Reasoning About Reason: Why Philosophy Should Now Abandon Monism in Favor of Pluralism

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Abstract The term *reason* is used in a widespread and recurring way to indicate one of the traits that characterize human beings in a non-negotiable way. While this or that human behavior can be considered "irrational", no human individual can be qualified as "irrational" *per se*, whereas a person can be "immoral" or "amoral", devoid of aesthetic sense or incapable of linguistic expression, etc. Unlike other aspects, reason is always coextensive with humanity: as long as there is one, there is also the other. And this consideration already raises questions; it opens to reflections and calls for clarifications and explanations.

A classic starting move to dig into the theme is to look at the past, to the history of the term "reason", and to proceed with a philological recognition. Such an approach is often useful in recovering not only the semantic outline, but also the conceptual groove through which the current meaning of a term has stabilized. This shift into the investigation of reason is a good point of departure, but honestly it does not suffice by itself. "Ratio", the etymological antecedent of "reason", provides chameleonic mutations over time, it intertwines and overlaps with "intellect", "logic", from which in different eras it sometimes diverges or converges, without a linear genealogical transmission. This historical complexity has still a lot to teach us, and it must be kept in mind, but it is also necessary to exploit contemporary cognitive resources to elaborate a concept of reason that is current and suitable for today's world.

The aim of this essay is to make a contribution to philosophical research by making a proposal that does not operate by simplifying the problem and reducing it to a few components, but rather intercepts its richness and complexity, in order to achieve a contemporary concept of reason for our world, philosophical as well as cultural, making available to scientists and philosophers, sophisticated intellectuals

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and men of good will, a reference and a debating platform within which to interact with critical attention and intellectual honesty.

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1 The Meaning of "Reason"

1.1 A Brief: Though Almost Impossible—History

A tangled term of the philosophical repertoire, the word "reason" presents chameleonic mutations over time. It intertwines and overlaps its meaning with "intellect" and "logic", from which in different times it sometimes diverges or converges, without maintaining a prevailing or stable semantic line.

Given all this, any effort of tracing the philological etymology of "reason" (which probably derives from the Latin *ratus*) is expected to be almost zero interest for philosophy. By trying to advance in such a complex subject matter, it may be promising the search for its conceptual antecedents, which can be found in a cluster of related terms provided by the classical Greek thought: *logos*, *noesis*, *dianoia*. Precisely *logos* displays the semantic density that characterizes every ancient utterance. In *logos* (from *legein*, to connect, to link) we face the very idea of a profound connection that binds things together, which can be grasped by human beings according to an immediate mental act, the *noesis*, which organizes the world scenario without any mediators. It becomes *dianoia* when the *noesis* is expressed in discursive or propositional form and eventually regimented in logical arguments.

If the story of "reason" is impossible to sketch in a very linear way, being destined to disperse itself in several semantic streams, the one that concerns its conceptual antecedents opens a broader perspective: it includes not only the discursive knowledge (*dianoia*), but also a wide number of references (*noesis*) starting from which the discourse is structured. The concept of *logos* also contains—at least in some classical authors among which Aristotle stands out—also an implicit but undeniable ontological commitment: human understanding, the *subjective logos*, can effectively perform its capacity to understand the world because the world consists of a rational structure, an *objective logos*, which makes it understandable.

If *logos* is the most plausible conceptual antecedent of "reason", it possesses, with respect to "reason", a semantic density that the latter no longer has. As if, we could otherwise say, in the historical path that led from *logos* to "reason" the concept has undergone a process that emptied it out by reducing it to a few traits. Do we have reasons that allow us to check this hypothesis? What has ever happened in the historical-semantic evolution that led from *logos* to *ratio*? What idea do we have today of reason, in philosophy and in common sense?

1.2 The Current Use of "Reason" in Philosophy and in Common Sense

Even if we are looking for the prevailing current use of the term "reason", it is necessary to immediately exclude that any current use exists absolutely, or that it can be traced without geographical, cultural, historical, personal, and many other limitations.

In contemporary European culture, among populations that share wide cultural spectra and a sufficiently homogeneous cultural past in which a semantics in good approximation uniform has settled, the utterance "current use" corresponds to the ordinary meaning provided by a good dictionary.

In this context, and within these semantic limitations, reason is primarily understood in term of reasoning, as the ability to correctly argue or "any process of drawing a conclusion from a set of premises" Blackburn 1994 (Oxford Dictionary of Philosophy, 1994: 320). Despite its precision, this definition does not allow to distinguish reason from the realm of logic, which is notoriously the discipline that specifies the conditions of correct inferences. The prevalent philosophical use follows the meaning ascribed by common sense; a rather extensive literature expresses with sophisticated specialist discourses (see, among many, Putnam, 1981; Simon, 1983; Rescher, 1988; Stich, 1991; Nozick, 1993) the basic idea that there are some universal standards of rationality. Such reduction of rationality to logic is sometimes tempered by modest concessions to inevitable but tolerable pragmatic deviations from the logical standards.

In short, not only for common sense, but also for philosophers, reason is mainly logical, and the deviations from formal correctness that are frequently found in the vast sea of human reasoning should be attributed to human irrationality, or to the particular circumstances that limit and distort the correct application of inference rules. (Piattelli Palmarini, 1994).

If we describe "reason" in terms of "logic", limiting the concept of reason within the boundaries of logic, we offer an easy conceptualization, simple to manage and apparently not problematic, of the term "reason". But have we answered the question posed before ("What the reason is?"), or do we have just ignored in what reason exceeds logic or is not superimposable to it? It is well known that simplifying ideas tend to successfully substitute more complex ones, but to better understand how such depletion took place, it is worth asking when this simplifying scheme was founded and established, given that not even Aristotle, the inventor of logic, would have probably subscribed to it. The turning point came in the seventeenth century, due to the New Mathematized Science that reinforced the objectivity and the certainty of its observations by expressing them in mathematical, formal or formalizable language.

Descartes (1641) took on the task of transforming the scientific method into a metaphysical scenario by codifying and transmitting many forms of philosophical reductionism such as mechanism, materialism, reductionism, mind-body separation to future generations. The Cartesian intellectual legacy imposes strict constraints

on the subsequent research and orients its development through some powerful suggestions: the reason is univocal, it is nothing but formally correct reasoning, all the sciences use the same "rational" method, the errors of reasoning depend on the interference of the "irrational", generated in the heterogeneous spheres of will, passions, obstinate and rebellious unjustified beliefs. The identification of reason with logic became a paradigm, so pervasive to be implicitly accepted also by its opponents, who could escape the motto "Reason is nothing more than logic" only devoting themselves to "irrational" theories.

The conceptual constraints imposed by Descartes are, *de facto*, accepted and considered non-reviewable in many areas of philosophical thought up to the contemporary age (see the Philosophy of mind, and especially the debate on A.I., Scientism, Physicalism). The shared conceptual inheritance provided us with the idea that reason consists of correct argumentation and that the term "reason" is univocally referential. Furthermore, it is given for granted that philosophy and the sciences are qualified for common use of reason; any deviation from this use is to be considered as a sort of weakening. As a consequence of it, history, psychology, medicine, and all the arts that cannot satisfy the universal criteria valid for reason are rejected in those uncertain and cognitively opaque domains that we can only qualify as irrational.

Common sense and philosophy converge in identifying reason with logic despite the impossibility of proving the co-extension of the two domains and despite the innumerable corrections that are necessary to exclude logical incorrectness from the realm of reason as well as to exclude that logically correct arguments must be included in the domain of the non-rational (Devlin, 1997).

1.3 Reason and Logic

Contemporary Anglophone thought has questioned the epistemological status of reason by asking whether rational standards of argumentation exist (Stich, 1991: 49).

A positive answer has two implications: first, the standards of rationality are specified in detail. Secondarily, reason is co-extended with logic because, if such standards exist, they correspond to universal criteria of logical correctness.

Putnam (1981: 104) wonders whether there is an ideal theory of rationality, which establishes the necessary and sufficient conditions for a belief to be considered rational in current circumstances and in all possible worlds. The problem is whether a criterial theory of rationality might exist. The answer can only be negative; Putnam shows that looking for such a criterial theory is a consequence of implicit scientism and reductionism but also, one might suggest, of a logicist assumption.

The search for universal standards of rationality has not provided valuable results and has forced many authors towards a pragmatism which by renouncing that claim, obtains in exchange the legitimacy of behaviors, decisions and choices, which are dominant and successful in our life, even though they cannot satisfy the

requirements of any logical correctness. Pragmatism recognizes the appropriateness of the *pragma*, but it eludes the underlying problem because it does not address the twofold question: "in what relationship are logic and reason? Is it possible that reason can deviate from logic while maintaining the truth value?"

Piattelli Palmarini (1994) proves the logical inaccuracy of everyday reasoning and concludes for the unreliability of ordinary reason, which does not stand up to the logical test. He too seems to regret the formal inappropriateness of reason, without further pursuing the investigation.

Damasio (1994, 2010) and Devlin (1997) are the scientists who subjected the problem of the relationship between logic and reason to a drastic revision. Precisely they demolished the rationalist equivalence that, from Plato onwards, through Descartes to Turing (1992), Minsky (1986) and Winograd and Flores (1986) was unable to perceive the profound difference between describing human behavior in terms of rules or mathematical formalizations—a perfectly legitimate description in terms of the science that carries it out—and reducing the human behavior to such rules, neglecting the fact that actions are performed according to abilities, skills, moral constraints, preferences that escape formalization.

Thanks to Damasio and Devlin, philosophers have now the tools to get out of the logicist dilemma: either the reason is logical, or we are consigned to skepticism.

Damasio proves the embodiment of reason in opposition to the disembodied formality of logic and describes perfectly rational though illogical behaviors and completely irrational, but perfectly logical, behaviors. In the same line, Devlin criticizes logicism, that is to say the extension of logic to a univocal and unitary reference for human behavior and reasoning, and emphasizes how the context influences the standards of rationality—which undergo notable changes according to circumstances—and demonstrates the irreducibility of human actions to a repertoire of formal rules. Devlin also points out how much the meaning of the same term is influenced by the circumstances in which it is used and how much communication depends on the structure of conversation and culture.

In the light of Damasio's and Devlin's discoveries—just to name the most influential ones—it is necessary to reverse the logicist relationship between logic and reason: reason is the vast field that dominates human activity, of which logic is a subspecies; in some cases we use logic because we deem it appropriate and useful in a given context, in other cases we neglect or violate it openly without the rationality of what we do, say or think being weakened. If at the entrance to Macy's store we read: "on the escalator it is mandatory to carry dogs in your arms", an extremist logicist will go in search of a dog to carry in his arms, sacrificing context, circumstances and reason, where a human being who intends to keep in line with reason, even at the cost of sacrificing logic, will easily be riding on an escalator without a dog in his arms (the example is from Devlin, 1997: 270). As Devlin clearly remarks in his passionate investigation at the edges of logical thinking, it is not the logic and semantics of the sentences alone that can make their meaning fairly understood. In all the discourses the meaning is determined also by reference to the context given.

Here is an example: "A bachelor is an unmarried man"; this guy is a bachelor, so this guy is unmarried. An unmarried man can get married. But this guy can get married because although he already has three wives, he can get a fourth because he is Muslim, so it is not true that this guy is both bachelor and unmarried. Furthermore, this guy is a bachelor because he can get married, but he is not a bachelor because he is married. This guy is both a bachelor and a non-bachelor. In this case the problem is generated by the very meaning of "bachelor" which is understood as having a univocally referential meaning, that is, as a logical-linguistic symbol, while it undergoes important changes that depend on the context and circumstances of the utterance.

If the Platonic line has historically been dominant, the time has come to re-evaluate Aristotle's philosophical attitude, according to whom logic is one of the ways of expressing the *logos*, but it is not the only one nor the best.

It is beyond the scope of this investigation to discuss the historical debate about reason and logic, we have simply limited to sketch some lines in order to introduce our theoretical claim.

2 A Philosophical Proposal

The etymological and semantic history of the term "reason" can supply useful insights, however, as we have seen before, it does not convey a concept capable of adequately supporting the many facets and features that belong to reason. It is necessary to venture into a new path and identify a definition that also takes into account the new horizons of knowledge opened by the sciences. Here is a first proposal, a deliberately broad one, therefore marked by a necessary level of vagueness and openness.

> Reason is the ontological principle underlying the structuring of reality and at the same time the epistemological counterpart that guides us in its understanding. It is the interface between the subject and the world.

We can try to better specify the meaning of reason and to deepen its understanding. Taken with reference to the human subject, reason is the ability to implement strategies for understanding the world and ourselves; it guides behaviors, it uses arguments, and it knows how to orient itself amid different hypotheses and scenarios. Rooted in the body and in contact with the emotional experience, with which it intertwines a silent and continuous confrontation, reason gives rise to different scenarios, evaluating the consequences and orienting towards choices and decisions.

Its action goes beyond what is present to conscious awareness and also includes subliminal levels in which it shows its activity by generating effective and efficient behaviors which remain unknown or ignorable to consciousness. Thanks to the bond that connects it in a profound and continuous way with the body, reason is embodied in a very full sense, as it moves within bodily constraints and limits. The body

anchors it to the world of things, making it unrealistic to believe that the subject can disregard of the object and vice versa.

Epistemology and ontology cannot do without each other. Reason is the interface between the human subject and the world, it connects and puts them in communication for the aspects in which they diverge, and at the same time it makes them partakers of converging and common traits. Human beings can exercise their understanding of the world because both human beings and the world have a structure of reason which structures their configuration.

We therefore consider reason as the ontological principle that structures and organizes reality and as the epistemological counterpart that guides us in understanding ourselves and the world.

Reason is principle (*arché*), in the Aristotelian sense: "Ontological foundation of entities and gnoseological foundation of knowledge". Translated into a philosophical language for the contemporary context, reason is irreducible to another concept, in the sense that the notion of reason cannot be expressed in terms of other conceptualizations. It follows that one could speak of reason as a "primitive", a term dear to logicians, or even, in a classical way, as a "principle", in the sense of "what structures the constitution of an entity".

If we apply to reason the meaning of "principle" as seen above, we achieve a more articulated and less generic understanding of the trait that so typically identifies the human: reason constitutes an internal criterion that structures the ontology of the human world, gives shape and character to all its values and manifestations, and it is expressed in its phenomena. Used as a knowledge tool, it allows and supports cognitive activity. If we wish now to move from the maximum degree of the conceptual extension of "reason"—which inevitably involves the minimum level of intension—to its specifications, we will trace different relevant aspects according to the fields and interests of investigation. In this way, reason's specifications will gain in terms of intension what they lose in terms of extension.

3 One Reason, Many Viewpoints

3.1 From an Ontological Point of View Reason Can Be Subjective and Objective

From an ontological point of view, there is an objective reason that structures reality, organizes it into distinct phenomena and objects, activates a processual activity that consists of the arising and the decaying of phenomena. The world, by being made up of separate entities—even if not isolated ones—is imbued with reason. From the ontological point of view, the peculiar structure of reason is inherent to the world, and would persist even in the absence of rational observers. This is not an epistemological hazard, but a condition rooted into ontological processuality.

In the world we are acquainted with, symmetries and symmetry breaks are dominating. In this scenario, phenomena endowed with properties and characteristics emerge. They do not only hold a certain degree of stability, but also changes according to dynamics specific to each domain.

With human beings, reason also acquires a subjective value: it becomes the tool that grasps and understands the rational structure of the world and its objects. We open a bracket: the failure of the enterprise of knowing that the skeptic declares is not very credible because, even to sanction the failure, reason is needed and even filing for bankruptcy is a rational declaration.

In reference to the human subject, reason is the ability to implement strategies for understanding the world and ourselves, it uses arguments. It therefore knows how to orient itself between different hypotheses and scenarios, thanks also to the contribution of emotions and the body with whose needs it intertwines its path.

Between objective reason and subjective reason there is a fundamental asymmetry that inevitably derives from their different structure, but "pure" objectivity, that is to say objectivity without a subject that catches it, is unattainable, as idealism has well noticed: there is no object except for a subject who knows it (Calogero, 1927), while the reverse (no subject without object) is at least an unexplored field. The dynamics between subject and object is a continuous flow of mutual transformations and the attempt to know the object regardless its interplay with the subject is a rather dangerous myth, which drives us to seek the unobtainable.

Today the vital trace of idealism can be found in the "sourcentist" positions, (Maturana & Varela, 1980) which affirm that the subject makes the world arise in the act and in the way of knowing. Unlike the idealist, the "sourcentist" is not obliged to conclude for the mental existence of the world, but he can argue that reality is a domain of reference external to the subject, the identification and description of which pertains to the subject, to its objectives and capabilities.

3.2 From an Epistemological Point of View Reason Can Be Implicit and Explicit

While the "explicit" reason is well known to philosophers and also to the on-going experience of human subjectivity, which always talks to and with itself in ways that can be related, remembered and even traced, a meaningful part of the rational activity that does not reach the conscience has been largely ignored or denied. We refer to the "implicit" reason, whose effectiveness is revealed in what we do, that governs our behaviors and also acts without our knowledge, with motivations and orientations not being necessarily present to the consciousness. Aristotle calls it *noesis* and attributes to it a regulating force much wider than that recognized to *dianoetic* reason, which translates the dictation of *noesis* into the propositional discourse, subjected to the constraints of syntax and logic.

Vitiello (2019) expresses a not dissimilar concept in the field of theoretical physics when he states that the microscopic phenomena that support macroscopic manifestations are intrinsically opaque to knowledge: reason admits them and identifies them at least in part, even though it cannot provide their description, if not indirectly.

It is easier to recognize the explicit reason, which exercises its action in a traceable way. Its path can be followed in the areas in which it is active and does not require the use of abduction to pass from the visible to the invisible: it can be expressed through the classic tools of logic, which organize knowledge data in a formal structure.

3.3 From the Point of View of the Knowing Subject Reason Can Be Conscious and Unconscious

The Freudian discovery of unconscious processes has not weakened reason by handing it over to a dark and unknown region, but it has extended its breadth: even the unconscious with its proper dynamics, traceable only through interpretation of universally shared phenomena—the well-known dreams, slip acts, discomforts and psychic pathologies—can be understood thanks to the guidance of reason.

A guideline which in this case prepares and uses observation, access and control tools built in order to investigate a field that can be intellectually grasped only indirectly. Also in this domain there is no lack of anchoring to the empirical, which is the therapeutic capacity of the different psychoanalytic approach to interact with the hidden world of the patient, bringing about improvements or remission of pathologies at least in the cases where they are successful.

It would be interesting and worthy of a discussion the problem about the violation of the principle of contradiction observed in several interpersonal conflicts: I can love and hate the same person at the same time, I wish to meet someone and I can't stand to see him. One could suggest the hypothesis that the violation of the principle of contradiction experienced at an unconscious level is at the origin of mental illness.

To verify this hypothesis it would be necessary to build an interdisciplinary research project, with the collaboration of philosophers and psychoanalysts. If such conjecture were proved, we would confirm furthermore the divergence between logic and rationality: the contradiction is a violation of logic—which only possesses tools for reporting the violation, but would not know how to exploit and understand it. But it does not violate rationality that even in this case would pervade any human action: pathology expresses and denounces an "impossible" experience because it is contradictory in the only language available to it, that of suffering. In fact, as it is well known, the unconscious does not have access to the discursive and propositional language of consciousness and is expressed through images, metaphors, and symptoms.

According to Libet (2004), a neuroscientist well known for his experiments in the field of brain and the mental *timing*, alongside the conscious mind, there is the unconscious mind, which governs many human actions, including the complex and intertwined operations of physiology, aimed at the organism's survival. It solves many problems, even theoretical ones, silently, providing the conscience with the result of its work. We are talking about an unconscious mind which, Dupré might add (1995, 2003), in an imaginary remote dialogue with the sciences, is action-oriented ("I press the brake so that I don't kill a cyclist crossing the roadway"), introjects cultural imperatives and models.

A further insight about this topic comes from Stern's (2004) distinction between unconscious and nonconscious mind, which provides a more comprehensive set of the dynamics of the Ego.

From these and other researches, the profound unity of the human emerges with even more solid evidence: psychic states influence choices, reason is imbued with endogenous and exogenous relationships, the unconscious mind interacts with the conscious mind. The weft of the human is woven by intertwining all these threads and each of us expresses and lets himself/herself be seen in its intertwining. Hence we face a fundamental challenge that consists of refuting the idea that mind primarily and exclusively follows logical rules. To provide some valuable motivations to support this criticism, it is useful to begin by exploring the possibility of a more extensive feature of reasoning. New lenses are required to adequately support this task.

3.4 From a Logical Point of View Reason Can Be Abductive (Creative) and Deductive (Tautological)

Reason, in particular in its explicit value, applies different inferential modalities to achieve the cognitive objectives it has set for itself. In a very general way, inference consists of the necessary or at least possibly provisional connection between a proposition that is deemed true and a subsequent and dependent one. The inferential modalities traditionally studied in logic and epistemology are deduction and induction; the deduction that is drawn from true premises leads to necessarily true conclusions, while induction obtains, at most, a cognitive result of high probability as it generates laws or rules starting from a limited number of cases. Due to the necessity and certainty of its conclusions, deduction remains the leading tool for logic, with the well-known limit of producing tautologies.

Yet human knowledge is not only tautological or anchored to observational data: on the contrary it is often innovative and capable of progress (very different from accumulation). On closer inspection, human beings mostly use another inferential modality—abduction—the results of which are not certain, and often not even probable. Abduction is widely and successfully used not only in daily practice, but also in many areas of the greatest relevance, such as medical diagnoses, police

investigations. More widely this inferential modality is applied in all occasions in which a "new", "creative", "unexpected" theoretical or practical result is reached; this is the case with scientific theories. It is due to systemic thinking that we have brought attention back to this kind of inference, already known to Aristotle 1924, (*Prior Analytics*: 2, 26, 69 a, 20–38) and Peirce (1931–1958), and which is now beginning to enter the logic manuals (Frixione, 2007). But what is abduction? (Urbani Ulivi, 2016).

Just to have a reference platform, we suggest two definitions for "abduction" and for "creativity".

> By abduction we mean an inference that, by operating in an incomplete information context, over-determines the available data and identifies either a universal hypothesis (a law or a theory) or even a particular object in response to the question posed by the investigation.

> By creativity we can mean, at least in a useful approximation in this context, the outcome of a procedure that cannot be formalized through given rules.

Abduction can be of various types, but at this point of the paper we aim to underline the *creative abduction* as the discovery of the hypothesis that organizes the entire cognitive landscape in a new way and that cannot be prescribed through a formal procedure; it follows that it is impossible to bring creative abduction back into the context of formal logic, for which abduction is nothing more than an incorrigible anomaly. Obviously, the investigation on abduction remains open to further philosophical investigations, which require to widen the context of reference. In other terms, we should answer a main question that can be formulated as such:

> How knowledge must be re-thought so that it can also include abduction, creativity, information incompleteness, variable contexts, non-deductive and not even inductive inferences?

There is but one answer: once we recognize that the formal rules of logic characterize a part of the knowledge activity, but do not exhaust it or even complete it, we must admit that thought processes draw on many and different resources that go beyond any formal procedures. They root knowledge in a real world and, first and foremost, in a subject embodied in the personal and affective relationships: all these aspects are part of the individual's personal history, in the social, political, religious bonds, which enter into the argumentative procedures, orient them, support them, being only partially recognized and explicitly recognizable.

At this point of the investigation we have reached the intermediate result to focus an enlarged view of reason, embedded in structural, dynamic relationships with the environment of which human beings are included. This path, by shaking all the current paradigms, invite us to turn on a systemic perspective.

3.5 From an Anthropological Point of View Reason Is a Second Level Property of the Human System

We generally say, through the lenses of the system thinking, that a property is a "second level property" when it depends on the entire constitution of an entity. In the case of humans, reason operates taking into account all those factors whose intertwining qualifies and identifies each subject.

We talk about body, emotions, personal history, preferences, moral, family, social constraints, freedom, and much more that is typical of the human being. Reductionist simplifications cannot be followed: such a thesis cannot be sustained, at large, because offering a simplified explanation of a multi-faceted phenomenon it misrepresents the phenomenon as a whole, only describing some of its constituents.

To provide some intuitive motivation for this remark, it could be useful to recall some examples. "It is rational to eat if you are hungry, to drink if you are thirsty"—this is the deceptively persuasive example used by many philosophers to suggest the universality and sharing of the criteria of rationality, but it is an example, precisely, deceptive: I'm hungry, there is food, it is not always rational to eat it. Indeed, it is rational that I do not eat it if I'm waiting for the guests for whom the food has been prepared (cultural constraints) if I want to lose weight (wishes to which hunger is subordinated), if by eating that food I steal it from my child if the ongoing famine does not allow further supplies, etc.

Human action, of any type, from the most corporeal to the emotional, sensitive, deliberative ones, is as rational as it is capable of prefiguring different scenarios with the results of the various actions undertaken. And it is as rational as it is able to choose which scenario to give course, but reason does not oblige us to make a specific choice, nor it does make the same scenarios available for everyone. It is not a universal criterion, it is a principle that activates scenarios and strategies of orientation—practical and theoretical—that we use to understand different situations and to behave in different circumstances.

The "ways", in the sense of paths, of reason are neither homogeneous nor even equal, despite having in common the achievement of a goal. The battles are different, but while you need an enemy to make a battle, for there to be "reason" you need a purpose. Purposes are not rational—nor irrational—they are pursued with rationality.

Some might prefer to the term "way"—which remains very approximate and vague, similar in this to the term "manner"—the term "procedure", more precise. However, we suspect that, by procedure, we inevitably mean a coordinated series of passages formally codified by logic. Of course, reason is also this: logical-formal procedure, but it does not only reduce to this, being a complex texture of a variety of threads. It is also choice, decision, preference, appreciation of some aspects, carelessness of others, it is tears, it is laughs. For none of these traits we would ever use the term "procedure", while we could speak of "mode", recalling the Cartesian sense of mode as a "variable or transient quality", or Aristotelian pluralism (the

modes of being), to arrive at the grandiose Spinozian construction, which saw in the modes the necessary "affections" of the substance.

To the "mode", even if differently declined in different eras and authors, the plurality of expressions appears intrinsic, very suitable to reflect the operative plurality of reason, and its unpredictable, different, surprising, yet rational outcomes.

3.6 From a Topological Point of View Reason Can Be Local and General

Once the dangerous illusion of a universal reasoning criterion that governs every cognitive domain in the same way has been abandoned and the simple recognition of a plurality of philosophical visions *à la* Rescher (1985) is considered insufficient, one cannot but accept and put forward a pluralist perspective (very different from perspectivism). Declined on a topological horizon, pluralism affirms that reason governs each domain of knowledge with local criteria, within which the conditions of acceptance or rejection of hypotheses and theories are established, and that in addition to local criteria there are validity criteria that going beyond the local ones we can perhaps call "general" (we speak of "general" with some caution, because it is a generality connected to the different "localities"). It should be recognized that the general criteria by increasing the extension, fatally decrease the intension, whereas the local ones by increasing the intension lose in extension.

In this perspective, general and local criteria interact and are linked by relationships of interaction and interference; they are mutually open to changes and developments that transform them over time. To the various characteristics of reason, another one should be added: it is processuality, which makes it flexible and adaptable to the different needs of its presence in history.

3.7 Pluralism Versus Monism

There are no formal and universal criteria for rationality, valid in any circumstance, for any subject, in any environment. Reason adopts different validity criteria according to the domains intended. What is rational—or inspired by reason—here and now is not exportable—or it is not always exportable, nor should it be expected to be—elsewhere and in another time. Therefore monism and universalism of criterial reason and logic should be replaced with a pluralistic view of reason.

Rescher in his *The Strife of Systems* (1985), observing the coexistence of philosophical systems on the scenario of thought, each of which claims to be universally valid, to avoid the easy skeptical drift, proposes the "pluralism of orientations", which affirms that in philosophy coexist acceptable alternatives, although they may have very different merits, therefore many different orientations in terms of

setting and results are admissible on the philosophical scenario. Rescher's position, by recognizing that there are different competing philosophies on the scenario of thought, does express a fact, but does not explain why these differences exist. In order to explain this wide range of perspectives (hence perspectivism), reason should no longer be considered as an universal tool that exercises its activity according to universal procedures and rules, but in an authentically pluralistic way, as an activity of understanding that changes according to the historical moment, of the circumstances, of the problematic area to which it refers, of the objectives to which it is addressed, of the implicit but powerfully influential assumptions that it adopts, of the own and individual sensibilities of each philosopher, of his moral structure, of his aesthetic sensibility, and of much even more.

Philosophical systems are not ahistorical, disembodied, absolute, they do not express a criterial reason independent of the circumstances, but they represent the effort with which each generation and each individual tries to understand the world with the tools of knowledge available at a certain time and with different capacity and sensitivity of each. A pluralistic position—very different from the obvious admission that different systems coexist and struggle, *à la* Rescher—explains the plurality of positions by introducing not only, but also logical reasons as forces that structure and define different positions.

4 What About "Irrational" and "Unreasonable"?

"Irrational" is not a term predicable of "man". Losing one's reason—understood in the extended sense proposed here—means losing humanity. The subjective reason may be missing, but the unconscious reason or even only the objective reason will remain to structure the human, even if only in the organization of corporeality. The human subject can carry out actions whose *ratio* remains opaque to the observer and also to the one who performs them, but the embodied, hidden, inspiring *ratio* is always there: the mentally ill person, the immoral, the criminal, behave following questionable criteria, or not shared by others, but they follow reason. Their reason. Which can be misused, superficially, erroneously, counterproductive, but it is still followed. Of course, there are "irrational" or "unreasonable" actions, but they are precisely single actions that do not undermine the general structure of reason characteristic of human behavior.

This passage is highly relevant because it is expected to reshape the dominant paradigm about the human agency and to have consequences in several fields of the human sciences, from psychology and psychiatry to law. It's interesting to underline that, regarding reason, contemporary researches in psychotherapy are moving towards the same path traced by the systemic thinking approach. We could not understand why therapy brings about a change in the psychological discomfort if we would not consider that *sui generis* rationality. The possibility of any psychological treatment passes by the capacity of the therapist to become acquainted with the mental world of the patient, both cognitive and emotional: therapeutic approaches

like the EMDR (Eye Movement Desensitization and Reprocessing), which works with the opaque dimension of the mind, proves that any presumed "irrational" content is highly "rational". Worth noting that not the logic but a processual approach—the EMDR counts 8 different phases—both cognitive, emotional and sensitive (the therapist's hand tapping) is the very key to enter the intimate ground of the patient. A logic approach is taken on by the two actors of the process, the patient and the therapist, only in the "assessment" (phase 3) and, at the end of the therapeutic path, in the "closure" (7) and "evaluation" step (8) (Fisogni & Fisogni, 2020).

Furthermore, in the last two decades the phenomenon of global terrorism has deeply put in question what "reason" is and how reason works in evildoing.

There is a wide consensus among scholars that global terrorists are not irrational, although their acts seem to be completely out of reason. It is questioned whether they perform their attacks according to a limited critical capacity, due to the ideological desensitization, or their acts are the result, on the cognitive ground, of a lack of empathy (Fisogni, 2010) that is amplified by the turn from the offline to the digital domain. Finally, exploring the opaque dimension of the reason also means to re-open the ethical debate about the major phenomena of evildoing, like the death of millions of innocent persons in the Nazi's extermination camps.

4.1 Skepticism Towards Reason Defeats itself

The procedures and outcomes of reason are the thread that guides us into the investigation of reality: every attempt at understanding is radically antisceptic; the outcome can be uncertain and provisional—or even, as for the skeptic, negative—but trying to understand is an activity imbued with optimism, animated by a fundamental trust in rational activity and by the constant and continuous use of reason.

We are well aware of the fact that many authoritative voices of philosophical thought have risen against this statement (Pascal, 1901; Kierkegaard, 1944; Schopenhauer, 2014; to a certain extent also Hegel, 1807; Bergson, 1907). These authors deserve the credit for having grasped and denounced the limits of reason understood only as logic, which is criticized for the impossibility of understanding those areas in which logic has no place to proceed. The defect of these "irrationalist" positions has been to adhere to a reductive and limited concept of reason, which has not been able to see how much reason goes beyond logic and impregnates every human activity. Their denunciation is not valid against the expanded and pluralistic concept of reason that we have proposed, while it remains very effective in demonstrating the limits of a restricted reason within the bed of logic.

5 Conclusion, Knowingly Open and Provisional

This inquiry took as its starting point the question: why do we return once again to a subject so widely discussed, plowed up and debated? The answer could be this one: for an unshakable confidence in the progress of knowledge. We think that although knowledge does not progress in a linear way or even by accumulation, it is necessary to exploit the undoubted cognitive advantages offered by the contemporary world and by the tools that have been discovered, developed and made available by it. We are thinking in particular of systemic thinking and its theoretical strength that is starting to be exploited. It has been proved capable of expanding our capacity for understanding in several areas, and of replacing worn-out tools that have frequently proved insufficient or unsuitable to solve many theoretical or practical problems.

We find different terms in Greek: *logos*, *nous*, *dianoia*, and non-corresponding other terms in Latin: *ratio*, *intuitus, mens, intellectus*. All these terms belong to a conceptual family in which there are notable similarities and divergences. For the differences, a brief historical investigation is sufficient; but where do they converge? What is the platform of reference which is inclusive of the different expressions of reason? As we have noticed before, reason is not reducible to *dianoia*, to any judgment argued in a logical form, but it is also not reducible to *nous,* nor to the rich and deep *logos.*

Every *dianoia* takes place starting from a *noetic* basis, from a *nous* understood as the ability to intellectually grasp the elements that will subsequently constitute the judgment: that too is the business of reason. It is *dianoia*, the connection of separate parts, but it cannot be reduced just to *dianoia*; it is explicit and conscious, but its foundations are rooted in the unconscious mind and bodily activity. It is subjective, but it acts by tracing the reason that objectively structures the world of phenomena.

Reason therefore is a principle of organization and order of both reality and knowledge. We talk about "principle" in the sense of "what regulates"; for example it regulates the dynamic of a process and allows it to be distinguished from the environment in which it is immersed, while the order is mainly the result of an organization of objects (both concrete, theoretical or even mental) between which relationships are established. It follows rules, laws, prescriptions, constraints. It results from negentropy, from symmetry breaking, from self-organization.

Reason has many aspects and shows different faces depending on the focus of each investigation: it is, and can be, subjective and objective, conscious and unconscious, explicit and implicit, pragmatic and theoretical, argumentative and apprehensive, and much more.

It is necessary to abandon any illusory ideals of reduction, it is necessary to admit more than what contemporary logicisms have accustomed us to recognize: reason is not only the procedure that guarantees scientific knowledge, but it is, within the sciences, also that ability to formulate hypotheses that precedes the control procedures.

In a word, it is creative.

It favors vagueness and incompleteness: it renounces misleading claims of accuracy, completeness, which have remained unrealized announcements and proclamations. It investigates the asymmetries that govern the transformation of *chaos*—where everything is interchangeable because it lacks identity characters—into *cosmos*, rich of order and of orderly processes, distinguishable because they are equipped with emergencies that make them identifiable. If we want to use a metaphor that makes our idea clearer, the reason is similar to the road for those who walk. To make any walk possible, there must be a road, and it can be flat or uphill, well defined or barely outlined, smooth or coarsely cobbled. It must be accepted and recognized that not all roads are the same—there are 10-lane highways and mountain paths—and one cannot give a universal description, which is suitable and appropriate for all roads. What is good for everyone is minimal: a road establishes a limit with respect to the environment (external limit) and allows different movements within it: the pace can be fast, slow, depending on who takes it, why it is accomplishes.

We reached the end of the paper, not of the investigation, which is expected to be developed through further interdisciplinary suggestions and criticism. The scope of our proposal is intended to be a preliminary, however well-argued step addressed to rethinking what reason is, what it does, how it acts, what results it can veritably achieve. In search of a more comprehensive understanding of such a challenging subject matter, we are perfectly aware that the shifts of reason are different and often unexpected: they must be followed carefully, with patience and with optimism.

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Bibliography

Readers do not find any bibliography, and this choice ought to be at least clarified. We gave up on it because a bibliography, while not complete or at least reliable, would have been probably manageable with difficulty because of its immense extension. We could adopt selective criteria, one could say; yes, we could, however even this hypothesis was discarded because any selected criterion would have been tailored to personal interests and sensibilities. We therefore leave to the reader to pick up his/her personal choice of reference texts. We would like to suggest—in particular to the less experienced—to let themselves be guided by the entries "reason", "intellect", "intuition", "argumentation", "inference", "logic", "mind", of the Stanford Encyclopedia of Philosophy and the Oxford Dictionary of Philosophy.