LIVING BEING



Edited by Euresis and Camplus Assosciation

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The title of the Meeting 2020 ("Devoid of wonder we remain deaf to the sublime") is an invitation to let oneself be carried out of the haze and banality that cover everything when the wonder is not awaken, and to open oneself to the depth of reality.

Of all the elements of reality, our "living being" – that state that in a very intuitive but sure way we recognize also in other living beings – is one of the most elusive and at the same time the most immediate and persuasive. It is assumed by every knowledge, even the reflection and investigation on the inanimate nature, or on the world before there was life, are rooted in today's life, in the life of people who reflect and investigate and in the life that invades the family of the living beings that offer themselves to the attention of those who study.

The huge progress in biological sciences, particularly in the last half of the century, has highlighted an extraordinarily complex material organization that, in its surprising logic, is shared by every living being, from the unicellular bacteria to the immense variety of marine and terrestrial animals and plants and to the human being and makes them something absolutely unique within nature. At the same time, given the founding role of physical and chemical laws in the explanation of natural phenomena and reality, a new vision has silently been installed – a vision of living beings as material constructions characterized by a special complexity, but ultimately similar to every natural inanimate body. This has caused the very concept of life to fade and present itself as inconsistent and almost superfluous in a general lack of meaning of nature as a whole.

Yet, through life an absolute novelty is introduced in the universe. To a particular kind of asset of the matter – in which a very complex molecular system remains located in space and time by being at the same time cause and effect of itself – corresponds the emerging of an identity, that of an organism, in significant relation to an alterity: the environment – an identity whose recognition is made possible by the fact that we are living beings ourselves, by our own life, which we lived and felt as living beings.

So, even in the simplest organisms, with which we share the fact that we belong to the family of living beings, we can see a foreshadowed self-world polarity. In every living being the single molecule cannot be considered

only in terms of pure chemical species, but it is just as essentially part of a rational process that, against the background of the entire organism, takes a particular meaning and function.

According to the very suggestive vision of Hans Jonas, every organism is home to a continuous and dramatic emancipation of the environment in terms of "a needy freedom", and in every living being you can trace, in an elementary way, those fundamental antithesis that mankind discovers in himself: form and matter, self and world, autonomy and dependency, freedom and necessity. The tension among these poles, that coexist dramatically, marks a deep character of the living being, rooted in his relational nature.

But how can we take into account tensions, needs, signs and signifiers in the context of scientific investigation on living beings? Is it naïve anthropomorphism to see in non-human organisms something more than mere matter moving in space, to see in them agents that bring interests and points of view, rather than blind sets of mechanisms? What do a bug and a machine have in common and what are the differences between them? And how does mankind – whose natural continuity with other living beings coexist with the mystery of his radical diversity – fit in this picture?

If on the one side these questions push us to extend the use of the reason beyond the methodological limits imposed by scientific method, their validity and urgency is such that it actually makes them inseparable from the intentions of the scientist who investigates the structure of the living beings.

The investigation on the living being sheds light to fascinating complex and ingenious scenarios. What gives to an organism its identity, its shape, since the matter of which it is made flows and changes continuously, but it remains itself in time? What role do cellular structure and the two most peculiar and impressive classes of biological macromolecules – proteins and nucleic acid – have in the creation and preservation of this identity, in the short span of the individual life and, at the same time, over the multimillennial course of generations? How do these elements intervene in the development and differentiation of cellules in complex organisms?

As is known, the evolutionary processes play a key role in the living world. But the fact that evolution is possible is anything but predictable. We are surrounded by an amazing variety of different living forms blossomed throughout millenniums, especially in the marine environment, in where imposed structural constraints are lesser. Where does the organisms' propensity to prefigure continuously new possible ways to exist come from? And what does that incredible constraint determine so every being, including us humans, depends in a deep and essential way on every living being? It's enough thinking that everyone of us takes billions of microorganisms of many different species with themselves and they radically contribute to our physiology! Even if they are nearly hidden behind the huge diversity of living forms and the complexity of the nets of relations that make up the biosphere, the scientific survey is highlighting structures and regularities that amaze for their simplicity and elegance.

Going into the more and more unexpected scenarios that life sciences reveal – staying aware of the gravity that goes along with the common adventures of every living being – will show us how life doesn't exist without links. Furthermore, it will help us to get how deep the mystery is and how sublime the total "construction" whose we freely become subjects and testimonies – as we are living in it – is.

The **virtual exhibiting space**, by Associazione Euresis and Camplus, will be divided in four areas – each one regards a specific scientific aspect about what "living being" means. In addition, referring to incredible facts that the scientific survey on biological systems has revealed in the last decades, it will offer a path which will open to a new way to look at the living beings. This new gaze can get from different perspectives a nature which avoids our grasp but which is so much present that is instantly familiar land where our and the world's mystery takes place.