

2. A THEORETICAL MODEL OF SOCIOCULTURAL EVOLUTION

If there are at present no complete theories of sociocultural evolution, i.e., theories that capture at least principally all important features of these complex processes, then one has to proceed in a way that has often been criticised as "eclectic". This means, to be sure, that one picks from different theories the concepts, and if necessary the results, one needs for one's own task. I have to admit that I never fully understood why some social theorists scorn an eclectic procedure; apparently they believe that each theoretical social scientist has to develop a theory of his own or must avow to some particular theoretical school. But science does not make progress by valuing theoretical paradigms for their own sake. When the great behavioural scientist Bateson once noted that all new ideas are *de facto* recombinations of ideas already known, then scientific progress is also possible only if everything is taken into account that may be learned from different theories already developed. The fact mentioned in the last subchapter that the main theories of sociocultural evolution are all incomplete in some way or other must not make one blind to the insights they all give in their different ways. When I sketch the theoretical foundations of my own model of sociocultural evolution in the following subchapter I try therefore to keep in mind this eclectic way of proceeding.

2.1 SOCIAL ACTORS, ROLES AND SOCIAL SYSTEMS

What is to be learned from the theories discussed above? Obviously at least the following aspects: (a) cultural evolution as one of the two dimensions of sociocultural evolution depends on the mechanisms of social learning, that is the taking over of new ideas from other people. Boyd and Richerson (1985) stress this fact in particular and characterise the ability of social learning, referring to Bandura (e.g. Bandura 1986), as an ability characteristic for the human race and perhaps in this degree only for humans. There are some doubts as to whether this ability is in fact mainly restricted to the human race (c.f. Maynard Smith 1996), but the overwhelming importance of social learning for cultural evolution

cannot be denied (cf. also Tomasello loc. cit.) I shall deal with the concept of social learning more thoroughly in the next chapters. (b) Evolutionary materialism and rational actors theories both tell us that the focus of research must be the social actor and the interactions among different actors. Therefore there is no need to look for some more or less ill defined units of culture like "memes", which operate seemingly independently from concrete actors; it is enough to study the rule governed behaviour of actors who are in a particular way determined by their beliefs, their ideas about the world and about what is right or wrong. (c) Theories of social differentiation tell us, though some theorists think them to be outdated (cf. Schmid 1998), that the relations between subsets of social rules change over time and produce an important part of the whole sociocultural process. Therefore it is not enough to study rules of social interaction and their changes by adaptation; one must also take into account rules between sets of rules, i.e. rules that define relations between different institutions or subsystems.

Let us start with the concept of social systems, the "abstraction" of Sanderson. As usual with social concepts there are many ways to define a social system; perhaps the most famous definitions are those of Parsons and Luhmann, which are, as is well known, not the same. I do not intend to enumerate and discuss all the different proposals that have been given in the history of social theory. In regard to the lessons one may learn from the evolutionary theories sketched above, I favour a rather pragmatic definition, which is consistent with the remarks about general systems theory made above in 1.2. and 1.3.: a social system consists of social actors whose interactions are determined by specific rules; the (intended or unintended) consequences of their interactions produce other interactions with particular effects and the successions of these interactions generate the dynamics of the system; the changing of the rules of interactions and/or the enlarging of the rule sets of the system generate the metadynamics or evolution of the system. So far, so simple, but of course a lot has to be clarified.

When speaking of *social* actors it must be understood that I do not simply mean human beings. From Marx to Luhmann social theorists have rightly stressed the point that the social sciences do not deal with human beings but, as Marx put it, with the *relations* between humans. Human beings, as Luhmann frequently emphasises (e.g. Luhmann 1984)

are not a unity but are composed of several facets, each of which is subject to a particular scientific discipline like biology, psychology and of course, the social sciences. Therefore sociology deals only with the *social* dimension of humans, i.e. their behaviour, beliefs and thoughts insofar as these are determined by society and conversely are producing social reality. The concept of social actor refers to humans in the degree that they act according to social rules on the basis of belief systems and/or knowledge, which are part of the culture of a society. The key concept for this very traditional definition of social actors is that of social *roles*.

The classical concept of *homo sociologicus* as a rule following actor is intuitively rather clear. Yet theorists of rational actors, in particular those of rational choice, have rightly pointed out that it is by no means self evident that people obey rules, i.e. laws, norms and so on. Among other intentions people are obviously also looking for their own advantages and as humans are no simple automata they are free to choose between different options in each situation; in particular they are free not to obey rules if it is more profitable for them. Because people indeed sometimes tend to disobey rules, "governments are instituted among men", as the Declaration of Independence put it, that is institutions that guarantee social order. Why then is it an undeniable fact that most people do follow rules and that the concept of *homo sociologicus* is confirmed by empirical evidence?

The answer to this question was of course given by sociology long ago. In perhaps first the political essay of Western culture, the *Politeia*, Platon already emphasised the importance of (social) education for creating and maintaining social order and for keeping people on the right track, in his case of course the social order of an aristocracy of philosophers and guardians. In more modern terms G.H. Mead (1934) described the process of socialisation as the growing capability of role taking, i.e., understanding "objective" social rules and internalising them, that is believing in their rightness and acting according to them. It is well known how Parsons dedicated a great part of his work to investigating these processes and to analysing the importance of social roles for the integration of society (e.g. Parsons and Platt 1973).

The answer therefore to the question of the theorists of rational actors is rather simple: people follow rules because they learned to do so as part

of their socialisation, i.e., their role taking processes. During the processes of socialisation and of intentional education, humans are integrated into the social network of rules, i.e. laws, norms, customs and so forth by taking particular roles appropriate to their stage of development, and sometimes abandoning these roles when, during their social ontogenesis other roles seem to be more adequate. If one follows the classical distinction between primary and secondary stages of socialisation (e.g. Berger and Luckmann loc. cit.) then it seems that some roles are more fundamental than others, for example roles founded on gender, and these fundamental roles contain a lot of people's "social identity".

Of course, people sometimes refuse to take specific roles and so "deviate", that is they declare other rules to be obligatory for them than the ones society postulates as valid. In most of these cases deviant people are treated as criminal or mentally retarded and/or not responsible for their actions, as the concept of social maturity implies in all societies the capability *and willingness* to act according to the rules the different social roles consist of. In a few cases, however, the deviating people are able to maintain their new rules against society and thus create new roles, these innovators become something like founding fathers (or mothers) of new social structures and traditions.

Actually, this is common knowledge to social scientists. I remind here of these truisms for the simple reason that in theories of sociocultural evolution these thoughts are seldom considered to be important; one of the few exceptions I know of is the theory of Habermas (1976) and Eder (1976 and 1991) but this theory is only a very rough draft and has never been carried out in more detail.

Before analysing the concept of role a bit more thoroughly, I have to go back once more to the theories of rational and egoistic actors and the question of Hobbes, because they still have an argument left: it may be true that people are basically *homines sociologici* by socialisation and education, and it may also be true that in the sense of the arguments of Vanberg (see above 1.4.), rational reasons can be found why this *social* behaviour is more profitable than permanent free and arbitrary decisions in each situation. Yet the question remains as to how this behaviour emerged during the evolution of mankind. Concepts like socialisation and even more education always have to presuppose an already existing

society. If the question of Hobbes is to be understood how such a society is possible at all so that people can get accustomed to social rules and roles, it seems a logical circle to answer Hobbesian questions by pointing to society and processes of socialisation and education.

Strictly speaking this is not a question of (evolutionary) sociology but of evolutionary biology and not by chance many evolutionary biologists have dealt with this question (e.g. Maynard Smith 1982 and his concept of evolutionary stable strategies). Biological ethology has found overwhelming evidence for the fact that practically all higher species of animals live in some kind of social order, some of them comparable to particular human societies. Especially famous are the social groups of subhuman primates (e.g. Goodall 1986). Therefore we may safely assume that the capability to organise social groups, that is social order, and thus to avoid the Hobbesian *bellum omnium contra omnes*, is part of our biological heritage. To put it even more plainly: if, as Hobbes said with one of his famous metaphors, *homo homini lupus*, man is to other men like a wolf, then we know from numerous ethological researches that wolves are fundamentally social beings that often behave very nicely to other wolves and in particular follow the rules of their specific pack. Therefore, there is a very high probability that the Hobbesian premise that man is by nature an anti-social being is wrong. The sociological interesting question is therefore not how social order is possible at all, but how and why mankind developed different types of social order and whether there is a general logic behind it.

Evolutionary biology has of course dealt with the Hobbesian question and asked what evolutionary advantages are combined with the evolution of *social* behaviour; this is not necessarily the same as *co-operative* behaviour. Especially famous has become the theory of kinship selection (for a mathematical treatment see Parisi et al. 1995); I already mentioned the answers Maynard Smith gave from the point of view of the Theory of Games. It seems that individuals have more chance to survive and to reproduce, the fundamental criterion for biological fitness, if they acquire, via the genetic mechanisms, the capability to live in groups and act according to the specific rules of these groups. As a social scientist I think therefore that it is quite enough to assume that there are biological reasons for the emergence of social behaviour during the course of *biological* evolution and that the very premise of Hobbes and his modern

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