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Animals eat when they are hungry, (...) man, hungry even from future hunger, strives.

- Thomas Hobbes

ACT I Change to Survive

We are at the end of the last glaciation, in the geosphere: 15,000 years ago, the climate begins to change. The melting of the glaciers creates an abundance of water and life begins on Earth.

"And God said, 'Let the earth bring forth sprouts, herbs producing seed, and fruit trees bearing fruit on the earth with seed, each according to its kind.'

"And so it happened. The earth produced sprouts, herbs that produce seed, each according to its own kind and trees that each bear fruit with the seed, according to its own kind. " (*Genesis 1, 11-12*) For part one of this story please see the July 2021 edition of Milling and Grain magazine at www.mymag.info/e/1168

Here we are in the time of the biosphere, in which many people begin to contend for the origins of wheat.

In 63BC Strabo, historian, and philosopher citing Aristobolo, identifies the banks of the Indus as the homeland of the seed, Linnaeus brings it back to the Caucasus region, Durbeau de Lamalle indicates Egypt, while Ethiopia is named by Thiebaud de Bernard.

The Italian botanist Antonio Bertoloni is unbalanced in favor of the Sicilian origin, comforted by quotations in the Odyssey, while the Russian scholar Vavilov moves the origins of wheat to the Middle East (Turkey and Afghanistan). All the areas listed above may have been the origin of the cereal, but for sure the Middle East, the Fertile Crescent, Mesopotamia, cradle of the ancient civilizations of Sumerians, Babylonians, Hittites, Assyrians and Egyptians, will be the scene of the radical change of history of man.

And it is precisely on that territory, in the shape of a half moon, crossed by the Nile, Jordan, Tigris and Euphrates rivers, that the tribes begin to concentrate in the city, where writing is invented and where the first techniques of agriculture are applied: everything this defines the concept of civilization, a prelude to the noosphere.

We are in the Neolithic, a period of transformation of stone tools.

In the previous Paleolithic Era, with the climatic changes and their improvement, the woods and prairies began to be populated by animals, creating a paradise for nomadic "hunter-gatherers", for whom hunting animals and collecting plants were the only daily food sustenance.

They were communities formed by a few individuals and still nomads. Between the end of the Paleolithic and the beginning of the Neolithic, in a middle age that scholars call the Mesolithic, large mammals begin to be scarce (many species disappear) and man increasingly feels the need to be able to count on a supply of constant food, also by virtue of the demographic increase, which requires more and more resources.

"(...) son of a titan, Prometheus (...) entered into the graces of the so-called 'father of the gods' for his help in the fight against Cronus, (...) he was charged with forging man with the earth and fire. Humans were born: all males [to whom he gave divine fire, after having stolen it from the gods].

Zeus saw dangerous adversaries in humans [and was angry with Prometheus to the point of punishing him by chaining him to a cliff and having him tortured by an eagle that daily devoured his liver].

Towards men, on the other hand, who also had no fault, Zeus was even (...) more subtle, perfidious and evil. (...) commissioned Hephaestus to model a human image, the woman, using water and clay [and from which the beautiful Pandora was born] (...).

All the gods were instructed by Zeus to place gifts in her [and with the gods also Zeus].

He gave the girl a vase, forbidden to ever open it, containing all the evils that humanity did not yet know: old age, jealousy, illness, madness, vice, passion, suspicion, hunger, and so on [and only two virtues such as hope and the ability to foresee]. (...) Zeus entrusted the girl to Hermes to bring her as a gift to Prometheus [the provident] who, however, thinking of a deception, refused her. Then Zeus ordered Hermes to take her to Epimetheus [the fearless, the non-provident, the stupid], brother of Prometheus, who as soon as he saw her fell in love with her and accepted her as his wife (...).

(...) Pandora, taken by curiosity, opened the box. From it swiftly all the punishments that Zeus had placed there ran like lightning on the Earth (...) hitherto unknown. The only good gift (...) got stuck under the lid that Pandora had immediately closed: it was the Elpis, hope [together with the virtue of foreseeing, which fortunately remained in the container and which from that moment supported the breed. human, even in complicated and most despondent moments] (...). "

And thanks to those virtues that remained in Pandora's box, shortly thereafter, an unknown novelty would have made human progress possible and changed humanity forever: the discovery of grass plants fundamental for the diet of men, which thus they stopped traveling in search of food, changing from nomads to permanent settlements and building their first homes. The first villages arose, the oldest of which was found in the archaeological excavations made in Israel, in the Judean desert, at Wadi-en-Natuf.

The tribe that lived there was that of the Natufians.

Little has been heard of them: living 14,000 years ago, they were the first to harvest wild wheat and barley, recognizing them as useful, and separating them from other inedible plants.

They do not yet produce bread, but an ancestor of it, similar to a kind of hard dough.

Then, 10,000 years ago, the return of the ice to the European continent and the consequent drying up of the areas of the Middle East, caused a natural catastrophe which was followed by the drying up of the great lake of Galilee in Jordan.

No longer a lake, the bed is transformed into a fertile plain, alternating drought, during the summer season, with fertile periods, thanks to the spraying of water from the surrounding hills.

The species that thrive in this climate are suitable for surviving the long drought and growing rapidly when the rains resume; they are annual plants, which dry up and die with the arid season, small in size, but with large, robust and very productive seeds in the wild and, most importantly, edible for humans.

The condition favors the permanence of hunter-gatherers even before agriculture is "invented". Soon the Mesopotamian populations changed their habits, from gatherers to farmers, passing from the sole activity of gathering grasses, which first arose spontaneously, to their cultivation.

With the permanence there is a great demographic explosion and therefore the demand for food increases, which obliges the first farmers to constantly search for suitable methods and tools to increase the production of the plants then cultivated.

It is in this context that the domestication of plants is born: in favor of nature, man exploits both the mutations and the natural crossings that occur between different species, for the constitution of new species, more suitable, for rusticity, for productivity, of those that had originated them and that often, without human intervention, would have disappeared over time.

The first cereals cultivated in the Natufian age are probably spelled and two-row barley.

During the Neolithic, around the 10th millennium BC, the harvesting of primitive wheat, small spelled, medium spelled and barley was common practice in Iraq, Syria, Turkey, Iran and Palestine.

It is thanks to the Natufians that we come to the invention of agriculture, and we owe a lot to them, as they were the first to ignite the spark of civilization.

Agrariness becomes the cipher of civilization and culture, the beginning of the phase of the noosphere.

The triumph of human adaptability.

The Natufians create their own controlled environment, digging the ground and using their food supplies, the seeds, sacrificing them for the future, for their re-sowing.

Not limiting themselves to the collection of spontaneous plants, but rather by cultivating them, the Natufians became the first farmers in the world.

They didn't know it, but from that moment the history of man changed, forever.

A courageous choice, that of the Natufians, to change to survive, a constant bet in the history of man, which can exist thanks to his extraordinary ability to adapt, to change, to invent himself. No animal could have done this because it is the absolute prerogative of human intelligence alone. The population begins to grow and with it the need to spread the technique and technicalities of the agricultural art.

Exchange is born, commerce is born.

From generation to generation the expansion of the population spreads further and further, until reaching, 8000 years ago, Turkey, Cyprus, Southern Italy, where the local aborigines are not aware of agricultural techniques.

The spread of agriculture and the first crops of wheat start from the regions of the Fertile Crescent, particularly from Anatolia, towards Europe, and is relatively fast. First in Hellenic territory, then in Italy, in France, in Spain and in about two centuries it reaches the Balkan countries and expands to present-day Germany. The wheats that accompany this diffusion are mainly small and medium spelled in addition to spelled, also called granfarro, ancestor of soft wheat, also from the chromosomal point of view.

The most ancient finds, which date back to 5000 BC in Iraq, suggest that the first plant ever to be cultivated by man was the medium spelled, while the cultivation of the small spelled appears to be later, initially considered naturalized as weed.

The spelled, long and thin, with about twenty spikelets each, containing 2 or 3 grains, appears for the first time around the Bronze Age in Switzerland and then spreads to northern Europe. The Bible already speaks of it, while the Ancient Romans used it in times of famine distributing it to the plebs for the high nutritional value and the easy sense of satiety generated.

A wheat similar to soft wheat, of low size and squat ear, classified as compact wheat, widespread in Egypt, in the Indus valley and in some areas of the Swiss Alps.

In central-southern Italy spelled is grown almost exclusively, while in northern Italy, bare kernels are also used (similar to current soft wheat and durum wheat) and it is in these regions that it appears, for the first time in Italy. Moving towards the African continent, the wheat arrives a little later than in southern Europe.

It initially appears in Egypt, in the Nile delta, and from here towards the south, without however crossing the Equator, as this belt is characterized by dense and impenetrable tropical vegetation.

In the Roman world, grain supplies were ensured by the colonies, especially those of the African Mediterranean coasts, which represented the granary of the Empire.

With the invasion of the vandals along the same coasts, the barbarian invasions, the epidemics, as well as the famines, agriculture suffered a dramatic collapse in the fourth century and with it the cultivation of wheat.

In the proemial passage Cato, in his work De agri cultura, elevates and affirms the superiority of agriculture, on the social, moral and educational level, but also on that of economic profit, compared to other activities that also procure earnings, such as trading and wear.

"... Et virum bonum cum laudabant, ita laudabant bonum agricolam bonumque colonum. Extensive laudari existimabantur qui ita laudabantur. Mercatorem autem strenuum studiosumque rei quaerendae existimo, verum ut supra dixi,

Metamorphosis: transformation of one being into another.

In zoology, the functional or structural modification of an animal being during development,

in the passage from the larval to the adult stage. As well as the vocabulary of the Italian language, so likewise, David in his work. Change to survive.

Metamorphosis

Davide Conti

In every knot that tightens against the flesh there is a seed of change: a continuous metamorphosis that creates new possibilities and cognitive spaces.

And from the body constrained by the ropes, two multicolored wings unfold, and through the constriction, and perhaps thanks to it and the need to free oneself, beauty is born and reveals itself.

A splendor that is not only aesthetic, but also spiritual. A metamorphosis, a journey through which the human and the universal, the known and the unknown are integrated.

A long and difficult path, which is no longer just functional or structural modification in passing from the larval phase to the adult stage and a necessary change to survive, but a real path that leads from non-knowledge to knowledge and to discover the true being, one's physical and spiritual identity, oneself in its entirety. No more hands and arms, which remain close to the body, no more legs to move, but the gentleness and power of the wings; no more words to express oneself, but the beauty of color, new tools to face the inner journey. And by observing this new being that rises from the darkness in all its power, one can perceive, as also happens in Ovid's Metamorphoses, all the emotional variations of that fear of the unknown and of that destructive action which in reality is rebirth.



periculosum et calamitosum. At ex agricolis et viri fortissimi et milites strenuissimi gignuntur, maximeque pius quaestus stabilissimusque consequitur minimeque invidiosus, minimeque male cogitantes sunt qui in eo studio occupied sunt ".

"... And the man they praised, they called him a good farmer and a good settler; and whoever was thus praised estimated that he had obtained very great praise.

Now, I believe those who dedicate themselves to trading are courageous and diligent in earning money, but subject to dangers and disasters. From farmers, on the other hand, very strong men and very valiant soldiers are born, and their earnings are fair and safe from any insecurity, nothing hateful; and those who devote themselves to agriculture are not drawn to bad thoughts. "

(Marco Porcio Catone - De agri cultura, praefatio).

Only between the eighth and thirteenth centuries agriculture was reborn and with it wheat; with this rebirth also the technicalities and techniques that foresee the rediscovery of ancient practices develop. The studies on the cultivation of wheat experienced a particular flowering during the eighteenth century by many scholars including Jethro Tull, who exposes the techniques of cultivation of wheat and the control of weeds, and the French Mittelburg, who reclassifies some species of wheat. "Today that peasant, bent between earth and sky, has raised his

back; that farmer has become a farmer.

He knows when his land is hungry, when it is thirsty and sleepy. His hands take care of his land with new caresses. The treasure that he keeps with the memory of the past and the science of the future is his field and on that field there is no longer a farmer who hopes but a farmer who knows. "

(Advertising campaign, The seasons of Italy)



