

EPISODE 1: "CIVILISATIONAL CRISIS IN THE ANTHROPOCENE"

0:00:00.1 Juan Mayorga: Embodied inequalities of the Anthropocene. Building capacity in medical anthropology. A podcast series that analyses the human and non-human health impacts of this geological epoch of profound transformations.

0:00:20.6 Paola Sesia: Welcome to this first episode of "Embodied Inequalities of the Anthropocene." This is a space dedicated to exploring the damages and impacts on the health and well-being of human and non-human populations and societies in this geological era. This podcast is the first in a series. In a series of interviews, we will explore the research of the experts involved in this project. For example, we will look at indigenous experiences and anthologies, the coloniality of knowledge in the Anthropocene, gender, reproduction, environmental and reproductive injustices, multispecies and interspecies ethnography of human and animal health, pandemics, epidemics, COVID-19, public understandings of the Anthropocene, and the differentiated exposure to toxicity among populations. For this first session, we have invited Dr. Iván González Márquez, who today will share his reflections on the "civilizational crisis," which is one of the research areas he is currently working on and a term which we think will help us to expand our conceptual and methodological horizons. Iván has also worked developing other concepts based on Complex Systems Theory, and has collaborated on projects related to agroecology, permaculture, hydrological design, and biocultural conservation. My name is Paola Sesia, and I am part of the team at CIESAS Pacifico Sur, and this time, I will conduct the interview along with my colleague and friend Laura Montesi—Laura, Iván, welcome!

0:02:19.6 Iván González: Hello, everyone. Thank you very much for this invitation. I am thrilled to be here.

0:02:24.8 Laura Montesi: Thank you, Paola! I'm very excited to be part of this outreach project. Iván, tell us a bit about how you became interested in what you address as the "civilizational crisis" in the context of the era we call the Anthropocene.

0:02:40.0 Iván: When I was reflecting on this just now, it dawned on me that this term came about precisely from the issue of embodied inequalities, although obviously, I wasn't thinking of it in that way back then. When I was in college, I studied a case of sexual violence committed by Mexican soldiers against indigenous women in the Sierra de Zongolica, in Veracruz, which led me to reflect on the origins of the terrible violence we were witnessing. This led me to first ask questions about colonial relationships with indigenous communities, and then I wondered if all this systemic violence is also the result of an exacerbation of the war for natural resources in a context of resource depletion in what was already being called a planetary crisis. So, that's how I started researching more about the history of colonialism as a process that has led to this planetary crisis, and I eventually arrived at the concept of a "civilizational crisis."

0:03:58.8 Paola: Thank you very much, Iván. You touched on it somewhat in this first intervention, but we would like to ask you more specifically, based, of course, on your work experience and your own conceptual reflections: Why talk about ethnocide and ecocide in Mexico and Latin America? What connections exist between ecocide and ethnocide? And

finally, how are issues of damages to the health and well-being of communities generally understood from this perspective? If you could share with us your ideas on this.

0:04:35.7 Iván: Yes, um... well, look, these two concepts, like the concept of femicide, are extreme points on a continuum of violence structural violence, both against indigenous peoples and against nature—that I think are trends that have marked a long process over centuries, even millennia, that have led to this civilizational crisis or planetary crisis. I have worked on this from the perspective that civilizations—what we know as the great civilizations that developed in the Holocene—are precisely systems of power centralization. They are systems of wealth accumulation in any of its forms, based precisely on these axes of inequality; inequality both in terms of gender culture, and inequality among species. In other words, it's an androcentric, ethnocentric, and anthropocentric system that exerts violence on all these axes from the centers to the peripheries, accumulating benefits in the center and causing outward harm and violence.

So, these types of political systems have been hugely successful and have spread across all continents in an era of climatic stability we call the Holocene. Thus, these embodied inequalities have expanded to all continents, not only to Latin America, and this expansionist process ends up colliding with the biophysical limits of the planet.

I should it make clear that in the history of civilizations, there were many small collapses, so to speak—"small" (in quotation marks) compared to the global crisis we are seeing today. But I think it's precisely because there is an inherent expansionist dynamic in these systems that leads them to collide with the limits of their environment and then collapse. How does all this relate to health? Well, it's worth analysing this from many perspectives. From a perspective of extractive violence, we are damaging the capacity of both ecosystems and populations to sustain themselves, affecting their well-being in multiple ways. Besides, as I mentioned, the process itself generates this system of inequality, this extractivism, etc. Today, as we see how this expansionist process has collided with these limits, some interesting situations arise. For example, since the 1970s, we see how the overall energy return rate of the capitalist industrial system has entered a process of decline, meaning it is no longer growing exponentially but has begun to reach its limit. Interestingly, Nafeez Ahmed, in a book called "Failing States, Collapsing Systems: BioPhysical Triggers of Political Violence," has traced how the increase in violence observed in recent decades, especially in the context of what we call Neoliberalism, is in direct response to that systemic energy stress, where the system begins to feel a kind of suffocation. The system reacts by exerting more pressure on productive bases and starts generating the kinds of reforms that are associated with this period. Thus, the entire system is subjected to collective stress, an increase in violence, and I think it's interesting to connect this with the type of research and new scientific perspectives on health that people like Gabor Maté have been promoting, where it has been shown that many chronic health conditions and autoimmune diseases are a response to the persistent stress, structural violence, and inequalities faced by different marginalized and excluded populations who do not benefit from this system.

0:09:35.5 Laura: Thank you very much, Iván. You allow us to think in terms of systems, in terms of complexity, and also to try and understand the era we are living in in relation to the Holocene and various past civilizations. So, in this sense, I think it's also important to rethink

the categories through which we try and understand the world and generate knowledge. Do you think the concept of the Anthropocene helps or not to understand this civilizational crisis, and if so to what extent? Or do you think we need to think in other terms, concepts, and ideas that allow us to account for the current civilizational crisis? What do you think?

0:10:18.2 Iván: The concept of the Anthropocene has its utility; it's in vogue. It's a concept that draws our attention to a big problem, a problem that is marking an era change. I think that is commendable. Also, interestingly, it's a concept that is currently receiving funding—many projects related to this concept are being approved and seem to be responding to an urgent issue of our times. In my own research project, the concept of the Anthropocene also appears in the subtitle. Although, for some years now, I have been questioning this concept and looking at it from a critical perspective. Why? I think the authors who proposed this name for the new era we are entering did it in good faith. At that time, there was a question of whether climate change was anthropogenic or not, so they were trying to demonstrate that this era change was brought about by human activity. However, something interesting happens when this concept enters the hegemonic cultural matrix—some interpretations emerge that, in a way, end up reinforcing an anthropocentric worldview, the dualism between humans and nature and, above all, the narrative that man, or human beings, but in particular the narrative that *man* is on a path that takes him away from nature, to dominate nature, and even towards post-biological futures, such as the transhumanism movement, which is an extreme example of this worldview. However, this is an ancient cultural matrix, something that authors like Jeremy Lent have written about. In his book "The Patterning Instinct: A Cultural History of Humanity's Search for Meaning," Lent extensively traces this Western worldview—something that needs to be done with caution—but it is this vision that humans are outside of nature and are somehow called to dominate it, becoming a kind of "God-like" all-powerful and omniscient being.

So, the idea of the era of man or the era in which the human being becomes a geological force that rivals or even dominates other geological forces is in danger of reinforcing the narrative that lies at the origin of the discourses that legitimized such expansionist systems based on domination, as we discussed earlier. On the one hand, it's interesting to see how this has a somewhat counterproductive effect, because indeed many people not only accept that we are in the Anthropocene but even view this with a certain optimism, thinking, "Well, there we go, on our way to dominating the planet, and then we can conquer other planets and the universe." However, this is where my second objection comes in, because I believe that the Anthropocene has already ended or is already ending. Why? Because all that force that we can see in geological terms has depended largely on fossil fuels, on the ability of a civilization—a system of domination like many that have existed before—that has been able to globalize its impact, as we are currently seeing, thanks to the use of this energy source, and this energy source is running out.

The peak of global oil production is already behind us—it reached its peak at the end of 2018—and no alternative energy, not even nuclear energy, will be able to replace this energy source. So, the expansionist trajectory will not continue. In other words, we are witnessing the end of this era where humans had that capacity to have such an impact. And not only this—on the way, we have profoundly affected the natural productivity of ecosystems, which

was the basis on which civilizations of the past were built in an era of climatic stability, known as the Holocene, which has already come to an end.

So, not only are fossil fuels running out, but the productive bases of ecosystems are also coming to an end. So, we are talking about a profound crisis that will affect food production as we have known it. Another major marker of this era change is the sixth extinction of species in the history of the Earth. From an Anthropocene perspective, it might seem that this doesn't affect us, "Well, it's sad that polar bears are going extinct, but humans will continue, right?" Well no! Humans are entirely dependent on all the rest of the earth's ecosystems and species. In fact, I share the view of many authors who think that, instead of these techno-optimistic fantasies, we are at a moment where we face the risk of our own extinction. What is the way out? The real way out is to reintegrate ourselves into ecosystems in a functional way. So, I prefer concepts like those of Thomas Berry, who talks about the Ecozoic era, and proposes that, whether with us or without us, the next era will be an era of ecosystems reconstructing themselves after this great impact, which will ultimately be, as we say in Mexico, a "llamarada de petate," which, for our colleagues who are not familiar with this phrase, like the flames from straw that's set alight—so something that burns very quickly, or something that can't be sustained over time.

0:16:26.1 Paola: Thank you very much, Iván. The panorama you provide from the perspective of us as part of the human species is terrifying, but it is also a wake-up call. This wake-up call can also show us possibilities for where we should be heading. In that sense, we would like to ask you one last question for this podcast and for our audience, which has to do with the research project you are involved in. It's a CONACYT project—that is the National Council of Science and Technology. We understand it's called "Pies Ágiles," and it aims to provide training and territorial impact through the study and implementation of agroecological practices at the community level—perhaps to reach the Ecozoic era you are talking about, without the extinction of the human species yet. What are you learning from this experience in your research project? Which not only aims to generate knowledge but also to have an impact on the transformation, in this case, of productive practices at the ecological and agroecological level. And what is the importance of agroecological food in relation to protecting health—not only that of the human species but also inter-species health and the health of the planet?

0:18:03.7 Iván: Yes, thank you very much for this question, because for me it is important to balance things out a bit, right? Because indeed, we are talking about bad news on a quite tremendous scale. So, where is the hope? How can we look forward, towards a positive future? I work with the students of the "Pies Ágiles" program, the first generation of which was made up of almost 300 students nationwide. In one of the first sessions, I presented this panorama of the "civilizational crisis" to them, which, for me, is a concept that seems more useful than that of the Anthropocene because I think it focuses attention on a crisis, on the crisis of a particular political system that stems from these forms of organization we call civilizations. This can be analysed from both a metabolic and an ideological perspective. That is to say, neither is it completely human beings, nor do I agree with this idea of the Capitalocene, because I believe that capitalism is only a more sophisticated form of a problem that is much older. So, what are the ways out if this is the problem? For me, what stands out as the way forward are paths beyond civilization—other forms of political organization, other

social forms that, well, in human history, have actually made up 99% of our history, right? More egalitarian social arrangements, greater reciprocity in exchanges, not only among humans but also with nature, which has often been seen as a subject, and not in this subject-object relationship. So, these “simpler” forms of organization (in quotation marks) can subsist with lower energy flows than, for example, a megalopolis like Mexico City, and they are also more resilient in the face of climate change scenarios or situations of low ecosystem productivity.

So, for me, it is very important to understand this predicament from this systemic perspective, because it points towards local forms of organization in the face of this crisis. These are forms of organization that we can trust in and can bet on—local futures, as Helena Norberg-Hodge and her team say—local economies based on artisanal techniques, low technologies, that consume little energy and use local natural resources, local knowledge, and biocultural diversity. These are all things that we should focus all our efforts on protecting, strengthening, and recovering ways of meeting basic needs with these types of elements which, in countries like Mexico, like Brazil, are some of the most important places where biocultural diversity is preserved globally.

So how can we meet basic needs like food, like health, from these local resources or this local knowledge? That, for me, is the question that our lives depend on. Fortunately, we still have time to have dialogues between countries like we are doing right now. I think focusing attention on these things is what allows us to align collective creativity in this search, where, indeed, recovering the health of ecosystems coincides with recovering the health of populations and towards horizons of greater justice, and also greater equality in the distribution of resources, which—even if they are scarce, as colleagues in the "degrowth paradigm," have shown us—we can redirect the goal of economic systems so that, instead of accumulation in a few hands, we can satisfy the basic needs of the majority. And that can be done with a significant reduction—in metabolic terms—in the consumption of different types of energy resources and in waste production. So, these are the types of utopias that, from my perspective, we can and must pursue in these times.

00:22:43.8 Laura: Well, thank you very much, Iván, for this glimpse of hope. It's mainly about a path we have to walk, that we have to rediscover, and that indeed entails a lot of work. I don't know if you would like to add anything else?

00:22:56.8 Iván: Yes, just to express to this interesting group that you are forming, that I really like the articulation of concepts that you are proposing. You emphasize the links between social issues, health and well-being, and long-term ecological issues. I think the idea of emphasizing the embodied aspect is crucial, in the sense that bodies are things that connect metabolically not only in the social collective but also with ecosystems, with the flows of matter and energy on the planet. So, from that perspective, I truly believe that we can ask very important questions for our times, so I congratulate you, and thank you for the invitation.

00:23:46.4 Paola: Thank you very much, Iván. I think it's important to emphasize the idea of the civilizational crisis as part of the planetary crisis. Or rather, that the planetary crisis is caused by the civilizational crisis. I also think it's important this idea that you raised—that the origin of the problem is human domination of nature and the concentration of power and

accumulation in few hands. Why are these key points? Because these points are the origin of the exaggerated exploitation of planetary resources and natural resources, and their accumulation in few hands, through which human civilizations—which are ultimately human civilizations that have been around for a short time within the history of the planet—have done enormous damage. And well, really, the current situation could be defined in concepts that you used, such as "structural violence," "excessive exploitation of resources," "extractivism," "plunder," "exaggerated accumulation," "benefits for few," "power also for few," the world, the planet that ultimately is based on a conceptualization and exercise of power that is androcentric and anthropocentric—and I would also say that it is Western-centric if we want to put it in those terms.

The idea that human beings can live outside of nature and can dominate it is the basis of this crisis. And you really pointed out that the productive bases of ecosystems are coming to an end, that energy sources are coming to an end, and in that sense, civilization cannot continue in this way—we have reached the limit. Yet, however, we should also put on the table the idea that we are facing the risk of extinction as a human species, because the planet will continue, and not only will the planet continue, but there are also glimpses of some possible alternatives. And these possible alternatives must necessarily involve reducing, evidently, the exploitation of natural resources, reducing the production of waste, radically changing the social organization in which we live, forming much more egalitarian, much more democratic, and much more solidary societies, where nature is not seen as an object to be exploited. And that these alternatives, ultimately, are on a small scale, I mean, the alternatives are at the level of using low technology, having local futures, having an agroecological production that ultimately has to be distributed in a much more equitable way and without exaggerated accumulations that have precisely led us to the limit or to surpass the limit, as we are experiencing today.

So, it seems to me that you also give us an idea that we have to search, we have to be creative, that there are still possibilities and hope for the human species, but that this human species cannot survive if it does not take into account that its survival depends on nature and interspecies relationships. So, with that, I would like to conclude, I would like to thank you for your presence, your participation. It has been very illustrative and tremendously interesting to listen to you. I learned a lot, and surely our listeners will too. Thank you very much, Iván.

00:27:33.7 Iván: Thank you all. With great pleasure, and greetings to everyone.

00:27:39.2 Laura: And from our side, we thank you for listening and invite you to continue reflecting along with us in the upcoming episodes, in which experts from other disciplines and experiences will provide us with different perspectives and testimonies regarding the various challenges posed by the Anthropocene and the inequalities in the health of human and non-human populations.

And of course, if you want to learn more about our project, you can go online and simply write "University College London, Embodied Inequalities of the Anthropocene." There you will find the other materials that make up the project. Thank you very much for listening and for being with us.

00:28:31.9 Juan: This episode was recorded in the studio of the Center for Research and Higher Studies in Social Anthropology, Pacific South Unit, in the city of Oaxaca, Mexico. This interview was hosted and conducted by Paola Sesia and Laura Montesi. The production and general coordination were done by Gabriela Martínez, and the audio editing and postproduction were done by Juan Mayorga.

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