

Neolithisation

The transition from an economy based on predation (hunting, gathering, fishing) to an economy based on the voluntary production of given plants and animals has been an essential process in the History of societies. In a limited number of places on Earth, some societies, confronted with particular constraints, achieved mastery in the reproduction of vegetal and animal species. This new relation to nature could then spread out from these places, either because of the expansion of these particular societies, once they had become societies of cultivators and/or breeders, (largely because of the demographic potential that had come about through their new mode of production of food and raw material), or because, willy-nilly, neighbouring, still Palaeolithic societies adopted this new way of life.

The word 'Neolithisation' used to designate this domestication process derives from 'the 'Neolithic' (the Polished Stone Age), a word invented by pre-historians of the nineteenth century to characterise the most recent type of prehistoric industry in Europe (the production of stone tools), just before the Age of Metal. Indeed, around the Mediterranean, the timing of these two developments-the polishing of stone and the domestication of plants and animals-coincided.. This was anything but universal, however. It would therefore be more logical to designate this decisive change by the term 'domestication'; but here there is a risk that the expression 'domesticating revolution' could be misunderstood. And at the same time, the term 'revolution' must retain its full meaning-major and irreversible historical change-even if that change took the form of a long and complex transition. Despite a few marginal cases of a return to situations of hunting and gathering (e.g., the society of the Chatham Islands in the South Pacific), the process of domestication moved forward without reverting to these activities. The primary reason for this is probably the extent of the population growth that accompanies progress in the mastery of nature in a systemic way.

Places of primary neolithisation are sparse, and each of them involves only a limited number of species.

-First of all, the Fertile Crescent (10,000 BC at the earliest): this is where the wheat family was domesticated, but barley, peas, lentils and flax; oxen, pigs, goats, donkeys and sheep were also domesticated here.

-The North of China (8500 BC): millet, cabbage and probably also the domestication of pigs, for pork.

-Mexico (8000 BC at the earliest): mostly corn but also hot peppers, avocados, squash, beans, cotton and turkeys.

-The Andes (6000 BC): first potatoes, then lamas and guinea-pigs.

The examples of domestication provided here are only the first to have been recognised. A number of others would follow, such as cocoa and vanilla on the coast of the Gulf of Mexico; in fact, the process never stopped: monks in the Middle Ages achieved the cultivation of strawberries. On the other hand, domestication could take hold before neolithisation, e.g., the dog deriving from the wolf. This last example shows that domestication is always a process of deep transformation of species; GMOs (Genetically Modified Organisms) are not as new as all that!

The places listed above are certainly not the only ones affected by these processes. But with other areas, it is difficult to distinguish what developments were the result of diffusion (spread and distribution) and what were truly local innovations. It is likely that once cultivation and breeding became known, people thought of domesticating new species. In this way, a secondary area, Southeast Asia, played a major role: rice, bananas and sugar cane originated there. The Southern Sahara provided sorghum, millet, African rice, yams. From North America came the sunflower. But the Neo-Guinean area deserves special mention. In the high mountains of New-Guinea, societies existed that domesticated taro and maybe pigs, in their own unique and independent way.

In the matter of their location, these primary and secondary areas of domestication have their own particular geography. They depend on local, natural conditions, but also on the spatial logic that influences the societies that produced them. First of all, in order for domestication to take place, there had to be a 'supply'; and few vegetal species, even fewer animal species, were likely to be used by societies. Plants that could be transformed relatively easily, could retain their new characteristics through heredity, and could concentrate enough of the required qualities, would never exist in great numbers in one place. This is all the more obvious when it comes to animals: there are not many species of big mammals, and not all of them are suitable for domestication. As the natural geography of plants and animals also depended on previous distribution, it is no surprise that the greatest availability of species appeared where the intersecting distribution pathways were the most numerous, that is, at the meeting point between Eurasia and Africa. On the other hand, the transition to agriculture also required the possibility of organising complementary production activities over relatively short distances.

But all of these natural conditions, post-glaciation contexts, these plants and animals suitable for domestication, these varieties of environments, the intersections on distribution pathways, etc., would not be enough in themselves to lead to the domestication we are describing. It was in fact not the first time that societies found themselves in similar conditions. We must therefore assume an internal evolution within those societies that also contributed to their becoming domesticating societies. And this could not have taken place just anywhere. There is obviously a connection between such societies and the densities that existed in their areas before the processes began, which would have depended both on local opportunities for hunting and gathering, and on a previous geographical mobility of the populations.

An essential aspect of domestication is the resulting change in the geography of societies. Two features generally accompany the process: densification and settling. The production of larger quantities of food allows human groups to be more numerous, and conversely, these greater numbers make it necessary to develop agriculture. New forms of production not only require less mobility than hunting or gathering, but they often make it necessary for populations to settle down in order to remain close to fields and orchards or cattle. Only those societies that became specialised in breeding retained-and maybe even developed-forms of mobility that were closer to those of hunting societies. Settling processes generated significant modifications in the geography of societies. With the village (it is generally considered that Catal Höyük, in southern Anatolia, is the oldest identified village-9000 BC) emerges the capability of storing large quantities of goods for long periods of time; many consequences result from this. On the other hand, the appropriation of fields and trees would not involve the same process as claiming hunting and gathering grounds; the territoriality of societies will thereby have been fundamentally changed.

Unlike older societies of predators, who could only accumulate knowledge, the material of ideas, domestication goes hand in hand with a geography of the accumulation of material wealth, which in turn makes way for other forms of accumulation. After agriculture and the village come the city and the State, writing and currency, etc. In short, neolithisation is definitely an essential moment when geography accelerates.

Bibliographie

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