/non-sensory* or *perceptual/non-perceptual* would have been far more suitable’. However, Moore is not non-cognitivist, but cognitivist (see Putnam 2017a, b, 35).

¹⁵ For a criticism, see Putnam (1994, 156–159) and (2002, 43).

Nonetheless, Putnam's positive proposal—clearly portrayed by the title of his 2004 book *Ethics Without Ontology*—remains inconclusive, as he belongs to a group of moral cognitivists, including Derek Parfit, Christine Korsgaard, Thomas Scanlon and others, who believe that there are true non-reductive moral claims, which, however, do not imply the existence of moral facts—a sort of 'non-metaphysical cognitivism' that certainly sounds paradoxical. This is one of the branches of a 'metaethical non-naturalism' (that regards naturalism as physicalist), while the other branch is a non-naturalist, morally 'robust' realism with a strong commitment to the existence of non-natural (understanding natural as physical) properties and facts.

With an eye on Mackie and the naturalists and other eye on the non-naturalists who remain fearful of metaphysics, FitzPatrick (2008) proposes the ontological, non-natural existence of ethical facts that determine the right deliberative starting points for an appropriate ethical upbringing, as envisioned by Aristotle.¹⁶ As explained in footnote 5, FitzPatrick's notion proves compatible with the supervenience of ethical facts, because he holds a 'dual-aspect view' of empirical and ethical reality. He asserts (2008, 194–195, italics in the original):

I have resisted the idea that ethical standards can come from nature *as empirically investigated*, or that they can be cashed out in terms of natural properties and facts *as grasped by the sciences*. But according to the kind of robust ethical realism toward which I am inclined (the development of which I can only sketch here), the objective values that are determinative of correct ethical standards are nothing other than objective, irreducibly evaluative or normative aspects of *this same world*, though they are not visible as such from the point of view of empirical inquiry.

No gap separates the empirical 'subvenient' from the moral supervenient, since the 'subvenient' is inherently and irreducibly value-laden (the value content that serves as the source of ethical facts).

In a 2016 article, FitzPatrick expresses these ideas in other ways that I find more appropriate from a liberal naturalist standpoint. Instead of speaking of non-naturalism, he calls his proposal 'a new, more expansive form of naturalism—what might be called "Non-Scientific Naturalism' (2016, 1),¹⁷ expanding 'the idea of the natural to encompass the irreducibly evaluative or normative' (2016, 9). In addition, in this new article, the idea of 'dual view' turns into a 'monistic view':

On this monistic view, there is a single reality that has both structural aspects that are investigable by the sciences ('the physical', narrowly construed) and non-structural or intrinsic aspects that are manifested inter alia as phenomenal properties to experiencing subjects and as normative properties to suitably developed ethical agents. We can legitimately call all of it 'physical' or 'natural', but only because these labels are now being understood expansively (2016, 10).

Niederbacher (2016) and Gasser (2017) robust non-reductive realists' (as Niederbacher's title reads). They both base their proposals on the ontological categories developed by the deceased British metaphysician Edward J. Lowe, expanding them to encompass moral

¹⁶ FitzPatrick (2008, 184–185) describes non-natural facts as 'facts that cannot be cashed out in empirical terms, as by appeal to facts of psychology or biology, or to complex facts constructed entirely from such facts'.

¹⁷ Note that he calls it 'scientific' not 'scientific' (more on this in the next section).

facts. In a nutshell, Niederbacher outlines a set of basic elements and relations for a moral ontology that he labels ‘rich, non-reductive moral ontology’. In the abstract of his article, he elaborates (2016, 1),

A distinction is made between moral property-universals and moral property-particulars. It is argued, first, that moral property-universals have the same ontological status as non-moral property-universals; second, that moral property-universals have many instances in the spatio-temporal world; third, that these moral property-instances or –particulars have the same ontological status as non-moral property-particulars.

In his critique of Parfit’s non-metaphysical cognitivism Gasser (2017, 4–6) explains that moral cognitivism requires a robust—ontological—truth theory, marking the difference with Mackie’s error theory. Gasser advocates enlarging Lowe’s ontological categories and applying them to the normative facts, arguing that there are moral standards for actions which specify morally good or bad action-types. He states (2006, 10),

Analogously to the ontological status of natural kinds and their instantiated particulars, as well as to that of universal natural properties and their instantiated modes, it makes sense to think that there exist normative standards specifying action-types and performed human actions as their instantiated particulars, as well as characterization relations to universal normative properties and their instantiated modes.

These proposals have an Aristotelian flavor that is also present in Lowe. In fact, Aristotelians also defend the ontological condition of values. Alasdair MacIntyre explains the roots of the disappearance of the connection between morality and the facts of human nature. He claims that, for thinkers like Hume, Kant, Diderot, Smith or Kierkegaard, reason discerns no essential natures; these scholars reject a teleological view of man (1981, 52). Based on the Aristotelian argument of the function (*ergon*) of things (he puts the example of a watch)—Aristotle applies it to the human being (*Nicomachean Ethics* I, 7)—, MacIntyre states that saying that something is good is a factual statement (1981, 57). However, teleology has been replaced by the ideal of mechanical explanation, with its laws, exile intentions, purposes and reasons for actions, as Quine (1960, chapter 6, n. 45, pp. 216–22) has argued (MacIntyre 1981, 80).

David Wiggins also challenges Mackie’s ideas, positing that ‘ethical judgments could be a subset of factual statements, even if they were an utterly special and essentially contestable subset’ (2006, 332–333). For Raz (2007, 1), ‘a normative reason is a fact which, when one acts upon it, gives a point or purpose to one’s action, and the action is undertaken for the sake of or in pursuit of that point or purpose’. Raz views these reasons as normative and additionally explanatory for actions. Christine Korsgaard also conceives normativity based on human nature, but, according to her Kantian perspective, it is a kind of constructed human nature. She explains, as mentioned, that ‘[a] human being is an animal whose nature it is to construct a practical identity that is normative for her’ (1992, 105).

Quite a number of philosophers believe that values are part of nature, without reducing them to physical stuff. I have mentioned McDowell, Putnam, MacIntyre Wiggins, Raz and Korsgaard. I also mentioned Nagel’s ‘pervasive conception of natural order, very different from materialism’ (2012, 15)—that is, a non-materialist naturalism, including mind, consciousness, meaning and value as fundamental parts of nature that cannot be reduced to matter (id., 20; 44).¹⁸ Nagel stands against physicalism and scientific naturalism, and he

¹⁸ Nagel (2012, 6) argues against both ontological and epistemic materialist naturalism: ‘It is prima facie highly implausible that life as we know it is the result of a sequence of physical accidents together with the mechanism of natural selection. We are expected to abandon this naïve response, not in favor of a fully

regards teleology as ‘a naturalistic alternative’ (id., 91; 122; 124), a conception that has old classical overtones.¹⁹ In the human consciousness field, teleology entails the use of practical reason to direct actions towards an end. Nagel asserts that human action ‘is explained not only by physiology or by desires, but by judgments’ (id., 114) made by practical reason. In sum, values are part of nature for Nagel.

Similarly, Bedau (1991, 655) states, ‘A broader view of nature, perhaps roughly Aristotelian in outlook, could reckon objective standards of value as part of the natural order. According to this broader form of naturalism, which would contrast with supernaturalism and would reject the miraculous in nature, values would be real non-eliminative natural properties, subject to broadly scientific investigation.’ This scientific investigation does not fit in with the narrow science of scientific naturalism. I will revisit the topic of the scientific character of broad naturalism in the next section. For Rescher (2017, 15) the fact that a value is not perception-accessible does not make it something non-natural.

In her book *Natural Goodness*, Philippa Foot proposes a naturalist theory of ethics, but her naturalism is not a ‘scientific naturalism.’ Her purpose is ‘to break really radically both with G.E. Moore’s anti-naturalism and with the subjectivist theories such as emotivism and prescriptivism that have been seen as clarifications and developments of Moore’s original thought’ (2001, 5). She speaks about the ‘natural goodness and defect in living things,’ including human beings, in a theory with evident Aristotelian resonances. Human defects and excellences depend on what human beings are and do. Subjectivists mistakenly disconnect moral judgments from the reasons underlying them: ‘acting morally is part of practical rationality’ (2001, 9), which is connected with facts. Foot states, ‘recognition of a reason gives the rational person a goal; and this recognition is [...] based on facts and concepts, not on some prior attitude, feeling, or goal’ (2001, 23). Rather than disconnected from nature, moral obligations actually stem from it and from living conditions, and practical reason captures them. For example,

Men and women need to be industrious and tenacious of purpose not only so as to be able to house, clothe, and feed themselves, but also to pursue human ends having to do with love and friendship. They need the ability to form family ties, friendships, and special relations with neighbours. They also need codes of conduct. And how could they have all these things without virtues such as loyalty, fairness, kindness, and in certain circumstances obedience?’ (2001, 44–45).

That is, the requirement of virtues derives from human nature and from its living conditions.

Footnote 18 (continued)

worked-out physical/chemical explanation but in favor of an alternative that is really a scheme for explanation’ (see also Nagel 1998 and Nagel 1986, 51–53 on consciousness as an irreducible aspect of reality). However, as Gasser (2017, 2) explains, Nagel (1986) does not commit to a notion of values that goes beyond the material realm.

¹⁹ Here an introduction to some Aristotelian concepts is advisable. ‘Nature’ comes from ‘natura’, the Latin translation of the Greek ‘physis’. Aristotle, in his first book of *Metaphysics* (I, 3), reviews Pre-Socratic philosophers’ views on the nature of the *physis* and argues that, for them, the origin of all things was material. He then presents his take on a teleological view of nature that includes non-material elements, adding the formal and final cause to the material and efficient cause. The current view of nature as only material is similar to the primitive, pre-Socratic, pre-metaphysical notion of reality. Indeed, Dilworth characterizes the physicalist worldview as materialist and mechanistic: causality is reduced to empirically observable, efficient and material causes (2006, 57ff. and *passim*).

Barry Stroud argues for a more ‘open-minded or expansive naturalism’ that includes values. He bases his argument on the need to explain everyday things:

This doctrine says we must accept everything we find ourselves committed to in accounting for everything that we agree is so and want to explain. We want to explain the thoughts, beliefs, knowledge, and evaluative attitudes that we think people have got. [...] If some evaluative propositions must be endorsed in order even to recognize the evaluative attitudes of others, then evaluative states of affairs must be included too, however difficult it might be to decide which particular evaluations are correct (1996, 54).

At the same time, he asserts,

Those who remain committed to a determinate and restricted conception of the natural world will have to locate the contents of all those attitudes somehow within that restricted world. If that leads to a distorted conception of the attitudes that people on Earth have actually got, as I think it does, the determinate and restricted naturalism is what is responsible for the distortion. A more open-minded or expansive naturalism will admit states of affairs and psychological phenomena that are found problematic from a more restricted naturalistic point of view. With no restrictive commitment in advance, a more open-minded naturalism will feel no pressure to exclude from the picture anything that is needed (1996, 54).

Similarly, Peter F. Strawson opposes a ‘catholic’, ‘liberal’ or ‘soft’ naturalism to a ‘strict’ or ‘reductive’ naturalism (1985, 1). He explains that, according to Hume and Wittgenstein, there are things that are indubitable: we cannot confront the skeptical with arguments about them; instead, we must point out that his doubt is ‘idle, unreal, a pretense’ (1985: 21). Strawson offers three quotes (1985, 26):

In the Preface to the second edition of *The Critique of Pure Reason* (B xi), Kant says, “it remains a scandal to philosophy and to human reason in general that the existence of things outside us... must be accepted merely on *faith* and that if anyone thinks good to doubt their existence, we are unable to counter his doubts by any satisfactory proof.”

In *Being and Time* (I. 6), Heidegger ripostes: “The ‘scandal of philosophy’ is not that this proof has yet to be given, but that *such proofs are expected and attempted again and again.*”

To complete this short series of quotations, here is one, from Wittgenstein again, that neatly sums things up from the naturalist, or social naturalist, point of view: “It is so difficult to find the *beginning*. Or better: it is difficult to begin at the beginning. And not to try to go further back.” (471).

Clearly, not everything needs to be argued. There are some facts—Strawson refers to the existence of body and the physical world—that can be captured directly by an intellectual apprehension (which is not Moore’s intuition), claiming that they partake of our ‘natural metaphysics’ (1985, 31). Then, Strawson talks about Scotland’s Thomas Reid, who ‘draws an explicit parallel between our natural commitment to belief in external things and our natural proneness to moral or quasi-moral response’ (1985, 34). Strawson considers that there are two different ‘stand-points’ from which we can view human actions: one naturally inherent as social beings—‘involved’ or ‘participant’—and

another ‘objective’ or ‘detached’, which is purely naturalistic. In the first stand-point human beings are moral agents. He states,

We are naturally social beings, and given with our natural commitment to social existence is a natural commitment to that whole web or structure of human personal and moral attitudes, feelings, and judgments of which I spoke. Our natural disposition to such attitudes and judgments is naturally secured against arguments suggesting that they are in principle unwarranted or unjustified just as our natural disposition to belief in the existence of body is naturally secured against arguments suggesting that it is in principle uncertain. Thus far, our naturalist way with the moral skeptic parallels our naturalist way with the skeptic about the existence of the external world (1985, 41).

Similarly, Jennifer Hornsby proposes a ‘naïve naturalism,’ based on a concept of the human person as a whole. The account of her actions goes beyond the explanation by a physicalist chain of efficient causes: the person is a rational creature, having reasons—sometimes values—and a power to act (2015, 1997, 132ff.). For Hornsby, ‘conscious purposive subjects are simply elements of the natural world’ (1997, 2). These conscious subjects of experiences are not brains (1997, 22), as an impersonal or third-person perspective would consider (1997, 129ff.). Real human actions are inaccessible from this latter point of view. In the same vein, Nagel, whom she (2004, 8) cites, affirms that ‘there seems to be no room for agency in a world of neural impulses, chemical reactions, and bone and muscle movements’ (1986, 110). Hornsby relies on common-sense psychology as source of our knowledge about human beings and their agency. To deny this, she thinks, amounts to falling in a sort of nihilism (1997, 6). She does not feel embarrassed to use the word ‘naïve;’ rather, she believes that this is the right way to access these human realities.

Wiggins also ‘naïvely’ argues against the thesis that moral values do not have causal effects, wondering ‘are we really meant to believe that the courage of a soldier or the charity (benevolence, kindness, considerateness...) of a Samaritan will not figure in any explanation of anything that exists or comes to pass?’ (2006, 380).

My mother often asks me what I am working on. My answers must be very simple, because she is in her eighties and an architect, not a philosopher—though architects are sometimes wiser than philosophers... When I explained to her that I am trying to argue that values must be present in sciences she told me, ‘That is obvious. Values are everywhere. Why would they not be present in science?’ Period. Her remark reminded me of Hornsby’s and Wiggins’ arguments, and it sounded sensible.

The conclusion at this juncture is that values exist and are natural facts, but they cannot be explained by the methods of natural sciences. The following question is: are values susceptible to scientific explanations, or do they belong to a different, unscientific knowledge realm?

6 Are Liberal Naturalism and Values A-Scientific?

The term ‘scientific naturalism’ seems to imply that liberal naturalism is not scientific, and this view stems from today’s reductive notion of science. Gasser is aware of this:

McDowell pleads for a liberal form of naturalism in which thinking, knowing and feeling are accepted as being part of our way of being animals. Any aims of naturalizing them by integrating them into the realm of causes and natural laws as the

proper space of science are rejected because human beings as rational animals find no place in *such a constricted scientific picture* anymore (2007, 8).

I agree with De Caro and Macarthur (2004, 14) when they say ‘better scientific’ than ‘scientific’ naturalism. Putnam (2002, 26) and FitzPatrick (2016, 9) use the term ‘scientific’, while Jennifer Hornsby agrees that the appropriate name for scientific naturalism is scientific (1997, 227), elaborating on this ‘naturalistic’ outlook (2004, 23). De Caro also asserts that strict naturalism is scientism (2011). In turn, Williamson (2014, 31) notes that ‘[scientific or restrictive] naturalism as dogma is one more enemy of the scientific spirit’ because it only accepts the methods of natural sciences while discarding the most appropriate methods to explore the questions of other subjects pertaining other sciences.

Hornsby, however, does not seem concerned about the scientific nature or lack thereof of her naïve naturalism, while McDowell also opposes liberal to scientific naturalism, apparently discarding the scientific character of the latter. Everything depends on the notion and scope of science, and the question remains, is it possible to scientifically deal with values? This was not only possible but absolutely necessary for Aristotle and for most philosophers until modern times.

For Aristotle’s teleological conception of human action, the reference to goods as ends was essential. There is a combination of two uses of reason—theoretical and practical—in order to know what is good and act according to this. While there are many views on the roles of human reason dimensions or uses, it is safe to say, as R. Jay Wallace (2014) does, that ‘Theoretical reflection about what one ought to believe produces changes in one’s overall set of beliefs, whereas practical reason gives rise to action; as noted above, it is practical not only in its subject matter, but also in its issue.’ A widely shared view of theoretical reason underscores the principles of ethics and practical reasoning that discuss and determine specifically how to behave, matching the classical division between practical science and practical reason. Though inexact, given the characteristics of its subject matter, it is possible to develop a theoretical study of practical affairs. However, I want to stress that I do not agree with the idea that ethical theory may encompass a set of principles, while practical reason simultaneously guides behavior in a different direction. I think that there must be a continuity between the two uses of reason. Currently, Rescher stresses the role of practical reason (2017, 138), rational and objective deliberation (2017, vii) or cognitive reflection (2017, 22) on valuation (see 2017, Chapter 6).

The past two centuries have seen the rise of new notions on practical reasoning that differ from the Aristotelian or classical view, actually voiding it. David Hume reduces practical reason to instrumental reason, as he regards reason as only instrumental, allocating means based on goals determined by desires. Reason depends on and obeys these motivational tendencies. For Hume, there is no rational deliberation about ends, and he views deliberation on means as unconnected to any rational consideration of ends. Ends cannot be argued or analyzed scientifically. His well-known statement reads, ‘Reason is and ought only to be the slave of passions and can never pretend to any other office than to serve and obey them’ (Hume [1739-1740] 1968, 415—II, iii, 3). Hume considers actions as motivated by ends determined by passions, not by reason (id, 415). In other words, for him, the sole role of reason in human behavior is instrumental and cannot be normative, because reason only aims at the truth—it is only theoretical—, while desires are not rational or irrational. Given that desires are the only normative forces of actions, actions are not rational or irrational but laudable or not, or simply ‘non-rational’. Hume’s influence has proven strong, leading to today’s moral emotivism.

This Humean conception of practical reason reduced to instrumental reason has garnered some criticism.²⁰ Millgram (2001, 9), for example, states,

A standard objection to instrumentalism is that it makes ultimate ends come out arbitrary: your ultimate ends are the things you just happen to want; they are beyond the reach of deliberation and rational control. But we know from experience that this is not what our lives are like.

In fact, many authors point to categorical—not hypothetical—reasons for actions that are independent of desires. Aristotelians believe that these reasons can be identified, and, therefore, it can be said that a choice is rational when the option chosen is a good thing. Human nature determines what is good in connection with the essential characteristics of human beings, and practical reason determines what is good as related to the specifications of these characteristics and contingent traits—i.e., what is the most appropriate behavior in specific situations. Searle (2001) emphatically argues for the existence of reasons for actions independent of desires. He thoroughly analyzes the assumptions made by Hume and the Neo-Humean's instrumental rational model, criticizing it while defending freedom, the reality of will weakness, and the existence of external reasons for action. These normative reasons lie outside agents—-independent of their desires—and are subsequently internalized by them (2001, 114–115). Thus, Searle concludes,

On the Classical Model [the Humean] human rationality is an extension of the chimpanzee rationality [...] The greatest single difference between humans and the rest of the animal kingdom as far as rationality is concerned is our ability to create, recognize, an act on desire-independent reasons for action' (2001, 32; see also 124 and Chapter 6).

Indeed, a prior reason underlies desire, driving the performance of the corresponding action (cf. 2001, 170).

Critiques to Hume's take on practical reason do not cast away instrumental rationality and its normativity. Rather, they only show that practical reason cannot be reduced to instrumental rationality, and that reasoning about ends is not only possible but also necessary and prior to instrumental rationality. In fact, what is most properly human is to decide about ends; the decision about ends is followed by a decision about means—a task of 'prudence', which acts imbued by the consideration of ends, taking into account the information about the available instruments to achieve them. We cannot separate the decision about ends from the decision about means: there is a rational interaction matching means and ends.²¹

The normativity of classical practical rationality is ethical, legitimate and necessary in social sciences. Strong support for the inclusion of values in social sciences emerged in the second half of the past century, mainly in Germany. The collective work edited by Manfred Riedel (1972–4), entitled *Rehabilitierung der praktischen Philosophie*, can be considered a hallmark of this trend. These views regard the practical science paradigm as a reaction against the modern prevailing requirement of value-freedom in social sciences.

²⁰ For more critical views on Hume's stance, see Crespo 2017b, 21–24. In the following paragraphs I draw from this book.

²¹ Actually, for Joseph Raz, the notion of instrumental rationality is artificial (a 'myth'): 'with creatures capable of reasoning about ends, reasoning about means is not distinctive and special, but part and parcel of our general rational functioning' (Raz 2005, 28).

Practical reason advocates argue that any science whose subject is an aspect or part of human action must include practical reason considerations as well. A different interpretation of the value-freedom postulate becomes necessary: values should not be ‘officially’ set aside but ‘impartially’ pondered. This is a task for practical reason, as the neutral description of social facts is only achievable with the scientific definition of practical reasonableness standards (see Finnis 1980, 12). In other words, practical reason is used to determine the set of values to seek; thus, values are not discarded but reasoned. Hence, we cannot do away with evaluation. John Finnis explains,

a theorist cannot give a theoretical description and analysis of social facts, unless he also participates in the work of evaluation, of understanding what is really good for human persons and what is really required by practical reasonableness (1980, 3).

Without evaluation we cannot determine what is significant. Therefore, this exercise does not invalidate the value-free ideal, as it looks for an unavoidable rational—neither emotivist nor consequentialist—assessment that is part of social sciences. Güth and Kliemt (2013, 15), quoting H.L.A. Hart (1961), note that understanding a decision presupposes modeling its underlying intentions from an ‘internal point of view’.

Additionally, for some practical science supporters, value-freedom is a pedagogical rather than an epistemological ideal (see Y. Simon 1991, 130-131). Concerning Weber’s *Wertfreiheit* (cf. Weber 1949), Wilhelm Hennis, in a thorough and documented study, concludes ‘that one cannot comprehend the passion with which Weber held to the postulate of value-freedom if it is seen as having primarily a ‘logical-methodological’ foundation’ (1991, 34). For him, it is largely a question of freedom from academic judgment. The value-freedom principle has a primarily pedagogical intention, provided by Weber’s fight against the arbitrary German academic policies of his time: ‘in Germany ‘freedom of science’ exists within the bounds of political and ecclesiastical acceptability—and not outside these bounds’ (ibid.). ‘Value-freedom’ is seen as ‘impartiality’—something that can sometimes be perceived in economics.

In effect, with a largely methodological view, Colander and Su (2015) argue that the positive-normative distinction in economics—as conceived by John Stuart Mill, John Neville Keynes and Lionel Robbins—only served pragmatic purposes: avoiding illegitimate applications of economic theory to practical affairs. As Mill adroitly puts it, economic science (‘political economy’) resorts to simplification in order to consider only the specific ‘economic’ drivers of economic actions—this is positive economics dealing with *homo economicus*. Nonetheless, he clarifies,

All these [economic] operations, though many of them are really the result of a plurality of motives, are considered by Political Economy as flowing solely from the desire of wealth [...] Not that any political economist was ever so absurd as to suppose that mankind is really thus constituted ([1844] 2006, 322).

Consequently, Mill finally emphasizes the need to consider additional motives for these ‘operations’ in order to come to a correct explanation and prediction—a de-idealization process (McMullin 1985):

So far as it is known, or may be presumed, that the conduct of mankind in the pursuit of wealth is under the collateral influence of any other of the properties of our nature than the desire of obtaining the greatest quantity of wealth with the least labor and self-denial, the conclusions of Political Economy will so far fail of being applicable to the explanation or prediction of real events, until they are modified by a correct

allowance for the degree of influence exercised by the other causes ([1844] 2006, 323, see also 326-327).

Lionel Robbins distinguishes economics, the economic value-free science, and ‘political economy’, a ‘branch of intellectual activity’ that includes value judgments (1981, 9).²² I think that Mill’s and Robbins’ views are both pragmatic and positive, for they recall the limits of economic theorizing. Mill and his followers recognize that there are other motives beyond standard economic springs for action, including values, and that they can be known, but these thinkers still believe that these non-economic motivations are not part of rigorous science. Today, challengers of the value-free ideal would contend that values are also embedded in economics.

There is another pragmatic motivation to uphold value-freedom in economics. As Terence W. Hutchison (1964, 17) asserts, ‘the dichotomy between normative and positive statements is not simply a matter of philosophy or logic. It has a considerable political significance’. Indeed, regardless of the unavoidable influence of values in the selection of problems and even in other steps of science—such as gathering evidence and accepting the hypotheses—, theoretical biases produced by personal, political or ideological influences have played a role in the history of social sciences—including economic thinking and practice—and should be avoided. However, this mistake could be repaired with a rational argumentation or discussion on values (see McMullin 1983, 22–23). In fact, new currents—such as the capability approach, happiness economics, civil economy and behavioral economics—are implicitly or explicitly considering values. Values have to be brought to the table to achieve a desirable objectivity (see Douglas 2007, 136).

Amartya Sen has heavily based his capability approach and theory of justice on practical reason (see 2002, 2009). Daniel Hausman and Michael McPherson, specifically referring to economics and its adoption of a theory of rationality, show that rationality is normative, and endorsing that theory unavoidably commits it to moral principles (1996, 7, 25, 45ff).²³ Normativity is not necessarily ethical (see Hands 2012); ethical judgments constitute a subset of normative judgments. In the case of economics, as Hausman and McPherson show, its normative theory of rationality underlies specific moral principles. These authors state, ‘rationality can function as a Trojan horse, smuggling ethical commitments into the theoretical citadel of positive economics’ (1996, p. 45). Also, Reiss (2017) has recently argued for the fact-value entanglement in positive economics. He has pointed out that facts and values are entangled in economic theory development, economic concepts formation, economic models, and in hypothesis testing and acceptance.

Davis (2016) specifically shows how the first fundamental theorem of welfare economics—every Walrasian equilibrium is Pareto-efficient—involves at least four value judgments: first, Pareto judgments assume that all individuals’ preferences have the same weight; second, this implies that distributional issues are not relevant; third, Pareto efficiency does not deal with preference contents, and, finally, the Pareto principle defines well-being as preference satisfaction, which is just one possible interpretation. Davis concludes, ‘Economists consequently promote one ethical vision of the world, while claiming that economics is a positive value-neutral subject, and extol the positive-normative distinction while systematically violating it’ (2016, 213).

²² See Scarantino (2009, pp. 460ff) and my 1998 paper for a more thorough elaboration on this notion according to Robbins.

²³ Guala (2000) also notes that economics works better as a normative rather than a descriptive theory.

Finally, in short, my answer to the question whether liberal naturalism is scientific or not is affirmative: values are natural facts, and reasoning about them is a scientific task—it is practical science. Economists increasingly recognize this, showing that values are present—sometimes behind the scenes—in their discipline.

7 Conclusions

In this paper, I have argued that values are part of nature, that they can be rationally discovered, discussed, explained and argued, and that there is an appropriate scientific way of dealing with them, which is not the method of the so-called ‘natural sciences.’ The arguments supporting these conclusions—common-sense thinking, classical metaphysical knowledge—will probably look weak to scientific naturalists and anti-normativists, like Turner (2010). Indeed, there are no definite arguments for what is evident (but see Turner 2010, 182–183 and 205 on evidence). Nonetheless, self-evident issues require no arguments.

What probably underlies this discussion is the definition of nature, natural and naturalism. If nature is all what it is, as meant by the corresponding Greek word—*physis*—used by ancient Greeks, the ethical is natural (see Fink 2006).²⁴ This can also be discussed: in these terms, it is only a terminological problem, but, if nature is only physical nature, values remain outside the realm of nature and become queer entities that are consequently dispensable or, at most, merely subjective or conventional. As Turner asserts, ‘we create a novel ontological realm beyond explanation, which has mysterious properties. But what necessitates the existence of this realm? A real force? Or our desire to appeal to obligations and the like as justifications?’ (2010, 17).

At least, I have shown that I am not alone in this position and that, up to now, opinions remain divided. These are difficult, deep philosophical issues, and their discussion will probably never end: you can stand for or against the existence of values, their scientific tractability, the reality of freedom and teleology. It is almost a matter of intellectual option. We can make the case for the need of values for our life in society or argue in their favor based on the fact of the linguistic or semantic normativity of some terms and a commitment to them (Sellars, Robert Brandom). However, the truly significant question is whether we are capable or not of metaphysical knowledge, specifically for this case—if it is possible to intellectually capture the existence and content of values.²⁵ Some may say, ‘Yes, we realize that at least some basic values—respect for life, kindness, justice and so on—are not human artificial constructions but natural human attitudes or characteristics about which we can rationally argue’. Others may argue, ‘Sincerely, we do not regard the existence of those values as essential characteristics of human nature.’ However, I firmly question the sincerity or sanity of people making such a statement. Who can remain indifferent while watching innocent people being killed? Who approves of torture? Who likes to harm animals? Who thinks, like Hume, that it is ‘not contrary to reason to prefer the destruction of the whole world to the scratching

²⁴ Fink (2006) has another interpretation of the Greek concept of *physis*, based on his analysis of some passages from Plato and Aristotle. However, this is not the place to discuss this difficult topic.

²⁵ As Risjord recognizes (2016b, 1), ‘questions about the place of normativity in the social sciences instantiate some of the oldest metaphysical and epistemological questions in philosophy’. Steuber (2016, 98) considers that discussions about normativity ‘express a typical philosophical conundrum.’

of my finger'? Who would view the condemnation of these behaviors only as a matter of social agreement or convention? I think that FitzPatrick (2016, 2) puts it quite eloquently,

Convictions about the wrongness of human trafficking, for example, present themselves as recognitions of ethical facts that are *objective* (not contingent on social conventions or subjective preferences, attitudes, or intentions) and carry categorical normative force, providing reasons to agents, independently of their desires, interests or aims.

Indeed, this implies a strong metaphysical condition for moral values as belonging to nature—an issue discussed in the section on the existence of values.

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Ricardo F. Crespo is Professor of Philosophy of Economics at Universidad Austral and Researcher at the Argentine Council of Scientific Research. He is a graduate in economics and philosophy and earned a Ph.D. in Philosophy and another in Economics (University of Amsterdam). He has extensively published articles and chapter books on his research topics. Recent publications of him include articles in *Synthese*, the *Journal of Institutional Economics* and the *Journal of Applied Economics*. His last book is *Economics and Other Disciplines. Assessing New Economic Currents* (Routledge, London, 2017). His current research interests include explanation in the social sciences, economic rationality and ethics in economics.