

Nature from Kosmos to the system

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'Faith' is not a feeling in the human soul,
but it is man's entry into reality, in total reality,
without omissions or reductions.
Martin Buber

Man and Nature in the framework of *Realitas*

What is nature? And what is man? These questions constitute two parts of a single question. Man and nature can only be identified relative to each other, in their non-symmetrical correspondence—the type of relationship that Illich named “dissymmetric complementarity.” We can speak of nature to refer to everything in the physical world, whether organic or inorganic, that is not the work of man, including the existence of man. Everything that occurs in nature belongs to itself. Unlike all that is man-made, nature is sovereign because it is self-generative. In this sense, man is transcended by nature, by its laws, by the generative force of organic nature with its ineradicable life cycle. As Illich reminds us, nature, as the one who gives birth and causes death, was very present in the visions of antiquity.¹

“Mother nature” is two-faced: the environment is her face that is external to us but in symbiosis with the face that is internal to us, the fleshy body. Our body is formed from the mineral, vegetable, and animal flesh of the world, and the world is, in turn, a sensorial extension of the body, proportionate to our organs of perception. Nature is a great sensori-

1 I. Illich, *The Rivers North of the Future. The Testament of Ivan Illich as told to David Cayley*, House of Anansi Press, Toronto 2005, p.183, epub.

al and sensual womb within the overall framework of being, which I call *realitas*: the immense archetypal symbol of which humans are a part but are also more or less sensitive interpreters. In this view, the natural forms are combined with the forms made by man.

Man, transcended by nature, in turn transcends it. Man is the door that opens *realitas* to further meaningful figures such as self-consciousness and personal self-determination, awareness of the whole, and the sacredness of being. The human space of freedom from nature and its determinisms allows creative interaction with the natural world and the creation of a second, properly human. Man's identity and survival are ensured equally by his belonging and dependence on nature and by his difference and autonomy from nature, by his naturalness as well as by his unnaturalness. The right proportion between belonging to nature and autonomy from nature includes proportionally *unnatural* instrumental choices: in the name of the *sovereignty of the person*, man can elaborate the laws of the body and the environment to enhance his own performances with the help of *non-violent technologies*, which are respectful of the *sovereignty of nature*. The *sovereignty of nature* finds its limit in the *sovereignty of the person*, but the *sovereignty of the person* also finds its limit in the *sovereignty of nature*. Ontologically conscious choices are those capable of respecting this double, mutual constraint.

We can speak analogically about animal cultures, languages, and arts if we do not forget the novelty of the human phenomenon, the threshold of differentiation between man and nature. The human innovation is nevertheless based on continuity. Animals appear to us as being simultaneously very close and also very distant companions: very close, because they, like us, are bearers of animated flesh, that flesh which is our first ontological distinction from machines; very distant, because they are beyond the threshold of the awareness that

man has of the whole. The sensorial and sensual experience of the body and the environment is elaborated by man in symbolic production, in the life of the *logos*, in ritual, art, and technical practices. Man experiences nature only through this embodied *neo-narration* that is called culture. This gift of being human corresponds to a reduction of innate animal abilities.

The great narratives of humanity complete the picture of *realitas* by recognizing a third ontological realm, through and beyond the physical world of space-time. Even though the natural world belongs to itself and is complete within itself, it trespasses into the transcendent by which it is generated and shaped. This “other” dimension is embodied in the human being and renders man ontologically different from other beings by guaranteeing a margin of freedom from every natural and social determinism. “Making Sacred” the *realitas* means welcoming the revelation of this transcendence and tirelessly questioning the framework of *realitas*—which marries transcendence, man, and the world to ensure human intervention is appropriate to it.

Kosmos and dissymmetric proportionality

Ivan Illich refers to the composite picture of *realitas* with the word *kosmos* and defines culture as “the art of seeing the *kosmos*.” The characteristics of the *kosmos* are revealed to the “specially trained gaze” capable of a cosmic conception of *realitas*. The cosmic vision pierces through the veil of chaos to see the “net of correspondences” that connects and gives meaning to *realitas*. *Kosmos* means order, proportionality, and appropriateness of a relationship.² Similarly, as Illich recalls, the original meaning of *logos* (in Latin *verbum*) refers to proportionality, to congruence.³

2 I. Illich, *La perte des sens*, Fayars, Paris 2004, “La sagesse de Leopold Kohr” (1996), p. 237.

3 I. Illich, *The Rivers North of the Future*, op. cit., p. 462.

Kosmos is an overall weaving, a net of differences/correspondences, a *gestalt* that does not break down the polarities of being. The intrinsic novelty and dignity of each experiential level are just as substantial as their co-existence and complementarity. To describe this “ontic proportionality,”⁴ this ontologically harmonious but not monistic vision typical of ancient traditions, Illich introduces the term “dissymmetric complementarity.”

For all worlds before our own, at least all those of which I know anything, it is a certainty that there is a correspondence between what is here and what is beyond. Heaven is mirrored by earth. The baby I saw in a woman’s arms yesterday is a cosmos, a microcosmos. When I look at this baby, I see something which appears, at first sight, utterly dissymmetric from what I see when I look up at the stars, and yet they fit at every point. They are both complementary and mutually constitutive, that is, the existence of one implies the other. Each people discern this complementarity through a specially trained gaze which anthropologists call culture, though I would rather speak of the art of seeing the cosmos, bearing it, suffering it, and enjoying it. The assumption that the world is a net of correspondences [...] is the assumption that all existence is the result of a mutually constitutive complementarity between here and there.⁵

The “cosmic understanding of being” referred to as the Great Tradition,⁶ “considers the dualities of male and female, up and down, heaven and earth, to be fundamental and

4 I. Illich, *La perte des sens*, op. cit., “Passé scopique et éthique du regard” (1995), p. 298.

5 I. Illich, *The Rivers North of the Future*, op. cit., pp. 315-316.

6 I. Illich, *La perte des sens*, op. cit., “La sagesse de Leopold Khor” p. 250.-

irreducible.”⁷ Illich speaks of the “perceptual duality” needed to apprehend the differences of being and their mutual congruence and generativity. The visual epiphany of the world itself is a cosmic event, the “fruit of the fit between two dissymmetric complements,”⁸ like eyes and colors. Dual perception also reveals the places of the *Sacrum*.⁹ Illich indicates as Sacred the thresholds where “the ultimate, the true otherness, the transcendent, that which is beyond” appears.

“When the idea of contingency, of constant creation by the will of the Lord in heaven, made its appearance, it had an ambiguous effect on this cosmic conception of reality,” says Illich.¹⁰ In some cases (e.g. Hildegard of Bingen) the idea of the world as constantly produced by divine will combines with a sense of the cosmic intelligence of being and with a perception of the vitality of nature. Thus, “the sense of contingency seemed only to heighten her [Hildegard] enjoyment of the relations between the microcosmos and the macrocosmos.”¹¹ Nature is glorified thanks to “God’s constant, creative support”¹² from which it receives its vitality. Cosmo-theo-an-dric (or theo-anthropo-cosmic) models such as that of Raimon Panikkar fall into this tradition (in this triad the term “cosmos” stands for the natural world).

However, according to Illich, the idea of the contingency of the world to God also has an opposite outcome, which is the vision of a world whose existence is not intrinsically regulated by the cosmic *complexio oppositorum*:

But the sense of contingency, for others, was a step in the

7 I. Illich, *The Rivers North of the Future*, op.cit., p. 317.

8 I. Illich, *La perte des sens*, op. cit., “Passé scopique et éthique du regard”, p. 298.

9 D. Cayley, *Ivan Illich in Conversation*, House of Anansi Press, Toronto 1992; pp. 418- 419, epub.

10 I. Illich, *The Rivers North of the Future*, op.cit., p. 316-317.

11 Ivi, p. 316.

12 Ivi, p. 183.

direction of monism, because a world in which everything immediately depends on God can be interpreted as a world reducible to a basic homogeneity or oneness, and this deeply undermines traditional cosmology, which is gendered and considers the dualities of male and female, up and down, heaven and earth to be fundamental and irreducible.¹³

The horrible resurrection of nature: the system as perverted kosmos

“The beginning of modernity coincides with an attempt to break out of a worldview defined overwhelmingly by contingency,” says Illich.¹⁴ Once the transcendence of the divine has disappeared, the world is abandoned to the gray homogeneity of monism. As Illich wrote, “a sense for this kind of mutually constitutive dissymmetric complementarity, for such ontic proportionality, is not included in those axioms that determine the mental topology of modern times.”¹⁵ “The cosmos was discarded” when, with modernity, the world passed from the hands of God to those of man.¹⁶

The homogeneous vision is typical of systemic epistemology that recognizes the “integrated complexity” of the world but in a monistic sense, which is an inversion of the cosmological vision of the world. It is this perversion that we encounter, among others, in the ambivalence of Gregory Bateson’s thought.

The Australian aborigine had, in his totemic cosmology, a system that brought all natural species and forces and human institutions, plants and animals, wind and thunder, circumcision and the boomerang he used in hunting, into a relationship and defined his place in that complex whole-

13 Ivi, p. 317.

14 Ivi, p. 180.

15 I. Illich, *La perte des sens*, op. cit., “Passé scopique et éthique du regard”, p.298.

16 Ivi, “La sagesse de Leopold Khor,” p. 250.

and allowed him to use the sense of that multiplicity of relations in the decisions of his life. The European peasant in the Middle Ages went out to plow the fields in the presence of a great crowd (or cloud) of witnesses, patron saints, powers and principalities, and, of course, angels. The truth that the aborigine and the peasant share is the truth of integration. By contrast, we must be concerned today because, although we can persuade our children to learn a long list of facts about the world, they don't seem to have the capacity to put them together in a single, unified understanding – there is no “pattern which connects.” For most human beings throughout history, the pattern which connected their individual lives to the complex regularity of the world in which they lived was a religion, an extended metaphor, which made it possible for ordinary people to think at levels of integrated complexity otherwise impossible.¹⁷

Bateson interprets the traditional cosmic vision as a metaphor for his own systemic and monocular perception of the world, a “monistic and unified way of looking at the world.”¹⁸ However, the autotelic proportionality of the *Kosmos* is constituted by dissymmetries or harmonized ontological differences; the unity of the whole is accomplished through a continuous marriage between the different, which Bateson reduces to interfaces between subsystems in the biological hierarchy. Bateson will speak equally ambiguously about religion and the Sacred while stripping them of their meaning.

According to Bateson's “Epistemology of the Sacred,” the old religious and animistic conceptions, however useful at one time, are now worn-out visions; improper ways of per-

17 G. Bateson, M.C. Bateson, *Angels fear: Towards an Epistemology of the Sacred*, Bantam Books, 1988, pp. 195-196.

18 Ivi, p. 50.

ceiving the holism of the whole. "The pattern which connects" is projected by religions into the supernatural dimension, one of the two "nightmares of nonsense"¹⁹ that obsessed Bateson. The new religion, according to Bateson, derived "from cybernetics and systems theory, ecology and natural history."²⁰ The Sacred becomes "the integrated fabric of mental process that envelops all our lives,"²¹ "the reality of very large mental systems, systems of ecological size and larger, within which the mentality of the single human being is a subsystem."²² And what is Man in this systemic vision of the Sacred? How does Bateson, who regards "myself as a system [and...] the person whom I love as systemic,"²³ characterize man? Answer:

As a self-recursive communication system [...] It may have pain and many other types of awarenesses. It may also be aware of harmony in its own function, and that awareness may become the basis for awe and an awareness of beauty in the larger and more inclusive system.²⁴

According to Bateson, this is the new way of celebrating "the natural unity," the way that can limit "the excesses both of the materialist and of those who flirt with the supernatural."²⁵ The old mind-body problem is resolved thanks to the unification of mind and matter; the mind is here "an organizational, not a separate 'substance.'"²⁶ Therefore, as much as Bateson fights materialism, his is an authentic materialism.

19 Ivi, p. 64.

20 Ivi, p. 136.

21 Ivi, p.200.

22 Ivi, p.135.

23 Ivi, p.191.

24 Ivi, p.181.

25 Ivi, p. 52.

26 Ivi, p. 50.

The mind is a principle that organizes nature, and this principle does not have an independent existence distinct from matter. “There is no mind distinct from the body and (of course) no body distinct from the mind.”²⁷

Bateson’s nightmare is actually a quantitative or mechanical materialism, which sees only matter without perceiving the structure, the *gestalt*, the organization: “The materialist superstition is the belief (not usually stated) that *quantity* [...] *can determine pattern*.”²⁸ This awareness of form, the sensitivity to the principle of holistic self-fashioning that governs planetary organisms, plants, animals, and men, is the truly precious part of Bateson’s thought. But even Bateson’s great battle against mechanism resolves itself into a structural rather than quantitative mechanism. For Bateson, bio-cybernetic structures are irreducible to the machine. However, they have the traits proper to the special cybernetic machine: non-linear, and recursive and yet one-dimensional, totally reducible to the material *ratio*, to the objective process that supports them. The notion of machine evolves into that of mind, and the mind is reduced to an evolved machine.

The equation between matter and mind on the one hand, and between mind and cybernetic mechanism on the other, reduces nature to one big (pseudo) intelligent machine with all its subsystems, among which are the humans—complex mechanisms, non-trivial or unpredictable machines according to Edgar Morin’s definition—who are increasingly predictable and programmable. In fact, it is possible to design artificial intelligence machines that simulate the most creative human processes and to interfere with these processes.

How did it happen that many of us were initially

27 Ivi, p. 181.

28 Ivi, p. 59.

drawn to the systemic model? What was fascinating about that model was the holistic principle, which is an excellent tool for reading the personal microcosm and organic microcosms, as well as the macrocosm. But we used that model of “integrated complexity” for an operation opposite to that of Bateson, that is, as a metaphor for holistic entities constituted by an internal ontological differentiation. In the important essay “Soins médicaux pour systèmes immunitaires?”²⁹ Illich recognizes the profound influence exercised on him by Gregory Bateson’s thought at the time he wrote *Medical Nemesis*.³⁰ Illich took up the term coping (from the verb to cope, to indicate the mastery of one’s own state), used by Bateson to introduce systems theory into anthropology, and spoke of health as an *intensity of coping*. Illich believed that concepts such as feedback, program, *autopoiesis*, or information if used skillfully, could clarify matters. He later admitted he was wrong.³¹

The latent perversion in systemic epistemology subsequently became evident. Awareness of oneself as a system is part of the cultural *iatrogenesis* that Illich discussed in *Medical Nemesis*. The cultural experience of the body—of the nature within us—is expropriated by a clinical and then cybernetic reason, which replaces the art of incarnation: living and dying, enjoying and suffering in the body according to the meanings it takes in direct experience and elaboration of life. Together with the deep sense of self, we lose the carnal materiality of the world; it is the end of nature, “the end of a world proportionate to the senses.”³²

29 I. Illich, *La perte des sens*, op. cit., “Soins médicaux pour systèmes immunitaires ?” (1994).

30 I. Illich, *Limits to Medicine. Medical Nemesis: The Expropriation of Health*, Marion Boyars, London 1976.

31 I. Illich, *La perte des sens*, op.cit., “Soins médicaux pour systèmes immunitaires?” p. 264.

32 Ivi, “La perte du monde et de la chair”, p. 355.

Illich would write of a “horrible resurrection of nature.”³³ Nature is reborn in the new bio-cybernetic fetish of life, both “a life” as a purely biological fact that removes the person, and life as an eco-system. The natural and supernatural decay together, as parts of a unique cosmogony. “A contingent nature at its noon is gloriously alive, but it is also uniquely vulnerable to being purified and cleansed of its aliveness in the sunset of contingency.”³⁴ The reverential awe, the humility towards “the pattern which connects,” preached by Bateson, actually celebrates a desacralized *Sacrum*, that is, devoid of that transcendent depth that opens the picture of being beyond the material *ratio*: “the biological nature (cybernetic, hierarchic, holistic, nonlinear, systemic nature – call it what you will) of the world.”³⁵

Systemic epistemology—based on seeing man as a biological entity and the biological entity as a cybernetic entity—can therefore flow into the dystopian horizon created by reckless applications of atomic physics, molecular biology, neuroscience, and all the *substrate sciences*, which go beyond the direct experience of nature and the person to break them down into their manipulable micro-components. The history of technoscience here marks an unprecedented epistemic fracture: man-nature interaction breaks down the boundary that separates the “objects” due to a human creative act from those of natural existences. Genetic engineering, bio-engineering, and artificial intelligence usher in the realm of *artificial nature* and *artificial man*; the machine attacks the spirit and freedom of man starting from his body. *Anti-natural* choices are simultaneously *anti-human* choices: choices in which the violence committed on our biological basis com-

33 D. Cayley, *Ivan Illich in Conversation*, op. cit. p. 421.

34 I. Illich, *The Rivers North of the Future*, op.cit., p. 185.

35 G. Bateson, M.C. Bateson, *Angels fear*, op. cit., p. 99.

promises our humanity. Post or trans-humanism defines itself through improper suffixes: the right suffix is *anti*-humanism.

The new cosmic ark of being

The resulting civilizational crisis affects the deepest levels of politics, economics, and techno-science. The protagonist of this crisis is a power with absolutely new features, a power exercised by man against the very ontology of man, as it has always been configured in the dialectic between nature and culture. The new power is a transversal power, compatible with both ecological and humanitarian rhetoric and with nationalist, classist, racial, and sexist ideologies. This power is so pervasive and introjected by its victims that it takes on a character of inevitability. “Political” participation in the fate of the world, militancy for civil causes, and battles against social disparities aggravated by the system do not change the system. Every militancy takes place on a stage where nothing is prohibited because the power of global imperatives to produce, consume, communicate, intermediate, automate, algorithmize, and cybernetize is stronger than everything.

Let us abandon the unrealistic hope of changing this world. But what does that mean? Disengagement, hyper-individualism, or defeatism? No. We cannot be complicit with this power. But we can reserve for ourselves a different hope, we can bear witness to ourselves and to the good in which we believe. The societies of the past are now behind us. Illich has repeatedly asserted the vitality of the vernacular *ethnos*, of traditional and geo-rooted culture. However, ethno-communal virtue as a “naturalized culture” can take on a normative, static, and discriminating character, which can exacerbate distinctive traits to the point of making them defensive and oppositional, leaving us divided and defenseless against the new universal challenge. We need a third way that is radically critical of the present and beyond any restoration of the past. The third way passes

through the new marriage of flesh and spirit in the integrity of personal existence and its asceticism, those weddings revealed to history, according to Illich, by the Incarnation of Christ.

The ancient myth of the flood and the ark is perhaps the myth of our times. Illich referred to this myth when he told of Deucalion, son of Prometheus, helmsman of the ark that withstood the flood, and who, together with Pyrrha, his wife, daughter of Epimetheus and Pandora, parented a new humanity generated by the earth.³⁶ The flood is now underway. We can build that ark and embark. And that ark is, at this moment, our landing place. An ark of hope that Illich called Epimethean, convivial, ark of *philia*, of liberated, Christic brotherhood. From here we start again to weave the “net of correspondences” between I and you, individuals and community, community and humanity, humanity, nature and technology, nature and super-nature: the continuous and never-concluded refinement of our cosmological sensibility according to a new personal sense of proportionality, outside the old naturalized cultural grids.

From here we start again to face the *novum* of *nature and artificial man*: man and nature, spirit and flesh can only be rediscovered and saved together, in a renewed ontological framework and pact that assigns to each component its place. Nature is saved not from within eco-cybernetic battles, that is, through that model that sanctions its death (the paradox of an *anti-natural* ecology). Nature can be known and saved only in proportion to a framework of reality capable of respecting its self-regulation, its transcendence, and its mystery; the same framework capable of defending the transcendence of the person from his *anti-human* double.

36 I. Illich, *Deschooling Society*, Harper & Row, New York 1971.