THE PARADOX OF THE PRISONER

Jacques Cheminade, Jean-Pierre Luminet, and Richard Martin on the performative method of coming out of Plato's Cave

Pierre Beaudry, 12/9/2018

INTRODUCTION

How can you solve this political paradox: The left and right political parties of opposite tendencies in France cannot exist together and yet, they are currently expressing a common purpose which is to improve the well-being of the whole population. This report is about discovering how to break your shackles, solve this paradox by discovering the *coincidence of opposites*, and free yourself from yourself by thinking from outside of the box that you live in.

A delightful example that illustrates this experiment of Plato's Cave is the axiom busting dialogue which recently took place in France between the President of *Solidarité & Progrès*, Jacques Cheminade, and the astrophysicist and poet, Jean Pierre Luminet, at the Toursky Theater of Marseille, on November 28, 2018.¹

This *epistemological and theatrical event*, in which an audience of about 80 people participated, was a unique experiment in the true sense of Schiller's meaning of "Theater." The axiom busting conference was monitored by the Toursky Theater director, Richard Martin.

¹ See <u>Jacques Cheminade et Jean-Pierre Luminet - Le monde est-il logique ?</u>



HOW TO GET OUT OF THE BOX OF A LOGICALLY MANIPULATED WORLD

"It is not enough to change the world. That is all we have ever done. That happens even without us. We also have to interpret this change. And precisely in order to change it. So that the world will not go on changing without us. And so that it is not changed in the end into a world without us."² Günther Anders



From left to right, Jacques Cheminade, Jean-Pierre Luminet, and Richard Martin.

² Günther Anders, *The Obsolescence of Man, Volume II: On the Destruction of Life in the Epoch of the Third Industrial Revolution.*



I would like to highlight the main points of the exchange which are relevant for understanding how to make the axiomatic discovery of principle that the prisoner must make in order to get out of Plato's Cave. I encourage everyone who is somewhat familiar with the French language to watch and listen to this Youtube video of about 2 hours; you can learn a lot about how to use the performative method of changing axioms.

At the very opening of his representation, Cheminade introduced the axiom busting idea that "Our world cannot be logical because if it were, we would all be dead, because all formal logic consumes itself and exhausts itself in a closed world without bringing forth new resources, either material or spiritual." [3:37-3:55]

What Cheminade established, tongue in cheek so to speak, is that the human condition is like that of a prisoner chained inside of Plato's Cave, unable to liberate himself from the logical set of fallacious social rules which are imposed on him at his birth, and which make him accept his condition whether he likes it or not. Cheminade didn't refer to Plato's Cave explicitly, but he did not need to do so.

From the vantage point of epistemology, this theatrical staging posed the problem of society as a whole, as does the metaphor of Plato's Cave. The irony, however, is that the paradox can be solved, but only if the solution is different from the condition in which the problem was introduced. Cheminade opened the Pandora box of the *coincidence of opposites* by citing Einstein who said about his own discovery of relativity: *"We can't solve problems by using the same kind of thinking we used when we created them."*³

According to Cheminade, this requires that our human identity be that of "*intellectual migrants*," because the world we live in is constantly "*changing*." Mankind has to discover how to become "*creative migrants*" in a changing world; and the question comes down to discovering how the world is "*poetical*" instead of "*logical*." At this point, Cheminade gave the microphone to Luminet with the

³Albert Einstein, <u>https://www.brainyquote.com/quotes/albert_einstein_385842</u>.



special provision that "most of all, this poetical world changes and it is those who make the world sing who define the future that we may or may not have."⁴

Luminet responded by emphasizing that the "*illogical nature of the world and the idea of fraternity*" were curiously linked together, but without any logical connection. Luminet started by investigating the question of what a "*rational world*" looked like from the standpoint of science. He said:

"The scientific world made the wager that the physical world obeys a certain form of logic, certain kind of rationality. Beyond that, however, there also exists the possibility that a non-physical world might also exist, and I say possible because it is not self-evident that there also exists a domain of the mind, where some of the most beautiful things exist and are generated by the human spirit. Because, there are those who say that everything is reducible to chemical exchanges in the brain and that all that exists finally comes down to the physical domain, and that's it.

"Effectively we can always think that the domain of the mind is, fortunately, not logical and not as rational as that, and this might just be because what makes the specificity of human thinking comes from both art and science, because these are the two domains which can best express creativity and invention. This connection is what makes a human being human and these are two domains where logical thinking is always beaten. And, that is very, very good." [8:10-10:00]

Luminet implies here that those two opposite orientations, art and science, live together in the same mind. How can this be? By posing this paradox of a "*coincidence of opposites*" to the audience, Luminet proposed to examine the most crucial paradox of the present day school system, which is that of the separation between the scientific domain and the artistic domain which are made to live in extreme isolation. In other words, how can one consider as invalid any exclusive approach of science without art or of art without science? This is a problem that

⁴ <u>CHEMINADE ET LUMINET - CONFÉRENCE AU THÉÂTRE TOURSKY À MARSEILLE</u>. [6:33]



cannot be solved by logic. At that point, the following dialogue took place when Cheminade intervened by asking Luminet:

CHEMINADE: "How is it possible that a poet like Gérard de Nerval, in the middle of the nineteenth century, was able to describe in the most striking manner the existence of a black hole with an appropriate poetical metaphor, at a time when the galaxy itself was practically unknown? That is not very logical, is it? Positivism cannot deal with this sort of thing. So, what is going on? As far as you are concerned, is there a way to understand this without the relationship between science, poetry, beauty, and knowledge? Could we have understood what Gérard de Nerval wrote without that relationship, and did that interaction have an influence on you?

LUMINET: "This is one example, among many others, where an extraordinary amount of creative imagination is required and which seems to escape the logical domain of rationality which could have penetrated the domain of scientific enquiry of that period. At that time, when Nerval published his poems called *Les Chimères* (The Chimera), the scientific world was completely ignorant of these strange stars, which I became so interested in and which were called black holes; these wells of dark space which swallow everything that exists, matter, light, and the passing of time itself. And regardless, one finds in the poem which is entitled, '*Christ on the Mount of Olives*.' So, it's a mystical poem in which the poet said:

'Looking for the eye of God, I saw only a socket, Black & bottomless; the night that sleeps there Shines down to a world growing thicker still;

*A strange rainbow enfolds a sombre hole, Stoop of the old chaos whose shadow is the void, Spiral that swallows the Worlds & Days!*⁵

⁵ Gérard de Nerval, <u>*Christ on the Mount of Olives.</u>*</u>

http://www.amatterofmind.us/ PIERRE BEAUD

PIERRE BEAUDRY'S GALACTIC PARKING LOT

"It so happens that forty years ago, when I was a young researcher interested in these mysterious objects, these black holes, which are invisible by definition, I had the idea, which turned out to be a pretty good idea finally, of attempting to calculate with a computer, because we did not have appropriate telescopes for those types of objects, to calculate what a black hole should be like, because a black hole cannot be seen. So, it had to be surrounded by something which could be gas flattened in the form of a disk, or it could be surrounded by stars, and so forth. The surrounding matter would progressively fall into that black hole and would shine in some sort of manner. And, all of this was done with equations from general relativity, and with a little bit of creativity added of course. Then, I published an article on this subject in 1978, exactly 40 years to date, with an image calculated by computer. That image came out precisely in November 1978 in the revue *La Recherche*.

"During that period I was already reading a lot of poetry, but less than the amount that I was led to read later. And that is where I discovered that particular section of the poem by Gérard de Nerval. And then, I was stupefied because I finally realized that the two stanzas that I recited for you from memory were the perfect caption for the image that I had calculated with the equations of general relativity." [10:25-14:10]

The point to understand, here, is not the fact of the translation between a scientific equation and a poetic insight; the point is that Luminet discovered that Nerval had reached into his mind to find the unknown source of his poetical inspiration; and all he could discover and come up with was the hidden truth of his fantastic journey, which materialized itself into words, but whose secret truth can never manifest itself in any rational form. That is what Luminet had to translate into a scientific language. During the second half of the nineteenth century, Edgar Allan Poe also had reflected on similar ethereal divine processes taking place in the physical universe and which he had committed to paper his last work, *Eureka*.⁶

⁶ Luminet wrote and introduction to the most recent French publication of *Eureka*.



So, the question is: How do you go about exploring such an unknown? Referring to all poets in general and to Balzac's *The Unknown Masterpiece* in particular, Cheminade, in turn, put everyone back onto the stage of history and incited the audience into making a *discovery of principle* by having people think through the following paradoxical state of mind:

"In his book, Balzac has four characters a painter, a musician and a couple, who are looking for something which does not yet exist in our world and who are trying to explore something unknown throughout all of the known domains [of human knowledge]. And, as they are going toward this unknown, they find that there is a language, things that are happening, an expression which corresponds to no existing and known language. Therefore, we are as explorers in that unknown, somewhat like an explorer in outer space. And then, if one remains there, one becomes mad, that is to say, we are no longer able to communicate with others.

"So, what happens after, which is what Balzac tries to establish, is that we are attempting to look into ourselves [...] at that moment, if we don't want to stay in the madness, we have to go backward; that is to say, what you have yourself understood and perceived in that unknown has to be translated into a language which has to be accessible and which must be welcomed by others; and this can only be done either through an identifiable scientific discovery or through poetry, and most profoundly through the metaphorical process of language like Nerval did.

"And, what you are able to communicate is not exactly what you have experienced or observed yourself, but only its footprint. So, you have a knowable trace that you can communicate to others. And I think it is very important nowadays, because I once had a friend whose name was Antoine Berman, who was someone who had the most reflected on the process of translation, and here we are in the very domain of translation; that is, in the situation when your own language can welcome the language of another into your own. The process is not logical because you have to compose by



yourself what the other has composed, and without falsifying it." [15:50-17:58]

This new type of discovery was the highpoint of the axiomatic change of the entire dialogue, because the discovery was about how to change the universe with your own mind. What Cheminade is emphasizing, here, is not only the secret of conveying profound ideas respecting man and nature, but also the secret of how the anti-humanist manipulators of our world falsify information in order to control the gullible majority of the population. That was the core of the paradoxical situation we were looking into as if it were a black hole.

One of the most obvious fallacies of composition which has been concocted recently on this subject has been to make believe that humanity will soon be controlled by artificial intelligence. Here is what Jean-Pierre Luminet said about this:

"This wager is that human thought is simply algorithmic; that is what in fact is called a Turing machine. The name comes from this famous logician who lived during the Second World War and who has brought enormous contributions to the conception of computers and who had hypothesized that a theoretical machine (which he never built) which could calculate the whole of the universe providing it is sufficiently perfected.

"So, the wager that artificial intelligence promoters are making relative to the extraordinary development of computers, especially with the possibilities relating to what quantum computers do, which I have briefly discussed before, is that in the short term, relatively quickly, a certain number of epigones of artificial intelligence claim that in 2040 or 2050, which basically means tomorrow, artificial intelligence robots will have surpassed the entire capacity of all of human brains; as far as I am concerned, I absolutely do not believe it at all. Because, for me, there is an irreducible part of the human mind which is not a form of algorithmic thinking.

"If we return to our original subject '*Is the world logical*?' an algorithmic way of thinking would be a logical way of thinking whereby you deduce things from the vantage point of axioms and postulates that you have established as a foundation. So, this is the way the scientific method works; it works essentially in that form. Then, suddenly, here comes a genius of



logical thinking by the name of Kurt Gödel, who was a colleague of Einstein at Princeton University, who had studied mathematical logic during the 1940's, gave the proof of a completely unexpected result and which is, for me, of an immense philosophical significance that almost no one cites. It is called the '*Incompleteness Theorem*' and is known as the '*Gödel Incompleteness theorem*.'

"Gödel demonstrated, mathematically, that mathematics themselves were incomplete and incapable of describing the totality of the universe. He demonstrated that in a system of mathematical axioms upon which you demonstrate a series of theorems, that all axiom-based systems in mathematics, as complex and sophisticated as they may be, there will always be propositions, that is, statements which cannot be demonstrated within the framework of the system. They are called '*undecidable propositions*.' We cannot say if they are true or false. After all they have to be true or false, but the system which produces them is incapable of saying if they are true or false. This means that mathematics themselves, which, for a long time, were considered to be the last word about the universe, demonstrate their own limitations.

"In a second theorem, Gödel made the supposition that if a new axiom was to be added to the theory and the new *undecidable proposition* is considered to be true, then this is a new added axiom, and the added axiom will generate a higher mathematical order which, in turn will produce a new *undecidable proposition*, and so on *ad infinitum*. This means that all axiomatic systems founded on mathematical logic are incapable of taking into account the totality of the universe.

"Therefore, we can think that Gödel's arguments and theorems, which are derived from mathematics and which show the incompleteness of mathematics, demonstrate how the human brain is not really a Turing Machine, and that this is not the way it functions. Thus, there are *undecidable propositions* only if we fail to consider the mind from the standpoint of creativity, which permits us to make a decision about *undecidable propositions*. But it is not the logical reasoning which will do this." [52:00-56:15]

At that point, the moderator of the Toursky Theater director, Richard Martin, interjected: "*This is very reassuring, in fact!*" He had realized, as the audience must have, that what both Cheminade and Luminet had been saying was that the



paradox of the prisoner could be resolved and that the human mind was able to go beyond the logic of any system. But, how could that be done?

In fact, what Luminet established and made the audience discover was that man always has the mental power of identifying the limit of certain forms of knowledge and is, therefore, always able to discover how to go beyond. This is the power of inference that the human mind can use as a first approximation to the idea of the transfinite. As a result, it is lawful that the first question coming from the audience was on how to come out of the social paradox of society. The person asked: "*How do we get out of this schizophrenic state in which we know we are manipulated and yet we have been made to accept?*" In other words, the prisoner of Plato's Caver knows he is being fed "fake news" instead of reality, but how can he get out of such a manipulation?

This question poses the paradox of the human condition. As Luminet put it: "*It is the paradox of social networks*." In other words, society is a trap but you also have the possibility of getting out of that trap by some form of revolt against the axiomatic rules of the game. In other words, the measure required is that of courage; and courage comes only, as Leibniz demonstrated, when a balance between *reason* and *power* can be restored within a social interaction. Cheminade's reply to that paradox was as follows:

"The best weapon those manipulators have against you is cultural pessimism and the immense comfort that cultural pessimism gives you, the immense comfort that voluntary servitude gives you. You absolutely have to get out of that comforting cultural pessimism that society offers. You have to discover that there is something else, which can be found in the apprentice of the arts in school, poetry, theater, and music, and in a reflection on what is consciousness, creativity. Those are the tools you can defend yourself with. [...]

"People say that you can't do anything against the system, which is a system of collaboration like during the Second World War. They will never join the resistance. So what makes a resistant? Often he who becomes a resistant is the unexpected, and he who becomes a collaborator is also the unexpected. So, what is it which appears inside of the human being, and I think this is what we have said about music. We have to search within



ourselves what it is that makes us happy or guilty with respect to what we do to others in society. Are we brothers or not?

"Fraternity is a very interesting thing because it is the common sentiment of belonging to a group which goes beyond our individual selves. [...] Fraternity is the idea that we belong to the human family. But it's not just that; it is the sentiment which is associated with it. It is by the sentiment that we will be able to go beyond the present resentment, and we see this with the yellow jackets, and we can reach out, as the poet Schiller said, to the 'scared runaways' who have become pessimistic; by giving them again the idea that we start from the nature of man as he is, but then we proceed by inspiring him to become a human being as he should be. But, never by imposing onto others what you have not accepted ourselves."⁷ [1:00:36-1:03:011]

The second hour of the exchange relates to questions and answers with the audience on various aspects of culture and science with the intention of searching for the best road to improve mankind.

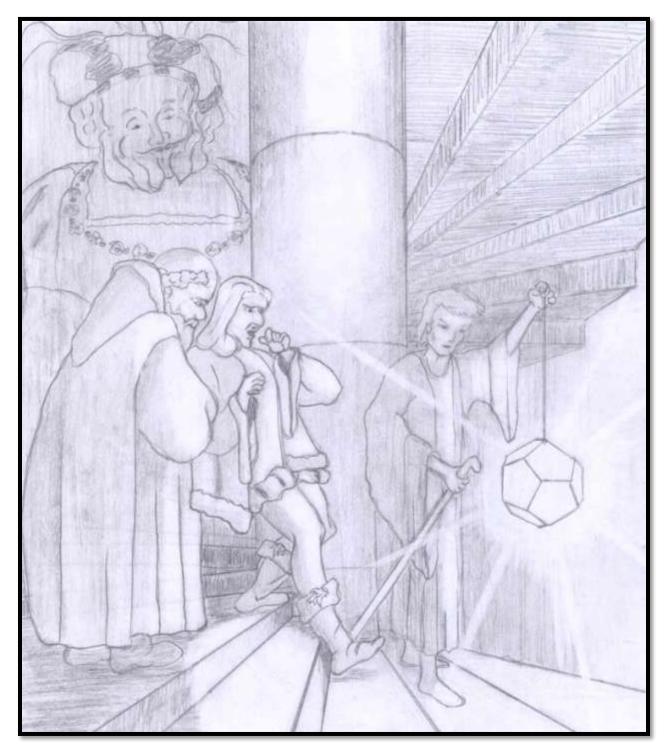
CONCLUSION: THE PATHWAY OF HOW TO BECOME A GIANT

Cheminade gave the key to the process of discovering the transformative process of change which people need to make in order to conquer the present moment in history. It can be found in the Rabelaisian adventure of Pantagruel and Panurge of *Book Five*, Chapter 36, at the moment of the "great fright" that Panurge experienced when he descended the Pythagorean "Tetradic Steps" of the great underground marble staircase in Lanternland. "Let's turn back, if you please," said Panurge. "I'm very much afraid that this is Taenarus, which is the way down to hell."⁸

⁷ Jacques Cheminade et Jean-Pierre Luminet - Le monde est-il logique ?

⁸ Francois Rabelais, *GANGANTUA AND PANTAGRUEL*, translated by J. M. Cohen, Penguin Classics, New York, 1955, p. 686.





Panurge's great fright during his descent of the Tetradic Steps. Rabelais, Book Five, Chapter 36.



The point that Panurge and his companions had reached corresponds to a very special turning point, which can best be experienced through the musical power of the human voice. The experiment refers to the epistemological nature of the musical F# passing tone in bel canto singing, otherwise known as the "register shift." Renaissance researchers called it ironically the "Devil's Interval" because they feared they were falling into hell if they went over that apparent limit. In fact, if you succeed in controlling your fear of dying at that crucial axiomatic moment of change and let yourself be carried beyond by the musicality of your own voice, the passage to a higher geometry will be successful and the universe as a whole will sing with you.

VOILA!