

Aggression

Dess bakgrund och natur

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Mention Lorenz and you think of geese. He was instrumental as a pioneering ethologist to establish the notion of imprinting and raised goslings as his own children. The remarkable fact is that geese seem to exhibit many human-like emotions and behavior, remarkable as they are not mammals and the common ancestor of mammals and birds go way back. Thus a matter of striking convergent evolution.

Lorenz was a staunch Darwinist and hence always looking for evolutionary explanations involving selection pressures to account for what we see now. This is of course a risky business, one can easily come up with a hoist of ingenious scenarios but how to choose between them? For a zoologist this is of secondary importance, but really matters is the wonderful variety of the actual living world and evolutionary speculations provide a means of structuring the chaotic. He was also a member of the Nazi party, which by itself, given the times, need not mean very much; except that Lorenz denied it until proof was produced that he joined in 1938 in connection with Anschluss. Lorenz believed in genetic soundness, that the domestication of man was a bad thing and led to an inferior stock. Such opinions were quite common and acceptable earlier in the 20th century and need not at all to be anti-semitic or racist in any more general way, although it may spuriously inform the latter. Probably Lorenz never repudiated those ideas, which although they may be seen as cold and inhuman are not irrational nor criminal.

He was also a staunch defender of science, in particular the scientific method with its provisional attitude to theory and the need to continuously check empirically. After all he was a childhood friend of his contemporary Popper. He rallies against the division of the real and material and the ideal and the spiritual. To find explanations for phenomena do not diminish them on the contrary. As a scientist he is soft, although he emphasizes the need for quantitative reasoning the heart of his subject is careful observation. True, he points out the need to formulate hypotheses to be tested, yet the anecdotal plays a central role.

His main tenet is the phenomenon of Aggression. In fact his purpose is better served by the German title: *Das sogenannte Böse, Zur Naturgeschichte der Aggression*. Aggression is something inevitable and it supplies the basis for not only friendship and love, but also ambition and enthusiasm, be it that the latter can be too much of a good thing. As an evolutionist Lorenz has been criticized by Dawkins for his emphasis on the species as a target for evolution, while Dawkins maintains the radical position that it is the (“selfish”) gene. On the other hand anything is the subject of evolution in the biological world, from the gene (maybe even the pertinent molecules) to individuals, tribes, species, eco-systems. First what is aggression? When a predator attacks a prey, it is not a matter of aggression on its part, on the contrary; but from the point of view of the prey, its desperate defense

is an act of aggression. Lorenz focus, however, is aggression inside a species, i.e. against members of its own species. Every animal has a territory, normally it does not bother with members of other species as they are not considered rival, occupying different niches be it at the same location. An animal encountering its own species experiences two contrary urges. One to attack the other to flee. The further it is from the center of its territory the weaker the urge to fight, the stronger the urge to flee. In this way there will be a partition of territories, reminiscent of the Voronoi decomposition in mathematics, among the members of the same species, which, according to Lorenz is good for the species, its members making optional use of the resources by being spread it as much as possible. But if evolution only works on genes, not species, this becomes somewhat spurious. Strong individuals would be favored by the evolution, but by the side condition of not requiring too much energy. On the other hand a species may gain from being numerically numerous rather than individually strong, and those species that optimize distribution may be seen more often than other. The problem with prediction of evolution is that there are so many contradictory options possible, which also, incidentally, may make retrodiction problematic as well, and hence the relevance of many scenarios retroactively cooked-up. Now if there is only one species per territory, sexual congress and hence reproduction becomes a real problem. How to counteract the natural tendency to repulsion? Of course attraction can be added, but this if of course both obvious and trite and gives little in terms of explanation. Another problem is the phenomenon of flocks and herds.

In a shoal of fish there is no leader, every member follows its neighbors. To a lesser degree that is also true of herds of sheep, and also among humans in extreme situations, a most scary experience for those once caught up in it. Rats form large packs, aggressive towards other rats. There seem to be no personal relation and recognition between them but identification is purely based on smell. Take a rat from a pack, change its smell, and put it back. Soon it will be torn to pieces by its former members, unless rescued by soft-hearted laboratory researchers.

However, not by 'higher' mammals and birds, then there are personal bonds based on recognition of individual characters. The remarkable thing is the above-mentioned convergent evolution, making it present both in birds and mammals. Lorenz notes that in many cases the marital bond between male and female is merely tht of co-habitation, and the author recalls how a male stork arrived at the nest earlier than his wife. That did not seem to bother him but he readily accepted another female showing up at the nest. But in the case of geese there is definite personal bonding, when a mate has died the remaining partner shows definite signs of mourning and looks for the missing partner, and often lifelong celibacy follows. In fact the bonding between partners seems not primarily be that of sexual congress but with an extended ritual, closely observed and studied by Lorenz and his students and co-workers, which also explains the case of couples consisting of two males, who may not have any sexual relations with each other but instead by females trying to enlist their attention.

The rituals play an important part in his narrative. Dog owners may have observed the elaborate nesting behavior of dogs prior to going to sleep, how they make intensive sweeping movements around themselves as if making the ground free of debris. Now the ritual serves no tangible purpose, this is why it is called a ritual, but seems to be genetically

encoded. This presents a problem as how the latter has emerged as we deny the possibility of acquired characteristics a la Lamarck. A possibility would be that the behavior is very advantageous but that is far too vague to make much sense. More to the point would be if a certain invented behavior changes the environment of the species and introduces a new evolutionary pressure. Incidentally Lorenz points out that evolutionary development due to 'subjective' internal pressures rather than 'objective' external ones, often is detrimental, and takes the classical examples of elaborate and cumbersome structures evolved because they pander to the sexual preferences of the opposite sex (such as plumes of pea-cocks) or huge antlers effective in combat between rivals but a hindrance in everyday life (the Irish elk). When it comes to greeting rituals between geese, they seem to have merged from aggression deflected, a phenomenon rather common also among humans, when their direct targets are not feasible and hence inhibited (there are many urges clamoring for attention and the organism has to prioritize) and thus the aggressive impulse has to take other less momentous avenues.

The conclusion of the author is that aggression is a necessary ingredient in all the commendable virtues of humanity. Love, friendship, creativity, enthusiasm. In short it provides the psychological energy for all mental activities. The concept of sublimation comes readily to mind. In fact Lorenz takes a rather indulgent view as to Freud, maybe because the latter along with his controversial theories were still fairly fashionable in the sixties.

The concluding chapters deal with the state of the world, and it was no doubt those which caught most of the attention at the time. Lorenz is worried about the future of humanity in view of the nuclear threat of mutual annihilation which was on everybody's mind at the time, much more so then than today when it is even more pertinent. The author concludes with an exhortation to sublimate the aggressive urges constructively. However, this is necessarily, given the situation, on the collective level and beyond the capability of the individual, and thus reduces to a pious hope for author and readers alike.

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