

## ACT II

From fertile Cresent Moon to Strampelli
The Little Prince from Senator to
Ambassador of Genetic Improvement
Your Majesty the Wheat

# Do not ventilate the grain in any wind and don't walk on any path

# Sirach

Wheat, a heritage of nature, is a botanical engineering which, in the old varieties of wheat, near maturity, provided a culm up to two meters high, to shelter from weeds.

Then the hand of man, the domestication, already in 9000 BC, and subsequently the genetic improvement of the grains lead to the current varieties.

Self-sufficient hermaphroditic plant species, able to reproduce independently, without having to interact with another specimen of its own species, but can be pollinated by different species, giving the advantage of raising new varieties, hybrid varieties. One of these varieties is soft common wheat, which, marking the history of humanity, has become the most important on the planet. The varieties of wheat differ from each other for the better identified characters such as the height and size of the culm, the leaf extension, the color, the compactness, the shape of the ear.

The most important characteristics, where genetic improvement has paid attention and concentrated, are those relating to the yield per hectare sown and the quality of the cereal, characteristics which in turn depend on the productive potential of the plant, on its ability to resist diseases and adverse weather conditions.

The vegetable proteins present are Albumin (soluble in water), Globulins (soluble in 70% alcoholic solution) as well as Glutilins (soluble in acidic and basic solutions) and Gliadins (the main ones responsible for celiac disease).

Thanks to the various studies carried out between 2017 and 2018 we come to the conclusion that, comparing ancient grains to modern ones referring to proteins, little has changed in the composition.

It would even seem that modern wheat proteins are less harmful to celiacs than ancient ones, as evolution has led to an increasing in glutenins (which play an important role in bread making), leaving out the gliadins which are mostly responsible for celiac disease.

Intolerances are real and diagnosable diseases, despite the fact that the diagnosis is very complex.

Many of those who claim to be gluten intolerant have selfdiagnosed the condition, which is obviously reckless.

But the evolution of the seed, whether spontaneous or induced, has in any case brought benefits starting from the adaptability of crops to soils that are difficult to cultivate, to previously unsustainable climates, in areas that would otherwise not be practicable. However, there is one certainty, wheat, modern or ancient, is an enemy to a person suffering from celiac disease.

A clear demarcation of change
A golden crescent that becomes the figure
of civilization and culture

## Hy - 2

#### Leonardo Blanco

There is something hypnotic and extremely fascinating in the words of Leonardo Blanco that trace the plots of the genesis of his works. One has the impression of attending a ritual, made up of waiting and suspensions, in which the temporal dimension plays a fundamental role, as does the measure of the gesture, the rigor, but also the randomness.

With his painting he gives life to a research that involves a long time: the numerous glazes he uses impose suspensions, which mitigate the impulse and lead to a confrontation with the temporal dimension.

Expectations also made of silence that become a space for existential research. Thus on the pictorial surface, often aluminium, the artist transposes the dynamics that move the soul and the world.

The flat backgrounds of colour, which become the emblem of something denied or an absence, are contrasted by areas characterized by a powerful materiality, which attracts the eye. Games of empty and full in which the soul gets lost and for which the letters and numbers that identify the works are transformed into geographical coordinates that lead the soul to find its way.



#### The Little Prince

The vocabulary of the Greek language, the pilot book of biology, reports the noun carapello from the Greek karpos, that is the fruit to which the reproductive process belongs.

The lemma and the palea, the two protective little boat-shaped leaves, contain microscopic scales with sexual functions. Hermaphroditism is its reproductive phenomenon.

The palea represents the ventral part of the flower and it is precisely here that, after fertilization, an ovule is formed which, when fertilized, changes into seed, while the entire ovary becomes the fruit, for the caryopsis botany, for all of us the kernel.

Only one fruit for each flower, one seed completely immersed in the caryopsis.

The grain has an ovoid shape crossed by the Ilo, the longitudinal furrow, and a tuft of hair at the top. Indehiscent, the grain is made up of three distinct parts, each containing the next: a real matryoshka!

The external envelope, the pericarp is broken down into 3 fibrous membranes rich in cellulose, the epicarp, the mesocarp and the endocarp, which when milled will become bran. The endosperm, which with the milling process will become flour, is enveloped by two membranes, the internal one aleurone, the external hyaline layer.

It is the nourishment source for the plant development and is the most consistent part of the fruit.

It is a starch reserve from which the embryo of the plant will draw to feed itself during development, until it reaches the size to feed itself autonomously through photosynthesis.

And finally, the germ at the base of the kernel, which gives life to the plant through the cotyledon, the two meristems and the hypocotyl: the first, the umbilical cord that conveys the starch, the second acts for the development of stem and roots and the third having the task of providing the growth axis of the plant.

It contains mostly unsaturated fats, proteins, antioxidants, rich fragrant and tasty oils, as well as the highest quality vitamins, B complex particularly. In refined flours, the germ is totally absent to avoid rancidity phenomena that would prevent the conservation of the flour for a sufficiently long time.

Thus reconstructed the anatomy of the wheat grain, it is possible to go into the sub microscopic level, and analyse its composition at the molecular level:

**Water:** Constitutes eight to 18% of the fruit, depending on the stage of ripeness.

Sugars: They are the dominant fraction, 72% of the fruit.

**Fats:** About 1.5-2% of the grain.

**Mineral salts:** They amount to 1.5-2%, equal to the lipids percentage.

**Proteins:** On average around 12%. Much of it is contained in the endosperm; some of them (gliadins and glutanins) in contact with water, and thanks to a mechanical action, form gluten.

Enclosed in the flours derived from the grain of wheat, not only precious nutritional substances, but also archetypal languages, more proper to the Soul than to the Body. From a primary hermaphroditic reproductive process, therefore, the birth of a fruit (Ear) and a seed (multiple in one ear) that will die to itself during the summer drying to be interred, buried in the clod, to reincarnate in new life.

A transubstantiation and subsequent Christian resurrection or a true cycle of pagan reincarnations.

"In the most critical moment of the story of vegetation, when the span of time seems to close, the creator god of life and saviour from death, from Tammuz to Christ, had to die and then be reborn. His death and resurrection were, in fact, proof of his power to convert death into life."

(Antonino Buttita)

The archetype of time and its flow, of its consummation until its periodic re-foundation, renews a cyclical conception of life where "... the seed, and in all archaic societies the grain in seeds, was felt as a visible and concrete metaphor.

"On one hand, its inert aspect, its apparent death, were a dramatic denunciation of plant life; on the other hand, the power to vegetate contained in it identified it as the source of life.

"It was no man land in the border area between living and dying ....

"In the process of tracing back from the invisible to the visible, to an all human visibility, the identification of this drama in an anthropomorphically represented god is consequential."

(Antonino Buttitta)

Triptolemus, Sophocles' first tragedy to be performed

The tragedy refers to the story of the Homeric hymn to Demeter narrating how she in her wanderings to Eleusis attempted to give immortality to the son of King Celeus. Triptolemus' journey depicts him on a flying chariot pulled by snakes, to bring to men the gift of wheat offered to him by Demeter



### **Triptolemus**

#### Alessandro La Motta

In this work, inspired by the figure of Triptolemus, the artist continues a research that began a few years ago linked to the myth of Demeter, connected by the ancients to the seasons changing and the cyclical nature of time.

There are several stories dedicated to the character of Triptolemus, who is variously identified, in the Orphic tradition, as the son of Disaule and Baubo, two beings born from the earth, and in the Homeric Hymns, as the son of Celeo and Metanira, the rulers of Eleusis, where Demeter is welcomed during her desperate wanderings in search of Persephone.

The goddess will give the young man a chariot pulled by winged snakes, to travel the world sowing wheat and teaching agricultural techniques to the human race.

Generous gesture that allowed humans, as Vincenzo Monti wrote in 1797 in his Prometheus, "to the correct man abandon the oaks, / and abhor the food fiere of the fiery." Here, La Motta chooses to depict the hero according to the iconography that took hold from the end of the fifth century BC, or as a beardless young man, offering us a contemporary reinterpretation of classical art according to his personal stylistic code.

The battle is simple because the goal is precise:

Is it possible in your jurisdiction to increase agricultural yield?

So if this is possible, this must be done!

Benito Mussolini

#### Da Senatore ad Ambasciatore

After completing his university studies in Naples, the Marquis Raffaele Cappelli devoted himself to a diplomatic career, assigned to the embassies of London, Vienna and Berlin.

In 1885 he conquered the foreign ministry, in Rome, with the office of secretary, until he became a senator in 1919.

Collecting the family inheritance, he deals with the agrarian reform of the early twentieth century with competence and leadership.

We are in the first half of the 1920s and monarchical Italy is an importer of wheat for 1/3 of the national consumption equal to about 7.5 million tons, the cause of a deficit in the trade balance.

The project of a self-sufficient policy leads to the Battle of the Grain to achieve complete self-sufficiency.

Proclaimed by the Chamber of Deputies in June 1925, the battle was already decreed in early July of the same year, and the permanent wheat committee was established, headed by Benito Mussolini and the agronomist Nazzareno Strampelli, father of Senator Cappelli, that is part of it.

The project and the intervention had to mainly address the yield increase of wheat per hectare, an average increase, even a modest one, would have given remarkable results, avoiding enlarging the area cultivated with wheat to the detriment of other more profitable crops and in each case necessary for the national economy as a whole.

The extension of hectares covered with the sowing of the previous year is thus established.

The project has to face three main problems: the problem of seed selection, the problem of fertilizers and technical improvements and,

last but not least, the problem of prices.

Unfortunately, starting from 1927, the world market was characterized by a sudden collapse in prices and the government was forced, in order to continue to follow its economic line based on self-sufficiency, to defend the income of farmers by imposing protective duties on wheat importation.

In a historical context in which the goal is to feed the growing population and drastically reduce the quantity of imported wheat, the work of the agronomist Strampelli is mainly aimed at identifying, with the crossing and selection of the progeny, new varieties of plants that increase crop yields and resistance to pathogenic fungus and ensure an earlier earing date.

Strampelli tries to anticipate the earing time to have the grain when the climate is cooler and more precisely when there is more water in the soil, to allow the plant to produce more.

The Senatore Cappelli wheat (Strampelli dedicated the new wheat to the Marquis Raffaele Cappelli), despite being just over 150cm tall, late and susceptible to rust and lodging, caused an increase in harvest yields compared to the averages obtained with the old local varieties.

Its hybrid wheat cultivars were one of the decisive elements in winning the Battle of Wheat.

In the 30 years from 1920 to 1950, up to 60% of the national durum wheat area is invested in Cappelli. From the beginning of the last century until the 1960s, Senatore Cappelli wheat represented the basis of the genetic improvement of durum wheat and is in fact present in the genetic heritage of almost all durum wheat cultivars, now cultivated in Italy.

High ear, deep roots, diploid, great personality for intense aromas and rich flavour, digestible and capable of exerting beneficial actions on cholesterolemia, inflammatory state, oxidative damage of cell membranes and intestinal function.

Italian, even if deriving from a Tunisian variety, the great protagonist and the most widespread until the 1960s, is today once again in the limelight because it is extraordinary, prone to organic crops and hostile to excessive fertilization.

If the grain of wheat
fallen to the ground
does not die, he remains
alone;
If instead he dies
it produces a lot of fruit
John 12, 24-25

#### **Father and Son**

#### **Davide Frisoni**

In this work, inspired by the figure of Triptolemus, the aOrganic teaching of training and technical elements specific to the other faculty learning and moral education at the same time.

The simple also becomes easy.

In this intense portrait played on two-tone and in which research and plays of light are intensified by the lack of colours, two generations are compared.

In front of a building, which is easy to imagine as an old rural house, a male figure and a child, a father and a son stand out, who, as if they had been taken aback and interrupted, look beyond the limit of the picture, in a moment of suspension. We are faced with a story that traces family plots and relationships and speaks of heredity and roots. Affections, but also ties with their land, their culture and tradition.

A work that the artist himself defines in some respects "Pascoli" and that tells of the hardships of work, of suffering, but also of that ability to play and ironize about the harshness of life that is well defined by the suffering but cutting gaze of man and that contrasts with the other gaze, that of the child that opens onto the horizon of life.

