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Groups, Norms and Practices

Essays on Inferentialism and Collective Intentionality



Chapter 5 Normative Mindshaping and the Normative Niche



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Abstract Members entering a community are inevitably formed by its "cultural framework" (via the process of enculturation). The "cultural framework", in turn, is produced by the members of the community. The nature of this dialectical movement – producing the framework while being produced by it – has long been investigated; however, it is only recently that some scholars have started to appreciate the centrality of *rules* and *norms* for an adequate description of this phenomenon. In this paper I argue that to understand it we must give pride of place to norms at a radically foundational level – we must realize how deeply normative we as humans are. I argue that even the most promising accounts of this movement, such as those based on the concept of "mindshaping" or on the idea of "social niche construction" must be seen as essentially normative enterprises.

Keywords Normativity · Mindshaping · Niche construction · Rule · Culture

5.1 Introduction

It is clear that various social mechanisms will act upon the minds of the members of any society; that every society generates a "cultural framework" which will have a bearing on any new member being introduced ("enculturated") into the society. However, what is less clear is how deep this influence cuts, how the framework is produced, and how it wields its influence on newcomers.

Naturalistically-minded researchers, until recently, have tended to downplay the influence of enculturation. We humans, they would stress, belong to the animal kingdom and are therefore biological entities; thus our nature is determined by the weighable and measurable factors of biology and genetics, rather than the elusive determinants of culture. Thus, in their classic article, Tooby and Cosmides (1992) criticized what they called the "Standard Social Science Model (SSSM)", according

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to which the minds of members of a society emerge as "blank slates" (a term reintroduced into this context later by Pinker 2002) which get shaped by the "cultural framework" of the society to become its integral parts. They objected that any "cultural frameworks", and how they actually influenced individual minds, remained so opaque that this whole picture cannot be taken too seriously.

Since this paper was published there have been many developments, and it is now accepted that referring to "cultural frameworks" of this kind need not clash with naturalism, that it might be merely a way of emphasizing the specifically social facets of human animals. Authors, such as Boyd and Richerson (2005), Henrich (2015) and Heyes (2018), have shown how this specific kind of sociality leads to the establishment of a system which parallels the genetic evolution, a system of "culture" that gets handed down from generation to generation in a paragenetic way and which works because social newbies not only come to be immersed into it, but also gradually come to reproduce and upgrade it, providing for future newbies to be immersed into an upgraded version.

In this paper I want to contribute to the understanding of the working of the "cultural framework", arguing that its crucial components are *norms* and *rules*. (I use these two terms interchangeably in this paper.) Norms, I argue, are what we learn to be sensitive to during our "enculturation"; they create virtual spaces in which we spend great chunks of our lives after having become fully-fledged heirs of our culture, and they are also what we reproduce and upgrade after having been able not only to follow them, but also to understand, ponder and possibly challenge them. In short, I argue that to understand the working of the "cultural framework" and of both the way we produce it and the way it co-produces us we must understand that we humans are essentially *normative creatures*.

5.2 Mindshaping

In his book, Zawidzki (2013) argues that the broad discussion in current anthropology of the emergence of the human (and possibly of other animals') capacity of "mindreading", which is often considered as crucial for our species, tends to ignore the important fact that what was going on during the stages of evolution where "mindreading" was to emerge and flourish was also the rise of what can be called "mindshaping".

According to Zawidzki, mindshaping amounts to "imitation, pedagogy, norm cognition and enforcement, and language-based regulative frameworks, like selfand group-constituting narratives", its point being "making human minds and behavior more homogeneous and hence easier to predict and interpret" (p. 29). The mainstream story, Zawidzki points out, is that the evolution of us humans accelerated to set us on a track deviating from our animal cousins (developing our sophisticated language, creating culture etc.) all thanks to our increasing ability to read each other's minds (caused, perhaps, by an increase in our brain size). But this story, in Zawidzki's view, neglects the essential role of our concurrent mindshaping abilities.

As a first approximation to understanding the term "mindshaping" as I use it here, consider the following situation. A skilled chess player may be able to "read the mind" of her opponent in that she is able to predict, more or less successfully, his upcoming moves. This is achievable partly because there is only a limited spectrum of possibilities: the mind of the opponent has been formed, by being inculcated with the rules of chess, into a shape where he considers only the possibilities offered by the game. Similarly when she tries to "read the mind" of her peer, the task may be facilitated by the fact that there may also be a kind of game in play that limits the spectrum of thoughts that are available to the peer in the current social situation.

Zawidzki's point is not merely that the mainstream view pays scant attention to the phenomena accompanying the rise of human culture (such as pedagogy, enculturation, social norms etc.). His more crucial point is that such phenomena are being taken as just consequences of the improvement of mindreading, whereas, more fittingly, they should be seen as *underlying* this improvement. The most basic message of Zawidzki's book is that our mindreading abilities, instead of underlying the mindshaping ones, in fact piggyback on them. We are good readers of each other's minds not because we have developed big brains, but because we have managed to shape each other's minds so that they have become easily readable. Thus Zawidzki writes (p. xii):

I argue that the attribution of full-blown propositional attitudes cannot have evolved before sophisticated practices of mindshaping aimed at making us easily interpretable to each other. It is likely that sophisticated mindshaping coevolved in the human lineage with improved versions of sociocognitive capacities that we share with nonhuman primates, such as tracking the goals of conspecifics and anticipating the rationally and informationally constrained behavioral means they select to achieve them. However, as I argue, even highly sophisticated versions of such behavior tracking do not amount to the attribution of fullblown propositional attitudes. The capacity to attribute such mental states depends on, and had to await, the evolution of sophisticated mindshaping practices, especially linguistic practices like norm institution and narrative self- and group constitution.

For Zawidzki, mindshaping is closely connected with what has come to be called "niche construction" (Odling-Smee et al. 2003). A *niche* of an animal species is an environment in which the species lives, seen especially as a distributed collection of resources and dangers relevant for the species. However, some animals not only respond to the selective pressure of their environment, but are able also to *modify* their environment, thus also modifying the selection pressures to which they respond. This may launch a spiral that, under favorable circumstances, may become largely self-propelling. (Altering the environment can bend the trajectory in the direction of enhanced abilities to modify the environment, which, in turn, can bend the trajectory further ...)

Our human species is distinguished by the fact that aside of the physical niche construction we can be seen as engaged in the construction of our "social" niche, in fact of the "cultural framework" we mentioned in the beginning of this article. And

one of the ways to explain the peculiar acceleration of human evolution is precisely as the result of this kind of self-propelling.

Zawidzki writes (p. 21):

Distinctively human mindshaping is crucial to explaining the success of the hominid sociocognitive syndrome because it constitutes a way of bringing social niche construction under control: unlike other species, we obsessively engage in practices whose raison d'être is social niche construction. Unlike fortuitous niche construction that occurs as a by-product of traits selected for other reasons, human mindshaping enables targeted social niche construction. This is key to understanding mindshaping's crucial role in the evolution of the human sociocognitive syndrome.

We may imagine that a species which has been selected, among other things, for its ability to avoid a certain kind of danger constantly present in its environment, manages to change the environment so as to dispense altogether with this particular danger. In this way, it influences its own evolutionary trajectory. Now this change may result in a further modification of the environment, effecting a further change of the selection pressures and a further deflection of the trajectory. And the idea is that this is what happened to us humans, when our evolution accelerated and achieved an "escape velocity", enabling us to part ways with other kinds of animals.

Take language. The mainstream story is that due to some biological development of our brains, we became capable of more effective and more articulated thinking than other animals, and this brought about the usefulness of communicating our thoughts (*viz.* language), which we hence developed. But an entirely different story is possible. At some point, the sounds we emitted became such an important part of our niche (helping us predict what will happen around us) that we not only came to be selected according to our sensitivity to it, but we also came to influence it, to construct our linguistic niche. Such a view of language emergence and development has been put forward, e.g., by Rouse (2015). He writes (pp. 119–120):

Language ... initially emerges not as the product of enhanced internal capacities of a larger hominid brain but instead as a perceptually salient, developmentally effective, and selectively important behavioral dimension of the developmental and selective environment of some hominid apes. Vocal expressiveness and its behavioral integration into a transformed way of life persisted as an integral part of these organisms' ecological heritage only through its development and reproduction in each succeeding generation.

Imagine that many of our conspecifics came to emit a similar kind of sound when they detected a danger. Becoming sensitive to such displays of others would likely be useful; and, furthermore, it would be natural to work towards making the sound into a wholly reliable indicator of danger, getting other individuals to emit it always in cases of danger and not to emit it otherwise. Thus, it is not difficult to see that building this kind of regularity into our niche could be advantageous. (And, needless to say, it might be seen as a case of mindshaping.) In a similar way, many other uniformities of our communal life may be helpful, and benefits could be reaped by encouraging and producing them.

Thus, linguistic, and more generally social, niche construction would tend to make the social landscape more homogenous and more perspicuous – optimally more accommodating and more hospitable. This, obviously, can be achieved by

setting up standards and getting each other to comply with the standards. And we can do this because we have developed into essentially *normative* creatures – we are apt and diligent producers and consumers of norms, which thus become an important determinant of the world in which we live. (I discussed the details of how norms fuel cultural evolution elsewhere – see Peregrin 2014a.)

5.3 Cognitive Niche vs. Cultural Niche

Pinker (2010) also talks about the human *niche*; and as he thinks that our specifically human way of life is primarily the result of the improvement of human cognition, he talks about a *cognitive* niche (8993–4):

In biology, a "niche" is sometimes defined as "the role an organism occupies in an ecosystem." The cognitive niche is a loose extension of this concept, based on the idea that in any ecosystem, the possibility exists for an organism to overtake other organisms' fixed defenses by cause-and-effect reasoning and cooperative action – to deploy information and inference, rather than particular features of physics and chemistry, to extract resources from other organisms in opposition to their adaptations to protect those resources. These inferences are played out internally in mental models of the world, governed by intuitive conceptions of physics, biology, and psychology, including the psychology of animals. It allows humans to invent tools, traps, and weapons, to extract poisons and drugs from other animals and plants, and to engage in coordinated action, for example, fanning out over a landscape to drive and concentrate game, in effect functioning like a huge superorganism.

This conception is criticized by many of those who think that it is not the improvement of cognition that came first and underlies our peculiar kind of human "cultural" sociality, but that rather it is the sociality, in the form of social niche construction, which boosted the cognition. Thus, Boyd et al. (2011) write (p. 10919):

It seems likely that the average human is smarter than the average chimpanzee, at least in domains like planning, causal reasoning, and theory of mind. However, we do not think this is sufficient to explain our ecological success. The cognitive niche hypothesis overestimates the extent to which individual human cognitive abilities allow people to succeed in diverse environments and misunderstands the role that culture plays in a number of important ways. We suggest, instead, that our uniquely developed ability to learn from others is absolutely crucial for human ecological success. This capacity enables humans to gradually accumulate information across generations and develop well-adapted tools, beliefs, and practices that no individual could invent on their own. We have entered the "cultural niche," and our exploitation of this niche has had a profound impact on the trajectory of human evolution.

Similarly Laland and O'Brien (2011, p. 191):

Niche-constructing species play important ecological roles by creating habitats and resources used by other species and thereby affecting the flow of energy and matter through ecosystems – a process often referred to as "ecosystem engineering." An important emphasis of niche construction theory (NCT) is that acquired characters play an evolutionary role through transforming selective environments. This is particularly relevant to human evolution, where our species has engaged in extensive environmental modification through cultural practices. Humans can construct developmental environments that feed back to affect how individuals learn and develop and the diseases to which they are exposed.

It is clear that niche construction can come in various forms, from very simple to highly complex. Rearranging simple elements of the environment (like stones or branches) is quite simple and can be done by animals without excessive sophistication. However, the more complex the elements are, and the more complex their rearrangement aims to be, the more sophistication and specific skills are required. (Dealing with plants, for example, is less easy than dealing with stones, for plants tend not to stay in the form in which we put them). And, needless to say, if the niche we are dealing with consists of other humans, the difficulties associated with its rearrangement bourgeon.

Now the idea, in a nutshell, is that we humans have succeeded in mastering even this form of niche construction, that mindshaping is its principal tool, and that norms are the principal tool of mindshaping. You can move a stone and it stays where it is; you can pull up the weeds, but you have to repeat it regularly; and you can organize a society, but only by means of a kind of constant influence on its members. And the idea is that rules and norms can be seen precisely as the tools we humans have developed for this very purpose.

This, I suggest, is what has led to the creation of our cultural niche alternative. Thanks to it, we humans are smart not only because of our genetic endowment, but also because of the niche, which we hand down from generation to generation. (This, of course, would not defy a naturalistic explanation – the only proviso would be the ability to cope with the sheer complexity of the corresponding naturalistic picture, taking into account the peculiarities of our species' sociality which has allowed us to establish our cultures as frameworks which also provide for "cultural inheritance".) However, it is crucial to explain how the perpetuation of the cultural niche works; and here again, I think, we must turn our attention to what I think is its more forerunning element – our ability to bring rules into being and to follow them. Therefore I propose we characterize our human niche as first and foremost a "normative niche".

5.4 Rules and Normativity

I have frequently pointed out that an extremely inspiring philosopher with regard to the normative dimension of human sociality and its perpetuation was Wilfrid Sellars (Peregrin 2010, 2011, 2014a). His analysis of the concept of rules, and of rule following, not only demonstrates the crucial role rules play within the human world, but can also be taken to indicate why and how rules appeared and spread in human communities. Sellars (1969) anatomized the dialectics of what he called "*ought-to-be's*" and "*ought-to-do's*".

Return, for an illustration, to the example of chess. Suppose Boris plays chess and his king is checked. In this situation *Boris ought to move so that his king is no longer checked* is an *ought-to-do*, a prescription addressed to Boris. Of course, it can do its work only if Boris is able to understand it; hence Boris must be a creature possessing the concepts out of which the *ought-to-do* is composed. On the other hand, consider the general prescription *The king ought not stay checked*. This is a case of an *ought-to-be* and of course it does not presuppose that the king understands it. The prescription, obviously, is not addressed to the chess piece; it is, as it were, "free floating" and should be picked up by those agents who are able to use it to infer some *ought-to-do's* addressed to them. This is the case, for example, of Boris: as *The king ought not stay checked* and his king is checked, he infers that *He ought to move so that his king is no longer checked*.

Sellars is concerned with the workings of language: speakers of a language grasp certain *ought-to-be's* concerning language in the form of certain patterns displayed by the ways words are handled. Because the speakers grasp the patterns as *ought-to-be's*, they try to bring them into being (because *ought-to-be's* entail the *ought-to-do's* which aim at bringing about the *ought-to-be's*) by getting the language novices to instantiate these regularities. Thus the linguistic behavior of the novices comes to instantiate the patterns in question.¹

The same can be said about many systems of rules other than the linguistic ones: the point is that what we need in order for a rule to perpetuate is that the novices taught to follow the rule not only instantiate the pattern prescribed by a rule, but also grasp the pattern as an *ought-to-be*. If this grasping were somehow brought about by being squeezed into the pattern, we would have a virtuous circle which would propagate the rules from generation to generation: by becoming a follower of a rule one would become, in one sweep, a tutor of the rule. And as rules do seem to be perpetuated in this way, it seems that something like this must actually be happening.

Let me stress how nontrivial this step is. Suppose that I am trying to scramble through some dense forest, where it is difficult to find any way through. Here, the forest is restraining me and it may be that it forces me into an almost unique path. I submit, and move the way which the forest permits; but certainly I do not join the forest in restraining others who want to get through it. Being restrained by nature is something one has to face; of course it is not something with which one feels any need to join forces.

Compare this with what happens when I learn a language (or, for that matter, another social activity). I may try various ways of doing it (for example I may try to emit various kinds of sounds), but I get diverted, by my tutors, from many of them, and am left with only a few – with only a restricted path to move through the "forest of language". But in this case, surprisingly, and unlike in the physical forest case, I come to mimic the activity of my mentors and I start to mentor other would-be speakers of the language. This is a crucial difference betraying that we come to distinguish the patterns in social reality from our patterns in the natural world; the difference is that we understand many such patterns in our social world as *ought-to-be's*.

My conjecture (and this is something which differentiates my view from those of other inferentialists, notably Brandom) is that the Sellarsian notion of *ought-to-be* points to the minimal element laying the foundation of any kind of normativity: the

¹For a further anatomization of rules of language see Sellars (1949, 1954).

attitude of "holding as ought-to-be", or "holding correct".² (This attitude can perhaps be seen as a generalization of that of "holding true" in Davidson 1990). This, we can say, is the only "unexplained explainer" of the theory – I simply assume we humans, in contrast to other animals, have come to acquire the ability to assume this kind of attitude.³ As a consequence, it is this specific kind of attitude which is the source of our culture and our very specific kind of sociality. From the viewpoint of Zawidzki's notion of mindshaping as the container term for "imitation, pedagogy, norm cognition and enforcement, and language-based regulative frameworks, like self- and group-constituting narratives", the thesis is that these disparate activities have a common denominator and that mindshaping, after all, is *not* merely a container notion.

The idea is that while many animals certainly assess the behavior of their conspecifics in the sense that they try to divert them from certain ways and encourage them in others, their main concern is the resultant behavior of the conspecifics towards themselves. We humans, on the other hand, have become capable of assessing the behavior as such, largely independently of who, whom or what is its source and target. We raise ourselves above our parochial individual perspective and reach a more "impartial" stance, enabling us to see the behavior in question as independent of any particular source or target.⁴

My idea, presented in the papers mentioned above, is that the peculiar "operating in normative mode" is the ability to perceive the kind of social coercion which amounts to enculturation, as not only something that is to give *me* a direction, but rather something that ought to be, generally. In a recent empirical study (Schmidt et al. 2016), the fact that human infants do indeed come to acquire precisely this kind of stance is confirmed (p. 1360):

Three-year-old children are promiscuous normativists. In other words, they spontaneously inferred the presence of social norms even when an adult had done nothing to indicate such a norm in either language or behavior. And children of this age even went so far as to enforce these self-inferred norms when third parties "broke" them. These results suggest that children do not just passively acquire social norms from adult behavior and instruction; rather, they have a natural and proactive tendency to go from "is" to "ought." That is, children go from observed actions to prescribed actions and do not perceive them simply as

²See Peregrin (2014b, Chapter 4).

³The list of primitive notions in the theory of Brandom as well as in those of some other inferentialists is more complex: especially it includes the concepts of *commitment* and *entitlement*. In contrast to this I think that these notions are reducible to the more primitive concept of *holding correct: to be committed (to do something)*, for example, is *to be held for committed*, which, in turn, is to *be required to carry out certain actions*. This means that a person is committed to something iff certain actions of the person are taken to be correct.

⁴The "impartiality", of course, is not to be understood so that the correctness of an action must be assessed independently of other actions. An action might be correct as a successor or a predecessor of other actions. Thus, an action of a person may be correct (because of other actions of the person), while the same action carried out by a different person may be incorrect. The "impartiality" means that it is disregarded which concrete persons are behind the actions – especially whether it is the assessor or somebody else.

guidelines for their own behavior but rather as objective normative rules applying to everyone equally.

Seen from the phylogenetic, rather than ontogenetic perspective, Henrich (2015) diagnoses a very similar phenomenon (p. 188):

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.

5.5 Acting as Persons

It is important to realize that from our human viewpoint, norms do not merely make up a scaffolding that helps us read each other's minds in the sense of estimating their future behavior, consequently better coordinating with each other and thus establishing a system of "cultural inheritance". Rather, it is the normative scaffolding itself that licenses us to live in a world that we perceive as "meaningful", in a world where there are not only moving bodies causing various effects, but also persons acting for reasons to achieve goals.

The basic idea is that a system of norms, if put together in a suitable way, may constitute a space in which we can carry out new actions unheard of before. (And there is a sense of the term *action* in which it is only within such a normative space that we can carry out actions at all.) Hence, the framework of the rules of chess allows us to check the opponent's king, that of the rules of language allow us to assert that the sun is shining, while the framework of rules making up a university allows us to pass an exam. This idea was tabled by Brandom (1979) and it leads to what Steiner and Stewart (2009, p. 530) call *heteronomy*:

Becoming socialised is achieved by becoming *heteronomous*: it involves knowing that the behaviours one produces have to be performed in a certain way, and acting accordingly. Abiding by norms is a relational property of agents: it depends on the existence of these norms independently of the agent (this existence consists in their following and practical acknowledgement by a community of agents), and on the fact that the performances of the agent are recognised by other agents as being sensitive (and not randomly conforming) to these norms. Unlike natural laws or biological norms, it is quite possible for an agent to behave in a way that does *not* respect a social norm; the sanction is no more, and no less, than that the behaviour in question will not be recognised as a socially meaningful and appropriate action.

Thus, various kinds of frameworks of rules have come to take part in constituting the world in which we live: they are our *niche* into which we are born and, later in our lives, we are destined to contribute to its reweaving.

This brings us back to the mechanism allowing us produce the "cultural framework" which then co-produces us. Once we recognize that the "cultural framework" crucially involves a system of frameworks of rules, we can easily see how this works. We have become able to "hold" certain kinds of behavior in certain circumstances "as correct", while others "as incorrect". Once these "normative attitudes" came to resonate throughout a community, there appeared something akin to rudimentary "implicit rules": certain ways of behavior came to be (taken as) generally correct or appropriate within the community. The rudimentary rules that were established by such attitudes were then, on the one hand, fortified and elaborated, while, on the other hand, becoming composed into frameworks that constituted rudimentary communal institutions.

The most important of such institutions was language: here a framework of rules provided for the possibility of making various kinds of meaningful utterances. Once language was in place, the whole enterprise of establishing, maintaining and abiding by the normative institutions changed its character – it became possible to make the rules explicit, to constitute new rules by means of explicit stipulation, and, on a still more advanced level, to discuss the pros and cons of various rules. Many institutions we take for granted would be inconceivable without the support of language.

There is nothing mysterious about the normative frameworks and institutions established in this way. At the same time, there is little doubt that we do live in a system of such frameworks and institutions – so many things we do in our lives are not merely physically or biologically characterizable pieces of behavior, they are rather actions which can be carried out only within their normative context. Hence the "cultural framework" understood in this way is indeed something quite crucial, and yet nothing that would be suspicious from the viewpoint of science or philosophy.

Learning to live within this system of normative frameworks and institutions, which one does during the process of education and enculturation, is a kind of mindshaping. Undergoing mindshaping is learning to respect not only the limits of one's world as posed by nature, but also the limits as posed by other people and the wider society (the *ought-to-be's*). But becoming not only a "mindshapee", but also a "mindshaper" (which is ultimately part and parcel of undergoing mindshaping) one must learn to *distinguish* between the two kinds of limits (to take the *ought-to-be's* for what they are, namely something that yields us *ought-to-do's* to be followed). It is only the latter, the limits posed by social reality, which have the qualities of a *rule*, *viz*. something to which one must not only yield, but which one must take part in supporting.⁵

⁵At first, it would seem the apprentice may perceive all kinds of limits to her world as on a par: the fact that she *cannot* as on a par with the fact that she *may not*. It is only later (perhaps at about 3 years of age, as Schmidt et al. 2016, suggest) that she comes to distinguish between the "hard" *cannot* and the "soft" *may not* - the latter being "soft" not only in that there are ways of violating it, but also in that to hold, it needs the support of people, including the apprentice. Also, she becomes more sensitive to the often quite mild "social friction" that marks the presence of a rule. And, as a culmination of the process, she may come to reflect on the rules constituting the "cultural framework" and their appropriateness.

5.6 Normative Niche and Collective Intentionality

Some philosophers and scientists have proposed that the ultimate trigger of our specifically human evolutionary trajectory leading us to our self-propelling cultural niche, was the emergence of the ability of shared or collective intentionality (thus, e.g., Tomasello et al. 2005, claim that it is the ability to share intentionality that constitutes "the crucial difference between human cognition and that of other species"). To what extent is the proposal discussed here compatible with this claim?

It is quite clear that once a human community fastens down its "normative niche" (i.e. once its members come to spend most of their lives within a system of normative frameworks), we can account for this in terms of collective intentionality – it is clear that the rules are "commonly accepted" by the community (in a sense which goes beyond mere concurrent individual acceptances). The question, however, is whether such a "common intention" must be one of the very basic building blocks of the whole edifice; and whether it is *the only* (or at least the most basic) building block.

Tomasello et al. (2012, pp. 673–4) write:

Our hypothesis, which we call the Interdependence Hypothesis, is that at some point humans created lifeways in which collaborating with others was necessary for survival and procreation (and cheating was controlled by partner choice). This situation of interdependence led inevitably to altruism, as individuals naturally wanted to help the collaborative partners on whom they depended for, for example, foraging success. Moreover, interdependent collaboration also helps to explain humans' unique forms of cognition and social organization, since it is collaboration, not altruism, that creates the many coordination problems that arise as individuals attempt to put their heads together in acts of shared intentionality to create and maintain the complex technologies, symbol systems, and cultural institutions of modern human societies.

This proposal is meant as an alternative to the "altruism first" views, proposing that it was altruism (yielded by the kin selection mechanism or sustained by reciprocation) that founded cooperation; Tomasello and his collaborators propose that cooperation developed in its own way, not presupposing (but possibly yielding) altruism, and that it was shared intentionality that played a crucial role in this.

Tomasello (2014) writes that while the intelligence of primates is utterly "Machiavellian", i.e. oriented towards "competition or exploitation of others", our human intelligence aims at "cooperation or communication with others". This may be true (and there is, to be sure, a sense in which it is *obviously* true); and it is also quite clear, from the empirical studies, that shared intentionality is something that distinguishes us from the primates and that must have played a role in our development. The question, however, as I see it, is whether it was really shared intentionality that formed the bridge from individualistic to cooperative intelligence. Perhaps there is also another possibility to be taken into account.

The view put forward here indicates that there is also an alternative to the proposal that it was shared intentionality that made us cross the Rubicon separating the "individualists" from the "cooperators". This alternative possibility is that the crucial point was the specific kind of attention that we started to pay to each others' behavior, the peculiar way in which we started to practically discriminate between behaviors that are "correct" or "incorrect" not in respect of their influence directly on us as individuals, but from an "impartial standpoint". It was behavior as such, not its impact on the assessor that started to be seen as desirable or undesirable.

I think that reaching an "impartial standpoint" (or "agent-neutral thinking", as Tomasello 2014, would call it) may be seen not as a result of overcoming the "Machiavellian" stance, but as its continuation (if not culmination). It seems to me that in their effort to exploit everything around them including their conspecifics, our ancestors might have come to the conclusion that it is profitable to concentrate on the usefulness of actions independently of who or whom is their source or target.

Let us return to our example of the tribe whose members tend to emit a certain sound when they are in danger. Sounds of this kind may become a part of their niche as accompanying certain kind of situations. And it would certainly foster the survival of the members of the tribe if at least some of the sounds were generally *reliable* indicators of the situations; which may lead, under certain circumstances, to the members coercing each other to emit them always only in the appropriate situations. This requires emitting the sounds "appropriately" independently of who is the emitter. And this, it seems to me, can still be an outcome of the "Machiavellian" stance, though this is also a clear rudiment of the normative attitudes that, according to me, in their more mature form build up rules.

However, it is clear that the ability to assume normative attitudes towards actions is not enough to produce the fully-fledged normative niche. The attitudes must, as I put it, come to *resonate* throughout the community. Does this mean that it is enough that they just *coincide*, or do they have to be assumed *collectively* in some deeper sense, *presupposing* shared or collective intentionality?

I have already stated that I take for granted the fact that shared intentionality is a distinctively human innovation which plays a substantial role in the way we humans co-exist and cooperate; I take it to be an empirically ascertained fact, not warranting challenge from a philosophical ivory tower. Let me just point out that the theory I am proposing does not presuppose this in any obvious way. We can very well imagine that rules evolve from the mere resonance of normative attitudes via their reflective coordination to a collective sustainment of the rules, which is however a product of the coordination of the normative attitudes, rather than their presupposition.

In a sense, the problem might be seen as that concerning the relative primitiveness of cooperation and coercion with respect to each other. One possibility is that the emergence of shared intentionality makes us switch from the coercion dictated to us by our "Machiavellian" intelligence to a brand new kind of intelligence that is essentially cooperative; another possibility is that the cooperation emerges directly from coercion, once it turns out that the coercion might be especially effective when wielded from an "impartial standpoint". The latter option conjectures that what comes out of the selective pressures of the environment is the tendency to control one's conspecifics in such a way as to force them into the emerging mold of what is correct and what is not.

5.7 Conclusion

We, humans, live in largely a normative world; or perhaps in a motley of normative micro-worlds. The introduction of infants into a human community consists, to a large part, in teaching them how to recognize, to respect, and also to support the rules that make up our common "virtual" worlds. Our ability to "operate in the normative mode" provides for a suitable engine on which these worlds "run": they enable us to become the inhabitants of the worlds as well as their wardens in one sweep.

This account, I think, explains the self-perpetuating character of our culture. The normative niche tends to shape the minds of all novices joining the society; they become sensitive to the kind of social friction that indicates the presence of rules, thus learning to live within the system of normative frameworks that constitute it. They learn to respect the norms, and at the same time also to sustain them. In this way enculturation produces not only subjects conforming to the norms, but also those enforcing them, which guarantees its continuation.

The enculturation, due to the specific character of the normative niche, also produces *persons*, who carry out various kinds of actions made possible by the individual normative frameworks. In particular, it produces *discursive persons* or *speakers*, who enter the most important normative framework, the framework of a natural language, *viz*. the framework providing for the possibility of carrying out meaningful utterances. Entering this framework completely rebuilds our ability to operate within other frameworks and especially to create and sustain new frameworks.

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