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How to React to a Change in Cosmology

It's very moving to have received the Kyoto Prize here, because this is the place where for four generations the Latour's family has lived and got its luck, so to speak, because of a plight: The phylloxera destroyed entirely everything else here, the whole wine region of Burgundy, and it was then replanted and replenished much later, especially in this neighborhood, in Corton, by my great-great-grandfather. The other reason, of course, is that wine is entirely about fermentation and microbes and bacillus and all of those ferments, and it's of course something which we are now very much reminded of because of the Covid epidemic.

So, I will use the Covid as a sort of lead, because of a type of entity that viruses have taught us—a very harsh teaching, of course—during those two last years. We learned from—collectively, of course, if you are a specialist of viruses, you didn't learn anything, but we, the whole earthly community, so to speak—we learned something about viruses: the virality, so to speak, of that type of agent. The virality of the way it spread is extremely typical of viruses and microbes. First, we learned, which is quite extraordinary, that from basically January, a year and a half ago, and three weeks later, the virus going from mouth to mouth, from mouth to hand, from one person to another person, starting probably somewhere in China, spread out everywhere and became completely globalized. That sort of connectedness, sort of very fast speed, is typical of virality. So is the surprising speed at which it mutates, and we learned again, somewhat tragically, how fast the virus is actually learning other habits, so to speak, through this multiplication of variants which we now follow in the press everyday, which, again, we are very surprised by. And the other thing which I have studied for years is of course that it completely modified our social relations: We had to wear masks, we had to distance ourselves. And those social relations are not only modified among families, inside a small circle, not only nationally, inside any given nation, Japan or France, but it was also an amazing experience of relearning connections between countries. I mean, as we know, we cannot go from one country to the next, and we learn everyday that this country is available, but not that country, etc.

So, the whole connectedness of human relations was modified by the insertion of the virus's own way of connecting and connecting people globally. So, it has a different view of the global, its own way of globalizing. It has a different view of mutating and it has a different view of modifying every other entity, including humans, bacteria of course, inside which it inserts itself. And that's very interesting, and of course, for me especially because I've studied Louis Pasteur, the great French bacteriologist, many years ago. And of course, what I studied in Pasteur's case, that is how microbes inserted into society in the 19th century have deeply modified what we could call the social order at the time. And we re-learned that with the AIDS, of course, a tragic story, we are still learning it, and with every epidemic, but we will learn it globally with the Covid. And that's what interests me.

So, I want to use virality as a guide, as a sort of token, a mascot, because every cosmology has its own privileged object, if I can say that, and I want to contrast what was the privileged object before and what is now the privileged object, which I will argue is something like the virus's type of virality, or actually in English, also vitality, which is so typical of the sort of situation in which we are now embedded. So, I want to argue about a shift in cosmology—and I use “cosmology” as anthropologists would do, as sort of a structure that distributes agencies around. So, I want to start with a very strange puzzle: Why were we surprised by the emergence of the virus? I mean, this is

an absolutely normal way in which they spread, microbes have done that forever, we know that when we do a fermentation in the wine business right here, and we were nonetheless completely surprised to have to change the whole fabric of our society because of the emergence of this virus. So, that's what I want to understand: Why were we puzzled by a type of entity which is so absolutely typical of the way the world in which we live and have ever lived is being built?

So, I want to contrast it with an older privileged object of the cosmology earlier. We could say that, if we are looking for a typical object, we would probably, at least in the Western imagination, use Galileo's inclined plane, where the rolling balls go down in order to calculate the laws of falling bodies. I mean, if there is one canonic example, an icon, of what we imagine the world to function in the past cosmology, that would be it. You have a plane, you have big billiard balls that go around and that's what allows to connect. Now, the problem with this privileged object is that it has two very strange consequences. The first consequence is that it works only in ideal conditions—because of course when Galileo did the experiment, as every historian of science knows, it was not exactly as accurate as he said, because you had to forget all of the consequences, all of the resistance of the air, and so on. So, the law which was of course discovered by Galileo, and then, of course, by the whole Newtonian mechanics, etc., works, but only in ideal conditions. So, you have to shift away, so to speak, from the ways in which we, as living bodies, live, in order to say that this law is actually fully and completely calculable. Which is not a problem, I mean, every science has to idealize its object.

But there is one second consequence which is slightly more worrying. It's that the scientists themselves, so to speak, imagine that they are themselves transported somewhere in the out-of-space abstract calculable model. They confuse the invention they have of the world, of the ideal world, with they themselves being somewhere idealized in another world, which is well-known now in the science critique by the word "view from nowhere." So, the science has been sort of shifted away and the scientists have been shifted away from the practical consequences of their own living, so to speak, existence. That's a very unfortunate consequence, because it means that when we talk about those privileged objects that are falling bodies the scientists that know about them in a sort of view from nowhere, they are themselves nowhere. And that I think is one of the reasons why we were so surprised by the emergence of the virus. Of course, we know that the origin of this view from nowhere, at least in the Western tradition, is actually a consequence of a theology, Christian theology of God, which is an all-powerful God, which is itself, himself, or herself, nowhere. So, how could I say, the "nowhereness" of the science imagination, what is called the "scientific view of the world" is, in the Western tradition, a descendant of theology and of Christian theology.

So, if we take this privileged object of the first cosmology, I think that explains in part why we were so surprised by the emergence of all the sorts of globalizing virus. Because, if you have as your canonic example of what the world is made of the falling bodies which I take as a canonical mascot, so to speak, of the earlier cosmology, life forms are very strange! Life forms have nowhere to go, they have to be pigeonholed, so to speak, in the view from nowhere, but they are completely different. Their grammar, so to speak, of agency, the way they behave, is entirely different. And, as you know, biology had always great difficulty in entering, in sort of being pigeonholed, into the tradition coming from mechanics, physics and so on, all the way from the beginning of the 17th century to the mid-20th century. Why? Because, life forms—and again, the Covid is a very good example of that—they react very fast, so they are constantly, sort of agitated by other sort of behaviors, they mutate, as I said, we observe that all the time with different variants, they adapt very quickly, they converge sometimes, they overlap with one another, and they have connections with one another. Viruses—we don't even know if viruses are our enemies or our friends! So, we cannot even locate them. Sometimes we need viruses—if we have no viruses and no bacteria, we would not survive—and sometimes we have to fight them, or find a solution to accommodate their very quick way of mutating. So, we have a completely strange relation: strange by comparison with

the other canonical model which was used in our former cosmology, but completely normal in this world in which we live. So, this is a great, I think, a great source of surprise, and the reason why the Covid epidemic was so completely surprising. The grammar of agency is completely different if you take now the viruses as the typical object of what resembles to be a new cosmology. And of course, Darwin was supposed to make a big difference, but in fact even in Darwin, organisms are supposed to be obeying an order of nature, which are the laws of nature being natural selection, which play about the same role as the laws of falling bodies in the canonical tradition. So, Darwin did not modify deeply this sort of situation: There was still an order of nature. And what we observe today is that there is no order of nature, there are viruses upon viruses, upon bacteria, upon organisms, etc., which are constantly moving in and building this world of ours.

So, what I could now conclude from that is that, today, we are shifting from one privileged object, which I described as the falling bodies example, to another one, which I would say is my strange idea of taking virality as the best example. But, if we do it, we have to land somewhere, we have to actually situate ourselves inside a world of organisms, for which the virus, and the grammar of agency that it represents, is absolutely typical of the situation. Of course, it was there before: I mean, there was virology, bacteriology, all sorts of sciences of those entities before. But they were at the margin of the privileged object of the first cosmology; and now we are moving to another cosmology, where the privileged object is this virus. And what is really interesting, and I want to do my second part of my little argument with this, is that it has enormous consequences. It has a big consequence for what I've called in a recent book the new climatic regime. The new climatic regime is the situation inside which we find now ourselves. First, if you take the viruses and virality as the privileged object of a new cosmology, science is no longer a view from nowhere. Science is inserted inside the life of organisms, as we saw magnificently during the Covid lockdown. I mean, we learned a lot about epidemiology, we learned a lot about the difficulty of knowing what the virus was doing. All of the sciences which were mobilized during this period were highly visible, made explicitly visible, disputed in the popular press as well as in the scientific press. So, there was no way we could actually do for the science of the viruses what had been done before for the science of mechanics, with the scientists going away and imagining that they had a view from nowhere. No, no, no, they had a view from here, and they were very much inserted into all the controversies about the virus and how it was actually followed, and, in the magnificent case of the vaccines, how quickly it was possible to actually control some of its activity—only some of its activities, because you know the imbroglios and all the difficulty to pursue the vaccination in every country.

The second, of course, big consequence of this shift in cosmology is that we begin to learn, to our great dismay, at least in Western tradition and Western society, about the constant activity and the quick reactivity of all these living entities. And the most amazing thing is that this is true at the very small scale of the virus and at the extremely big scale of the atmosphere. Because, after all, the whole geopolitics now is around this question of climate control, and the complexity of making the climate the result of the activity, not only of the life forms in the past, but of the human life forms in the present. So, at the two extremes, at the viruses and at the atmospheric levels, we learned that, at an extraordinary speed, living forms react to our actions and we are reacting to their actions—we got sick from the viruses, and the atmosphere got sick, so to speak, from our own activity in the last hundred years. So, it changed the default position, if you want. Before, these things were known, but they were peripheral, they were marginal. Now they are absolutely necessary, they are the default position with which to compare, so to speak, every single movement and agency.

And the third consequence, and I will conclude on that, is that of course the canonical object, the preferred mascot of the earlier cosmology, triggered a different project for the evolution and the drive, the vector of history. History was supposed to be a movement to try, as far as you could,

to escape from the earth, and live in this imagined world of the scientific vision of the world, as it had been imagined by the first cosmology taking the Galilean laws of falling bodies as its privileged object, so to speak. I simplified, of course, I dramatized, but it's to make the point much clearer. But now, if you take virality, viruses, the way they spread, the way they react to our actions, and if you take it at the two levels of the extremely small and the extremely big, and all of the intermediary, you are in a different project. You enter into very much a different history. And that's the complete shift from what I've called, in several books and a long career, the end of the modernist project. Modernism in the Western tradition was completely driven by this vector, completely driven by this idea that we could actually shift out of the world, in some sort of strange way, with a sort of strange imagination that there was a world of infinite access and infinite resources. Now, we are back to Earth. Now there is no way. You can't actually move out of the Earth. You have to get back into it. And this is what I've been arguing for many years, but I have to say that the Covid epidemic was so prodigiously instructive for all of us, because of this connection with the climate crisis itself. So, it's two crises, sort of lodged into one another: one for the medical, so to speak, and one for the cosmological.

Well, that's exactly why we now have to work on a new project, which is something probably very different from the modernist project: science, the art, and the law, and all of the moral sciences. So, I'm very proud of receiving this Prize, and thank you again very much for giving the Prize, because that is the sort of thing that I'd like to push in the rest of my career: what is the alternative to the modernist project if we have to live here and not there. I mean, I know there are people who want to go to Mars, but it's the sort of project of the past. The future is actually to get back here. And it's very amusing for me to say that, here, in my own house, so to speak, and in the deeply microbe-built, how could I have that, if it's one thing which is microbe-built, it's actually the wine. So, maybe at the end of this little talk, we will celebrate it in some ways, and I will try to find a way to celebrate the Kyoto Prize. Thank you very much again.