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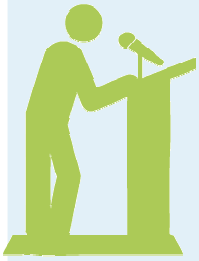

Dear EurSafe Members,

It is my pleasure to present you the June issue of EurSafe News. It focuses on "naturalizing ethics". At least two reasons were influential to choose this topic: First, looking at the debates in animal ethics, empirical disciplines like animal welfare science and more recent neuroscience and cognitive biology have gained more and more significance. Obviously, empirical knowledge plays a major role when the moral status of animals is argued for or when the question arises how we can live up to our moral duties towards animals. Secondly, the life sciences and their striking story of success not only brought solutions to problems but also new problems. In animal ethics and in many other fields – for instance medical ethics, agricultural ethics, and food ethics – new developments gave rise to a number of ethical questions and conflicts. Since the early 1990s, topics such as genetically modifying animals, cloning animals or the designing of chimeras have made it necessary to develop new answers in animal ethics.

The mentioned empirical disciplines provide valuable knowledge that can be utilized in animal ethics on the one hand and raise new issues in animal ethics on the other hand. Undoubtedly, empirical sciences have great impact on the work of ethicists. Looking at the debate more closely, it even seems as if ethics cannot do without them anymore. Therefore, the aim of this EurSafe News issue is to scrutinize the role of natural science in ethics and whether and how ethics is or can be "naturalized". What in particular can empirical sciences contribute to ethics? Where are the limits in the process of "naturalizing ethics"? Is the normative reducible to the empirical? And if so, what – if anything – do we lose?

I am very happy to introduce two authors that took on the challenge to discuss some of these questions within the limits of a Newsletter. Kirsten Schmidt is the first contributor in the "thematic section". She has been working as a philosopher on animal ethics and published several serviceable papers and a profound book on the various connections of ethics and science. In her corresponding papers and a book she focuses on ethical questions stemming from new possibilities in genetic engineering and the normative aspects in animal welfare science. The second author is Ludwig Huber. He has been conducting research in cognitive biology for more than 20 years. As a natural scientist with a background in philosophy he specialized in comparative cognition.

in every part of ethics as a scientific discipline. The enrichment of ethics with findings from the natural sciences is essential not only for the practicability of moral norms but also to make sure that living beings with moral status are treated in a morally adequate way. However, to have an impact on the normative level, the project of naturalization in ethics has to be linked to a normative framework that can be supported by but not deduced from empirical facts.

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Naturalizing Ethics?

An enduring intellectual challenge is the question of whether the natural sciences, especially biology, can help solving philosophical problems. Opponents have been those who think, like Wittgenstein, that "*Darwin's theory has no more to do with philosophy than any other hypothesis in natural science*" (namely nothing) and those who maintain, like E.O. Wilson, that the time might have come for "*ethics to be removed temporarily from the hands of the philosophers and biologicized*". Of course, the area in which the significance of Darwinian ideas has been most hotly debated is morality. As Philip Kitcher famously said: *"Does Darwinism reveal how human societies ought to be constructed, or how human beings ought to behave? Does it finally debunk morality? Or is it simply irrelevant to our understanding of morality?"* (Kitcher 2009).

How can we achieve a fair compromise here? How can biology inform moral philosophy and vice versa? Are there ways in which empirical data might play a useful, if only partial, role in philosophical discussion? Like many biologists I am inclined to say

that biology can make indeed a very fruitful contribution, which of course is a *descriptive*, not *normative* account of morality. In particular, I consider the evolutionary understanding of our species as relevant to the tracing of all aspects of human history, including the history of our social systems, our culture and our morality.

But does this historical understanding have any consequence for the evaluation or derivation of substantive new ethical principles? We are only too familiar with the difficulty (or fallacy) of inferring normative statements from factual statements. Isn't the human mind limitless in its power to create new thoughts? Aren't we free to want whatever we think and to do whatever we want? *"Must we acquiesce in the propensities attributed to us or to aspire to the ends that are singled out?"* (Kitcher 2009)

The most common way in which ethics have been "naturalized" is by investigating the evolutionary roots of human morality. This endeavour starts with two premises. Firstly, humans have not been uniquely endowed with special attributes (including a moral sense) by divine grace alone. Secondly, morality is not a fiction but firmly grounded in both *socio-cognitive abilities* – like the understanding of the wants and needs of others – and other-regarding *emotions* like empathy and sympathy. There is accumulating empirical evidence that human moral judgements are co-determined by unconscious processes ("moral intuitions") and conscious reflections on which actions (including wilful defaults) are justified or not. Unfortunately, many moral philosophers disregard the first part and focus only on the latter, "genuine" part of morality.

There is no doubt, humans are "*hypersocial"* animals, relying on many physiological and psychological processes to establish and maintain group living, culture being only one of it. In the social realm we find endless patterns of similarity in the tree of life. Many non-human animals behave in ways that share a number of important aspects with human behaviour. These similarities are especially evident if non-human animals are compared with children, elderly people, people deciding under pressure (the so called "fast and frugal decisions"), hunter-gatherer societies and our extinct relatives and ancestors, the other hominid species. Why is this so? What causes these similarities?

When it comes to morality, the essential transition is the one from social to *prosocial* behavior. Prosocial tendencies include acts of help or assistance to others. Together they constitute *cooperative* and *altruistic* behavior (Brosnan & Bshary, 2010). Konrad Lorenz used the term "moral-analogous" to emphasize the obvious, non-accidental similarities of prosocial behaviors between humans and some non-human species. In the last decades, primatologists and ethologists discovered and investigated a broad variety of behaviors that could be labelled "cooperative" and – in few cases – also "prosocial" (Silk 2007; de Waal & Suchak 2010). Many surprising discoveries are the result, especially how widespread these behaviors are in the animal kingdom. For instance, cleaner fish have been found to cooperate in a mutualistic manner, and even more exciting, they show sensitivity to the presence of an audience in order to maintain a cooperative reputation (Bshary & Grutter 2006). From a biological ("Darwinian") point of view even these altruistic acts, which are per definition costly and disadvantageous for the donator, must on average and in the long run produce fitness-increasing behavior.

Modern biologists don't stop with a historical or comparative

description but seek to uncover the mechanisms of behavior. They ask how these cooperative and altruistic acts are regulated. Which set of psychological rules, which intrinsic motivations and which response rules to extrinsic stimuli have emerged during evolution, favored by natural selection? Because natural selection is a slow and "opportunistic" process, maintaining successful traits as long as possible and only slightly modifying them over time, we find similarities as patterns of divergence (homology) and convergence (analogy) in closely related species. This is not only true for anatomical or physiological traits but also for cognitive and emotional ones (Fitch et al. 2010).

In human foragers (hunter-gatherer societies), prosocial acts include voluntary food sharing with both kin and non-kin, allomaternal child care, division of labor, care for the sick, injured and elderly, information donation (teaching), cooperative hunting and collective warfare. Prosocial acts occur within (mostly) and between family units within local groups (Gurven 2004; Hrdy 2009). Counterintuitively, some species more distantly related to humans than great apes show striking parallels with humans concerning cooperation. In particular, voluntary food sharing, teaching, allomaternal care and care for the injured are more common in cooperative breeders such as callitrichid monkeys, social carnivores such as meerkats and canines than in great apes. It has been suggested that a high intrinsic prosocial motivation evolved convergently in *cooperative breeders*, probably because of the risk of neglect of unattended offspring and the need for active provisioning to maintain fast growth levels. The adoption of cooperative breeding typically leads to the formation of family units, within which prosocial acts are dispensed more freely because they generally benefit close kin or pair-bonded partners (Chapais 2008; Jaeggi et al. 2010).

What are the cornerstones of such intrinsic prosocial motivation? The famous primatologist Frans de Waal proposes that the human capacity to act well at least sometimes, rather than badly all the time, has its evolutionary origins in emotions that we share with other animals – in involuntary (unchosen, pre-rational) and physiologically obvious (thus observable) responses to the circumstances of others (de Waal et al. 2006). A fundamentally important form of emotional response is *empathy*. This proximate mechanism for prosocial behavior that makes one individual share another's emotional state is biased the way one would predict from evolutionary theories of cooperation (i.e. by kinship, social closeness and reciprocation). There is increasing evidence in non-human primates (and other mammals) for this proximate mechanism as well as for the unselfish, spontaneous nature of the resulting prosocial tendencies as reflected in the way they support each other in fights, hunt together, share food and console victims of aggression (de Waal & Suchak 2010). However, there is now also evidence for individualized social support in common ravens, including consolation, i.e. post-conflict affiliation directed from a bystander to the recipient of aggression (Fraser & Bugnyar 2011) and long-term memory of the value of relationships (Boeckle & Bugnyar 2012).

Importantly, empathy is not a uniform trait across the animal kingdom but comes in at least three different shades. It is considered as the capacity to (i) be affected by and share the emotional state of another (e.g. emotional contagion), (ii) assess the causes for the other's state and/or (iii) identify with the other, adopting his or her perspective (de Waal 2008). At a more

advanced level, however, emotional empathy can yield *sympathy*, that is, the recognition that the observed partner has situationally specific wants or needs that are different from the observer's. Current research aims to understand whether non-human animals also share forms of sympathetic concern with us.

A crucial element for the evolution of advanced forms of cooperation, including both cognitive and emotional propensities, is the sensitivity to others' efforts and payoffs compared with one's own costs and gains. *Inequity aversion* is thought to be the driving force behind unselfish motivated punishment in humans constituting a powerful device for the enforcement of cooperation. Primatologists showed that capuchin monkeys refuse to participate in cooperative problem-solving tasks if they witness a conspecific obtaining a more attractive reward for the same effort (Brosnan & de Waal 2003). We found experimental evidence also in dogs (Range et al. 2009).

Much of the debate among philosophers and biologists over human uniqueness has centred on the question of whether any non-human animal is capable of developing anything like a real "Theory of Mind" (Call & Tomasello 2008). The possessor of this special socio-cognitive capacity is able to imagine the contents of another being's mind as different from one's own and thereby infers the wants and needs of the other. There is a wealth of experimental data now from many non-human animals being capable of "*mindreading*" to various degrees. Again, not only chimpanzees, but even ravens infer from "what the other has seen", "what the other knows" and "what it would do next" (Heinrich & Bugnyar 2007). Many philosophers are now inclined to accept these discoveries as the evolutionary basis or prerequisite for moral reason.

It would be foolish to doubt that humans are nevertheless different in many respects. First of all, their prosocial attitudes can be more intense and far-reaching, suggesting that prosociability has been under stronger positive selection during human evolution. Within human societies, kin networks extend far beyond the family unit (Chapais 2008). Even when applied to non-relatives, a high prosocial motivation may be beneficial if it sends a costly signal or serves to maintain one's good reputation. Nevertheless, even if human prosocial behavior is considerably more elaborate than that of any non-human animal, it is continuous with non-human behavior. Given this continuity of good nature, there is no need to imagine morality being mysteriously added to an immoral core.

What remains then to be added to achieve full morality? The roots of human moral uniqueness lie in our ability to take an *impersonal* view of our own doings and to invent co-operative *principles*. The main proposition here is its *universal* nature. Non-human animals do not *universalize* their good behavior, but humans do. Philosophers point out that the universalization of the set of beings (all persons or all creatures with interests) to which moral duties are owed is treated as conceptually feasible by humans. And it is at least sometimes put into practice by them. True "moralists" sharply distinguish animal behavior motivated by emotion from human *cognitive* morality. The latter, they say, must be based on self-consciousness about the propriety of one's proposed line of action (akin to the Kantian conception of self-governance). So, now we are finally at the important distinction. Philosophers prefer a self-consciously *normative* account of morality as how people *ought* to act, while biologists and psychologists are more interested

in a *descriptive* account of how most of us *actually do* act most of the time (these different accounts are nicely discussed in "*Primates and Philosophers*"; de Waal et al. 2006).

In conclusion, morality is a natural phenomenon. It has a core (emotion-motivated prosocial behavior) that can be (easily) naturalized. Added on to it is the human capacity to *reflect* own interests in the mirror of the other, to *extrapolate* and *reason* about universal norms and to *enunciate* normative ideals. This part is less easily naturalized. However, if there is continuity between biological and cultural evolution, with self-consciousness, language and reasoning being a result of an intricate interplay of both, it would come into reach. Anyone still for mysteries?

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Books and Publications

Books

Why Calories Count: From Science to Politics (California Studies in Food and Culture)
Authors: Marion Nestle, Malden Nesheim
Hardcover: 304 pages
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Tomatoland: How Modern Industrial Agriculture Destroyed Our Most Alluring Fruit
Author: Barry Estabrook
Paperback: 256 pages
Publisher: Andrews McMeel Publishing; Original edition (April 24, 2012)
Language: English
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The Weight of the Nation: Surprising Lessons About Diets, Food, and Fat from the Extraordinary Series from HBO Documentary Films
Authors: John Hoffman, Judith A. Salerno, Alexandra Moss, Harvey V. Fineberg (Afterword), Kelly D. Brownell (Foreword)
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Environmental Ethics
Author: Joseph R. Des Jardins
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Four Fish: The Future of the Last Wild Food
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