



# ON THE UNIVERSE FROM THE TOP-DOWN

By Pierre Beaudry, June 27, 2013.



## FOREWORD

Lyn emphasized that the difficulty people have with conceptualizing the Solar System, comes from the fact that they think of it from the bottom-up as opposed to from the top-down. He added that this problem had to be solved gradually by his personal intervention, but that others might want to intervene if they had something to contribute. So, this is my response to Lyn's challenge, simply off the top of my head. The report contains two sections:

1. THE IDEA OF LOOKING AT THE UNIVERSE AS A WHOLE
2. BRUNELLESCHI'S CUPOLA FROM THE TOP-DOWN.

### 1. THE IDEA OF LOOKING AT THE UNIVERSE AS A WHOLE

*"The important thing is not what you do, but how you do it."*

Pierre Etaix

The idea of the universe as a whole is the most difficult idea to treat from the top-down, because your mind doesn't know how to deal with a reality that is so big. Therefore, the very first problem that you encounter, when you first attempt to understand it, is that your sense perception is confronted with a bad infinite, because your sense perception is the first to be impressed and it can only grasp perceptible limits. This means that the universe is simply not made for sense perception, but for a mind only. From the standpoint of epistemology, the universe can only be represented as an Aristotelian geocentric and linear flatland in which sense perception dominates everything and locates you at the center of the universe looking outward from the flat Earth up. This gives you a completely ego-centric view of the universe; an animalistic view of yourself and of everything around you. This is the wrong way to look at the universe, not because the earth is actually round, but because you are excluding your mind from the process, and you are making knowledge depend entirely on your sense perception. This is the way to see the universe, not the way to know it.

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However, if you inverse the process, you have to imagine yourself being outside of the universe looking in as if from outside the surface of an imaginary sphere. This is the equivalent of a reflection in which your image comes back to you as reversed. Then, you are imagining seeing yourself on your flat Earth through the entire span of the universe from the top-down, and only then, can you recognize that the Earth is not flat, but that what your mind sees can be projected non-linearly onto a flat disk. The curvature of top-down thinking becomes non-linear, while the curvature of bottom-up sense perception is strictly linear. The two are necessary, because the astrolabe, for instance, was built with both the top-down and bottom-up projections, during the period of Charlemagne and Haroun al Rashid. This is the reason why all of the stars are projected on an astrolabe table from the outside of the universe and not from the inside, and the star-mapping is generated onto a non-linear spherical grid today known as a Riemannian surface.

Next, ask yourself: What does this difference imply from an epistemological standpoint? Isn't the mind just as dependent on sense perception when you imagine yourself looking at yourself from the top-down?" The answer is no. Your mind is now dependent on the power of your imagination, which means that your mind is also part of the process of discovery! And, that is what makes the axiomatic difference between the two curvatures. It is the axiomatic leap from one to the other which establishes the superiority of the top-down approach over the bottom-up approach and causes your mind to increase its energy-flux density by this self-reflective process. Therefore, top-down also means self-reflective!

Moreover, by conceiving the universe from the top-down, you put your mind in a condition of continuous change. *That is to say, you cannot help but noticing yourself looking at yourself as constantly changing by looking down at yourself looking up, and thus, being in two places at once, up above and down below at the same time. Only the mind can accomplish this sort of performative non-linear contortion. Sense perception could never account for this form of ubiquity, even if it tried. If you understand this, then, you are beginning to think like God, who is always everywhere and nowhere at the same time.*

Next, let's examine the differences in boundary conditions between bottom-up view and the top-down view; that is to say, between inside-out and outside-in. What does the universe look like when the boundary conditions are set by sense perception from the Earth looking up; that is, from the inside out?

Everything you see is located linearly, that is in a straight line from your eye sight. The fallacy, here, is to think that because you see something you think you know. That is wrong. That is a typical Euclidean fallacy of composition. All you get is a simple apprehension of facts, nothing else. Such a linear view is not knowledge, because knowledge is a process that is in motion that changes all the time. Sense perception is merely a shadowy impression, the snap shot of something that has already changed and is in the process of changing again. Therefore, perceptions are merely the end results of non-linear changes which are required to be translated into multiply-connected circular motions in order to be understood. Such sense perception impressions can only be approximated through momentary shadows of circular action upon circular action. Thus, the limits of sense perception are flat and linear.

The problem with observing the night sky, for example, represents such a fallacy of composition, because sense perception cannot give you the reality of the universe as the motion of the heaven changes. Not only things are never what they appear to be, but they are never what they are either. When the British oligarchy says: "We are who we are," it is a big lie. It would be better to say: "We are who we

become and we are no longer what we were.” That, in reality cannot be perceived; it can only be known as if in a glass darkly. Therefore, what appears to be is always from the bottom-up and always leads you to fallacies and confusion. Let me give you an example of what is merely a fleeting shadow of change. Take a look at the galaxy from the bottom-up, as in **Figure 1**.



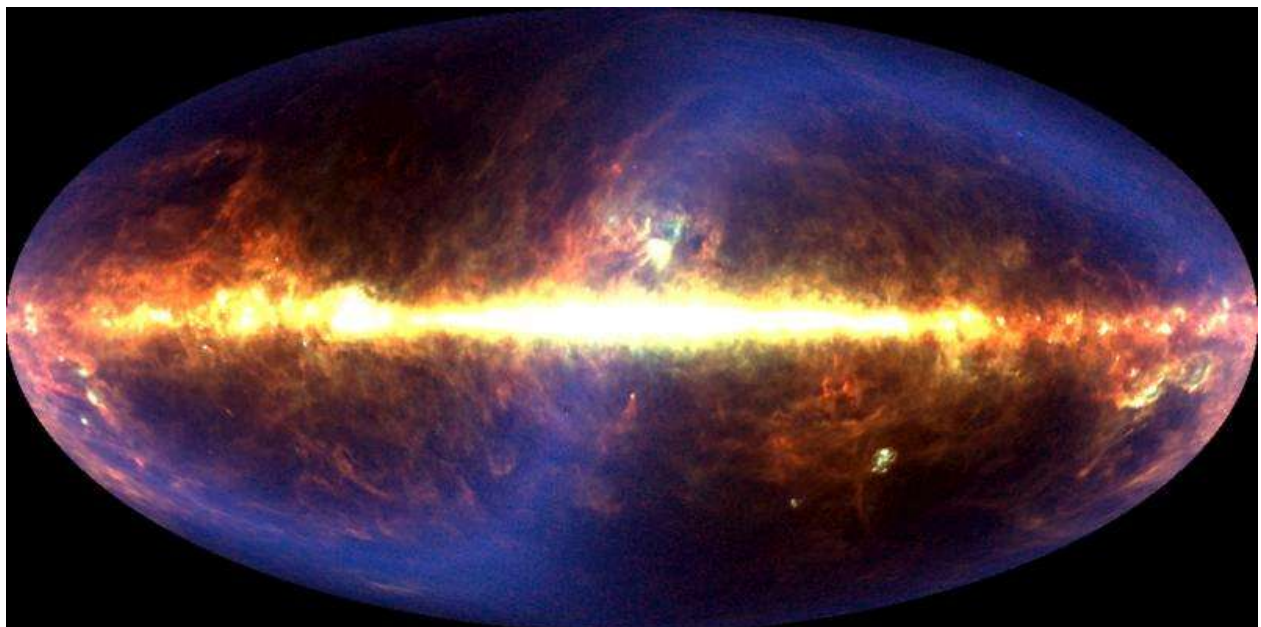
**Figure 1** Sense perception view of the Milky Way as seen from the bottom-up. This view alone should be enough to make you realize that you cannot understand the nature of the Milky Way galaxy from this point of view, because that galaxy is not what it appears to be. (Photo credit NASA)

During the last ten years or so, so-called astronomers have been telling us that the galactic home of our Solar System is no longer the Milky Way galaxy, as everybody believes, but the much smaller galaxy called Sagittarius Dwarf galaxy that is colliding with the 200 billion star Milky Way. The point is that these astronomers think they have done their job when they have succeeded in visually locating where things appear to be in the sky at any given moment. But, they keep making mistakes, because reality is never what they see with their telescopes.

For instance, consider the fallacy of composition formulated by University of Virginia professor, [Steven Majewski](#), who stated with total conviction and absolute certainty: “If people had infrared-sensitive eyes, the entrails of Sagittarius would be a prominent fixture sweeping across our sky, but at human, visual wavelengths, they become buried among countless intervening stars and obscuring dust. The great expanse of the Sagittarius system has been hidden from view.” (Reported by Dan Eden, [Scientists Now Know: We’re not From Here!](#))” If only the professor had asked: “What would happen if people had minds to see with instead of ‘infra-red sensitive eyes’?”

The fallacy even goes further. From this so-called scientific “point of view,” some astronomers have come to the conclusion that the Solar System has an invisible mother and that the Milky Way is a galactic cannibal that is eating up the mother of the Solar System and her children. Thank God we can’t see that, because I would be afraid to let my children go out at night. There you have it, in black and white; foolish astronomers believing that reality is based on the experience of sense perception.

The issue is not to debate whether we are here or there, born of this galaxy or that galaxy, or being eaten up by some giant galactic cannibal. The issue is that if you believe in the certainty of sense perception, you are either an animal or an idiot! That’s the problem we have to deal with the backwardness of science today. The fallacy is that astronomers have made the telescope the harbinger of truth, while it should have been a mere instrument at the service of the mind. As a result astronomers focus only on sense perception discoveries instead of discoveries of principle. It were better for mankind to be contemplating the sphere of the universe with their minds rather than with telescopes. Take the case of the infrared perception of the same galaxy. Se **Figure 2**



**Figure 2** Infrared photo of the Milky Way viewed from Earth (Image credits NASA)

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Again, people get a wrong idea about this infrared view of the Milky Way, because it is nothing else but another sense perception view of the universe. Don't get me wrong. The infrared image is useful, but it is not by adding a sense perception to another sense perception that you are going to get an idea. It doesn't matter how many sense perceptions you add up, no ideas will ever come out of them. Unless you deal with this Platonic question rigorously, once and for all, you will never get the thinking job done properly. So, my suggestion to you is that, while you are organizing, consider that you are outside of Plato's Cave and that your job is to pull the prisoners out of it in order to have them face the truthful source of the shadows they were the slaves of. Thus, if you wish to understand how our Solar System works as a part of the universe as a whole, it is essential to look at the universe as a giant Platonic Cave. That is a much better way to proceed; but you'll have to borrow the beryl looking glass of Nicholas of Cusa to see your way out of Plato's cave, because this will change the way you look at things inside the universe.

For example, take the case of life and project on the wall of the cave a hyperbolic conical image of the Lithosphere, Biosphere, and Noosphere. What is wrong with that view? The ordering is expressed from the bottom-up, in space and time, instead of from the top-down. What you have to do is turn this image inside-out and go to the source of the projection. Start thinking in terms of the Noosphere, Biosphere, and Lithosphere, in that reversed order of space-time reversal. In other words, if you compare the living with the non-living you will get nowhere, because this is not where the difference between the two can be understood. If you wish to understand the difference between the non-living and the living, you will have to examine their difference from the top-down, that is, from the noetic to the living.

This is not simply a rhetorical question. This is how the top-down method works, by inversion. Otherwise you are wasting your time comparing things with their lower species. That's what the British like to do. The universe is not built from the bottom-up; universal physical principles do not proceed from the oceans to the lands, like embryos growing from cells. The universe is built originally from a divine intention as *amatterofmind*. The same approach must be applied if you are to understand life. If you wish to understand what life is all about, you have to start from mind. Similarly, the way you want to understand the nature of mankind is not by comparing it with the animal, but by comparing human cognition with the Mind of God. That is why Lyn insists that if you want to understand the Solar System, you will have to understand Nicholas of Cusa. That's also how you should approach the question of Mars.

In other words, the way you understand how the human mind works with respect to the future requires that the function of time reversal come first as a matter of intention. Why? Because the real mother of humanity is the Mind of God, or the Ordering of universal principles, not the proverbial galactic soup. Therefore, this whole galactic trajectory question has to be in tune with your mental trajectory projected from universal principles. This means that the issue is an epistemological question before it gets to be an astronomical or physical question. This is the reason why the question of the Solar System is first and foremost a question of epistemology, not of astronomy. See **Figure 3**



**Figure 3** The Imaginary view of the universe from the top-down. (Flammarion Woodcut)

The Flammarion Woodcut about the investigation of the universe represents the right approach from the top-down. Why? Because it projects your mind instantly to the outer limit of the universe and forces you to imagine what might be the underlying ordering principle behind what we see as a false approach to the universe.

The irony, therefore, is that in opposition to the projection from the bottom-up, this top-down imaginary view includes the human subject as being an integral part of the investigation. The discovery of principle cannot take place without the explicit subjective presence of the creative process of the individual who is investigating the process. **Looking from the top-down, therefore, means that you are able to look at yourself and recognize that looking from the bottom-up as a mistake.** That is the ironic clincher of the Flammarion Woodcut; that is what makes it truthful as opposed to a mere sense perception observation. In that sense, the top-down view must be at least a doubly-connected manifold as opposed to a simple non-self-reflective manifold of sense apprehension. This is precisely the dimensionality that Lyn has identified with the Chorus Principle:

“And this is exactly what, for example, was demonstrated by Nicholas of Cusa and Kepler, and also by Shakespeare. All these people have defined, in common; the concept of the

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mind is not controlled by speech, by dialogue. Quite the contrary, as is demonstrated in the case of *King Henry V*. What the commentary on the action [[does]], from that side, is correct. The interpretation of the action itself, as being the evidence, is *false*, and that's the crucial element here. In other words, you do not know from speech, you do not know directly what the truth is. And your assumption is false, if you think it's so." (Lyndon LaRouche, *NEC Meeting*, June 15, 2013)

This is the difficult part that most people have problems with, because they have never taken the habit of including themselves in their thinking process, either because they have never really properly thought before, and therefore, they are not aware that they have to include themselves and their mistakes in that process, or they don't know how to do it because they are blinded and enslaved by the false certainty of sense perception. This is why Lyn emphasized that the problem is not *what you think*, but *how you think*, when you include the process which involves the chorus principle. That is what the chorus principle is all about. It is your guide and lantern to the truth. This is the reason why it is useless to imagine that an "infrared perception" will give you a better understanding of the galaxy, if you have not already included your mind and the shortcomings of your experience in the process of discovery.

The problem, as Lyn identified it, is not that people don't understand; it's that they are not willing to act on what they understand and change it, because of the obstruction of sense perception. They are afraid to act performatively; that is, to act metaphorically on what they understand to be the truth of their mistakes, and state that fact as an act of truth with the intention of causing an axiomatic change in themselves and others. The idea is not to make true confessions, but to tell a story as if it were about someone else. Ultimately, the idea is to hold a mirror in front of people, so they can see how their perceptions lie.

That is the only leadership that people are willing to follow, and the only way they will commit themselves to change. That is why you must always pay attention to the intention; because the intention is to always be willing to make people better. And that is why the first thing to do in order to act truthfully is to act on what you know is wrong and from there, project your mind into the unknown future, from the top-down.

## **2. BRUNELLESCHI'S CUPOLA FROM THE TOP-DOWN.**

One of the best examples of generating something from the top-down comes from Filippo Brunelleschi's state of mind in the construction of his Cupola for the Cathedral of Florence. This Cupola was entirely constructed from an intention located in a future oriented task that was considered by everyone as impossible to realize. It was based entirely on the unknown and on how to bring the unknown future into the present. What Brunelleschi succeeded in doing with the Cupola project is to redefine the curvature of the creative human mind.

The reason why this impossible construction was made possible was because it was not based on past experience and pre-established knowledge. Everything about its construction was new and all past

experiences in cathedral building could not have helped Brunelleschi at all with the erection of this project, simply because it could not have been built, brick by brick, from the bottom-up. The Cupola was constructible only from the top-down, that is to say, only by discovering the principle by means of which the maximum amount of self-sustaining stress could be applied with the minimum amount of external support. See my report on [BRUNELLESCHI'S MIND AND THE CATENARY PRINCIPLE](#).



**Figure 4** Florence Cathedral Santa Maria del Fiore.

Not a single individual of Brunelleschi's time considered that his project was feasible. Everybody said it was going to fail, because experience showed that that it could not be done. Practical people said that the Cupola would have cost the entire forest of Tuscany just for the wood that was required for the scaffolding. The irony was that Brunelleschi's plan did not require scaffolding. That was also a historical first in church building. What was required was the discovery of a new physical principle of construction that would be without framework "*sans armadura*."

Brunelleschi went even further by demonstrating that the bricks would not be laid from the bottom-up, but from the top-down. Indeed, the project appeared so impractical to the professionals of his day that the Consuls and the Wardens of Works responsible for the Cathedral were petitioned to get Brunelleschi out of the project altogether; because they said his ideas were crazy and he was adamantly



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refusing to show them the details of his plan. Art historian, Giorgio Vasari, related this moment of dispute in very delightful details:

“They would have liked Filippo to speak his mind in detail, and to show his model, as they had shown theirs; but this he refused to do, proposing instead to those masters, both the foreign and the native, that whosoever could make an egg stand upright on a flat piece of marble should build the Cupola, since thus each man’s intellect would be discerned. Taking an egg, therefore, all those masters sought to make it stand upright, but not one could find the way. Whereupon, Filippo, being told to make it stand, took it graciously, and, giving one end of it a blow on the flat piece of marble, made it stand upright. The craftsmen protested that they could have done the same; but Filippo answered, laughing, that they could also have raised the Cupola, if they had seen the model or the design. And so, it was resolved that he should be commissioned to carry out this work, and he was told that he must give fuller information about it to the Consuls and the Wardens of Works.” (Giorgio Vasari, *LIVES OF THE MOST EMINENT PAINTERS, SCULPTERS, AND ARCHITECTS*, Volume I, trans. Gaston Du C. De Vere, Publisher to the Medici Society, Limited London, 1912, p. 209)

Thus, was made the demonstration of how to build the Cupola of the Cathedral of Florence from the top-down! You have to break the rules of the game! In reality, all of the bricks were pulled upward by the power of the catenary principle that Brunelleschi used for the completion of the entire project; and it is that catenary principle which has been holding those bricks together to this day, not the cement of practicality. Indeed, the Cupola could not have been erected otherwise, simply because, no other principle embodied the least action necessary to carry the task to its completion. Thus, Brunelleschi had initiated a fundamental requirement for any discovery of principle: ***“Given that nothing from the past will work, apply a new universal physical principle from the future.”***

As the present case of Glass-Steagall also demonstrates, it is the invention of the future that is the mother of necessity; and not necessity which is the mother of invention. The great work of the founding fathers of the American Constitution can only be completed by applying the same catenary principle of pulling this nation together by its bootstraps and getting the job done. All impossible projects are made by breaking the rules of the game; thus, Glass-Steagall is the American egg that stands on its head because without it, a World Credit System will never otherwise be built.

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