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THE LUMINOUS SHADOW OF MATERIALISM

ABSTRACT

The so often criticized shadow of materialism, when reflected upon with an integral perspective, reveals itself as a hidden potential seeking emergence. However, such a condition for human progress can be grasped provided we are willing to lessen the tension between the two-fold excess of pride and complaint so characteristic of the illusory attachments of enlightenment and romanticism. An appreciation of the power dormant in the dark pool of light of materialism becomes particularly relevant in the context of the current international year of light.

Keywords

Materialism; light; human; evolution

In neuroscience meetings – and even more so in science news to the general public – we are accustomed to hearing triumphant claims about the elusive mysteries of the mind having finally been pinned down to its tangible material substrates. Science, having replaced God by means of a domination of Nature, offers to the Human a promise of unlimited potential to realize his own self-centered agenda. The hype-and-hope attitude of technocratic science is seen by many as the secular gospel of our times, while many others re-act to such excess of pride and its damaging effects with vehement complaint, sometimes impotently turned into resignation mixed with melancholia¹.

¹ Sri Aurobindo sheds a century-old visionary understanding on the topic, which we are still incapable of fully grasping. He starts his 1918 essay on Materialism as follows: "Many hard things have been

The diagnosis, rarely pregnant with treatment, is then apocalyptical. It is denounced that "we are victims of our own progress" or that "the terrible pace of science is making man obsolete". And there is certainly truth in it, but only partial truth. The source of the problem cannot be technology or rationalism (neither the source of the solution). The roots of it must be in us. To some extent, it must be "us", somehow reflecting our self-imposed limitation. The origin of the problem might reveal itself as a luminous spring of understanding and transformation that, perhaps, we cannot (or simply do not) fully apprehend in our present condition².

It is unquestionable that the error that was supposed to be cleaned by reason left a trace of ignorance behind to which reason was deliberately stolid. Science's torch illumined some provinces of reality with strength, necessarily leaving the rest in the dark. In this respect, much could be said about illumination analogies (note, operating mostly in space), where a point-source A projects its beam of light to object B, which in turn casts its shadow onto object C. But very little can be said – except perhaps by the great masters of sound-language, aka the poets – about an illumination that results by identity with the object, rather than by the mechanism of projection which can hope for no more than spinning around it. Those who wore the miners' torch on their head would never see what was not illumined; those who faced the miners' work were blinded directly in the eyes. Both loci of ignorance – blind spots and blind eyes – based their dynamics on an orbit against each other³.

There is no other way to allow something to move on than to first acknowledge what it is, namely, to validate its current state. This implies an appreciation of its own particular efforts to seek wisdom, in whatever incomplete form. Actually, wisdom is always sought from a certain state of

said about materialism by those who have preferred to look at life from above rather than below or who claim to live in the more luminous atmosphere of the idealistic mind or ether of the spiritual existence. Materialism has been credited with the creation of great evils, viewed even as the archimage of a detestable transformation or the misleader guiding mankind to an appalling catastrophe" (Sri Aurobindo, 1918).

² A warning about the partial truth of each incomplete perspective is made: "All this wealth of accusation may have and much of it has its truth. But most things that the human mind thus alternately trumpets and bans, are a double skein. They come to us with opposite faces, their good side and their bad, a dark aspect of error and a bright of truth" (Sri Aurobindo, 1918).

³ Careless rejection misses the role and importance of previous stages: "It will be useful before we say farewell to it, and can now be done with safety, to see what it was that gave to it its strength, what it has left permanently behind it, and to adjust our new view-points to whatever stuff of truth may have lain within it and lent it its force of applicability. Even we can look at it with an impartial sympathy, though only as a primary but lesser truth of our actual being, – for it is all that, but no more than that, – and try to admit and fix its just claims and values" (Sri Aurobindo, 1918).

ignorance. Science might be accused of being superficial, and it is certainly at the surface where the work could first be started with enough security and clarity to be able to remain. Superficiality was, to some degree, a compulsory act of austere detachment from the seductive dive into the depth of things. After all, depth and breath are aspects of reality as we see it. Reinforcement – either positive (to praise) or negative (to condemn) – is inescapably a mechanism of control based on incomplete knowledge and, as such, it is incomplete control (at the end of the day, no more than uncontrolled control).

Yet, an evolutionary bootstrapping is the natural course of things in time⁴. Re-evolution – powered by a fair desire for novelty – is centered on rejection, doomed to fail in annulling the past. The future it courageously fights for is tamed by its fear of embracing the past on which it stands. Evolution, instead, honors both the future and the past. It respects the openness of the former while embracing the totality of the latter. Facing the light, the shadow it projects behind becomes the very compass of its progress⁵.

The baby cries because her growing teeth hurt. Decouple for a moment the means from their goal in order to be able to look back at the painful strike of the mechanisms to achieve such blissful purpose, and delight can then be discovered in pain. The force of will (even minute will) is the same force of truth (including falsifiable truth), which ultimately corresponds to the force of love (still when loving in despair)⁶.

What do we take for the ride right now, and what are we willing and supposed to leave behind? Evolution asks (and answers) this question all the time: negation of what is opposing us affirms what is alive in us⁷. The fire that purifies also burns. The sword of reason was the state-of-the-art psychological technology when sharpness of discrimination were required

⁴ A first suggestion for evolutionary advance is made: "We can now see too how it was bound to escape from itself by the widening of the very frame of knowledge it has itself constructed" (Sri Aurobindo, 1918).

⁵ An impartial look on the matter allows to affirm part of what is easily subject to negation: "Examine impartially its results. Not only has it immensely widened and filled in the knowledge of the race and accustomed it to a great patience of research, scrupulosity, accuracy, – if it has done that only in one large sphere of inquiry, it has still prepared for the extension of the same curiosity, intellectual rectitude, power for knowledge to other and higher fields" (Sri Aurobindo, 1918).

⁶ Rejection is unfair when taken seriously: "Reason, science, progress, freedom, humanity were their ideals, and which of these idols, if idols they are, would we like or ought we, if we are wise, to cast down into the mire or leave as poor unworshipped relics on the wayside?" (Sri Aurobindo, 1918).

⁷ Reason is not the final stage of mind, but it is certainly a necessary condition in the progressive unfolding: "Reason is not the supreme light, but yet is it always a necessary light-bringer and until it has been given its rights and allowed to judge and purify our first infra-rational instincts, impulses, rash fervours, crude beliefs and blind prejudgments, we are not altogether ready for the full unveiling of a greater inner luminary" (Sri Aurobindo, 1918).

for education of our own internal emotions and social convulsions⁸. We might admit, in a metaphorical sense, that it killed more flowers than the bushes it was trying to get rid of (yet flowers keep on blossoming).

What is energy? What is matter? What is space? The first has been mapped on the second, while the second fusses with the third. What is life? What is mind? What is time? The second, present in the first, uses the third as its precondition for expression. Physics' triumphant conquest of the inert by means of the orderly ruling of geometry now gives way to scuffle in biology, where the apprentice who used to build castles in the sand is asked to erect skyscrapers with plastic buckets and shovels⁹.

When facing north, my back literally has to face south. The nothing-but-ism is an inevitable consequence of our limited condition. Deeply immersed in figuring out X, I cannot keep no-X on the same canvas. Only later, when the exercise of attention has relaxed, can I see what might be missing. Imperfection contains the seed of perfection. Perfection, in turn, hosts imperfection in its workings in time¹⁰. It is safe enough to move aside that which we are not willing to consider provided we are not oblivious to bring it back once the suspension or gap has fulfilled its role. This is not only the logic of science, but of religion too, and that of our everyday life. Time is creative – nothing is ultimately lost¹¹. Forward thrust eventually becomes upward force. Backward movement can reveal what dwells inside. Theories come and go – illusion and delusion cycle back into confusion. Yet, the movement is not purely circular but it draws a spiral¹², despite its own

⁸ A justification of the order with which the work could be done insists on the logic of temporality: "If it has laboured mainly in the physical field, if it has limited itself and bordered or overshadowed its light with a certain cloud of willful ignorance, still one had to begin this method somewhere and the physical field is the first, the nearest, the easiest for the kind and manner of inquiry undertaken" (Sri Aurobindo, 1918).

⁹ Limited knowledge necessarily has a limited strategy: "Ignorance of one side of Truth or the choice of a partial ignorance or ignoring for better concentration on another side is often a necessity of our imperfect mental nature" (Sri Aurobindo, 1918).

¹⁰ Ignorance is only problematic when it stubbornly refutes its own blind spots: "It is unfortunate if ignorance becomes dogmatic and denies what it has refused to examine, but still no permanent harm need have been done if this willed self-limitation is compelled to disappear when the occasion of its utility is exhausted" (Sri Aurobindo, 1918).

[&]quot;Growth in the horizontal dimension is complementary to vertical progress: "Even spiritual truths are likely to gain from it, not a loftier or more penetrating, – that is with difficulty possible, – but an ampler light and fuller self-expression" (Sri Aurobindo, 1918).

¹² Self-concentration on one aspect is never detrimental in the long run: "Even if the insistence of our progress fall for a time too exclusively on growth in one field, still all movement forward is helpful and must end by giving a greater force and a larger meaning to our need of growth in deeper and higher provinces of our being" (Sri Aurobindo, 1918).

apparent blockages¹³. Our survival instinct bends the past to anticipate the future. Explanation, only possible in space, unable to accommodate time, had to solidify everything it touched. The will to know became the will to power; spatialized it was soon mechanized. Could it have been otherwise? If the possible does not precede the real, such question is sterile.

The Greeks chose to erect Western thought on the stability of permanence. Perhaps it had to do with the mere issue of providing some sort of organization to the chaos of the polis. The liquid grounds of change remained a by-product; mobility was condemned to be no more than a series of immobilities (the fatal act of substitution: pure succession into practical juxtaposition..!). Nevertheless, those efforts, despite reducing life to matter, had the power to ensure survival. And so they concentrated on what is herenow to be done rather than what may take place then-there in some sort of imagined afterlife¹⁴.

We see how the emphasis on the above had to be counter-balanced by an emphasis on the below; why the image of the beyond had to be post-poned in favor of a certain touch of the immediate. Transcendence required a previous, sufficient and serious dose of immanence. The miracle of a routine that suspended miracles in favor of a slow but asymptotic perfection was carried out implacably. Such process sought its roots in values such as freedom and reason, so univocally distinctive of humanism as well as the spirit of the man of science¹⁵.

Use the simple analogy of climbing. We could say that humanity needed a set of karabiners and swivels to securely hold on to the firm rocks in order to soar the lighter summits. Still conserving a certain dose

¹³ Within the integral vision, critique is not avoided: "Materialism was rather calculated to encourage opposite instincts; and the good it favoured it limited, made arid, mechanised" (Sri Aurobindo, 1918).

⁴ The balky stubbornness of obscurantism (validated in its own attempts) gave rise to a reaction opposing its excesses: "They nourished too a core of asceticism and hardly cared to believe in the definite amelioration of the earth life, despised by them as a downfall or a dolorous descent or imperfection of the human spirit, or whatever earthly hope they admitted saw itself postponed to the millennial end of things. A belief in the vanity of human life or of existence itself suited better the preoccupation with an aim beyond earth. (...) The social effect of the religious temperament, however potentially considerable, was cramped by excessive other-worldliness and distrust in the intellect accentuated to obscurantism" (Sri Aurobindo, 1918).

¹⁵ Here we see the historical tension between the double movement: "The secularist centuries weighed the balance down very much in the opposite direction. They turned the mind of the race wholly earthwards and manwards, but by insisting on intellectual clarity, reason, justice, freedom, tolerance, humanity, by putting these forward and putting the progress of the race and its perfectibility as an immediate rule for the earthly life to be constantly pressed towards and not shunting off the social ideal to doomsday to be miraculously effected by some last divine intervention and judgment, they cleared the way for a collective advance" (Sri Aurobindo, 1918).

of flexibility in its determination, and against its own limitations, the tools were provided by reason. The boulder (sometimes even good enough gravel) was the material and the method. The ascent – effectuated by will itself – represented the arrangement towards the very same light that we are trying to rediscover now while inspecting the shadow of materialism¹⁶. If change has a direction of progress, if progress can result in evolution, and if evolution points towards self-transcendences, then the bootstrapping needs to eventually occur in every aspect of the human. The stone that hits the water causes a circular wave that ripples everywhere. Similarly, creative evolution finds divergent ways to accomplish different goals within the same purpose¹⁷.

The problem is, once more, that our self-limitation is incapable of seeing not only its current achievements, but the goal towards which we strive, and eventually are going to reach. Even in the timescale of our normal psychology, we are blind to our own post-hoc argumentation of trivial facts in daily life. What we claim a cause of ours is too often the effect of a self-built narrative that resists, with the artifice of a dull concatenation, any gap that might reveal a self-determining process¹⁸. The uninterrupted string of causality still is, after all, our security rope.

What once was an absolute mystery, forcefully became a trivial enigma. What cannot be known by our own efforts and methods is easily deemed as unworthy of knowing. Such is the oscillation characteristic of the phases of human confidence in will and truth. Impossibility is recast as asymptotic possibility. The quest for absolute truth is put on hold and redefined as a dispensable byproduct of struggle against error. Such were the dominant attitudes of the past, whose inertia still carries them with vehemence in the present. But what we force to the background, sooner or

¹⁶ "Even their too mechanical turn developed from a legitimate desire to find some means for making the effective working of these ideals a condition of the very structure of society. Materialism was only the extreme intellectual result of this earthward and human turn of the race mind. It was an intellectual machinery used by the Time-spirit to secure for a good space the firm fixing of that exclusive turn of thought and endeavour, a strong rivet of opinion to hold the mind of man to it for as long as it might be needed." (Sri Aurobindo, 1918)

¹⁷ The process of manifestation seeks perfection at every level: "Man does need to develop firmly in all his earthly parts, to fortify and perfect his body, his life, his outward-going mind, to take full possession of the earth his dwelling-place, to know and utilise physical Nature, enrich his environment and satisfy by the aid of a generalised intelligence his evolving mental, vital and physical being. That is not all his need, but it is a great and initial part of it and of human perfection" (Sri Aurobindo, 1918).

¹⁸ Our narrow horizon of understanding is aware of the drive in things both as a push and as a pull often later in time: "Its full meaning appears afterwards; for only in the beginning and in the appearance an impulse of his life, in the end and really it will be seen to have been a need of his soul, a preparing of fit instruments and the creating of a fit environment for a diviner life" (Sri Aurobindo, 1918).

later comes to the foreground¹⁹.

In replying to the excesses of a particular modality of practicing the materialism doctrine, some try to reject it or annul it without nuance. However, wouldn't that be a futile feat given that the material world is the basis of our being in the world²⁰? Albeit the felt presence of immediate experience is most likely prior to reasoning itself, as soon as the cultural operating system is running, things are certainly more like tangible "stuff" than ethereal "ghosts"²¹. Our unconscious commute between realism and idealism is one of the most pervasive paralogisms of our normal mode of reasoning. The universe, being mind, is also primarily matter²².

The principle of parsimony is the gift of reason in its practice of patience. The guard against error implies not letting any consideration be a part of the rational "bag of logical arrows" unless it is necessary. Necessity and sufficiency are in fact the economic godheads of scientific ascetics. Starting with a "free miracle" – because no ladder can have its point of support floating in the air – science iterates its bulk of facts avoiding any moves that do not follow from the previous state of knowledge. As walking in the dark, one foot tentatively moves forward with cautious determination, while the other is the solid home base of the familiar in our infinitesimal strolls to the unknown. Ironically, science's blind quest for light relies primarily on the sense of touch. The myth of the cave could be reinterpreted by the simple experiment consisting in the experience of finding a way out when abandoned in the dark. The dark pool of light that flashes our way is then literally in our fingertips.

¹⁹ The raw and natural mode of rebalancing consists in fierce oppositions: "When his thought and aim have persisted too far in that direction, he need not complain if he is swung back for a time towards the other extreme, to a negative or a positive, a covert or an open materialism. It is Nature's violent way of setting right her own excess in him" (Sri Aurobindo, 1918).

²⁰ After all, the strong impulse behind materialism must echo some deep aspect of the truth of our being: "But the intellectual force of materialism comes from its response to a universal truth of existence. Our dominant opinions have always two forces behind them, a need of our nature and a truth of universal existence from which the need arises. We have the material and vital need because life in Matter is our actual basis" (Sri Aurobindo, 1918).

²¹ Except for exceptional temperaments, the first approach to the omnipresent reality starts with the material world: "When indeed we scan with a scrupulous intelligence the face that universal existence presents to us or study where we are one with it or what in it all seems most universal and permanent, the first answer we get is not spiritual but material" (Sri Aurobindo, 1918).

²² Until firmly grounded on earth, one cannot successfully explore the heavens: "...insisting that his material base and its need shall first be satisfied and, until that is done, grimly persistent with little or with no regard for our idealistic susceptibilities" (Sri Aurobindo, 1918).

But unjustified jumps are sometimes justifiable²³. In a sense, materialism had the obligation to try to explain everything from matter²⁴. To advance towards non-material explanations of life and mind without having first tested the material hypothesis and all its multiple corollaries would have been not only self-contradictory but also unproductive²⁵. The authentic inauthenticity of matter and the unauthentic authenticity of spirit served each other²⁶. Each one emphasized his misunderstanding of the other – his faults are denied by her faults. Optimism of intellect is practiced at the expense of pessimism of will (and the other way around). Intellectual self-defense finds an anti-intellectual resistance to the attack. When spherical symmetry is broken, forwardly-oriented visual animals must be unable to see the light on its back nor the shadow on its front. The act of negation is

²³ A beautiful unmagnified plea to the origins and pioneers of materialism: "Materialistic science had the courage to look at this universal truth with level eyes, to accept it calmly as a starting-point and to inquire whether it was not after all the whole formula of universal being. Physical science must necessarily to its own first view be materialistic, because so long as it deals with the physical, it has for its own truth's sake to be physical both in its standpoint and method; it must interpret the material universe first in the language and tokens of the material Brahman. (...) Initially, science is justified in resenting any call on it to indulge in another kind of imagination and intuition. Anything that draws it out of the circle of the phenomena of objects, as they are represented to the senses and their instrumental prolongations, and away from the dealings of the reason with them by a rigorous testing of experience and experimentation, must distract it from its task and is inadmissible. It cannot allow the bringing in of the human view of things; it has to interpret man in the terms of the cosmos, not the cosmos in the terms of man. (...) it first has to inquire what consciousness is, whether it is not a result rather than a cause of Matter, coming into being, as it seems to do. (...) Starting from Matter, science has to be at least hypothetically materialistic" (Sri Aurobindo, 1918).

²⁴ "When the action of the material principle, the first to organise itself, has been to some extent well understood, then can this science go on to consider what claim to be quite other terms of our being,—life and mind. But first it is forced to ask itself whether both mind and life are not, as they seem to be, special consequences of the material evolution, themselves powers and movements of Matter" (Sri Aurobindo, 1918).

[&]quot;After and if this explanation has failed to cover and to elucidate the facts, it can be more freely investigated whether they are not quite other principles of being. Many philosophical questions arise, as, whether they have entered into Matter and whence or were always in it, and if so, whether they are for ever less and subordinate in action or are in their essential power greater, whether they are contained in it only or really contain it, whether they are subsequent and dependent on its previous appearance or only that in their apparent organisation here but in real being and power anterior to it and Matter itself dependent on the essential pre-existence of life and mind. A greater question comes, whether mind itself is the last term or there is something beyond" (Sri Aurobindo, 1918).

²⁵ The logic of materialism naturally requires to seek material explanations to apparently supra-material phenomena: "but none of these higher principles can be made securely the basis of our thought against all intellectual questioning until the materialistic hypothesis has first been given a chance and tested" (Sri Aurobindo, 1918).

²⁶ This is precisely the integral view that we seem to strive for and still usually fail to maintain: "That may in the end turn out to have been the use of the materialistic investigation of the universe and its inquiry the greatest possible service to the finality of the spiritual explanation of existence" (Sri Aurobindo, 1918).

then required in order to secure a future greater affirmation²⁷. The question then becomes how, starting from matter, one can go beyond it.

This is not the place to unfold what is usually meant by "emergence" - specially when that notion is a moniker to label, cover and hide the very same process that begs for explanation²⁸. The advances of physics in understanding matter and energy already suggest that, rather than all beings becoming actions of matter and energy, the latter two may actually be instruments of manifestation. The down-upwards view of things progressively indicates the necessity to consider an up-downwards perspective²⁹. The gates of reason also represent the concomitant possibility of escape from it. Some phenomena can successfully be explained purely by principles at the physical level. Yet, quite a large range of biological phenomena and most psychological phenomena cannot be reduced to matter (even if reductive materialism is naturally compelled to insist on that hypothesis, and so it must do). Explaining is often the frustrated victory of explaining away³⁰. Explanation of things is less and less about things themselves, and more and more about the justification of the reductionist programme. Comprehension and understanding of phenomena are downgraded to a certain manipulation of process. To first approximation, they appear as the same thing.

As we increase the variety of perspectives we are able to hold, a progressive disidentification from our biases, beliefs and pragmatic interests takes place³¹. Let us not abandon the tone that brought materialism to its

²⁷ Austerity, dispassion and impersonality as non-attachment qualities of the integral sage: "In any case materialistic science and philosophy have been after all a great and austere attempt to know dispassionately and to see impersonally. They have denied much that is being reaffirmed, but the denial was the condition of a severer effort of knowledge" (Sri Aurobindo, 1918).

²⁸ Perhaps a cautious reservation is due here, in complement to a possibly subtle affirmation of future indeterminacy: "The gates of escape by which a knowledge starting from materialism can get away from its own self-immuring limitations, can here only be casually indicated" (Sri Aurobindo, 1918).

²⁹ Even at the most fundamental physical level, there is an opportunity to conjugate bottom-up and top-down views: "Its first regard is on Matter as the one principle of being and on Energy only as a phenomenon of Matter; but in the end one questions whether it is not the other way round, all things the action of Energy and Matter only the field, body and instrument of her workings. The first view is quantitative and purely mechanical, the second lets in a qualitative and a more spiritual element. We do not at once leap out of the materialistic circle, but we see an opening in it which may widen into an outlet" (Sri Aurobindo, 1918).

³⁰ Despite the valid insistence that the attempt can still succeed, evidence accumulates supporting a radical hypothesis: "If indeed all action of life and mind could be reduced, as it was once hoped, to none but material, quantitative and mechanical, to mathematical, physiological and chemical terms, the opening would cease to be an outlet; it would be choked. That attempt has failed and there is no sign of its ever being successful. Only a limited range of the phenomena of life and mind could be satisfied by a purely bio-physical, psycho-physical or bio-psychical explanation." (Ibid.)

³¹ An essential aspect of the problem is a question of willingness to adapt the instruments to the

splendor. The spirit of any science – even if it is not a materialistic science – shall carry the great attitudes of the physical science and its philosophy³² if it wants to be great as well.

In order to provide the condition of possibility for bootstrapping the system³³, what must we keep and what can be dispensed? The proposal is very simple, yet still in the dawn of its practice: to keep the scientific method and to update its instruments. This distinction is certainly visionary³⁴. It implies that science, as practiced by materialism, contains essential conquests that are essential and perennial, while it has a way of practicing them that calls for reform. Three things need to remain³⁵. First, the importance and reality of the physical world, avoiding the tendency to declare the universe as exclusively illusory and withholding the inclination towards the one-way escape into nothingness (the forward escape must always have a comeback plan). Second, the subtle art of asking nature to reveal itself, rather than our egoistic imposition of imagined truths on things. Last, the realization of the meaning of temporality in the manifestation of our lives on earth, and in the context of the advance of the cosmos: man is not the final step in the evolutionary process.

In conclusion, the future seems to hold a greater light than that shed by materialism. Building on that dim luminosity, it does not rely on a reevolution that destroys all previous steps in order to self-affirm itself but

nature of the problem: "Having examined and explained Matter by physical methods and in the language of the material Brahman, – it is not really explained, but let that pass, – having failed to carry that way of knowledge into other fields beyond a narrow limit, we must then at least consent to scrutinise life and mind by methods appropriate to them and explain their facts in the language and tokens of the vital and mental Brahman" (Sri Aurobindo, 1918).

³² An encouragement of a serious study of all sciences in the light of the rigor characteristic of physics: "We may discover (...) too perhaps another, high, brilliant and revealing speech which may shine out as the definitive all-explaining word. That can only be if we pursue these other sciences too in the same spirit as the physical" (Sri Aurobindo, 1918).

³³ Already happening – though not integrated in the mainstream – physics, biology, and psychology (even philosophy) have started the process: "Very early in this process the materialistic circle will be seen opening up on all its sides until it rapidly breaks up and disappears" (Sri Aurobindo, 1918).

³⁴ This is perhaps the most important double prescription of the future of science: "Adhering still to the essential rigorous method of science, though not to its purely physical instrumentation, scrutinising, experimenting, holding nothing for established which cannot be scrupulously and universally verified, we shall still arrive at supraphysical certitudes" (Sri Aurobindo, 1918).

³⁵ This is the essential summary of the three elements that constitute the park pool of light of materialism: "Three things will remain from the labour of the secularist centuries; truth of the physical world and its importance, the scientific method of knowledge,— which is to induce Nature and Being to reveal their own way of being and proceeding, not hastening to put upon them our own impositions of idea and imagination, adhyāropa,— and last, though very far from least, the truth and importance of the earth life and the human endeavour, its evolutionary meaning" (Sri Aurobindo, 1918).

it tinkers with the past to leap onto the future, ultimately revealing that every dark pool of light involves and implies the full luminosity of being³⁶. The rejection of falsehood precludes us from reaching truth, which is to be found by the effort of peeping behind the curtain of error. This is the integral vision required to transcend the dogmatic views that decided to disown one side of the polarity, and from which the light metaphor still feeds itself. Desidentification in the context of opposition is the method to embrace the contradiction.

BIBLIGRAPHIC REFERENCE

Sri Aurobindo (1918). Materalism. Arya, Sri Aurobindo Ashram Publications.

³⁶ A statement that, far from being a prophetic mental supposition, is based on experience and self-realization: "They will remain, but will turn to another sense and disclose greater issues. Surer of our hope and our labour, we shall see them all transformed into light of a vaster and more intimate world-knowledge and self-knowledge" (Sri Aurobindo, 1918).