

The Relevance of Anthropology and the Evolutionary Sciences for Political Philosophy

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1. Political Philosophy for a Special Animal

All discourse on, and analysis of, human society has as its prerequisite some concept, simple or complex, of what it is to be a human being. Sociology, political theory and political philosophy require anthropology. Our understanding of ourselves relates directly to the way we wish to live – and to the set-up of our social world. According to Plato, for example, the human being is capable of ultimate insight, of grasping truth. This human capability can, however, be easily constrained by any number of human motives which cloud the perception of truth. This is the reason why Plato places education so centrally in the constitution of his *polis*. He recommends, among other things, that the citizens of the *polis* should grow up without knowing their own families (their parents and siblings). According to Plato, strong familial bonds lead people to think of their own particular interests as more important than the public good. Two thousand years later, Thomas Hobbes can characterize human beings by their fear of death. In Hobbes' analysis, a powerful state, governed by a powerful leader, is the only thing which will grant the sense of security necessary for the cohesion of a society of human beings. Therefore it is, according to Hobbes, in everyone's self-interest to subordinate one's own needs to the needs of the state. Rousseau, by contrast, holds the opposite opinion. He sees a strong relationship between misanthropy and an almost unlimited confidence in human nature: "Men are evil – melancholy and continuous experience removes the need for proof. However, man is naturally good."¹ For Rousseau social constraints are the primary source of the corruption of human nature. These constraints, he

¹ Rousseau 1755.

claims, are the cause of human hatreds and “all imaginable bad things.”²

Despite differences of detail, all the above thinkers have one thing in common: they assume that taking the natural state of the human being as fundamental to socio-political order will result in the greatest good. Given this, Political Philosophy has the task of understanding how human beings naturally behave. Furthermore, politics must seek ways of controlling and moderating the unsocial aspects of human nature, and of encouraging and promoting the social.

There was a fundamental change in the methodology of Political Philosophy at the end of the twentieth century. From then until now two opposed interpretations of the interrelation between politics and anthropology have co-existed:

- 1) The social sciences have freed themselves almost completely from the idea that there is a basic nature common to all human beings. After the “cultural turn” within these disciplines, they took it for granted that immediate access to facts is methodologically impossible, including facts about the purported nature of human beings. Scientific theories are understood as a kind of “symbolic orders which have been produced by social processes and lead to ultimately contingent interpretations.”³ These systems of orders do not explain human nature. Social scientists use them instead to construct a picture of the human being as a construction from nothing. One well-known example of such use is that of Judith Butler. According to her, both our gender and our sexual identity are – like any other binary system relating to the dichotomy between male and female – merely a cultural construct without any biological foundation.⁴ One might speak here of “culturalism.”⁵ Culturalism is an idea common to such diverse approaches as gender studies, structuralism, Foucaultian discourse analysis, deconstructivism, and constructivism. It presupposes that there is no immediate access to knowledge of human nature, and

² *Ibid.*

³ Cf. Reckwitz 2006, 24.

⁴ Butler 1993.

⁵ See the pointedly illustration in Fischer 2005.

that all so called “insights” regarding human nature are merely cultural products. According to these approaches, *any* claim to a definitive analysis of human nature is naive and must therefore be refuted. This has important consequences for the interpretation of biology as a natural science: According to culturalism, biology creates its own subject — biology only remains a “discourse of power which creates an illusion of objectivity, but which inheres its own contingency.”

- 2) On the other hand, one might choose to understand the twentieth century as a triumphal procession of evolutionary sciences. These disciplines unquestionably shed light on the biological species *homo sapiens*. After Darwin had cleared the way for evolution-oriented behavioural research (on the model of anatomical and morphological research) it was common to use evolutionary models to account for the ways we behave, feel, and even think. Classical ethology, and later socio-biology and, even more recently, evolutionary psychology together came to new insights and made the bold claim that nature puts a short leash on the human being, that is, that the scope of possible behaviours is narrowed severely through evolutionary pathways.

As a consequence of these two different approaches, political theory and evolutionary sciences became alienated from one another. On the one hand, every reference to “human nature” is vehemently rejected by political theorists. As Clifford Geertz puts it: “There is no human nature apart from culture.”⁶ This slogan had also a political dimension: Reference to nature was seen as a move by reactionary conservatives to justify inequality and to undermine emancipatory freedoms.⁷ On the other

⁶ Geertz 1973, 35.

⁷ Obviously, political dimensions are more complex. European conservatives often used recent results of behavioural biology to show invariable human properties and a constant social behaviour. But in the United States, the majority of conservatives refused Darwinism since it threatened their religious beliefs. “Many conservatives, it seems, find the Darwinian account of human nature at best useless and at worst pernicious” (cf. Holloway 2006, 7). However, in recent years, there were many conservative theorists in the U.S. referring to Darwin, whereas European socialists nowadays do not shy away from evolutionary arguments neither.

hand, evolutionary scientists point to a growing loss of reality within the (culturalistic) social sciences. For natural scientists it is problematic that socially relevant disciplines still do not acknowledge the results of empirical research. Some scientists even claim that social sciences should be re-constituted on evolutionary grounds. As Robert Trivers suggests, disciplines such as “political sciences, law, economics, psychology, and anthropology” should all become “branches of sociobiology.”⁸

In the following, I will defend neither of the two extreme positions but will look for possibilities of updating the traditional synthetic view that is based upon an interrelation of natural and political sciences. To do so, I will focus on two questions:

- What do evolutionary sciences tell us about human beings and about the development of culture?
- What practical consequences can we draw from this for political philosophy? (How can, for example, we make use of the knowledge of biological anthropology and evolutionary theory when conceiving prudent political structures and institutions?)

The first question will be discussed in the following section (Section 2) in which a thumb-nail sketch of the human being as interpreted by biology will be presented. After that, the consequences of this picture for political philosophy will be investigated (Section 3).

2. Human Nature and Culture Seen from an Evolutionary Perspective

2.1 The Human Being as a Creature of Possibilities

What can we learn about the nature of human beings from biology and evolutionary theory?⁹ “Seeing a dog, a horse and a man yawn, makes me feel how much all animals are built on one structure,”¹⁰ wrote

⁸ Quoted from the German newspaper *Die Zeit (Dossier Soziobiologie)*, July 29, 1978, 33.

⁹ For a more detailed answer to this question, see Illies 2006, 120-155.

¹⁰ Darwin 1838.

Darwin into his diary in 1838. In 1859, in his *On the Origin of Species*, he made only a few vague comments about human beings. But the evolutionary perspective obviously gives a new foundation for (biological) anthropology, and thus it is no surprise that a few years after the publication of the *Origin*, other authors came up with evolutionary histories of the human animal: Thomas Henry Huxley, Ludwig Büchner, and Ernst Haeckel being but three examples.¹¹ Darwin wrote his own anthropology later: *The Descent of Man and Selection in Relation to Sex* was published in 1871, and *The Expressions of Emotion in Man and Animal* in 1872. His method was to compare observations of human and animal behaviour.¹² He found, for example, similarities in the expression of fear and submission. In both works Darwin raises topics which are still points of debate today. All of them share the premise that there exist biologically selected dispositions within human behaviour: for emotions and even for cognitive acts.

Evolutionary biology has, in the last century, been honed by correcting two points within Darwin's theory. Firstly, biologists discovered the *mechanism* of heredity (about which Darwin had no developed theory). Secondly, not the *species* but the *gene* is now seen as the fundamental unit of selection. A property is selected because it gives a certain individual (plant or animal) advantages over its fellows of the same species. This is the only way the property can be distributed within a certain population. As a consequence, selection primarily takes place between genes which encode certain properties. Selection on the level of a group or species is second-order.¹³

This does not change the validity of Darwin's basic assumptions, which are still accepted by the majority of evolutionary biologists. Human beings naturally have dispositions: emotions and ways of behaving and thinking. They were useful at a certain stage in our evolutionary history – for example in the age of hunter-gatherers – and therefore they have been positively selected (first for an individual and later for the whole species). We assume that these dispositions can be found in all

¹¹ Huxley 1873; Büchner 1869; Haeckel 1875.

¹² For Darwin's methodology, see Höhle and Illies 1999, 85 ff.

¹³ For the possibility of group selection, Wilson 1995, Sober 2000. Vehement defenders of group selection of the human are Robert Boyd and Peter J. Richardson (1988).

human beings: they are part of the “genetic core” of the species. Even if they are always integrated into culture, their generality does not allow for an explanation in purely cultural terms (at least, according to evolutionary biologists). This does not mean that these dispositions are found equally pronounced in every single human being or that they always cause identical behaviour. Behaviour varies from case to case and depends also on the socio-cultural environment in which the life of an individual develops.

But which of these results are important for political theory? We can distinguish four areas, even if only roughly. We shall call the first area *elementary life requirements*. These requirements human beings and most animals have in common: we (as all animals) must eat and drink, be active and sleep, and reproduce. In addition, there are three groups of phenomena which, we would argue, have a genetic foundation: *dispositions towards sociability* (cooperation, strategic alliances, altruism etc.), *dispositions towards unsociability* (aggression, defence against strangers, social ambition etc.) and *dispositional beliefs, thoughts, and emotions*. Jonathan Haidt calls these emotions “moral emotions” since they either support social behaviour (including altruistic behaviour) or punish anti-social behaviour.¹⁴ David Buss gives a more precise account which categorizes these feelings in to three groups, namely “respect for authority,” “a thirst for justice,” and “the evolution of care.”¹⁵ The last area is especially interesting since it not only touches on the socio-political, but also includes phenomena that seem to be over and above pure emotions. These include certain inborn patterns of thought, mainly relating to social crises which the individual experiences when dealing with other individuals, which might well be part of our genetic heritage. Leda Cosmides and John Tooby claim that we naturally think in categories of “social contract.”¹⁶

It is likely that there are also genetic dispositions to normative structures – behavioural rules, norms, and values. Edward O. Wilson argues, along these same lines: “Precepts chosen by intuition based on emotion

¹⁴ Haidt 2001 and 2003.

¹⁵ Buss 2004, 388.

¹⁶ Cosmides and Tooby 1992; see also Cosmides 1989.

are primarily biological in origin and are likely to do no more than reinforce the primitive social arrangements. Such a morality is unconsciously shaped to give new rationalizations for the consecration of the group, the proselytizing role of altruism, and the defence of territory.”¹⁷

A whole range of social behaviour seems to be determined (or at least influenced) by natural dispositions. This, at the least, is what biological anthropology can tell us about human nature. This does not contradict the fact that the human being needs a cultural community for his full development. The human being is not able to flourish completely by virtue of these innate dispositions alone: without a cultural community, his dispositions cannot be manifested. Furthermore, specific cultural frameworks play decisive roles when it comes to the question of *how* these dispositions are to be developed. What, for example, does social standing mean? How does one attain to it in, for example, wrestling, singing, or a successful professional career? What status symbols mark it? These questions cannot be answered with reference purely to disposition alone: specific social settings determine the expression of the disposition. “The dispositions influence the development of human behaviour rather by suggestions than by prescriptions” – as Hubert Markl puts it.¹⁸ From a biological point of view, the human being is primarily a *creature of possibilities* placed within a range of behaviour where the range is biologically bounded but the behaviours are culturally affected.

2.2 Problems in Biological Anthropology

There is much to support Darwin’s idea that the evolutionary history of *Homo sapiens* also includes behavioural dispositions. The literature of the last few decades adduces many examples of human beings displaying strong regularities and culturally independent patterns of behaving, feeling, or thinking; and there are various explanations of their selective advantages. But what does this tell us? How can this rule out the possibility that a regularity – even if it occurs in all human beings – is *solely* a

¹⁷ Wilson 1978, 167.

¹⁸ Markl 1986, 86.

cultural regularity? Statistical methods can make genetic-disposition claims plausible, but can never prove them.¹⁹ One would need as a control group a number of individuals who grew up without any cultural framework; but such persons do not exist, and such a comparison is therefore impossible. Human development decisively relies on interactions with other human beings. Furthermore, most dispositions in which political philosophy is interested relate to social action, i.e. behaviours enacted within a cultural framework (even if this framework may be minimal). It is a methodological precondition that our actions are interwoven within a socio-cultural framework.²⁰

The analogy adduced by Darwin does not help here. Similar behaviour in animals and human beings can never be enough to give a *positive* proof of the existence of any disposition. For such a proof, one would need to show how certain genes encode proteins which build up a certain brain structure and thereby cause certain behaviours. At present no one can say when or whether biology will be able to demonstrate such details.

Perhaps such a positive proof will never be forthcoming. Many critics assume that human culture developed in so a short time that genetic selection of relevant dispositions was impossible.²¹ Also most dispositions (if they exist at all) are inherited poly-genetically, and this would make the whole concept of rival genes inapplicable. There is also the objection that many explanations for selective advantages are mere speculations and do not help in the understanding of the phenomena.²²

There is much biology would have to do in order to come up with a positive proof of genetic dispositions. One of the first steps biology

¹⁹ For an overview of objections against biological anthropology, see Kleeberg and Walter 2001.

²⁰ However, one might try to observe the *interaction* between “natural” humans (i.e. humans growing up without any cultural frame), since such humans could not learn anything from anyone. But even this would not be enough for a proof in the strict sense: Firstly, most behavioural patterns which are genetically disposed require a minimal ability of communication, and language can only be acquired within a cultural frame. Secondly, even the observation of “natural” humans does not methodically exclude the possibility that they might learn a certain behaviour, if only during process in which they are observed.

²¹ For example Kleeberg and Walter 2001, 51 f. But for the opposite opinion, see Lorenz 1974.

²² Many critics say that sociobiology often re-describes already-known social phenomena with evolutionary terminology, but do not add anything to our understanding. Even Michael Ruse claims this rather snappishly in *Philosophy of Biology Today*, 1988, 66 ff.

would have to take is to articulate *what* actually might be grounded genetically. What does it mean to have a “disposition?” What exactly are we claiming if we, for example, assume that human beings are nepotistic or reciprocal altruists by nature? Obviously this should mean that humans behave in certain situations in a particular way (which needs to be demonstrated by statistically significant evidence) and that the cause of this particular behaviour lies (at least partially) in biological structures. But actions are not properties like hair colour or the ability to roll the tongue. Actions are always the result of complex factors and procedures.

Emotions may well have an important role in triggering action. Mark Ridley describes emotions as mediators between an inner calculator and outer behaviour.²³ A disposition for altruism would then mean that we naturally have certain emotions, such as sympathy, which lead us into particular sets of relationships (for example, when a relative is in need) which lead to altruistic actions. But this cannot be enough; when human beings *act*, the behaviour is not determined; for then it would not be an act. A person who feels vertigo when looking down from a great height, will shy away from a precipice in fear. This is not an act. When we *act*, we are not simply determined by an emotion – we *decide* to behave in a certain way (at least, that is what most of us believe). That is the reason why early ethologists stressed that human behaviour is not entirely controlled by instincts (as they believed the behaviour of other animals was), but rather that human beings can and must always make decisions. Even if emotions mediate between the inner calculator and behaviour, one would need to clarify the complex role of reflection (or of the human will). One might agree with Steven Pinker when he claims that the expressions ‘kin-directed’ and ‘reciprocal altruism’ (and we might add: the dispositions towards them) are a “behaviourist short-hand for a set of thoughts and emotions”.²⁴ But we also need to clarify what is meant by those “thoughts.”

This whole interrelation is barely understood — and as long as there are no plausible theories purporting to explain it, all theories of natural behavioural dispositions remain incomplete. This general problem is

²³ Ridley 1996, 193.

²⁴ Pinker 1999, 403, my emphasis.

brought to the fore by various attempts to supply a conceptual analysis of “dispositions” which would make the *explanandum* more precise. What is it that could be genetically determined? Konrad Lorenz speaks about “inherited coordinates” (*Erbkoordinaten*) or “instincts.” Recent ethologists speak instead of “innate behaviour.” Edward O. Wilson postulates natural “epigenetic rules,”²⁵ and other evolutionary biologists rather vaguely claim that there are “internal desires, emotions and lustfulness.”²⁶

Should these considerable problems lead us to the conclusion that political theory should take the possibility of genetic behaviour dispositions with a pinch of salt? No. The hypothesis that such dispositions exist is still a plausible explanation for the fact that certain behaviour and phenomena are culturally invariant. This holds even though there is no positive proof of such genetic disposition and all such dispositional theory needs to be spelled out more precisely. The hypothesis is plausible for two reasons. Firstly, it is consistent with many other insights in evolutionary biology and in other related disciplines (such as neurobiology). Secondly, we do not have any other plausible explanation. If – as many contemporary political theorists argue – statistically significantly behavioural patterns were *merely cultural phenomena*, it is rather puzzling as to why they occur within *all or very many* cultures.²⁷ It is therefore, I believe, fruitful to pursue my initial question concerning the ramifications of the evolutionary sciences on the notion of human nature, even if the results of these sciences must still be regarded as speculations.

2.3 Anthropological Foundations of Socio-Cultural Phenomena

Thus far my analysis has been limited to the individual human being and the biological determination of her actions. But many see this limitation as a conceptual barrier when asking why a biologically-determined human being gives her actions certain social forms and creates (or plays

²⁵ See Lumsden and Wilson 1980.

²⁶ Hubert Markl, quoted by Voland 1999.

²⁷ One exception may be the — even less plausible — thesis that the human is completely free and there are no explanations for frequent behavioural patterns at all.

her part in creating) institutions controlling her own behaviour. ('Institution,' in this context, means a system of rules creating a certain social ordering. Institutions can be either formal or informal.) Unlike behavioural biologists, who analyse the genetically-determined realm of possibilities, I wish to investigate why human beings order their realm of possibilities in such a way as to create their socio-cultural worlds.

Arnold Gehlen was one of the first philosophers to arrive at such an analysis. His starting point is the human being as a biological creature, but he arrives at a social philosophy and a theory of institutions. He does not, however, begin with the rich biological realm of possibilities, but rather focuses on the shortcomings and limits of human nature. He describes the human being as an "undetermined animal" (referring to a formulation by Nietzsche). This "undetermined animal" has many shortcomings, since there are no controlling instincts or stable behavioural patterns in its nature. Even though his analysis is in many ways outdated (as demonstrated above) it is still worth taking a look on Gehlen's explanation of complex social structures. According to Gehlen, social institutions compensate for the shortcomings of natural instincts. They unburden the human being by giving him stability and control of his actions. Gehlen distinguishes three ways in which the socio-cultural world (first and foremost the institutions) is influenced and affected by natural human dispositions:

(i) The lack of other behavioural controls makes it necessary for human beings to create unburdening institutions.

(ii) Even if dispositions do not entirely control the human being, these instincts still guide her actions in general directions (for example, towards ingestion). Institutions are to be understood as "forms of overcoming life-important tasks or circumstances," since, for example, "reproduction or defence or ingestion require a regulated and continuous cooperation."²⁸

(iii) Gehlen also claims that institutions arise during a process of development. They are not the result of any conscious plan but the result of the unplanned action of many individuals. "The living together of humans is stabilised in forms of orderings and rules, which come into ex-

²⁸ Gehlen 1961, 71.

istence just by themselves. One has to look for their steering mechanism within the area of instincts, but never in the rational calculation of ends.”²⁹

About the process of democratisation, Gehlen claims that this has its own dynamic and does not follow any sociological rationale: “The democratic form of government for example is adopted by many peoples like the European way of clothing.”³⁰

We might present two general objections to Gehlen’s thesis. Firstly, his theory of institutions is too neutral as to question of their validity and justification. He explains institutions more or less purely functionally in terms of a stabilising power. But whether an institution, first and foremost the important formal institutions within law and politics, are philosophically legitimated is not an interesting question for Gehlen. Secondly, Gehlen does not reflect whether and how the individual institutions are involved in a selective competition with one another. He does not say whether a non-biological evolution within the socio-cultural frame is possible or not. Gehlen does not think in a sufficiently evolutionary way. He considers the functionality of institutions but seems not to care about their variation or selection. This is a rather “thin” understanding of Darwinism. It is, of course, a very evolutionary way of thinking to assume that a phenomenon has an advantageous property. For, according to evolutionary theory, properties are functional adaptations (at least in general; there are some exceptions, such as the “*genetic drift*”). This is, however, only a conclusion drawn from Darwinism and not a central tenet of Darwinism itself. Thirdly, Gehlen’s starting point conflicts with the insights of modern evolutionary biology. It is hard to see how his assumption, that human beings are deficient (“*Mängelwesen*”), holds when we obviously have highly specialised behavioural dispositions.³¹ Furthermore, the assumption of deficiency contradicts the logic of evolutionary thought. For the human being was – at a certain point in time – a successfully selected primate. She must, then, have been well

²⁹ Gehlen 1969, 95.

³⁰ Gehlen 1964, 91.

³¹ Gehlen argues against this that the possibilities human beings have is so-to-say the “flip-side” of an incomplete being and he is contrasting human imagination with rationality. See Gehlen 1940.

adapted. (The compensation of physical shortcomings via cultural achievement is a phenomenon which occurs much later in history and cannot be an explanation for the positive selection of *Homo sapiens* over other *hominidae*).

I wish now to focus on some other attempts of relating the biological to the socio-cultural. In his studies of ancient religions Walter Burkert (1996) raises the question of the biological roots of our symbolic culture (religion is a good example of such culture). Like Gehlen, Burkert sees religion as a cultural phenomenon which guides human action and gives its adherents orientation. It is therefore a functional institution. Burkert does not see religion as a compensation for our natural shortcomings, but understands it as a consequence of biological skills. Thus he conforms to the widely accepted opinion that human beings have many dispositions which allow for a wide range of realisation.

But what is meant by a disposition towards religion? Burkert claims that it is an extension of the cultural framework created by the ability to communicate in a language. "Parallel to language, religion too, as an effective means of most serious communication, can be hypothesized to have arisen at a certain stage in prehistory as a competitive act, a way of gaining an advantage over those who did not take part in it."³² That language has a biological foundation is not only obvious because of its universality, it can also be shown by reference to the very special physiological apparatus needed for vocalization. According to Burkert, one must assume a combined evolution of the biological conditions for language and language itself. One cannot separate nature from culture here, since language is a so-called hybrid phenomenon in which nature and culture are intertwined. Language allowed early human beings not only to communicate, but also to create a common linguistic world of meaning which gave them guidance and orientation.

But in what way is religion an adaptation? Although Burkert (1996) admits that a detailed explanation of its development and selective advantages remains part of the inaccessible pre-history of humankind, one can make educated guesses as to how religion contributed to evolutionary fitness.

³² Burkert 1996, 19.

One factor is the *orientation* religions (and other institutions) provide. In a complex environment religions offered categories for interpretation which helped to order and structure the natural world. Burkert refers here to Niklas Luhmann's thesis that religion allows for a "reduction of complexity," and adds that religion gives "orientation within a meaningful cosmos for those who feel helpless vis-à-vis infinite complexity."³³ Religion helps to orientate the individual both in a theoretical and a practical way. It offers sense and gives practical solutions to difficult problems. Its offers are universal since religion broaches all topics affecting human life: elementary needs (such as hunger and thirst), elementary actions (such as giving and receiving), special experiences (such as death), and emotions (such as fear and happiness). Religion thus gives the human being a certain distance from these phenomena. Religious reference to trans-empirical principles makes it easier to deal with difficult situations. According to Burkert, all this contributed to human evolutionary fitness. Another factor is the *motivating* power of religion: it can channel and encourage particular behaviours. Rituals encourage continuous repetition of certain behaviours.³⁴ Religion motivates by enduing reality with transcendental seriousness. It integrates fear and hope, and events and actions, into an ordered moral and metaphysical scheme.³⁵

Both Gehlen and Burkert treat institutions as functional features of the human being. But Burkert understands the human being from the perspective of her dispositions (and possibilities) rather than from the perspective of her shortcomings. He also assumes that the human institutions and the nexus of individuals in community offer a higher evolutionary fitness than that which can be attained by individuals functioning alone. He therefore concludes there must have been positive selection for this combination. Human beings without religious disposition, and therefore without its institutional manifestation (as, for example, the Neanderthal) appear to have vanished. But Burkert does not address the question as to whether there is competition among institutions and

³³ Burkert 1996, 26.

³⁴ Cf. Burkert 1996, 44.

³⁵ Cf. Burkert 196, 47.

therefore a (Darwinian) evolution of institutions.³⁶ His primary goal is to demonstrate how culture – and especially religion – builds upon biological dispositions and how it reacts to these dispositions.³⁷

2.4 The Natural Framework of Cultural Developments

The above authors attempt to connect the socio-cultural and the biological using the individual human creature as a starting point. Other authors begin by looking at collectives. One can see how some societies and cultures are influenced by natural (but non-human) circumstances: by, for example, the characteristics of a landscape, the climate, or the local flora and fauna of a region. Such observation has been used in political philosophy, in Montesquieu's *De L'Esprit des Loix* (1748). He sees, for example, a connection between the climate of a region and its legal system. However, his speculations remain largely unjustified. The same is true of Ellsworth Huntington's attempts in *Climate and Civilisation* (1915), in which he proposes maps of "climatic energy" which lead to certain cultural developments.

Jared Diamond's arguments are more convincing. By reference to certain environmental parameters he explains evolutionary scenarios according to which the members of a tribe either died out, became hunters and gatherers, or created complexly organised states.³⁸ In *Guns, Germs and Steel. The Fate of Human Societies* (1997), he identifies four *natural* factors which have played a decisive role in the development of human cultures over the last 13,000 years.

1) He points us to the richness of regions with wild plants and animals which could be domesticated. Only where there is enough richness of this kind, is there the possibility of agriculture. Agriculture and the nutrition surplus which is allows enable both the specialisation of professions (there can be non-agricultural professions) and the growth of population.³⁹

³⁶ He distinguishes bigger developmental steps, for example from a primarily oral towards a written culture and religion. See Burkert 1996, 214 ff. But he does not say whether this has to be seen as an evolutionary process of selection.

³⁷ Cf. Burkert 1996, 36.

³⁸ Diamond 1997, 501 f.

³⁹ Diamond 1997, 502.

2) Diamond also refers to the agricultural circumstances which allow the “diffusion and migration” of innovation. The Eurasian regions benefited from their east-west orientation, which allowed such exchange. With its east-west axis, it is not divided by impassable seas or mountains (obstacles for the exchange of plants, animals, and technical innovation). Moreover, useful plants (such as the pea) and domestic animals (such as the chicken) could flourish in all areas of this region because, by virtue of its east-west orientation, it presents much the same climate within its latitudinal boundaries. This not the case for North America, for example, because of its north-south orientation.⁴⁰

3) The relative propinquity or isolation of continents from each other is another significant factor according to Diamond. Relatively isolated continents, such as America, did not profit from the innovations of societies on other continents, whereas Africa’s relative proximity to Eurasia allowed Africans some contact with some Eurasian invention.

4) The size of habitable area and population are also important. A higher population is an advantage: the more people, thus the more creative people – and the more ideas and innovations. China, for example, has had more human resources than New Guinea by virtue of its large population. It is, however, an advantage if the geographical circumstances allow for a number of rivalling and competing societies within a limited space. Diamond sees this as one of the main reasons for the swift political rise of Europe (and for the decline of the technically more developed China). Fragmentation into several small states (in Europe facilitated by a geography featuring many islands, peninsulas, seas, and mountains) creates, according to Diamond, high innovation pressure. Societies had to choose between decline, innovation, or the rapid acquisition of the innovations of other cultures (in, for example, the field of weaponry).⁴¹

In sum, Diamond focuses on the natural in human history, and seeks to shed light on causal interrelations.⁴² His book has been accused of defending a kind of determinism. He refutes this by pointing out that human creativity is also a condition of development. But he looks upon individual

⁴⁰ Diamond 1997, 208-230.

⁴¹ Diamond 1997, 503.

⁴² Diamond 1997, 506.

achievements with the eyes of a natural scientist. Why were there so many technological developments in Europe when time seemed to have stopped in Tasmania? For Diamond, the difference lies not in any special talents Europeans may have, but rather in the difference of environmental and cultural conditions.⁴³

But why is Diamond's history of the natural sciences interesting for political philosophy? It is because of the possibility of applying his reconstruction of development to contemporary societies in such a way that we might not only predict their future, but perhaps also be able to direct and influence that future. Diamond himself explores this in his *Collapse: How Societies Choose to Fail or Succeed* (2005) in which he analyses the conditions for the decline of cultures. In addition to social factors (such as warfare), Diamond identifies some natural circumstances which have contemporary relevance, notably the lack of resources caused by unsustainable methods of dealing with the environment and natural commodities. One need only consider the clearing of whole regions of forest in North Africa, which has destroyed the livelihoods of the population. Diamond accords due respect to human beings and their freedom by claiming that these environmental changes are not inescapable facts of history. Some of these circumstances are caused by human short-sightedness. Some circumstances are natural events to which humans beings did not react appropriately in good time. He concludes that it is the attitude and flexibility of cultures which determines whether or not natural circumstances lead to decline (as the work's subtitle implies). Cultures must be prepared to modify their behaviours and values if they are to react successfully to existential threats in a changing environment. Otherwise, they will be negatively selected.

2.5 The Darwinian Evolution of Cultures

Is it merely a metaphor to speak of the "natural selection" and "evolution" of cultures or of elements of a culture, such as institutions? Not

⁴³ This reinforces the objection of determinism since Diamond stresses over and over that natural factors are the "deeper causes" for the critical empiric line of thought in the Greek-Jewish-Christian tradition which finally lead to the rise of Europe. Cf. Diamond 1997, 507.

necessarily, since Darwin's explanation for the development of species can theoretically be applied in many fields. With its concepts of variation, inheritance, and selection, Darwin's theory can explain the development of very different phenomena. It appears to be necessary that replicating entities which are all dependent on limited resources compete with each other. Also it appears to be necessary that the passing on of properties is relevant to the survival of any such entity.⁴⁴ Thus evolution can take place even where the replicating units are not DNA helices so long as the relevant characteristics of a competition exist. Darwin himself attempted to explain the development of language using the concept selection. More recently we have seen evolutionary models for the development of creative thought and cultural traditions (D. Campbell), for the development of scientific theories (S. Toulmin), the distribution of computer viruses via the internet (S. Blackmore), and for the way our immune system works (C. Plotkin).⁴⁵ In all these cases, analysis in terms of replicating entities competing for resources proves fruitful. The entity which prevails in the long run is the one which exhibits the most useful properties – properties handed down to it by its parent or predecessor entity.⁴⁶ Toulmin, for example, argues that some theories prevail over others because of their greater explanatory and integrative power, and are thus handed down (replicated) more than less efficient theories (which finally vanish).

Daniel Dennett usefully talks about the “substrate neutrality” of the principle of selection.⁴⁷ If one accepts this idea it makes sense to ask to what extent cultures and institutions exhibit Darwinian selection processes — independently of the question regarding their biological roots or the consequences for the biological fitness of human beings. Very much in this sense, already Darwin's contemporary Herbert Spencer (1820-1903) distinguished three stages of the evolutionary process: an

⁴⁴ See Christian Illies 2005. In this paper I try to give reasons why this insight is necessary.

⁴⁵ Campbell 1960; Toulmin 1972; Blackmore 1999, 55 f.; Plotkin 1993.

⁴⁶ There are also borderline cases in which a property is selected without being “inheritable.” But this does not lead to evolution. If the “better fitting” properties are re-acquired in the new generation, there is only the same selection process taking place in every generation.

⁴⁷ Dennett 1996, 82, 353, 398, 430.

“inorganic” evolution of space and earth, an “organic” evolution of living creatures, and finally a “superorganic” evolution which includes the development of social structures including moral frameworks. (Arnold Gehlen simply ignored this possibility, and Walter Burkert did not analyse it in any depth — despite the fact that it has *prima facie* plausibility and had been mooted since the 19th century).⁴⁸

Let us consider a recent example: the theory of the development of institutions by Friedrich August von Hayek (1899-1992). Hayek sees institutions and other cultural artefacts as existing in evolutionary competition. He assumes that human beings need rules and, therefore, always follow them.⁴⁹ But human reason is too limited to do justice to the complexity of action, especially because an individual cannot well estimate the consequences of her actions (and inactions). Rules are helpful, according to Hayek, to overcome this constitutional lack of knowledge. They reduce complexity and limit the logical space of all related circumstances only to the ones which are possibly relevant.⁵⁰ For Hayek, systems of rules, and institutions, represent accumulations of historical experiences and the knowledge of a culture. They provide standard solutions for complex decisions and show the individual what she should (and could do). Language is the decisive condition for creating, mediating, and adopting such systems of rules, because only language allows us to store such rules and to pass them on to younger generations. This process intensified with the advent of written language in later human history. Hayek’s concept of the system of rules applies both to the personal and the social realm of human behaviour: how, for example, to plan my own day and how to greet other people. The rules can be more formal or less formal. Rules of jurisdiction (laws) are, for example, very

⁴⁸ Hodgson (2004) discusses the early attempts that apply Darwinism to social phenomena.

⁴⁹ von Hayek 1996, 22. A recently often discussed example for an evolutionary theory of culture is Dawkins’s memetics. Memetics understand all cultural phenomena (ideas, melodies, pottery, institutions, hallucination etc.) as “memes,” i.e. cultural units that show similar behaviour in the “selection chamber” of culture as genes do in the biological room. According to memetics, a meme is to be selected because understanding humans pick it up and reproduce it — and it fits well into the landscape of memes. (See Blackmore 1999).

⁵⁰ von Hayek 1994, 171. This comes pretty close to Gehlen’s and Burkert’s view that institutions are necessary for orientation.

precisely articulated, whereas moral rules (ethical norms) are often rather informal.

Regarding the historical development of systems of rules and institutions, Hayek uses the three Darwinian concepts of variation, inheritance, and selection. *Variation* happens whenever there is an innovation: a new rule or a new course of action which deviates from tradition. It can be introduced by a creative act, but also by mistake — as, for example, when one misinterprets an old rule. After that, *selection* takes place.⁵¹ Whether a new rule or convention for social interaction within a group will be selected or not depends on how advantageous following it might be for the individual. Advantageous rules will be adopted, whereas disadvantageous rules will be ignored — and finally die out. One might speak of a process of “trial and error.” Thus there will be adaptations to the past experience, which are a result of the selective elimination of less appropriate behaviour.⁵² Hayek seems to assume that selection takes place both within a group and between different groups. In the latter case, an element of biological evolution comes into place: groups with less advantageous rules will be also physically dominated or eliminated by the other groups. Hayek identifies the *mechanism of inheritance* as the imitation of rules. Advantageous innovations and useful rules will be followed by others. An important part of the mechanism of inheritance, according to Hayek, is language-acquisition since language assumes a metaphysic of classifications and relations. In learning a language, one adopts a way of viewing, ordering, and acting within the world.⁵³

According to Hayek, knowledge is accumulated during a long evolutionary process in institutions, (i.e. cultural traditions and habits) but also in language and artefacts. The individual uses this corporate knowledge by following the institutions, by learning a language, or by using a tool. Even if she is not aware of it, she cumulatively incorporates experience.⁵⁴ Understood in this way, cultural evolution is a process of social learning, in which the knowledge of whole generations is collected

⁵¹ von Hayek 1994, 157 f.

⁵² von Hayek 1991, 34.

⁵³ von Hayek 1973.

⁵⁴ von Hayek 1960, 43.

and passed on to provide efficient solutions to problems experienced. All in all, Hayek sees this process as something positive. The *invisible hand* of selection leads to an accumulation of useful experiences – if this evolution is not interfered with. State-directed economies and un-free societies experience negative consequences from interference since positive development is grounded in the freedom and unpredictability of human actions.⁵⁵ Consciously chosen rules can never produce the same wealth of knowledge and experience that unconscious processes of development bring about. Von Hayek therefore rejects wide-scale changes of social institutions but grants that small reforms may be beneficial to individual members of society.

But is this inconsistent with a Darwinian analysis of institutions, wherein the institutions are seen to develop by a purely mechanical selection process? No. It is not a Darwinian tenet that the cause of *variation* is blind – only that selection is. So it is plausible to assume that there will be competition between different institutions – Independently of their origin – and the result of this competition is solely decided by the criterion of efficiency. Only efficiency determines which institutions, and with which properties, will last permanently and which will vanish, and when.⁵⁶ Consciously chosen rules have no advantage over unconsciously evolved rules in the remorseless selection process. For Hayek, there is nothing to indicate that consciously chosen rules have any advantage over others. Conscious interventions are one way of producing variation, but there are many others. A theory of the development of institutions which includes only those rules which have been consciously stipulated by human beings remains deficient. According to von Hayek, only with the analytical tools of Darwinism can the long-term development of institutions be fully explained.⁵⁷

⁵⁵ von Hayek 1960, 50.

⁵⁶ Similar for the mechanism of inheritance: It was often argued that cultural inheritance of institutions were Lamarckian since it allows for the transfer of acquired properties. This is plausible, but stands in *no* contradiction to a Darwinian evolution of institutions since also here, variation, (blind) selection and inheritance (however it looks like) remain decisive. Darwin himself is Lamarckian regarding inheritance when he assumes in the the *Origin of Species* that acquired properties can be inherited.

⁵⁷ That is the line of argumentation in Hodgson and Knudsen 2006.

There *may*, however, be cases in which the development of institutions does not follow Darwinian principles. Such is Hayek's diagnosis of state-directed economies mentioned above, but also of totalitarian societies in which natural selection is precluded by violence. According to Hayek, this scenario often leads to bad development, because the positive natural accumulation of experiences and improvement of institutions has not been allowed to take place. This danger is especially pronounced in a modern technically-advanced world because the state has enormous power at its disposal, and may choose not to leave room for spontaneity.⁵⁸ Therefore, Hayek claims, it is a crucial responsibility of politics to be aware of this danger. Politics must fashion a framework of freedoms for the natural evolution of institutions, so that open evolutionary competition will be possible.⁵⁹ But this fashioning of the framework of freedom, one might object, could require the *conscious* stipulation of rules after all.

3. Convergence as Objective

3.1 Evolutionary Sciences and the Justification of Normative Judgments

The above approaches have in common that they seek natural explanations for specific social behaviour and cultural phenomena and for their development which are relevant to political philosophy (and to the political sciences in general). Thus they are helpful in understanding our institutions, their history and function. But they cannot contribute to the *justification* of institutions, political ideals, or objectives. This accords with Hume's law: that one cannot get from a descriptive 'is' to a prescriptive 'ought' without any additional normative arguments.

As early as 1903 George Edward Moore, in *Principia Ethica*, extended Hume's law to the evolutionary sciences: there is no direct connection between the evolutionary 'coming to be' and the normative 'ought.' Darwinian evolution must be understood as a blind (*i.e.* not goal-

⁵⁸ See von Hayek 1960, 50.

⁵⁹ See von Hayek 1976, 30.

oriented) process which does not imply any ideal or any evaluation of its outcome. That is also the reason why Moore rejects all evolutionary ethics proposals. (And there is a corollary: It is impossible to use evolutionary sciences to argue successfully that all morality is an illusion. For if it could be shown by *philosophical* arguments that there actually are correct moral judgments, and one could not deny this by reference to natural sciences which are normatively blind.)⁶⁰

Of course, it is possible to claim that evolution selects “fitter” entities, but “fitter” is a functional description relative to context. A fitter entity has properties which grant it a higher reproduction rate under certain circumstances, but not the status of being of more value than other entities. Many parasites and viruses are very fit for their host environment, for example, but we do not accord them greater value than other life forms: in fact, we evaluate them negatively. “Never use the terms higher and lower,” Darwin himself advised, as a kind of warning against overlaying the descriptive with the normative.⁶¹

Evolutionary explanations are not sufficient for normative judgments – at least not if one holds that normative judgments must be *justified* in the strict sense. This is the sense in which *rational arguments* are necessary to validate normative judgments — and only if they are rationally validated, are they valid and obligatory in virtue of a “legitimate legitimation,” as Manfred Wetzel puts it.⁶² This applies both to ethics and to political philosophy, if the latter claims to be able to make normative distinctions between institutions (such as forms of government) or if political philosophers formulate objectives for political action. To be sure, it is one of the most difficult of philosophical questions what kind of rational argument, or even what kind of methodology, would be sufficient for a normative justification in this area. But we do not, fortunately, have to answer it in this paper. For our purposes here, it is enough to say that the methodology of the evolutionary sciences *cannot* grant a “legitimate legitimation.”

⁶⁰ For a more detailed account, see Illies 2006, 225-235.

⁶¹ Darwin wrote this in the margin of his copy of *Vestiges of Creation* by Robert Chambers, who postulated an evolutionary upward movement. See Di Gregorio 1990, 164 f.

⁶² “Kraft einer legitimen [sic] Legitimation als gültig und verbindlich.” See Wetzel 2004, 209.

But why did it – and why does it still – appeal to many authors (such as Herbert Spencer, Edward O. Wilson and Richard Dawkins) to analyse normative ideals with evolutionary arguments? One reason is the present crisis in philosophy regarding the rational justification of moral values. No single methodology is commonly accepted. There is another reason: the particular interrelated-ness of descriptive and normative judgments in biological anthropology. In addition to descriptive statements (statements about human dispositions and evolutionary processes of development) and normative judgments (“ought sentences”) there are also evolutionary explanations of how human beings arrive at normative judgments – *descriptive* statements about whether and how human beings have dispositions for *normative* judgments. One obvious example of this is what David M. Buss calls “a thirst for justice”.⁶³ Leda Cosmides and John Tooby take this as a basis for their claim that we have a genetic disposition to think in the category of social contract — that means in normative categories. But can this be a justification for the social contract? I would deny this with reference to Hume’s law. It is and always will be a descriptive statement to explain the biological causes which lie behind the giving of a normative judgment, and a normative judgment cannot follow from a descriptive statement. Let us look at an example. In 1848 there was a rock-blasting accident in which an iron rod was driven through the head of the American railroad construction worker named Phineas Gage. Much of Gage’s left frontal lobe was destroyed, but he somehow (to everyone’s surprise) survived this accident. But Gage was no longer the polite gentlemen he was before the accident: he turned very negative. Today, neurologists might explain in some detail why Gage gave only negative judgments about his fellow men after the accident happened. But the fact that neurobiologists could explain these normative judgements does not mean that they are justified. Explanations are simply not reasons.

There might be a reason why evolutionary anthropology often confuses descriptive and normative judgments. It seems to follow *from our biological nature* that we ask for a “legitimate legitimation” at all. It is a special characteristic of the human being that her complex brain allows

⁶³ Buss 2004, 388.

her to stand at a linguistic distance from herself, and to consider herself free to choose between possible objectives, wishes, and the satisfaction of various needs. Max Scheler pointed this out in his philosophical anthropology when he describes humans as capable of suppressing his impulses. While animals must always say 'yes' to their needs and desire, we are able to say on occasion 'no' to our drives and impulses.⁶⁴

Standing at this distance, humans ask the universal 'why' question: we seek explanations for everything that exists, for good reasons for what we want to do, and for good reasons for what we ought to do. From this human characteristic arises the need for theoretical ordering and for practical orientation – two things Gehlen and Burkert identified (in different ways, of course) as the beginning of culture, politics, and religion. This human need culminates in the desire for a legitimate legitimation. We are not satisfied with easy answers to the problem of justification.

3.2 Convergence as the Objective of Political Activity

Political philosophy, if it acknowledges both the possibility of the normative and the existence of the inherent laws and processes in the world (made known to us by the empirical sciences), must fulfil the task of bringing about states of society where what is (normatively) best might become real. One part of this task might be the guaranteeing of universal human rights by positive law. The task itself may have to be spread over time in a somewhat complex way. For example, one might distinguish between what is possible at present, what is possible in the middle-term, and what is possible long-term (with the added complexity that present actions may increase or decrease the range of possible future actions). Johann Gottlieb Fichte adopted this methodology of political philosophy as the ground for his work *Der geschlossene Handelsstaat* (= the closed trading state). His idea can be easily identified by looking at the structure of the work: Fichte begins with the account and justification of an ideal (an institution of which he believes he can with good reason approve, i.e. the closed trading state). He then describes the reali-

⁶⁴ Scheler 1975, 55.

ty of his time: he gives an analysis of actual commercial intercourse. Finally he gives political recommendations as to how to implement the ideal in the real world.⁶⁵ The implementation, then, is not a task of political philosophy, but of actual politics.

Political philosophy cannot, however, always distinguish between these aspects as clearly as Johann Gottlieb Fichte did. It is especially difficult in practice to define the boundaries between the justification of normative judgments on the one hand, and the task of making the normative actual on the other. Normative ideals are generally part of the basic cultural equipment of a historically developed society. Normative ideals are used in practice and are not, therefore, a part only of *normative* approaches, but also a part of *descriptive* approaches (even though these latter approaches cannot justify them). Furthermore, discourses of normative justification are also embedded in culture and can often be understood only in their proper contexts. Finally, one must distinguish the validity of normative ideals from their factual acknowledgement, and this in turn must be distinguished from actual compliance with these norms. The latter two are both parts of the descriptive world and it is therefore difficult (but important) to give a strict definition of them. It remains necessary – following Hume’s law – to distinguish the justification of normative ideals from the description of ideals people actually hold to.

Not even the subtlest analysis of the world, knowledge of cultural contexts and of the realities of the acknowledgement of ideals can lead to a legitimate legitimization of normative ideals. But neither can a set of justified normative values lead to any good in the world. Even a perfect understanding of our normative ideals does not tell us how to implement them in the world: ideals without empirical data are empty; empirical data without ideals are blind.

How are we to understand the relation between the justification of ideals and the gathering of empirical knowledge? One usually assumes a reflective equilibrium between those two activities. The empirical sci-

⁶⁵ This is equivalent to the “mixed syllogism” already Aristotle used as a basic logical hypothesis of applied ethics. Given a normative a priori premise and a descriptive a posteriori premise, one can infer a special normative statement that represents an application of the firstly mentioned ideal to the descriptively grasped part of reality. See Hösle 1999, 169.

ences can be of use in aiding the implementation of ideals. If we hold, for example, that the right to political participation is fundamental, we need to analyse a culture to know exactly about what is meant by political participation within that culture. Furthermore, motivation for empirical research often comes from relevant questions which have arisen from normative ideals. The ideal of political participation will, for example, focus our attention on possible mechanisms of manipulation; and these we must understand if we seek to protect human beings from themselves. The reflexive process is subtle. We begin with a rather general formalisation of the ideal, and might perhaps have only a limited relevant knowledge of the empirical world. During reflection, we sharpen that ideal, but also focus on the relevant aspects of the empirical world which will help us implement the ideal. Inspecting the empirical world might also lead us to a more in-depth critique of an ideal. If an ideal *cannot* be implemented, one should seriously question its legitimacy. Thus the reflective equilibrium between the normative and the descriptive approaches helps us make normative ideals substantial. An important consequence of this equilibrium is a certain dynamic within political philosophy: Normative judgments have only presumptive validity, since they must remain open for revision and challenge by new objections which might become necessary in face of new empirical insights. The constantly varying contexts of a world in change should lead to constantly varying substantialisations of our ideals. But none of this entails that the justification of moral norms depends on social or cultural context – contrary to what the contextualists, for example, claim.

What does it mean to implement normative ideals in the empirical world? We cannot work, especially in politics, with so simple a deduction as tells us only that the normative ideal should be applied or instantiated according to this or that circumstances. (One might imagine such a simple process of substantialisation only, perhaps, in the case of prohibitions.) Generally, one would have to focus on long-term processes of development of political structures and institutions towards a normative ideal. There are a number of reasons for this. Change often can only happen in a rather plodding way – via reform and not via revolution. Complex institutions, deeply-rooted traditions, and strong attitudes cannot be reformed quickly. Attempts to do so either fail completely or re-

sult in immense social costs (remember Gandhi's attempt to abolish the caste system in India). Often slow reform is the more efficient, and sometimes the only possible, way. Not everything is possible at every point of time. Normative ideals cannot be implemented directly in many cases, but only indirectly through changing a certain framework. The best way to fight poverty in a region could be, for example, the creation of a better education system. This is something we can learn from the evolutionary sciences: processes of development have their own logic. A prudent political philosophy will accept this, but will also try to use this inherent logic to nudge evolution into the right direction.

With other words, political philosophy is about the "convergence" of social developments and normative ideals. The normative ideal should, in the long term, become a naturally practiced ethical life within a culture. Only thus can the normative ideal become substantive in a permanent and stable way. It is the enduring insight of Hegel that morality becomes concrete only in the actual practice of the ethical life. We might add that such an ethical life must be arrived at by evolutionary processes and must have proved itself through the process of selection. Convergence is not only a first-order objective, but also a higher-order ideal, an ideal ideal, as we might say, since it is the *ideal* way for ideals to become reality.

3.3 The Natural Conditions of Convergence

All actions, including political actions, take place within contextual frameworks of conditions. Without frameworks, there would be no options, and actions could neither be limited nor promoted. Political philosophy seeks to analyse and utilise these conditions. It is not, a priori, possible to reach impossibilities, and not therefore useful to aspire to the impossible. Therefore, political philosophy must strive for the best within a framework of limited possibilities. This might be achieved by changing the conditions, but if the conditions are immutable, one must choose or design institutions or actions which fit into the framework of immutable conditions and lead to optimal results, or at least to the best possible ones.

But what consequences can we draw for political philosophy from the diverse *natural* conditions which determine our actions? By *natural* conditions I mean to include those created by both nature within ourselves and nature around us, and also the inherent logic of evolutionary development. If the examples of cultural explanation in Section 2 are sound, political philosophy could improve our society the better with them than without them. We will differentiate four different aspects of this conditional framework which have been handed over to political philosophy by anthropology and the evolutionary sciences. Even though the distinctions are not sharp, the differentiation will prove useful.

(i) There are fundamental conditions, as we can learn from Diamond. Ignoring them makes success impossible. Cultures should not, for example, be wasteful with their natural resources since they cannot survive without them. It is obviously not reasonable to expect human beings to act in a way which is impossible for them, and we do not need any specialised sciences to tell us what is impossible for us.

More interesting are the areas where we could learn from anthropology what is *almost* impossible for us – areas where our genetically-disposed actions and emotions make things difficult for us. One example is our desire for social rank and respect of fellows. A society without social rank is not only hard to justify, but also unachievable. Attempts to achieve it, from the French Revolution to Communist experiments, have all failed and led to new ranking systems instead.

But if one desires to deal wisely with what is almost impossible, one should still be critical towards what is alleged as impossible. One should distinguish between a disposition and its development and manifestation. In most cases, certain actions are impossible for human beings because their dispositions developed in a certain way, not because their dispositions preclude such actions in principle. One example is antagonistic behaviour. Whether it is possible for a human being to solve conflicts without aggression depends significantly on whether she experienced peaceful conflict solutions in her adolescence — and whether she is in general familiar with such peaceful solutions. To understand the convergence of human action with normative ideals, one must understand the human being as a creature of possibilities. And one way of doing that is to focus on moral education.

(ii) Human beings have a natural constitution. This cannot be ignored. But more than that: one should make use of one's natural constitution in order to reach normative objectives. If institutions make use of this constitution to steer impulses to act in a certain direction, they can implement ideals without using force. If it were possible to connect social ranks in a society to the achievement of politically desirable virtues, there would be a competition between citizens over their contribution to the common good. This is something Plato and Aristotle had in mind, and is certainly welcome from the perspective of modern political philosophy and practice.

Liberalism in the 18th century had similar ideas. For the development of a liberal community one does not need a new kind of human being; rather all the shortcomings and weaknesses of human beings as they are could be useful in the attainment of this goal. This is what Kant had in mind when he called human beings the "crooked wood." But being an optimist, Kant acts on the assumption that even evil (for example avaricious and egoistic) motives could have positive consequences. For Kant, nature is designed to make harmony spring from human discord, even against the will of man.⁶⁶ Competition is enough to erect the high house of a harmonic society by making use of the human weaknesses. Contemporary political philosophy does not necessarily share Kant's optimism (that also influenced Hayek). But the main point still pertains: it should be on the political agenda that we use everything which motivates human beings to implement normative ideals, even our unsocial instincts. We should, therefore, also give *prima facie* unsocial motivations and dispositions a chance of expression in case they turn out to be useful in the long run.

Anthropology can contribute to this by showing us which dispositions need to be controlled, and evolutionary sciences can show what inherent logic we have to deal with if we want to control them. Understanding this inherent logic does not entail trusting in a self-developing selection process which will reach a desirable outcome steered by an "invisible hand." The bottom-line of evolutionary theory is that evolution is not goal-oriented. But evolution is *compatible* with the stipulation of

⁶⁶ Kant 1776, 143.

goals,⁶⁷ as Darwin made clear with reference to the breeding of domestic animals and useful plants (at beginning of his *Origin of Species*). If selection is goal-oriented, by, for example, the breeding program of a cultivator, it may lead to the desired result.

But now there are two conditions one has to consider if one wishes give a direction to an evolutionary process. These are the last two aspects of the conditional framework for political philosophy which one can infer from anthropology and the evolutionary sciences. Let us consider them.

(iii) In an evolutionary process, after many generations, a property (or an entity having a property) will prevail over its competitors, only if that property or that entity is better fitted than its competitors for the conditions in which selection takes place. “Prevailing” means to have more descendants in future generations than one’s competitors. This also applies to cases of non-biological entities which are in an evolutionary competition. It is important for the evolutionary success of an entity to have advantages over its competitors.

How can we use this insight in a prudent way in order to control political developments? Well, we must design institutions that accord with the normative ideal *in such a way* that they could prevail over competing institutions. To use an expression of game theory: Institutions have to be “evolutionary stable strategies.” That means that a strategy (behavioural rules, institutions, etc.) must be more useful for the relevant actors than any other potential strategy. We should, for example, ask how to design democracy in such a way that it is evolutionary stable within our society and cannot be annulled by extremist tendencies. To reach such a goal, prohibiting extremist parties and forbidding the self-disempowerment of the democratic parliament are wise means.

(iv) The conditions of selection itself must also be given attention. What property or entity prevails in the long run depends both on the relevant property or entities *and* on the selective circumstances. To reach convergence, one should therefore modify the conditions of selection in

⁶⁷ See Illies 2006, 81-90.

accordance with the objective. Robert Axelrod, for example, argues that children have to be educated in small groups since only in those conditions can a reciprocal altruism develop. (It is in these conditions that altruism becomes the prevalent strategy, and children can then develop the habit of cooperation). Any society needs, in order to survive, a deeply rooted altruism tying its members together. In contrast, schools without stable classes provide unfavourable selection conditions for altruistic strategies. Prudent politics should therefore avoid them as much as possible, and promote instead small, stable classes.

In this way, political philosophy can make a productive use of empirical data coming from anthropology and biological sciences: Politicians must analyse in a very concrete fashion, for each kind of circumstances, what behaviour and what institutions are generated by and compatible with given environmental conditions and political constellations. Such an analysis will heavily rely on considerations concerning what behaviours and what institutions were selected in the past. Even if we are only at the beginning of our attempt to understand the complex interrelation between nature (and its evolution) and cultural phenomena, such investigations promise to offer new insights into our practical problems. Political philosophy has to integrate the insights of anthropology and evolutionary sciences in an increasingly creative and constructive way, in order to pursue the goal of convergence between ideal and reality.⁶⁸

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⁶⁸ I am grateful to Joachim Fischer, Fabian Geier, and Christian Thies for their helpful remarks. A German version of this text appeared as Illies 2009.

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