# 12 Inferentialism: Where Do We Go from Here?

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Jaroslav Peregrin

"Because the rules are the only thing we've got!" William Golding, *Lord of the Flies* 

#### 1. Where We Can Go from Here and Where I Want to Go

In Brandom's (1994) Making It Explicit, inferentialism was founded and developed as a relatively clear-cut philosophical edifice; and Brandom's subsequent writings, despite adding some new stocks, have not changed its layout significantly. However, the edifice is surrounded by several burgeoning neighborhoods that threaten—or promise, depending on one's view-to mesh with it and to change its nature significantly. One of these neighborhoods is constituted by a development within logic, where the term inferentialism has emerged independently of Brandom's teaching and is now flourishing, somewhat overlapping with the Brandomian variety. Another neighborhood is emerging in connection with the current naturalistic trends of philosophy, which are closely interweaved with natural science; it brings about questions of the feasibility of the Brandomian picture of language and of human society from the viewpoint of scientific findings. A further neighborhood concerns the intricate relationship of inferentialism with the philosophical tradition, especially German idealism. And there are still other, smaller neighborhoods to consider.

Personally, I see them as welcome challenges, engagement with which will ultimately strengthen the inferentialistic case (in the sense of the Nietzschean "what does not kill us makes us stronger"). I have already done some work on the interface between Brandomian inferentialism and the logical variety (see especially Peregrin 2008, 2010 and the second part of Peregrin 2014a); and in this chapter I would like to elaborate on certain ideas concerning its interface with natural sciences, previously introduced in chapter 6 of Peregrin (2014a) and in Peregrin (2014b). My overall aim is to summarize the current state of the art of such potential extensions of inferentialism, to address some objections, and to offer a (highly idiosyncratic, needless to say) view of its future.

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#### 250 Jaroslav Peregrin

#### 2. Philosophy and Science

According to Brandom (2009, 149–150), what philosophers do is

produce new vocabularies in which we can understand ourselves and each other, and they do that by thinking about the kinds of being we are, and about the role of such vocabularies in instituting and constituting the conceptual normativity that is the medium in which beings like us live our lives.

Thus, the role of philosophy is distinct from that of science—philosophers neither tell us how the world around us is, nor explain why it is so. They rather equip us with certain expressive tools. I have my doubts about this: though agreeing that the task of a philosopher has some specific aspects, I would say that it is continuous with that of a scientist to the extent that the two cannot be disentangled.

Take language and meaning, with which inferentialism deals intimately. True, we inferentialists offer new ways of looking at what people do when using language and expressing meanings, and we provide new conceptual resources to help us make this explicit. On the other hand, to be able to do this we first need to know what it is that people really do when using language, and to map this is an *empirical* enterprise. In this sense, I agree with Quine that "philosophy [...], as an effort to get clearer on things, is not to be distinguished in essential points of purpose and method from good and bad science" (Quine 1960, 3). Thus I think that even if we believe that philosophy is not necessarily the very same descriptive and explicative kind of enterprise as science, we philosophers should not shun learning what scientists have to tell us about the subject matters of our considerations, and we should pay attention to whether what they tell us is compatible with what we want to say.

What I consider to be crucial for the inferentialist construal of the position of us humans within our world, is that the world is interwoven by rules. Our human sociality consists in redistributing the impact of our natural, physical environment on us in such a way that the limits of the world of an individual are no longer solely its natural limits: rather, they are normative, and are posed by all kinds of social rules. (But it is important not to overburden the opposition "social" vs. "natural" here—for social rules are not severed from nature, and often incorporate natural facts.) This crucial feature of our position in the world has been dramatically neglected, but I am convinced that it cannot fail to influence the interface of philosophy and the sciences.

Arguably, we can identify three general areas of questions implied by a broadly conceived inferentialism (or should we better speak about normativism?) where the results of empirical research may be of intrinsic relevance:

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#### Inferentialism: Where Do We Go from Here? 251

- (1) *The ontogeny of rules*: how do rules become ubiquitous in the life of an individual, how does one learn to follow rules, and what does an individual life look like within the network of rules that constitute a human society?
- (2) *Language and its rules*: what is the role of rules, and especially inferential rules, with regard to natural language; which of these rules are *de facto* in force and how do they exist?
- (3) *The phylogeny of rules*: why have we, and how do we humans become the normative creatures we are; what might be the point of normativity from the viewpoint of evolution?

It seems to me that over the last ten or twenty years, the first area of questions has been gravitating toward the full attention of empirical scientists; however, the other two areas have remained relatively unexplored. In what follows I would like to map the situation in greater detail.

#### 3. Normativity and Naturalism

Inferentialism maintains that there is a sense in which the normative is not reducible to the non-normative—indeed, this was the point of quarrel between the so-called "right-wing Sellarsians," who subscribed to its reducibility, and their "left-wing" opponents, who voted for its irreducibility. Brandom, and hence his inferentialism, belongs to the latter camp. It is, however, crucial to explain what the avowed irreducibility amounts to.

I have tried to sort this out elsewhere (Peregrin 2016). I argued that the said irreducibility amounts to normative claims not being translatable into declarative ones; but that nevertheless this does not preclude there being a naturalistic story telling us how normative claims, as a specific kind of speech act, came into being and how normative discourse functions.

My explanation of the irreducibility is thus utterly naturalistic: I claim that it is the consequence of the fact that "normatives" (statements to the effect that something is correct or that it ought to be) and declaratives are simply two different kinds of speech act, and hence that the intranslatability of the former into the latter is no more esoteric than the intranslatability of, say, interrogatives into declaratives. (I am unsure what Bob Brandom thinks about this, but I suspect he disagrees. In Brandom (2008) he talks about the idea that "although normative vocabulary is not reducible to naturalistic vocabulary, it might still be possible to say in wholly naturalistic vocabulary what one must do in order to be using normative vocabulary" and he ascribes it to Huw Price (Brandom 2008, 12). This is interesting in two respects. First, I am convinced that this very idea is explicit in the work of Bob's mentor Wilfrid Sellars,<sup>1</sup> whom Bob does not mention at all. Second, though Bob does not reject the idea, neither does he subscribe to it explicitly, which would seem to

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#### 252 Jaroslav Peregrin

indicate that he wants to distance himself from it.)<sup>2</sup> My hunch, then, is that we can have a fully naturalistic story about our normative capacities. And this chapter is a sketch of a travel plan according to which we can, I hope, arrive at it.

#### 4. The Ontogeny of Rules

The fact that, as Sellars (1949, 298) puts it, "man is a creature not of *habits*, but of *rules*" must manifest itself in the way in which one is initiated into the community of others, given that a newborn child certainly is not yet "a creature of rules." So it would seem that a child must be turned into such a creature during the process of its enculturation; and indeed forging it thus must be one of the most basic *points* of enculturation. And it would be strange if scientists who inquire into this process did not notice this.

And indeed, recently there have appeared a number of papers indicating that one of the most basic skills an adept of a human society must inevitably master is the skill of assessing human doings as *correct* or *incorrect* (in more than one dimension) and of weaving her or his way through the maze of rules that comprise human society. I have discussed some papers of this kind elsewhere (Peregrin 2014b), so here I give only a digest.

Some ten years ago, there started to appear papers considering the sensitivity of young children to norms. Probably the most popular (the results of which even found their way into popular media) was Hamlin and Bloom (2007). However, a lot of papers were produced especially by the Leipzig school of Michael Tomasello (Rakoczy and Tomasello 2008; Tomasello et al. 2012; Schmidt and Tomasello 2012; Rakoczy and Schmidt 2013; etc.). Schmidt and Tomasello write:

Beginning at around 3 years of age, young children do not just follow social norms but actively enforce them on others—even from a thirdparty stance, in situations in which they themselves are not directly involved or affected [. . .]. Although there are many prudential reasons for following social norms, it is not immediately clear why a 3-year-old child should feel compelled to actually enforce them on others. Such group-oriented behavior opens the possibility that young children are not merely driven by individualistic motives but that, from early on, they start to identify with their cultural group, which leads to prosocial motives for preserving the group's ways of doing things.

(Schmidt and Tomasello 2012, 233)

Thus, it seems that we humans are disposed to consider the doings of others not only from a narrowly egocentric perspective, but also from the perspective that classifies some forms of behavior as attractive or

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#### Inferentialism: Where Do We Go from Here? 253

repulsive *independently of who is its source and its target*; that is, not only when these behaviors target me, but equally when they target somebody else, including, at least sometimes, even when it is me who is the source of the behavior in question. This tendency to assume an "impartial standpoint," we can speculate, is a specifically human innovation in evolution; and I would go as far as to speculate that it is this single innovation that makes us creatures so different (discoursive, cultural, ultrasocial, . . .) from all other creatures of our world.

In addition to this, in a recent book, Henrich, one of the current stalwarts of the burgeoning evolutionary studies of human culture, puts forward a picture that is a rudimentary synthesis concerning the role of rules within human societies and in the process of socialization (Henrich 2015). It is amazing to see how this thoroughly naturalistic picture resonates with the basically speculative picture drawn by Sellars and his followers. I think that Henrich is completely right when he talks about "norm psychology":

Over our evolutionary history, the sanctions for norm violations and the rewards for norm compliance have driven a process of self domestication that has endowed our species with a *norm psychology* that has several components. First, to more effectively acquire the local norms, humans intuitively assume that the social world is rule governed, even if they don't yet know the rules. [. . .] Second, when we learn norms we, at least partially, *internalize* them as goals in themselves. This internalization helps us navigate the social world more effectively and avoid temptations to break the rules to obtain immediate benefits.

(Henrich 2015, 188)

In fact, my view is that the "norm psychology" is precisely the tendency to assume the "impartial standpoint" I talk about above (though I prefer to see it as a behavior pattern rather than as a matter of a *psyche*, which might misleadingly suggest that is it something sealed within the human mind).

Henrich, of course, pays attention also to the ontogenetic aspects of "norm psychology":

By observing others, young children spontaneously infer contextspecific rules for social life and assume these rules are norms—rules that others should obey. Deviations and deviants make children angry and motivate them to instill proper behavior in others. What's striking about these findings is that children can and will do all this without any direct teaching or pedagogical cues (like pointing or eye contact) from adults—though no doubt these must help convey the rules in many circumstances.

(Henrich 2015, 186)

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#### 254 Jaroslav Peregrin

All in all, the ubiquity of norms within human life is summarized as follows:

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It's clear that when people encounter a new situation, they try to figure out which norms, among those they've already acquired, might apply to the situation and are also prepared to acquire new norms specific to this unfamiliar context

(Henrich 2015, 190)

It is interesting how similar this is to the well-known colorful depiction of human predicament given by Sellars:

When God created Adam, he whispered in his ear, "In all contexts of action you will recognize rules, if only the rule to grope for rules to recognize. When you cease to recognize rules, you will walk on four feet." (Sellars 1949, 298)

#### 5. Language and Rules

That language is a matter of rules is generally accepted as a matter of course, but surprisingly, this feature is rarely pursued to its important consequences. Everybody knows that rules of grammar (and perhaps some other kinds of rules, like rules of orthography) are crucial for language. It is less clear, at least outside philosophical circles, that there are other, more important rules that do not determine how to produce well-formed expressions, but rather what to do with them.

The usual view seems to be that although *which* linguistic vehicles are available for our perusal is a matter of (the grammatical) rules, *how* we peruse them is a matter that has nothing to do with rules, for we are completely *free* to juggle with the contents the vehicles are engaged to display. This, I think, betrays two misconceptions concerning rules and meanings. The first is the belief that an act that is rule-governed cannot be free, and the second is the misconception that the meanings of our expressions exist before the given expressions, and the given expressions are invented only to make these meanings public.

That these are essential misunderstandings is quite clear to any adept of inferentialism (and possibly to some wider range of philosophers), but I do not think it is clear to those who are doing empirical research concerning language and its semantics. Empirical semantic theories are usually guided, implicitly, by uncritically accepted representational theories of human cognition and of language. (I do not want to say that representations cannot play an important role in the human mind and in its coping with the world, but I would stress that we should not simply assume that meanings are therefore a matter of representations.) And of course, we inferentialists, because we are pragmatists, insist that meaning is a matter of interaction, of interactions among individuals and interactions



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### Inferentialism: Where Do We Go from Here? 255

between individuals and the world, and that seeing it in terms of representations is utterly misguided.

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The rules that determine the semantic component of language are not as obvious as those of grammar, and in some cases, they are not even explicit. However, this makes them no less important than grammatical rules. Take the sentence, "This is a dog." One of the most basic skills which one who learns to handle it—and thus comes to count as understanding it—is that it is correct to display it in certain situations and incorrect in others (there will probably be a gray zone between these). This rule, however, is difficult to make explicit—for this would yield something as "One can use 'This is a dog' correctly if she points at a dog," which is not very informative.

Some of the other rules that must be mastered by anybody learning to use "This is a dog" are better in this respect. One must learn that whenever it is correct to display "This is a dog" it is also correct to display "This is an animal," while it is incorrect to display "This is a cat" namely, the inferential rule taking us from "This is a dog" to "This is an animal" and the rules that the former is incompatible with "This is a cat." These rules can be made explicit without problems; however, they are usually taken, by linguists, as irrelevant for meaning, for they have learned, from logicians, to call inference "syntax," and they have learned from Searle that "syntax is not enough for semantics."<sup>3</sup>

What I find especially striking is the fact we do not know, by and large, which particular inferential rules hold for a natural language like English. I think that the only justified way to get clear about this is to find out which inferential patterns are endorsed by (the great majority of) the speakers of the language. Take the logical vocabulary. Since Gentzen, we know which basic inferential patterns are needed to characterize the most basic logical constants (and by now we know lots and lots about how to characterize all kinds of operators, including very weird ones); but what about their counterparts in natural language? Is, for example, the English "or" governed by the rules governing the classical " $\vee$ "? It might seem that this is the case, but would speakers of English accept "It is raining; hence it is raining or it is sunny" as an acceptable inference? Do we, in English, reason from "The streets are wet" to "If it is sunny, the streets are wet"? And to move from logical words to more mundane parts of English vocabulary, which basic inferential rules, featuring a word such as "dog" are the speakers willing to endorse? A large unexplored field of research activity is looming here!

#### 6. The Phylogeny of Rules

An extremely interesting question, for me, is then the question of how and why rules and rule-abiding creatures emerged from the ferment of evolution. My idea is that it was selected as a tool of the peculiar form of sociality that we humans have developed.

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#### 256 Jaroslav Peregrin

There are many kinds of social animals, but none of them has developed such a spectacular correlate of their social bonds as our human culture. I do not mean to say that it is culture that holds us together. I think that culture is better seen as an extravagant by-product of that which does; namely, rules. We humans build fantastic virtual worlds in which we are able to live: states, churches, universities, orders of knighthood, criminal gangs, gardening clubs, . . . All such virtual worlds are largely a matter of make-believe, they stand and fall with people taking them to stand or fall. They are, to use the notorious and treacherous word, *conventional*.

A paradigmatic convention, like the Geneva convention, takes the form of explicit agreement among people, usually written down and ratified by the parties involved. But certainly not all human institutions can result from such explicit convention—language, for example, the institutional mother of all institutions, cannot itself be a matter of explicit conventions. Hence if we want to see it (and many other institutions) as based on convention, it would have to be convention of a special sort, it would have to be, as it were, *implicit* convention. And what I think is an ability piggybacking on our "norm psychology" is precisely the ability to establish implicit conventions.

The first philosopher to grip this problem by the horns was David Lewis (2002), who showed how the kind of implicit convention that is capable of sustaining language could have come into being. His idea was that the convention can be established as an equilibrium of certain coordination "games"—"games" that characterize our human kind of interaction and that we thus come to play, inevitably and involuntarily. This is an important idea, but I am afraid that the kind of coordination considered by Lewis is not enough to explain what is really going on when we humans interact. For me what is crucial, and what ultimately differentiates our kind of sociality from the kinds of other animals, is precisely our tendency to abide by rules—I think it is precisely this that enables us to play games far more complex than were they solely ones of coordination, and that sets us up for erecting the awesome institutional edifice that is our culture.

Coordination, in the straightforward sense of the word, clearly is something that is important for any social animal—in fact it represents, on the most fundamental level, what it takes to be *social*. But alone it brings us nowhere near to our human sophisticated kind of ultrasociality yielding our institutions and our culture. What I think is needed at the next level is the coordination of our normative attitudes. And this requires us to *have* normative attitudes, to be equipped with the Henrichean "norm psychology."

At the most fundamental level, I do not care about anything but my own business. The fundamental-level coordination is achieved because it

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#### Inferentialism: Where Do We Go from Here? 257

results from everybody following their own interests. At the next level, however, I do care what others do. I care that everybody does what she or he *should* do—and consequently, I care whether *I* do what, according to others, *I* should do. This, needless to say, opens up a wholly new range of possibilities of coordination, or better something that is no longer so aptly called merely coordination, for there is an entirely new level of complexity of cooperation in play.

Hints at this interconnection between norms and our specific human kind of sociality can be found scattered in the writings of Sellars. Recently, this has been picked up by Michael Tomasello (2014), who elaborated his earlier view, according to which it was shared intentionality that was behind our human specificity, in the Sellarsian direction, ending up with the view that it was social norms that were at bottom. He writes:

Social self-monitoring is thus the first step in humans' tendency to regulate their behavior not just by its instrumental success, as apes do in their goal-directed activities, but also by the anticipated social evaluations of important others. Because these concerns are about the evaluations of specific other individuals, we may think of them as second-personal phenomena. They thus represent an initial sense of social normativity—a concern for what others think I should and should not be doing and thinking—and so a first step toward the kind of normative self-governance, so as to fit in with group expectations, that will characterize modern humans in the next step of our story.

(Tomasello 2014, 47)

This, according to Tomasello, led to the following result:

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.

(Tomasello 2014, 120)

I think that this view duly appreciates the role of norms within the development of our species, not only as a catalyst of our specific kind of social cohesion, but especially as the mold in which our specifically human thinking is cast.

In this way, it seems to me that it is our "norm psychology," our ability to assume the normative attitudes and thus to institute, maintain and

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#### 258 Jaroslav Peregrin

abide to rules, which is the root of the diversion of the evolutionary trajectory of our human species from those of other species, including our cousins—apes. This principled innovation is, I think, the root of our culture, of our language, and of our distinguishing between appearance and reality, which launched our chase of the "objective truth" and led us to our science. This allows us to say that we humans, indeed, are creatures of norms.

#### 7. Conclusion

I am convinced that Brandomian inferentialism should not only be compatible with the results of relevant empirical research, but that it is virtually impossible to separate its philosophical from its empirical part. Thus, I think that inferentialism not only gives us new tools for explicitating ourselves and thereby making ourselves duly self-conscious (as stressed by Bob Brandom), but that it also indicates how certain things in our world (such as our languages, our societies and our minds) function. Of course it should not be taken as an armchair replacement of empirical research; however, I am convinced it can indicate helpful directions for empirical research, and that it can interpret the results of the research in a fruitful way.

The crucial role of normativity for our human predicament, and the ubiquity of norms and rules in human lives, is not merely something that we philosophers have fancied as our way of embellishing reality; I am convinced that it is a tangible part of how we humans exist, and hence it is available for empirical sciences to find and anatomize. I think that until recently, this dimension of human existence has scarcely been reflected upon by scientists; however, it seems to me that recently the situation has been changing. I find it fascinating, and I believe that this amazing hand-shaking between us philosophers and scientists is something to cultivate.<sup>4</sup>

#### Notes

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- 1 This is most explicit in Sellars (1953); see Christias (2015) for an exposition.
- 2 In a recent lecture I suggested, half-jokingly, that as Bob Brandom, as a trueblue left-wing Sellarsian, subscribes to the irreducibility of the normative to the natural, his followers might be divided into left-wing and right-wing Brandomians, according to whether they accept that this irreducibility is explainable, without a residuum, in naturalistic terms. Given this division, I am a devoted right-wing Brandomian.
- 3 A very specific role here is played by Chomsky and his school. According to them, language is rules all the way down. Aside of the rules of grammar, which are responsible for the "surface structure" of an expression, there are similar rules responsible for a "deep structure" or "logical form" that, as a matter of fact, amounts to meaning. Thus, in this sense, even the semantics of language is governed by rules, *nota bene* (pseudo?) grammatical rules. This, needless to say, is a notion of rules very different from that employed here (rules in our

#### Inferentialism: Where Do We Go from Here? 259

sense are characterized by the fact that they, as a matter of principle, can be violated). And it leads to the conclusion that it is not only rules all the way down, but in effect, syntax all the way down (and not syntax in the extended Carnapian sense of "logical" syntax that includes inference, but syntax in the narrowest sense of the word, which is a matter of merely well-formedness).

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#### 260 Jaroslav Peregrin

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