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The Physical Universe and the Theoretical Value of Science: Reflections on the Thought of G. Leopardi

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The essay has two main purposes. The first consists of discussing some literary and philosophical thoughts on the epistemological value of science by one of the most famous and celebrated poets in Italian literature, Giacomo Leopardi. The poet firmly believes in the cognitive power of science, capable of revealing false beliefs with the light of reason. However, in his mature reflections, what will radically change will not be the value of scientific activity itself, always admirably accepted, but rather its true salvific force. Leopardi was not a scientist, but he used the scientific culture of his time to critically address the great existential themes of man concerning nature and the universe. He had amply demonstrated a scientific culture since his youthful 'History of Astronomy', which would reappear in many of his other literary works. His deep and meditative reflections on the nature of finite and infinite space and time are a clear and fruitful testimony to this. However, Giacomo writes icastically, reason alone is not enough; it needs imagination. The second concerns a first reconstruction of the influence that the philosophy of Enlightenment had on Leopardi's thought especially in relation to these topics: atheism, rejection of providentialism and anthropocentrism, the conception of nature, the question of the relationship between human and animal intelligence, the rejection of metaphysics, the importance of scientific knowledge.

Keywords: Giacomo Leopardi, Leopardi's philosophical thoughts, Leopardi's scientific thoughts, epistemological value of science, materialism, philosophy of Enlightenment, metaphysics

Epistemological Value of Science

Leopardi's literary and philosophical learning has its roots in the eighteenth Century, with which he shares the enlightenment faith in science, the deliverer from the bonds of ignorance and of error. It is without doubt that his standpoints change with time, that his youthful optimism gives way to the pessimism of maturity, and yet there is a golden thread that runs through all of Leopardi's writings from his adolescent works to *La Ginestra*, which is in a certain way the "summa" of all the preceding standpoints, the final outcome of his anguished research of Man and the World.

Roberto Mantovani wrote paragraphs 1 and 2 of the paper and Alessandro Prato wrote paragraphs 3 and 4.

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What remains unaltered and intangible is the theoretic value of science, an indispensable instrument for freeing oneself of false beliefs and of all that has mortified man throughout the millenia. The youthful quote¹ (Leopardi, 1997, p. 200) at the beginning of *La Ginestra* (Canti, 1845) is emblematic of an attitude of lucid knowledge with regard to science and its cathartic and liberating force. One cannot help but think of Columbus (in the *Dialogo di Cristoforo Columbo e Pietro Gutierrez, Operette morali, 1827*) in a night without time, full of doubts and yet of ever-rising hopes, challenging the immensity of the ocean, relying on his hypotheses (without which science cannot progress, nor take shape) which are not sure but likely. One's fantasy runs to the vessel depicted on the frontispiece of Bacon's *Instauratio magna*, with the writing *multi pertransibunt & augebitur scientia*, even if the spirit is different: here the discovery of a new world is certain, while in *Columbus*, Leopardi's doubt prevails, even if, in a sort of infantile stupor for the timid presages coming from the new-land, man without certainties is not at all a man without hope.

If there were no other fruit to come of this navigation (says Columbus), it seems to me that it is extremely profitable because for a while it keeps us free from boredom, it makes life dear to us, and it gives value to things that otherwise we would not consider (Leopardi, 1928, p. 569).

Let us not forget that this operetta dates from October 1824! What changes in time is not Leopardi's position towards science, but rather towards its soul-saving power; he still remains anchored to the enlightenment vision, but what lessens is his optimistic faith in the lights of reason. Here lies the difference between the youthful works and those of maturity of Leopardi. The interest in science is constant from the dawn, one could say, until the sunset of his life. At this point one must move from the Storia dell'Astronomia of 1813 leaving to a side the Physics dissertations (1811-12) as the type of works written at school, albeit showing signs of an interest which will never diminish. The *History* should not be cast aside as a work of annoying erudition, "a miscellany that is frightening for the quantity of books it has drawn from" (De Sanctis, 1953, pp. 8-9) or at the most as "a palimpsest of poetic fantasies" (Russo, 1963, p. 197), inasmuch as it bears witness to the love that the young Leopardi shows for scientific learning, and in particular for "the most sublime, the most noble among the Physical Sciences" (Leopardi, 1811, p. 748). It was the Italian literary critic Walter Binni (1913-1997) who rid us of too-hasty and rhapsodic interpretations of the History of Astronomy. These readings had on the one hand placed in evidence the enormous learning of a fifteen-year-old by retaining it as a work of provincial erudition, and on the other hand they had gone seeking those lyrical segments which would have foreseen the poet of Vaghe stelle dell'Orsa (Le ricordanze, Canti, XXII, 26 August-12 September 1829). On the contrary, according to the critic, they strike in the very young Leopardi the effort of the search for a method and for an interpretation of science as a battle for culture and civilisation, the popularising standpoint and the heroic and enthusiastic tone, present also in the proposal of himself as a new collaborator, in the first person, in progress, and in a rational-providential enlightenment that enriches his Catholic viewpoints with such a progressive impetus as to carry it beyond the backward-thinking, invoking a new Copernicus capable of replacing the earth at the centre of the universe (Leopardi, 1969, pp. 21-22).

The *Storia dell'Astronomia* is an *oeuvre* at which the adolescent Leopardi worked with alacrity for years. It is the result of the assiduous reading of an impressive amount of works, consulted almost all at first hand as the corrections to the original manuscript show, and one from which the fervid wish is emanated to be seen as a diffuser of science, whose usefulness is constantly reasserted, according to a precise enlightenment paradigm (Di

¹ henceforth cited as Leop.

Meo, 1998, pp. 45-46). There is in it an admiration—enlightenment—for the "masters of reason", according to the definition of Algarotti, for those scientists who, in every epoch, contribute to the progress of truth; there is a sort of dialogue with them which significantly foresees and declares the participation of Leopardi in the contemporary scientific debate, even though for him systems are fables, even if they are approximately true. His concept resembles a refined form of fallibility, which, although it encourages the intellectual imagination in attacking dominant theories, places a challenge to an effective improvement in the ability to understand the world² (Massarenti, 1997, p. 22). In this sense, and only in this sense, can one deal with Leopardi's attitude towards science. He was not a scientist, but practised science, being interested in and placing himself in a critical position before the great themes of man (herein lies his illuministic matrix because the central problem of illuminism is that of the man), standing before dramatic questions regarding his relationship with nature and the universe. These are the eternal dilemmas which have assailed the human being throughout the various historical epochs and which still today have a decisive weight in determining his existential orientation.

The problem of the universe is central to Leopardian meditation before 1827, when it could be said to solidify itself definitively. It implies a whole series of considerations of physical and metaphysical concepts of great depth, such as time, space, infinity, immensity, the unlimited, eternity, and the Supreme Being. He returns to them constantly, in the *Zibaldone* as in the *Moral Operettas*, with solutions which are not unambiguous and, indeed, are often contradictory, betraying his dependence upon Galilei, Newton, Voltaire, and Maupertuis, as well as the Italian philosopher and scholar Francesco Maria Zanotti (1692-1777)—He, beginning in 1723, was secretary and president (from 1766) of the Institute of Sciences and Arts in Bologna—only once quoted in the *Zibaldone*, but to whom, in the *Crestomazia* of 1827, he dedicates the longest passage.

Naturally, the crucial question, which is reflected in the considerations of the universe and its history, is that of time and space. On 14 December 1826, he notes in the *Zibaldone* (4233):

Time is not a thing. It is an accident of things, and independently of the existence of things, it is nothing; it is an accident of this existence; or rather, it is an idea of ours, a word. The duration of things that are is time; as 7200 struck by a clock pendulum are an hour; this hour is, however, a product of our minds and doesn't exist, not of itself, nor in time, nor as a part of it, no more than it existed before the invention of the clock..... The same is true of space. Nothingness does not prevent that a thing that is, is, exists and lives. Where nothingness is, there does not impede that a thing may exist or may come there. Therefore, nothingness is necessarily a place. Therefore, a property of nothingness is that it is a place.... Thus, just as time is a way or an aspect of considering the existence of things, so space is nothing but a way, an element of thinking that we make of nothingness. Where there is nothingness, there is space, and nothingness without space cannot be. It is evident that going beyond the furthest boundaries of the existing universe, there is space because there is nothing. And if something could be created or pushed beyond those extreme limits, it would find a place, which is to say that it would find nothing to prevent it from going there or staying there. The conclusion is that time and space are, in substance, nothing but ideas, indeed, names. (Leopardi, 1898, p. 167).

Leopardian Philosophy

Leopardian thought moves within sensist thought: they are problems that move from Berkeley to Hume to Condillac to Maupertuis. On this point, his view is far from Newton, though he admires the greatness (*no system*

² In the *Zibaldone* (4-4-1824) after having extolled Newton's system, Leopardi states that "this is anything but certain and perfect, indeed it is recognised as defective in many places, besides the general insufficiency of its principles in truly explaining natural phenomenae in depth." For the rest, in 1823 he had written, still in the Zibaldone (21-5-1823), "We talk in the same way about Newton, whose already vacillating positive system, even in the schools, has never been able to be for the real and true philosophers anything but a hypothesis and a fable, as Plato called his system of ideas and the other particular or secondary and subordinate systems or suppositions, imagined, set forth and followed by him."

of physics has arisen that is equal to that of Newton—Zib. 4 April 1824), who affirms the absoluteness of time and space instead, considering the latter to be infinite, the great "Sensorium" of God (it follows that pure space, the vacuum, exist beyond matter). On the contrary, he is near Maupertuis (Maupertuis, 1768, p. 284), according to whom space and time are mere psychological functions, interchangeable perceptions. It is not by chance that Leopardi talks of *space of duration* and of *space of time*. Nor should we underestimate the possible influence of Zanotti (a little-studied problem, in reality), for whom space and time are mental entities derived from experience but conditions of it.

These ideas were expressed in an academic memoir (Bononiae, 1755, p. 100) read in 1751, that call to mind what would soon be the position of Kant in the outstanding dissertation of 1770, in which space and time become mere conceptual functions (Kant, 1770). Returning to Leopardi and his concept of time, some preliminary considerations should be made, which take us in two different directions. Firstly, he refers to the relativity of time, talking of the *ephemeral animals* and denying the existence of absolute time in the universe, that is, of a cosmic time³ (Leopardi, 2013); secondly, he refers to the one-way motion of time (the arrow of time) which is reflected the linear vision of time that was born with the Judeo-Christian world and which presents the lessons of Galilei and Newton.

On the other hand, if time has its own irreversibility, transferring such a concept to the life of evolution of the universe would necessarily lead to its end. This is the so-called "poetic, non-philosophical" thesis (since speaking philosophically, existence which has never begun and will never end (Leopardi, 1928, p. 577)) of the *Cantico del Gallo Silvestre*, the operetta which closes with a desolate but grandiose view:

A time will come when the universe, and nature itself, will die. And just as of the very great kingdoms and human empires, and their wonderful movements, which were famous in other ages, no sign nor any word remain today, so too of the whole world and of the infinite happenings and calamities of created things, not a vestige will remain; but a naked silence and a supreme quietness will fill the immense space. (Leopardi, 1928, pp. 576-577)

Alongside this, Leopardi has a second concept of time, circular and cyclical time which, in our opinion, derives from his familiarity with Greek thought, in particular Stoical. Time returns upon itself, the universe appears to be a gigantic building site in which everything is consumed and so scorched that new worlds and new species can arise. Matter and movement, which ends up coinciding with the first one, eternal duration, are the ingredients of reality as it takes shape in the *Frammento apocrifo di Stratone di Lampsaco*, the conclusive operetta to which Leopardi entrusts his ideal vision of the world⁴. Leopardi's atheistic and materialistic system has by now been formed, God has been destroyed⁵; it appears, at this point, patent that the concept of Leopardi is dependent upon that of the French-German philosopher Baron d'Holbach (1723-1789). Yet, there is an immense difference since the latter speaks of "harmonie universelle" and of the ability of man to insert himself into it, thus bending to an optimistic concept his destructive premises of traditional order.

Returning to the Greek philosopher and scientist Stratone and to the cyclical concept of time (in which, we repeat, the Stoic suggestions seem evident to us with no need to have recourse to incidences of oriental thought), the myth of eternal return is spoken of (and one's thought runs to the book of the same name by the Romanian scholar Mircea Eliade on the archaic ontologies) (Mircea, 1949). Still, here too it must be observed that one is

³ See the Zibaldonic thought of 24 September 1823 (pp. 3509-3514). We always indicate the autograph page.

⁴ See the confirmation of this in due Zibaldonic thoughts of 18 February 1827 and 16 May 1829.

⁵ See the Zibaldonic thought of 18 July 1821 (pp. 1341-42).

not dealing with a true and proper return because the worlds that will follow will constitute a reality which is not only different but unrecognizable. Notes with regard to this grandiose ending of the aforementioned operetta:

The planets, the earth, the sun and the stars having died, but not their matter, new creatures will be formed of this, distinct in new genres and species, and new orders of things, and a new world will be born of the eternal force of matter. But the qualities of the latter and the former, because they have come out of the innumerable things that were and of the other infinities that will be, we can but only imagine. (Leopardi, 1928, p. 580)

The scenario in which the production, preservation, and destruction of the worlds will be carried out⁶ (that is in reference to the ingredients of eternal and finite matter) is space: immense, one must be noted, but not infinite. There is a thought in the *Zibaldone*, very precise in this regard:

To believe the universe to be infinite is an optical illusion; at least, such is my opinion... thus according to every analogy, one must assume that the whole bulk of the universe, the assemblage of all the globes, which seems to us infinite for the same reason, namely, because we don't see its limits and because we are extremely far from being able to see them; but whose vastness for the rest is not absolute but relative, has in effect its limits.⁷

I'd like to point out that already by 29 April 1826 he had noted:

all the worlds that exist, as big as they are, not being however, indeed infinite in number or size, are consequently infinitely small compared with true infinity, to call it such, of the non-existent, of nothingness.⁸

And on 7 April 1827 he had written:

So that for the existence of the universe to be proof of an infinite being, the creator of it, one would have to prove that the universe was infinite This infinity of the universe, nothing can either prove it or enable us, probably, to imagine it.⁹

The universe has no limits, although it is not infinite; this is the limited concept that the constant consultation of Galilei's works had taught him. Only with nothingness does infinity accord ("It seems that only that which does not exist, the negation of being, nothingness may be without limits, and that infinity comes to be, in substance, the same as nothingness" [10], just as to not-being can be considered as the only eternity that Leopardi could imagine. In "immense" space, the history of the universe is carried out without any light of ultimate purpose, totally indifferent to the destinies of one who contemplates it and possesses it, as the only safety valve, imagination, memory, and hope. In a passage of the *Zibaldone* the poet observes:

three ways of seeing things. One is the most blessed.... typical of the men having genius and sensitivity......of those who consider everything from an infinite aspect and concerning the impetus of the soul; the other and most common......, [of those.]... that without being sublimated by anything, find however in everything a reality, and consider them as they appear, and are respected by all, and in nature, and according to this they regulate themselves; the third is the only sad and miserable one, however the only true one, of those for which all things....are vain and without substance.¹¹

On the one hand, there is the arid truth; on the other, the illusion, be it with the awareness of its vanity and with the sure and lucid conscience that human time is the time of shipwreck: the rooster of the *Cantico Silvestre* repeats every morning, as in a timeless fable, its Lifesong, which is dispelled however in a time of death, like the

⁶ See the Zibaldonic thought of 5-6 April 1825 (pp. 4129-4131).

⁷ See the Zibaldonic thought of 20 September 1827 (pp. 4290-4291).

⁸ See the Zibaldonic thought of 29 April 1826 (p. 4177).

⁹ See the Zibaldonic thought of 7 April 1827 (p. 4274).

¹⁰ See the Zibaldonic thought of 1-2 May 1826 (p. 4178).

¹¹ See the Zibaldonic thought of 1820 (p. 103).

hopes of lost youth. Leopardi, ever since his adolescence has looked to science with interest and with respect and has never abandoned his severe and scientific habit of considering the phenomena that surround us even if he has realised, with time, that it does not resolve the problem of Man because, as much as knowledge increases, so also do anxiety and solitude grow in the face of a world that has neither sense nor significance, but which is only icily indifferent.

Even if here and there the joy of research in itself, which opens up new horizons, shines through, it gives us a sense of risk and, despite the loss of acquired certainties, as occurred for the lovers who threw themselves down the cliff of Leucade, it forces us to confront daily life with new and different vigour. We like to recall the *Dialogue* of Columbus and Gutierrez, to which the preceding image refers; the vessel that challenges the perilous waters of the endless ocean captures well the spirit of the modern scientific revolution. The epilogue of the operetta suggests, in a magic and surrealistic atmosphere, the anxiety of the discovery, which constantly renews itself through the immense force of the imagination which expresses itself in the myth in which time is annihilated, and in the dream in which space is nullified. The same imagination allows man to surmount the limits imposed by reason as well as doubt and hypothesis. The epilogue suggests all this but also the discomfort that always accompanies us when faced with the unknown. Colombo concludes that: "In sum, all these signs gathered together, as much as I would like to be indifferent, keep me in a good state of expectance" (Leopardi, 1928, p. 570).

In the last words of *Colombus*, in an atmosphere of suspense, a fresh breeze of infinity is reawakened by the imagination that, like science, is joined to reason. Reason needs imagination, wrote Giacomo vividly on 4 October 1821 in the *Zibaldone*, and the illusions that reason destroys.

Leopardi and Enlightenment Philosophy

Enlightenment philosophy had great influence on 19th century culture despite the criticisms and misconceptions to which it was subject during that century. Within the Italian cultural sphere, one of the authors most interested in the ideas and policies of the Age of Enlightenment was Giacomo Leopardi, who on more than one occasion defended and promoted Enlightenment philosophy, which he knew very well as it was linked to his profound interest in scientific culture.

The Enlightenment movement also comprised within it a more radical line of thought which, taking cues from the denial of innatism, came to conceiving matter as the limit or boundary within which lies not only all of our knowledge, but our impulses and pleasures as well. Consequently, our desires and our sensations, including the more spiritual ones, never extend beyond the material, and even the most spiritual and imaginary and indeterminate happiness we might taste or desire is never, and can never be, anything other than material, and thus depends on the state of the body. Thought is tied to sensation (knowing is feeling); it is an attribute of matter, and with this, we have clearly transcended Cartesian dualism between soul and body, between thought and matter. Matter is active; it is not mere extension. Thought is not a spiritual or immaterial entity separate from the body, but is an integral part of it, because in man, matter itself is sentient and rational: the brain, not the soul (Timpanaro, 1969, p. 160). For example, Holbach maintained that when we know something, we feel our body at the same time, and it is this body that feels, thinks, judges, suffers, and rejoices, so all of its faculties prove necessary to its particular mechanism and organisation (Holbach, 1770, p. 120).

For Diderot as well, the existence of the soul as an autonomous and heterogeneous substance, separate from the body, was unsubstantiated; thus in his writing he never spoke of union or harmony between body and soul like other "philosophe" (e.g. Buffon, Condillac, Helvétius) but of substantial identity (Moravia, 1974, pp. 158-160). Thus the soul cannot be considered a simple (i.e., immaterial and lacking extension), single, and indivisible substance. The presumed immortality of the soul and the consequent belief in an afterlife is excluded without hesitation. Holbach also maintained that when a man dies, all of him dies, and that "l'esprit ou la soubstance inétendue et immatérielle, n'est qu'une absence d'idées" (Holbach, 1985, p. 200). The most radical and original positions in 18th century materialist philosophy were thus far removed from those that conceive man first and foremost as an active, creative force, capable of overcoming his own finiteness, identifying in himself a Spinozian nature.

The most important exponents of French materialism were aware of the fact that man, as a natural and sensitive creature, cannot consider himself the purpose of all creation; hence the rejection of any anthropocentric bias and the derision of men's pretence of being created in the image of God with a different, more important destiny and role than other living beings. Likewise, the pretence of considering the earth to be the centre of the universe was also rejected.

The rejection of anthropocentrism led to criticism of providentialism, according to which man imagines himself favoured by God, and thus believes that the universe was created for him, and that his life and personal vicissitudes are at the heart of all of nature. The intention of Enlightenment thinkers—in particular Louis-Fran çois Jauffret, who in 1799 in Paris founded the *Société des Observateurs de l'homme*, which Cabanis and Tracy also joined—was, rather, to study human behaviour from the moral, physical, and intellectual points of view, with reference to testable facts as opposed to abstract, spiritualistic theories. Todorov had great appreciation for the fact that the research carried out by these *philosophes* was based on the idea that the key to interpreting human behaviour and passions was habituation or conformability: nature provides man with a limited number of faculties which are developed through confrontation with various elements, like weather, so the weather/character relationship was one way to target investigation of the interaction between man and the environment, stripping principles of transcendence from man as much as possible (Gensini, 1984, p. 36).

One of the themes most frequently present in his works, on which Leopardi expressed views that were fully in line with those of the French materialists, is the mind/body relationship. For example, a celebrated passage from the *Dialogo di Tristano e di un amico* reads: "the body is the man, because (leaving aside all the rest) magnanimity, courage, passions, the capacity for pleasure, all that makes life noble and lively, depend on the vigour of the body, without which it cannot occur" (Leopardi, 1928, p. 234). In a few lines from the *Zibaldone* we find very clear ideas about his materialist orientation:

In short, the principle of things, and indeed of God, is nothingness. Since no thing is absolutely necessary, that is, there is no absolute reason why it cannot not be, or not be in a specific way, etc. And all things are possible, that is to say, there is no absolute reason why anything cannot be, or be in this or that way, etc. And there is no absolute discrepancy between all the possibilities, nor any absolute difference between all the possible goodnesses and perfections. Which means that a first and universal principle of things either does not exist, nor ever did, or if it exists or existed, we cannot know it in any way. 12

Following the lines of these arguments, Leopardi came to a radical anti-spiritualist conception¹³ (Timpanaro, 1969, p. 97) of life that led him to deny the concept of divinity, and in fact of the spirit itself because spirit is a

¹² See the Zibaldonic thought of 17 July 1821 (p. 1341).

¹³ On which Timpanaro rightly insists.

word without meaning.14

The analogies between Leopardi's philosophy and the 18th-century materialists also extend to other arguments, such as the animal nature of man and the savage nature of humanity, courage in the face of evil, atheism, the rejection of providentialism, the conception of nature and the principle of variety, and the human condition considered as the result of circumstances and habituation. Leopardi was particularly fascinated by the question of the relationship between human and animal intelligence, and often returned to this theme in the *Zibaldone*, eventually composing the celebrated passage from the *Paralipomeni della Batracomiomachia*—written between 1831 and the year of his death, and published posthumously in Paris by Ranieri in 1842—in which he denies any sort of interruption, metaphysical or original, between man and animal. The only difference between human and animal intelligence, he asserted, was quantitative (of greater or lesser extent) and not qualitative, and both are obliterated at death (Leopardi, 1969, p. 282). Leopardi derided men's presumption of their own superiority to other living beings and of a special destiny, and instead pointed out nature's indifference to humans. He believed that man is alone before the universe, and cannot hope for any particular help. Consider his *Dialogo della natura e di un islandese*, and the questions that the pastor asks the moon—and that remain unanswered—in *Canto notturno di un pastore errante dell'Asia*. The truth is that there is an overwhelming disparity between man's aims and those of nature, or the order of things: existence and the existent are not consistent with one another, but are openly contradictory.

The concept of metaphysics, at least in the traditional sense of the term, was also refuted. In fact, when Leopardi spoke of metaphysics, he did not mean principles the existence of which was to be admitted beyond or in the absence of experience, but merely a system of general acknowledgements that served to support and justify the empirical construct (Sansone, 1964, p. 139), or a philosophical genre that incorporated morality, ideology, psychology, logic, and politics.¹⁵ The concept of "a priori" or of the absolute served no purpose, in his view, because "Nothing preexists things. Neither forms, nor ideas, neither necessity nor a reason for being, and being thus or thus, etc. Everything is posterior to existence".¹⁶

His full agreement with Locke's anti-innatism is clear:

It could be said (but it's a question of names) that my system does not destroy the absolute, but rather multiplies it. That is, it destroys what is considered absolute, and makes absolute what is termed relative. It destroys the abstract and antecedent idea of good and evil, of true and false, of perfect and imperfect independent of all that is.¹⁷

Leopardi's thinking was based on doubt and scepticism, doubt being the essential element of both philosophical thought and scientific research; without it, intelligence is minimal:

My system introduces a Skepticism that is not only reasoned and proven, but is such that human reason, according to my system, whatever possible progress is made, will never succeed in ridding itself of this skepticism. On the contrary, it contains the truth, and it is demonstrated that our reason can absolutely not find the truth save by doubting, that it distances itself from truth whenever it judges with certainty, and that not only does doubt serve to uncover the truth (according to Descartes's principle, etc., see Dutens, part 1, ch. 1, § 10), 1 but that truth essentially consists in doubt, and whoever doubts knows, and knows as much as one can know.¹⁸

¹⁴ See the Zibaldonic thought of 11 July 1824 (p. 4111).

¹⁵ See the Zibaldonic thought of 13 July 1821 (p. 1317).

¹⁶ See the Zibaldonic thought of 3 September 1821 (p. 1616).

¹⁷ See the Zibaldonic thought of 25 September 1821 (pp. 1791-92).

¹⁸ See the Zibaldonic thought of 8 September 1821 (p. 1655)

Even the theory of pleasure Leopardi developed in 1820¹⁹ was based on a materialistic structure, because man's desire for infinite pleasure has a material, perceptible foundation in that it is rooted in the corporeal. Man aspires to concrete happiness that can be experienced through the senses, and at the same time, to unlimited happiness: hence the insurmountable contradiction of the human condition, which is the cause of unhappiness. Infinite pleasure can only be depicted by the imagination, on which hope and illusions depend. The theory of pleasure links materialism with pessimism, and confirms that "beauty", as Leopardi intended it, has nothing aestheticizing or mystical about it; it is, in a sense, elevated, but not so elevated as to be lost in the clouds of spiritualism or sensationalist delight as written by Sebastiano Timpanaro (1923-2000), one of the most important scholars of Leopardi's thought (Timpanaro, 1982, p. 175).

The constant unsatisfied need for an infinite and an absolute is not oriented towards a transcendent entity, but towards earthly reality. This infinite and this absolute do not imply the existence of any "other" reality than the earthly one. Leopardi certainly did not aspire to a Christian paradise, but to full realisation of the faculties of earthly life. In fact, he considered the happiness promised by Christianity an ineffectual consolation, because it is an abstract, unreal happiness, and does not pertain to this worldly existence²⁰. This yearning towards the infinite is thus not in opposition to materialism, but rather constitutes a strengthening of needs implicit in materialism itself.

Conclusion: Ideology

The last topic to be examined concerns the concept of "analysis": i.e., the work of the soul that lets us determine the elements of a compound idea, reducing it to the simple ideas that form it. This topic was fundamental to Leopardi, because it served to demonstrate that all of our knowledge springs from simple ideas, namely perceptions we perceive through our senses, like colours and flavours. These simple ideas are deposited in our memory, and by associating and combining them, we develop complex ideas, like the concepts of man and of beauty. Therefore, even the most abstract ideas are founded on experience, just as Locke had said. The analysis of ideas, or "ideology", allows us to understand how ideas are formed and how the knowledge process is organised²¹. Leopardi ascribed fundamental importance to the ideological method in the progress of human knowledge and the overcoming of the errors and false principles of the past.

Leopardi's fascination with "ideology" can be explained by the fact that in Italy in the first half of the 19th century, it was the only secular position countering the spiritualist restoration: the analysis of ideas was an efficacious weapon for philosophical and scientific knowledge. Only in this way can we conceive a democratic philosophy that aimed to oppose both Catholic ontologism in Italy and eclectic spiritualism in France (Formigari, 1990, p. 153). An affinity with 18th-century materialism lay at the basis of Leopardi's rejection of any compromise with restoration ideologies and the temptations of a spiritualist, neo-Catholic, medievalising, and mystical Romanticism (Binni, 1969, p. 17), and of his diffidence concerning the mystery and obscurity that went along with a penchant for the concrete and precise. These traits of Leopardi's personality and thought give us a picture of an author who has much to say to 21st century readers.

¹⁹ See the Zibaldonic thought of 23 July 1820 (pp. 165-83).

²⁰ See the Zibaldonic thought of 22 September 1823 (pp. 3497-3509).

²¹ See the Zibaldonic thought of 28 June 1821 (p. 1235).

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