Abstract. Recent decades are marked by the upswing of the use of the term "normativity" not only in philosophical discussions, but increasingly also within reports of empirical scientists. This may invoke the question how far these developments overlap and in how far they go past each other. A significant overlap might lead to an interesting coalescence of the two approaches to norms, which may provide for a "naturalization" of some philosophical speculations about normativity, putting them on a firmer foundation, while offering the empirical scientists some new impulses for directing their research. In this paper I give an overview of some recent empirical results concerning human normativity and I point out a certain philosophical tradition, rooted especially in the works of Wittgenstein and Sellars, which treats normativity so that it becomes more or less compatible with these results.

1. "Norms", "rules" and "normativity"

1.1. The rise of interest in normativity

A couple of decades ago, the concept of rule held no particular prominence among the ideas typically used by philosophers in their quest to reveal the nature of human beings. Traditionally, the hot candidates for the "specific factors" making us what we are were reason, language, conceptual thought etc.

The concept of rule, to be sure, has never been alien to philosophy. Rules have always been studied by, for example, logicians and ethicists; and when our focus has been human communities, then we have delved into social rules; but the very existence of rules was not thought of as a fundamental discriminatory factor of crucial importance with respect to the nature of us humans. Indeed, rules were usually considered as a supplementary phenomenon arriving relatively late in the history of Homo sapiens: it had seemed that their emergence must have been preceded by some long development of an already complex cognition (including perhaps a theory of mind and/or a language faculty) of language and of rudimentary forms of cooperation. Therefore, though rules were considered as an important ingredient for human societies, they were not seen as something intrinsic to the identification of human nature.

The change in this situation has been marked by the growth of the concept of "normativity". The following graph shows the occurrence of the term within the corpus of google books between 1920 and 2010:
The upswing of the use of the term indicates the growth of the view that, far from being merely one of the many phenomena to be encountered by those who study us humans and our societies, rules and norms in reality are a crucial underlying dimension of human beings, being inherent to human practices, human mind and/or human language.

This is to say that various philosophers have started to argue that rules and normativity lie much deeper, both in the phylogenetic history of mankind and in the "nature" of current humans, than the previous general view had it. Their point is that higher forms of human cognition (like conceptual thought, theory of mind, reasoning, language etc.) are underlain by normativity rather than being its pre-requisites\(^1\). Given this, it would seem that the normative dimension of human nature, \textit{viz.} the fact that humans are disposed to discern norms, to adopt them, to abide by them etc., may be something crucially characteristic of our species as such.

Interestingly, in recent years a similar increase of interest in rules and normativity has shown itself in the empirical sciences. Papers which present or summarize empirical research and use the concept of normativity to account for their results have begun to multiply\(^2\). These findings seem to indicate that the conjectures put forward by a few imaginative philosophers, namely that that rules are vital constituents of our, human way of life, have acquired a form in which

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\item \textbf{1} Thus, for example, Andrews (2009) argues that "having a theory of mind requires having at least implicit knowledge of the norms of the community, and that an implicit understanding of the normative is what drives the development of a theory of mind" (p. 433); while Cash (2009) urges that "contentful intentional states are normatively constituted within linguistic, social practices" (p. 133). In general, the view that normativity is not a result of our complex cognitive and/or discursive efforts, but rather already a specific dimension of our, human low-level coping with the world and with each other, has been argued for by a number of authors (see, e.g. Baerveldt & Voestermans (2005); Rietveld (2008); or Ginsborg (2011)). Some aspects of the recent development are summarized by Finlay (2010).
\item \textbf{2} Thus, for example, Rossano (2012) refers to a number of studies that "indicate that social norms are unique to humans and play a pivotal role in our hyper-cooperative tendencies" (p. 4). In a similar spirit, Rochat (2015) stresses that "the human state of being normative is unique in nature" (p. 741); while Rakoczy (2015) concludes that human children, unlike primates or other non-human animals, "use their essentialist and generic thinking for developing a distinctively social ontology, to conceive of their surrounding in terms of socially constituted objects governed by general prescriptive norms" (p. 683).
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they can be, and actually have been, verified by empirical research. This development is eminently interesting; and it may, I believe, represent a landslide for how we view our species.

1.2 Naturalization of normativity

Norms, as considered by philosophers, sometimes look as something that does not fit very well with the causal picture of the world as delivered by science. At the extreme, there seems to be something as the "world of the normative", irreducible to anything causal and not being explorable by the methods of science. Stephen Turner (2010, 9), one of the eminent critics of this "occult" notion of normativity, summarized the consequences of the claims of its proponents as follows: "Normative facts, constitute a rupture in the world of ordinary fact". They do not fit into "the ordinary stream of explanation". In short, "normativity is a name for a non-natural, non-empirical stuff that is claimed to be necessarily, intrinsically there and to in some sense account for the actual" (ibid., 5).

This may lead, on the one hand, to seeing the philosophers treating of normativity as a sort of occultists, who cannot be taken seriously by science; or, on the other hand, to seeing current science as unable to address a vital dimension of us humans. It is certainly true that some philosophers consider normativity as something inaccessible to science; so if we do not want to have an unbridgeable gap between the philosophical and the scientific images of the world, a "naturalization" of normativity seems to be called for.

In this paper I want to point out that this all philosophical approaches to normativity are not so orthogonal to science as those criticized by Turner. I want to point out that there is a philosophical attitude to norms that lends itself to an interconnection with empirical findings. (Though this is not to say that its proponents would mean it as aiming at a naturalization.)

It is important to see that the term "normativity" covers an assortment of very varied views, from those that fits with Turner's derogative characterization to such that propose wholly naturalized versions of normativity (i.e. such that norms are reducible, without a remainder, to causal facts). What I want to point out is that even one of the most central philosophical traditions putting weight on normativity, a tradition starting with people like Ludwig Wittgentein and Wilfrid Sellars, may be taken to lead to such a construal of normativity that chime with some recent results of anthropology, psychology and behavioral science.

What is characteristic of this tradition – in contrast to other traditions, according to which norms are some absolute determinants of our conduct, independent of what we, as a matter of fact, do – is that norms are parts of the natural world; they are features of the kinds of practices that we humans have developed and that can be studied in the way we study the rest of the animal world. From this viewpoint, the talk about "naturalization" of norms is not really appropriate -
norms need not be naturalized, for they are already part of the world, namely of human communities.

1.3 Disambiguation

A significant problem is that the term "normativity", as well as the terms "norm" and "rule", are prone to ambiguities, and authors employing them sometimes address rather different issues. Therefore it is vital to clarify the meanings of these terms.

From this viewpoint, the term "normativity" is especially problematic, as it is not quite clear whether we can speak about a single concept of normativity that is behind the term. The point is that it is not clear whether the term is always – or at least in the majority of cases – used in the same sense; indeed many of the authors using the term do not bother to clearly explain in which sense they use it. The situation is slightly better with respect to "rule" and "norm", where at least some rough "preunderstanding" can be presupposed. Still, however, dangerous ambiguities plague the employment of even these terms.

The term "rule" is often construed as referring to some linguistic or – more generally – symbolic object. On this construal, it is sentences like "One ought not have more than one wife", "One should greet older people" or "If one receives a present, one ought to reciprocate" that are paradigmatic cases of rules. (Well, maybe not the sentences, but their meanings, – but still rules in this sense are inseparable from a language or at least to a symbolic system.) Such rules may be in force in some communities, while not be in force in others.

But this is not the whole story, for we must not ignore "unwritten rules". Some rules are not codified, and some not even explicitly stated, and yet they can still hold force. For example, a community might be said to follow the rule that if one receives a present, one should reciprocate, even without the rule being explicitly stated (perhaps even without the members of the community fully realizing that there is such a rule). On what basis are we justified in claiming that there is such an "unwritten rule"?

It is clear that the only evidence we can have for such a judgment consists in the behavior of the members of the relevant community (in the typical case the evidence would be that there are ways of behaving which are not only usually followed, but which are also "required" in that people encourage others to behave in this way and try to divert them from doing otherwise.) From this viewpoint, when we say that there is a rule in force in a community, what we are talking about is some social constellation or a persistent behavioral pattern.

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3 In a paper where I discussed Turner's criticism in detail I dubbed this view "social normativism" (Peregrin, 2016).

4 Many of the papers discussed here, for which normativity is a central concept, do not offer any explanation – not to speak about definition – of the concept. See, for example Baerveldt, & Voestermans (2005), Wyman et al. (2009) or Schmidt et al. (2011). Explanations in other papers are often only cursory or partial.
Svoboda (2018) has introduced a useful disambiguation: he proposes to use the term *L-rule* for a rule in the sense of a linguistic object, and *S-rule* for the sense of a social configuration. An S-rule can exist without a corresponding L-rule; and it can be made explicit by an L-rule. Also an S-rule can be brought into being by means of the corresponding L-rule (if put forward by somebody with the needed authority). As there can be an S-rule without a corresponding L-rule, while an L-rule without a corresponding S-rule appears to be a rule more in merely a potential manner, we will use the term "rule" primarily in the sense of "S-rule".

Various different classification of rules have been given in the literature. Here I would like to single out especially what I will call *non-instrumental* rules, in contrast to instrumental ones (von Wright (1963), in his classical classification of rules, calls them *directives*), for I think that the latter are only rules in an attenuated sense and that what makes us humans special must be rules in some deeper sense. An instrumental rule derives from a goal: if we have a goal, then we can say that doing something is correct insofar as it contributes to achieving the goal. Thus if I am thrown into water, I can either swim or drown; hence if my goal is to survive, then it is correct to swim. (And in so far as I can say that survival is a “natural goal” for any organism, we can say that this is “naturally” correct.)

Why do I say that instrumental rules are rules in an attenuated sense? Consider the claim “If one does not want to drown, one should swim in water”. At least in one of its senses, what the sentence says should be done can be alternatively expressed by a sentence that is wholly non-normative: “If one swims in water, one does not get drowned”. Thus in this case, there is the suspicion that the underlying situation is not normative at all, that the normativity is merely an artefact of one of its possible descriptions.

It is clear that this kind of normativity can be seen as present even in the non-human world. For example, there is a sense in which evolution confers goals: the goal of any product of evolution is what the product has been selected for. (Thus the goal of the heart is to pump blood, and the goal of any human organism is to survive and produce offspring\(^5\).) So these cannot be the rules which mark out our species as different.

What, then, is a non-instrumental rule? It is a rule which does not derive so directly from a goal. Consider the rule that a certain sound is to be emitted when it is raining, or that a dance is to be carried out thus and so, or that one should greet other people in certain situations. True, all these rules can be seen as contributing to some goals (the first perhaps to an "exchange of information", the second and third to achieving social coherence), but they are not yielded by the goals in such a direct way as instrumental rules are. Each involves a certain level of arbitrariness; and it is precisely the establishment of such partly arbitrary rules (which do not directly serve a pre-given goal, but which, however, can contribute to achieving various other

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goals in unprecedented manners and which, moreover, can institute brand new goals) that characterizes us as a peculiar kind of social species⁶.

As for the term "norm", it is sometimes used interchangeably with "rule", and sometimes in a rather different sense. Often the sense of "norm" is considered to be broader than that of "rule", in that the former term, unlike the latter one, applies also in situations when something is "normal", viz. it is done usually or regularly, without this being taken to be correct. Here, however, we will not distinguish between a rule and a norm.

Finally, then, we can get back to the term "normativity" and I can specify the sense of it which I find fruitful and which I am going to pursue here. In what follows, I want to point out that in philosophical literature we can trace a line of though which leads to an explication of this concept which is not only clear, but leads to a certain "naturalized" view of normativity, in which normativity can be made continuous with results of empirical work. As a first approximation, we will speak about normativity where there are some human doings or practices which can be classified as right or wrong⁷. (Thus, if we, for example, speak about the normativity of the human mind, we claim that there is some sense in which the human mind has to do with rules, or that the actions of the mind can be classified as right or wrong.)

However, to get a firmer grip on the "naturalized" concept of normativity we are after, we must pay attention to two philosophers who are mostly responsible for norms and rules getting to the center of philosophical discussions in the second-half of the twentieth century.

2. Philosophy

2.1 Implicit rules: Wittgenstein

The philosopher who is most responsible for generating the huge increase of interest in rules in the second half of the twentieth century is Ludwig Wittgenstein. Abandoning his earlier "picture theory of language", he went on to present, in his *Philosophical Investigations* (Wittgenstein, 1953), the idea of language as a motley of "language games", heterogeneous discursive practices which we all engage in.

Wittgenstein's interest in rules and rule following obviously stemmed from his conviction that many (if not all) language games are rule governed, and that to understand them involves understanding how we follow their rules. Hence, a large part of his book is devoted to the investigation of such questions as *How am I to determine the rule according to which someone*

⁶ Rakoczy (2015), p. 689, claims: "Just as the glue that organizes the natural world (as we think of it) are descriptive regularities, the glue that keeps together the socially constituted world (as we think of it) are prescriptive rules."

⁷ Rochat (2015), p. 741, writes: "This is what we refer here as human normativity: practices or judgments that are collectively construed and internalized as either right or wrong, good or bad, true or untrue."
is playing a game? (ibid., §82). Can we have rules to explain other rules? (§86) or When does one know the application of a rule? (§147-8). 8

From our current perspective, Wittgenstein brings a vivid argument against the identification of rules with L-rules. Wittgenstein writes:

85. A rule stands there like a sign-post.—Does the sign-post leave no doubt open about the way I have to go? Does it shew which direction I am to take when I have passed it; whether along the road or the footpath or cross-country? But where is it said which way I am to follow it; whether in the direction of its ringer or (e.g.) in the opposite one?—And if there were, not a single sign-post, but a chain of adjacent ones or of chalk marks on the ground—is there only one way of interpreting them?—So I can say, the sign-post does after all leave no room for doubt. Or rather: it sometimes leaves room for doubt and sometimes not. And now this is no longer a philosophical proposition, but an empirical one.

Any L-rule ("sign-post"), in order to instruct me what to do, must be interpreted, and it must be interpreted correctly. In other words, to follow an L-rule, I must know the rules of its interpretation – viz. to be able to follow an L-rule, I must already follow some rules. And if these last rules were also L-rules, I would be in a vicious circle, which would prevent the rule following from getting off the ground. To avoid the circle, we must admit that at least some of the rules presupposed by L-rules are not themselves L-rules; there must be, as Wittgenstein would put it, some rule following that is not an interpretation.

So far, so good: we have "unwritten rules", the following of which, as Wittgenstein puts it, is a matter not of an interpretation, but rather of practical "mastering a technique" (§199), there must be rules which I follow "blindly" (§219), the following of which is a "custom (use, institution)" (§199). But of course, Wittgenstein was well aware that this cannot be the end of the story. Certainly not every custom and not every technique amounts to rule following; hence the crucial question is where does the normativity of those customs or techniques that do amount to rule following come from.

Wittgenstein's answer is that the source of normativity has to do with human sociality, that rule following must presuppose the background of some society:

202. And hence also 'obeying a rule' is a practice. And to think one is obeying a rule is not to obey a rule. Hence it is not possible to obey a rule 'privately': otherwise thinking one was obeying a rule would be the same thing as obeying it.

8 Wittgenstein's meticulous investigation into the nature of rules taught us some important lessons and indicated that rule following is far from a transparent enterprise. This conclusion was picked up by other scholars who tried to elaborate on Wittgenstein's analyses, the most influential of which was Kripke's book Wittgenstein on Rules and Private Language (Kripke, 1982). This book stimulated a new wave of "rule following discussion" (McDowell (1984); Goldfarb (1985); Boghossian (1989); Haugeland (2000)). Thus, the legacy of Wittgenstein, in this respect turned out to be eminently stimulating.

In what sense does a society "produce" the normativity needed to turn "customs" or "techniques" into rule followings? An idea that may come to mind is that a society renders a doing as correct iff it accords with the doings of a majority of the relevant society. However, this idea, which Blackburn (1984) dubs a "democratic harmony" theory of normativity, is hardly viable - it would preclude the possibility of a great majority of a community being incorrect, which it seems should not be generally excluded.

Hence a deeper theory of the birth of normativity from society appears to be needed. Various proposals in this direction have been presented (See Kusch (2002), Chapter 14, for an overview), but I will concentrate on the conception of Wilfrid Sellars.

2.2 Ought-to-be's: Sellars

Wilfrid Sellars was the only well-known philosopher who was taking the nature of human normativity to be the central problem of philosophy already before Wittgenstein's *Philosophical Investigations*. In his 1949 paper he famously states that "to say that man is a rational animal, is to say that man is a creature not of *habits*, but of *rules*" (Sellars, 1949), p. 298.

At the same time, he was clear about the fact that the most basic form of a rule is not an L-rule, but rather an S-rule. As he would put it, "the mode of existence of a rule is as a generalization written in flesh and blood, or nerve and sinew, rather than in pen and ink" (*ibid.*, p. 299). We have already noted that an S-rule is a matter of the behavior of the members of the relevant community, in particular their encouraging others to behave in a certain way and discouraging them from doing otherwise. Brandom (1994), p. 32, introduced the term "normative attitudes"; and from the viewpoint relevant here we may say that these are cases of "second-order" behavior, behavior aimed at behavior by giving the producer of the "first-order" behavior a positive or a negative feedback.

Hence, just like Wittgenstein, Sellars stressed that not all rules can be L-rules (in his own terminology, not all rule following can be "obeying of rules"). At the same time he urged (again in accordance with Wittgenstein) that following a rule cannot amount just to behaving regularly (to "merely conforming to a rule", as he put it). And his verdict is that in between a behavior that amounts to fully-fledged rule obeying and one which is merely regular, there mediates a behavior which he called "pattern-governed" (Sellars, 1954). This notion, I believe, can deepen our understanding of the nature and working of the kind of S-rules that are characteristic for human societies, and consequently for the nature of us humans.

What is "pattern-governed" behavior? This kind of behavior is more than just "rule conforming" (regular), for there is a sense in which we can say that it is done, as Sellars puts it, "because of the system" (p. 209). On the other hand, it is less than the "rule obeying" behavior (following of an L-rule), for it does not involve an explicit comprehension of the rule. It is brought into being by individuals being subject to a specific kind of "enforcement", which shapes their behavior into the pattern in question.
Imagine I want a dog to conform to the rule that if I throw a ball, he should bring it back to me. Using incentives and discouragements, it may not be too difficult to shape the behavior of the animal into the required pattern. The resulting behavior, then, arrives because of the rule, though the dog need not follow the rule in the sense that he would be aware of it. Of course, that it is possible to train a dog might not seem to be a philosophical discovery; but Sellars points out that in the case of humans the same process tends to have different consequences: human subjects of the "pattern-governed behavior" would tend to not only instantiate the pattern, but gradually also start to make others instantiate it.

Sellars (1969) notices that aside the standard rules which directly make the agent do something, which he calls "ought-to-do's", there is a different kind of rules, which he calls "ought-to-be's". Ought-to-do's are the ordinary kind of L-rules, viz. prescriptions, which order an agent to do something, such as "You ought to close the door". To follow them, the agent must interpret them and hence must possess the concepts they involve, e.g. the concepts of door and of closing. Ought-to-be's look similar, but they may prescribe something to an entity which is not an agent ("The door ought to be closed"), more generally, they flag a state-of-affairs as correct and hence desirable. Ought-to-be's, in the eyes of agents, may bear various ought-to-do's, namely such prescriptions which are aimed at bringing the desired state into being. We can imagine this as a practical syllogism carried out by the agent: If the door ought to be closed, and my closing it will make it closed, then I shall close it. Again, the agent must possess the relevant concepts to use the ought-to-be to carry out this syllogism.

Now Sellars points out that the elucidation of the interplay of these two kinds of rules may help us understand how rules exist and proliferate in human communities. Suppose that the community already contains rule-followers, who are able to follow ought-to-do's and are able to derive ought-to-do's from ought-to-be's. Suppose further that the ought-to-be's they follow include at least some that concern human agents. Then the rule-followers will derive the corresponding ought-to-do's and will try to make his fellow humans display the regularities articulated by the ought-to-be's. (If the ought-to-be is, say, "People ought to greet each other", then the ensuing ought-to-do is "One ought to bring it about that people greet each other", which may yield the more specific "One should make ones children greet other people".) Those of the humans that are not yet agents and rule-followers (especially infants) will display the regularities as the pattern-govern behavior – as a behavior that is not yet rule-obeying (for the humans are not yet rule-followers), yet that is here because of the rules.

Now the crucial point is that the neophytes, unlike other animals, do not remain in this state, do not acquiesce in this pattern governed behavior, but start to recognize the patterns they are made to instantiate as the ought-to-be's. Novices entering the human community, who are not yet skilled rule followers and accomplished concept mongers, must be able to acquire this capability via being initiated into the community – they must be able to recognize the normative force of ought-to-be's and ought-to-do's prior to their being able to conceptually articulate them.

Thus, a novice, according to Sellars, starts as the subject of ought-to-be's, as a learner of linguistic and other rules. But unlike the dog, who just yields to the forces which work to make him comply with the rules, to display the required behavioral pattern, a human learner is made
not only yield to them, but also to start taking part in their enforcement. Thus, by learning she becomes also a teacher of the rules.

Hence it would seem that what differentiates the human from the dog learner is that the former, unlike the latter, is able to recognize the social forces for something special, different from natural forces, and in their case tends to evolve from their subject to their enforcer. She recognizes the forces as realizing ought-to-be's, draws the corresponding ought-to-do's from these ought-to-be's via the practical attitudes, and thus assumes the normative attitudes which help to maintain and propagate the rule in question.

### 2.3 Normative attitudes: Brandom

The last piece into this mosaic of rules and rule-following was added by Robert Brandom, who developed some ideas implicit to Sellars' teaching to deliver a self-contained picture of the functioning of rules within human communities. According to him, implicit rules, the existence of which is crucial for the theories of both Wittgenstein and Sellars, exists, first and foremost, in the form of "normative attitudes" of members of relevant communities, viz. their tendencies to encourage some forms of behavior and repudiating others - of that which in its developed form can be called sanctions and rewards.

Haugeland (2000), p. 148, tries to explain the situation in terms of the concept of "conformism", which, according to him involves not only imitation, but, crucially, "censoriousness", "that is, a positive tendency to see that one's neighbors do likewise, and to suppress variation". All of this is "a complicated behavioral disposition, which the creatures have by nature ('wired in')". Haugeland then concludes: "When behavioral dispositions aggregate under the force of conformism, it isn't herds that coalesce, but norms."

Brandom (1984, 30) retells the story in terms "normative attitudes":

> The approach being considered distinguishes us as norm-governed creatures from merely regular natural creatures by the normative attitudes we evince - attitudes that express our grasp or practical conception of our behavior as governed by norms. These normative attitudes are understood in turn as assessments, assignments to performances of normative significance or status as correct or incorrect according to some norm. The assessing attitudes are then understood as dispositions to sanction, positively or negatively. Finally, sanctioning is understood in terms of reinforcement, which is a matter of the actual effect of the sanctioning or reinforcing responses on the responsive dispositions of the one whose performances are being reinforced, that is sanctioned, that is assessed.

And though Brandom himself does not find this picture yet fully satisfactory, the notion of normative attitude can indicate how we can imagine the workings of "implicit rules". Imagine a clan of our prehistoric ancestors who start to display certain kind of behavior when they notice a danger, a kind of behavior that can be noticed by others. This habit may turn out to be very useful, while it may be used by others as a warning, so no wonder that members of the clan may
start to appreciate those who display it in case of danger and scorn those who do not do so - i.e. produce rudimentary normative attitudes. In such a way there appears a state which we can call a "proto-rule", which may further turn into a proper implicit rule, if the appreciation/scorning reaches a quite systematic and later perhaps a conscious form.

3. Empirical findings

3.1 Children and norms

In 2009, when the role of rules within human ontogeny started to move into the focus of empirical scientists, Rakoczy et al. published the results of the experiment, in which children (3-years old) first learned how to play a simple rule game, and then they were exposed to a puppet violating the rules of the game. It turned out that the children displayed "normative responses" (i.e. tried to correct the puppet), while they did not display them in the context where the puppet did the same thing outside of the context of the rules of the game. The authors concluded that "even very young children have some grasp of the normative structure of conventional activities".

In the same year, a similar experiment was carried out by Casler et al. Young children (2 and 3 year old) familiarized themselves with the functions some artifacts. A puppet subsequently used the artifacts in atypical ways, which also elicited "normative responses" on part of the children. The authors summarized their results by claiming that they "depict toddlers as already sensitive to the uniquely human, normative nature of tool use", but an important thing this experiment indicated was that young children were not only quick in grasping genuine norms, but that their tendency of extracting norms from the environment was so intense that it led them to overgenerate – to interpret as normative what they felt as normal.

A lot of similar studies followed. In 2011, for example, Clément et al. published the results of a similar experiment, in which children (3- and 4-year-olds) underwent versions of the false-belief task, some of which were modified by the introduction of a rule or a regularity. It turned out that when the task included a rule, the performance of 3-year-olds, who fail traditional false-belief tasks, significantly improved. What was also remarkable about this experiment was that in one of its versions, the presence of the rule which played the crucial role in it was not indicated verbally, but exclusively in terms of the normative attitudes. ("Instead of giving a verbal rule, like in Study 1, Study 2 tested the capacity of 3-year-old children to infer the presence of a rule from the censoring behaviour of a significant figure (teacher) and to use this inferred rule in order to predict the behaviour of the protagonists.") In this way, it vindicated the claim that a rule can exist solely in terms of the attitudes.

The results of a similar experiment were published, in the same year, by Schmid et al. It concentrated on the question on the basis of what young children detect the presence of a norm, in the absence of its explicit linguistic articulation. The result was that the only cue the children used was adult social-pragmatic marking of the action as familiar, as if it were a token of a well-known type (as opposed to performing it, as if inventing it on the spot).
"These results," the authors claim, "suggest that – in the absence of explicit normative language – young children interpret adult actions as normatively governed based mainly on the intentionality (perhaps signaling conventionality) with which they are performed.

A lot of similar studies followed. What is important for us here what the studies reveal (it is not always what the studies concentrate primarily) is the following: Children are extraordinarily sensitive to the presence of norms in their social environment, they tend to interpret their findings of how things are done as how things should be done, thus overgenerating. The ultimate indicator of norms, however, are the normative attitudes - which, in the most straightforward case, are expressed explicitly by linguistic utterances, which can be, however, also expressed merely implicitly, via "censoring behaviour". This further indicates that norms, in their primordial form, can consist merely in the non-verbal normative attitudes.

3.1 Our "promiscuous normativity"

What experimental evidence has shown us is that we humans have a specific sensitivity for rules, i.e. a capacity to recognize social rules as distinct from mere regularities – we have, we can say, an uncanny knack for identifying ought-to-be's. This concerns not only adult humans, but especially human toddlers. When an infant starts to explore the world she inevitably encounters boundaries to the "space" which she can inhabit - via finding out that some of her activities get regularly frustrated; they are, as it were "bounced off" by the environment. We might perhaps conjecture that cognitively she starts to represents her world in terms of what is possible; but relatively soon, as her caregivers switch to more subtle ways of posing the normative boundaries, she recognizes the normative boundaries for what they are – something essentially different from natural ones (Kalish, 1998).

What turns out to be the case is that the infant is already prepared to meet the norms halfway. She is sensitive to their occurrence in her environment (which, of course, means that she is sensitive to the normative attitudes that are the vehicles of the norms), readily understanding that some regularities within the environment (especially those displayed by the caregivers and later by a growing range of "persons") are more than just regularities, that they manifest rules, viz. something that ought to be followed. The proclivity of children to pick out rules from the environment is documented especially by the fact that in this respect they often over-generate, expecting or seeing rules where there are mere regularities. The experiments described in the previous section clearly documented that children tend to interpret what adults do (including instructions that are not verbalized, but mediated merely by normative attitudes) as the correct way it is done, even in cases where such expectation is not substantiated. Rakoczy & Schmidt

10 Phillips & Knobe (2018) argue that in the first stages of cognitive development children tend to represent norms on a par with natural boundaries, simply as something the violation of which is "impossible", and that even in the later stages of cognitive development a similar kind of representation stays prominent.
(2013) introduce the term "promiscuous normativity" expressing the fact that children sometimes draw normative conclusions too quickly.\textsuperscript{11} Thus, empirical research indicates that children detect and take on rules in a surprisingly swift way\textsuperscript{12}.

### 3.1 Under the eye of evaluation (and self-evaluation)

Of course that the sensitivity to rules is not restricted to children; it accompanies us throughout our whole lifespan, maturing into our specific way of inhabiting our world. The anthropologists Castro and Toro (2010) write:

During ontogeny, the assessor communication between parents and offspring is extended by other evaluative interactions where the approval or disapproval of behavior is provided by other unrelated individuals. Throughout their lifespan, a person establishes a social reference group with individuals that interact closely during a particular stage of life (parents, partner, friends, and colleagues).

It appears to be an obvious fact that people assess the behavior of their conspecifics as right or wrong, and that this assessment plays a crucial role in human ontogeny. It is such assessments that guide human enculturation and that equips us with what some psychologists have come to call \textit{norm psychology} (Sripada & Stich, 2006). We enter our societies by being continuously curtailed by our elders, and we inhabit the social spaces the "walls" of which are of then nothing but curtailments. We have come to extricate our evaluations of actions from the egocentric perspective and have come to evaluate them independently of how they relate to the evaluator. Tomasello (2014), in this respect, talks about "normative self-governance" (p. 120):

Modern humans thus operate with the social norms of the group as internalized guides to both action and thinking. This means that in their collaborative interactions modern humans conform to the collectively accepted ways of doing things, based on norms of cooperation, and in their communicative interactions they conform to the collectively accepted ways of using language and also linguistically formulated arguments, based on the group’s norms of reason.

This leads to the situation in which many human doings acquire a characteristic shape, in that they with an eye on correctness. As Kern & Moll (2017) put it, in the following way: "when a human walks or talks, her walking or talking is guided by an understanding of what it means to walk or talk, including an understanding of how it is done correctly". How does this come about?

\textsuperscript{11} For other results regarding the role of norms within human ontogenesis see Kenward et al. (2011), Clément & Kaufmann (2011), or Schmidt et al. (2016).

\textsuperscript{12} Of course, this somewhat uncanny sensitivity to norms must be underlain by a cognitive (and consequently neurological) mechanism (it might be related to what some authors see as inherited cognitive specialization of "deontic reasoning" – see Cosmides & Tooby (2005)), but the mechanism is not as yet entirely clear.
The maturing of infants of our species is guided by massive education (unlike that of infants of other species, where purposeful education is an exception and the only learning is a matter of imitation). During this education, the ways we behave are curtailed to fit into the socially delimited channels - we learn the "correct" ways to behave, to solve problems, to deal with others. As result, there comes the "internalization" Tomasello talks about, the transformation of mere doing things into doing them under the surveillance of correctness.

The difference is like the one between merely kicking a ball around the playground and playing football. Though we can imagine that in both cases the people on the playground do exactly the same things, the two cases is very different; and it is only because in the second one, while not in the first, the things happen within a certain framework of rules.

Of course that the presence of the framework is not an esoteric business – it is present in that the participants have it, in some sense, "in their minds". On the other hand, it is not enough for a person's doings to be governed by rules that the person thinks they are governed by rules = as [WittgPhilo1953], §202 famously stressed, "to think one is obeying a rule is not to obey a rule". The reason is that rule is a social institution: though there is a sense it is mind-dependent, it cannot depend on a single mind, it always exists, as it were, in the intersection of more minds.

3.3 The integrative function of rules

There is also another angle from which to view this peculiarity of us humans. A crucial dimension of how we relate to our environment and master it consists in our classifying of the entities we encounter. There is no reason to deem that other animals differ in this respect. (Construing the term classification very broadly, we could even extend this propensity for classifying to inanimate things - for example, we could perhaps say that iron distinguishes certain liquids from other entities by rusting in contact with them.) Of course, the classification as carried out by us humans is extremely sophisticated because we have an unprecedented tool to put to this use, namely language. But what is more interesting for us here is that in addition to engaging in "substantial" or "qualitative" classification, we also engage in "deontic" classification; we classify things as "right" and "wrong", and we do this in more than one sense. What is specific about this kind of classification?

This extrication would seem to link to the genesis of our human sociality, with the way our societies hold together and how they have come to develop their peculiar non-generic, cultural system of inheritance. Rakoczy (2015) suggests that whereas we tend to categorize the natural world in order to capture its observed regularities, when categorizing the social world we not only describe it, but also sustain it. Therefore, "the glue that keeps together the socially constituted world (as we think of it) are prescriptive rules. Full-blown understanding of the social constitution of objects involves an understanding of the deontic powers going along with being a certain kind of socially constituted object, an understanding of the rules coming along with the corresponding practices."
Rochat (2015) comes up with a similar idea. While the natural world challenges us to detect invariants (elements which persist through changes and thus remain the same), when it comes to social, interpersonal relationships, we pursue sameness in a slightly transposed manner. We try not only to detect, but also to establish invariants of our coexistence with others, to "mutually monitor sameness in mutual as well as reciprocal affects and emotional expressions, including the timing of such expression that specifies mutuality".

3.4 Proliferation of norms

A lot of researchers interlink norms with the emergence of our human culture, as a system that is passed from generation to generation on a non-genetic basis. It has been laid out in detail by many theoreticians, and certainly it would appear to be the case that we humans have developed, aside of our standard genetic inheritance, also an additional, paragenetic one, a far swifter (though arguably less robust) system of cultural inheritance.

Clearly, norms must play some kind of non-trivial role within this process. This was emphasized by Boyd & Richerson (2005) and continues to be stressed by other theoreticians of cultural inheritance. Thus, Henrich (2015) argues that the role played for us by rules and norms over our evolutionary history has endowed us with a psychological mechanisms, causing us to assume implicitly that our world is rule governed and prompting us to detect and activate the rules which govern it. The result, then, is that "it’s our automatic norm following – not our self-interest or our cool rational calculation of future consequences – that often makes us do the 'right thing' and allows our societies to work. This means that how well a society functions depends on its package of social norms." (p. 240)\textsuperscript{13}

However, there is a more general link between norms and cultural inheritance. An important ingredient of cultural inheritance is teaching: like the young of other species, human toddlers can learn by imitating the ways of the adults, but in addition to this the human young are actively directed by the adults. Now if we understand rules as we suggest, namely not necessarily as symbolic articulations, but as coordinated normative attitudes, as the resonating propensities of classifying behavior into that which is "right" (and is to be done) and that which is "wrong" (and is to be avoided), we can see that this constitutes also the most elementary level of teaching. This is stressed by Castro & Toro (2004), p. 1023:

The key factor enabling [the transformation of primate social learning into a cumulative cultural system of inheritance in the strict sense] was the fact that some hominids developed the capacity to approve or disapprove of their offspring’s learned behavior. It was this capacity to approve or disapprove of offspring’s behavior that makes learning both less costly and more accurate and that transformed the hominid culture into a system of cumulative cultural inheritance similar to that of humans, although the system was still prelinguistic in nature.

\textsuperscript{13} See also Rossano (2012).
Thus, rules can be seen as the engine on which cultural inheritance runs; and here it seems that the structure that starts to emerge is akin to what we glimpsed from the Sellarsian bird's eye view. It seems that our enculturation proceeds in such a way that we are forced by our caregivers, teachers and eventually other persons, into certain behavioral patterns, first by "brute force", and then by ever subtler methods. However, what is crucial is that the norms thus brought to bear upon the infants, are recognized by the infants for what they are. Only then can the virtuous circle of cultural inheritance get going - only if the infants not only come to follow the rules, but also recognize these rules as "ought-to-be's" will they be automatically transformed into future teachers and propagators.

4. Norms as part of the (sublunar) world

Hence, thanks to this interanimation between philosophical speculations and empirical research it has become clearer which concept of normativity is useful both for philosophy and for the empirical sciences. If we realize, together with Wittgenstein, that the fundamental form of a rule is the S-rule, and if we further realize, together with Brandom, that the S-rules exist in the form of normative attitudes of the members of a society, we can see that normativity (at least the kind of normativity considered here) consists, on the most fundamental level, in the fact that "a person establishes a social reference group [who] evaluate and demonstrate approval or disapproval, even if the behavior in question does not affect them directly" (Castro et al. (2010), p. 353)

It would seem that what is the crux of the matter is our human tendency to display a specific kind of "second-order" behavior targeting our "first-order" behavior with the aim of bolstering or obviating it. This alone is nothing special, nothing that we could not find elsewhere in the animal kingdom; but the specific substrate of the fully-fledged human normativity is distinguished by the phenomenon that the "second-order" behavior targets the "first-order" one as such, i.e. as the kind of behavior it is, not as having a specific source or target.

This is connected with the fact that this reflective "second-order" behavior goes beyond simple instrumental normativity: instead of just assessing cases of behavior according to how they serve some particular goal, we introduce standards of assessment that are to some extent arbitrary and that can interlock to form complex structures which open up normative "spaces" in which we can carry out new actions. (The rule that we can move a certain piece of wood over a chequered board only diagonally, or the rule that it is correct to emit a certain kind of sound if a certain creature is passing by, by themselves serve no useful purpose, but coordinated with

Rakoczy & Schmidt (2013) write: "Even very young children learn and understand social activities as governed by conventional norms that (a) are arbitrary and shared by the community, (b) have normative force and apply to all participants, and (c) are valid in context-relative ways. Importantly, such understanding is revealed both in the fact that children themselves follow the norms, and in the fact that they actively enforce them toward third parties."
other rules of chess or of language they open up "spaces" which let us carry out unprecedented actions: the space of chess games or that of meaningful utterances\textsuperscript{15}.

These specific differences lay the foundations of a very specific kind of sociality, which, in the animal world, is of an unprecedented nature. It provides for a specific behavioral kind of interlocking, which evolves into the complex kind of edifice we know from human societies and which institutes profound interconnectedness among the participants. The normative attitudes tend to induce a superstructure aimed at making the "bolstering or obviating" more effective, turning them into the institutional incentives and rewards or discouragements and punishments which we encounter in developed human societies\textsuperscript{16}.

This might have stimulated the development of our culture, which is to a large extent cumulative, and the fact that we humans, as the only species, have supplemented genetic inheritance with a far swifter (though perhaps less persistent and reliable) system of inheritance, which consists in a non-genetic passing of behavioral patterns from generation to generation. And it seems that the Sellarsian model of producing "rule obeying behavior" via the intermediary of "pattern-governed behavior" might contribute to the explanation of this process. The key is the human ability to recognize rules – to understand that being forced into a pattern by a society (e.g. being coerced to greet other people) is something different from being forced into one by nature (e.g. being forced to swim in water). We come to take the former, unlike the latter, as something we not only must respect, but that we also should help sustain, requiring it also from others\textsuperscript{17}.

What is important is that the set of dispositions underlying this very specific behavior (or "metabehavior") has been engraved, by evolution, into our psychology. We have become essentially sensitive to what others do, assessing it by the standards which have been adopted by our communities. And we have become sensitive to how others use the standards to assess us – we tend, as it were, to look at ourselves through the eyes of others\textsuperscript{18}. Given this, the most basic concept of normativity which emerges is not something external to an individual, not a web of rules which would be cast over her, as it were, from without (by a god or nature itself), but rather every individual's tendency to treat, from within, the actions of others with their resultant consequences as right or wrong (on many different levels and in many different senses).

\textsuperscript{15} See Peregrin (forthcoming).

\textsuperscript{16} Of course, this kind of superstructure is again based on rules and it is subject to all the problems concerning rule following, hence the erection would involve "third-order" aimed at the "second-order" ones etc.; which may make the resulting configuration immensely complex.

\textsuperscript{17} See Peregrin (2014) for more detail.

\textsuperscript{18} I think that Rochat (2015)'s point that this is the source of what we call our \textit{self-consciousness} may be appropriate; and I think that also our concept of objectivity and of the objective world has very much to do with our tendency to always take into account the viewpoints of others.
5. Conclusion

We can see that there is a concept of normativity that, though emerging from philosophical speculations, comes to resonate with some results that has been recently emerging from empirical research, namely that we humans have a persistent tendency to assume the normative attitudes to the behavior of others. This, on the one hand, shows us rules and norms in their "naturalized" form, as peculiarly complex and unique interlocking behavioral patterns, while on the other hand it opens up a way of integrating normativity into the empirical studies of us humans.

The main ingredients of human normativity construed in this way, the normative attitudes, consist in our tendencies to encourage peers in certain manners of behavior and to divert them from others. And while in general this, of course, is something that also animals other than humans do, what seems to be the unique development of our species is that the behavior is endorsed/shunned in an "agent neutral" way. This complex behavioral pattern, which has been engraved, by evolution, into our psychology, has made us into what we are – not necessarily always rational, but necessarily norm abiding creatures, the mode of existence of which is marked by our tendency to discriminate between correct and incorrect. Thus, we can say that paying due attention to human normativity might open a new vista on how our species differs from the rest of the animal world.

References


