THE YEAR 3542: A FUTURISTIC RETROSPECTIVE

by Bernadette Pest

Welcome to MINDING HISTORY! Each month of this year, my colleagues and I talked to history experts about human mindsets in the era they specialize in. We have covered a lot of ground, or rather time: From "flat earth" as a mythological concept in many early cultures; to supposed "witches" being executed; believing the earth was the centre of the universe orbited by everything else; and up to baroque Europe when washing with water was considered dangerous. Now the year 3542 comes to an end and so does MINDING HISTORY with its 12th and final episode. Today we are looking at the time around the year 2000 – the last epoch in which belief systems were very different from nowadays. I am excited to welcome the esteemed professor Max van Lopez from the European University of Interdisciplinarity.

MINDING HISTORY (MH): Thank you so much for being here professor van Lopez.

Professor Max van Lopez: Thanks for having me, it truly is an honor! And please just call me Prof. Max, like my students. Anyway, it's funny that you have mentioned the idea of a flat Earth. My research group has found out recently that some people still believed that around the year 2000.

MH: You are joking, right? Wasn't the first moon landing in the 20th century? I mean they should have seen the globe from space.

Prof. Max: You are absolutely right, but a tiny minority didn't accept what was obvious to everyone else. The so-called Flat Earther had strange ideas on how our planet "really" looked like. Don't get me wrong, it was just a conspiracy theory from a bunch of weirdos and by no means a typical mindset of that time.

MH: Oh, okay. I guess every era has its conspiracy theories. Let's talk about the common mindsets of the people living about 1500 years ago. What would you say is the biggest difference between humans nowadays and around the year 2000?

Prof. Max: Well, we have to keep in mind that we are talking about a time when approximately up to nine billion humans lived on earth. The highest number ever. So obviously you can't lump everyone together. However according to our research, what's standing out is that most people back then thought they weren't animals.

MH: Hold on... what? I thought the basics of evolution had already been established. Did they think they were plants? I mean nothing against plants, but –

Prof. Max: [laughs] No, not plants, something entirely different. And yes, that's the weird thing, they already had a basic knowledge of evolution, nonetheless they denied being part of the animal kingdom. "Human" was not just the name of their species, it was a separate category. Humans were considered to be above every other species. They thought they ruled the world! Today we say "humans and other animals" on the same level as "tigers and other animals", around 2000 it would just have been "humans and animals". Someone was either a human being *or* an animal.

MH: That's so random. It's like looking outside and saying, "this is not a plant, it's an apple tree". And did you just say that humans saw themselves as the rulers of the world?

Prof. Max: Yeah...

MH: Right! [laughs] Humans ruling the world! If anyone is ruling the world it's fungi! On what basis did they declare themselves non-animals and world rulers?

Prof. Max: There were probably various reasons for this mindset. Religion might have played a role, we are planning on looking more into that. What's for sure is that they didn't know of the existence of most species and they just knew so little about the recorded ones. Therefore, most humans assumed to be the only ones with a differentiated language, complex culture or consciousness of self. They were convinced to be the smartest beings on earth, which means that they used their brainpower as a benchmark when trying to measure other species' intelligence. For example, because monkeys use tools and whales communicate by singing, they were considered to be among the smarter species. But allegedly no one came close to the humans' intelligence.

MH: Oh dear... Because humans can't do much without tools, is supposed to mean that using tools makes us smarter than more capable animals who don't need tools in the first place?

Prof. Max: Basically yeah... So, when other animals navigate over thousands of kilometres or communicate through complex networks, it was all reduced to instinct. But when people developed navigation systems or the internet, that was a sign of intelligence. Humans using tools and especially technology was somehow supposed to make them superior. They thought their lives had a way bigger value than the lives of any other species. By seeing themselves on top of the evolutionary ladder they gave themselves the right to exploit other species. If you don't consider yourself an animal, it is way easier to enslave, encage and torture them. Plants had an even lesser value. Putting it in a nutshell: Forests were destroyed and species wiped out; soil, water bodies and the air polluted.

MH: Obviously there is a big difference between ruling the world and destroying it. Didn't they see the destruction?

Prof. Max: Oh, they saw it. They talked about it. They tried to solve it with even more technology. Part of it was useful and paved the way to our current methods, but other ideas ranged from ridiculous to long-term dangerous. Someone came up with nuclear energy and as we all know, we still have to deal with tons of radioactive waste. We still don't really know what to do with it. Let's not dive into every single disaster caused by this, I am sure history books are covering that. I would rather talk about forgotten concepts if that's all right with you.

MH: Of course, go ahead. Uncovering fewer known stuff is what MINDING HISTORY is all about.

Prof. Max: Ok, let's start with one of my favourites, just because it is so insane: If Earth is beyond saving, why not live on Mars.

MH: I have actually heard about that one before. But I thought it was made up.

Prof. Max: According to a colleague's research, some people really thought Mars could be an option. A few people even went there and those who survived the trip were so disillusioned that all further plans were stopped. Luckily everyone realized that there is just this one life-supporting planet within reach and it's called Earth. MH: Seriously how stupid is using resources for building a life on a lifeless planet instead of preserving life here!

Prof. Max: Exactly. At least most people understood that climate change is caused by humanity. Therefore, a lot of effort went into redoing what had been done to Earth. In principle, this is a valid approach, though under the term geoengineering there were some wild ideas. Inspired by volcanoes, why not pump the atmosphere full of chemicals in order to cool down global warming? Fortunately, they never carried it out. Ok, just one more. Because of the high carbon emissions humans were searching for a way to remove CO² from the atmosph-

MH: Sorry to interrupt you, but what were they looking for? Shouldn't they have discovered photosynthesis by then?

Prof. Max: Photosynthesis was well known. But instead of working together with plants, engineers created high tech machines using finite resources. The argument was that reforestation wouldn't be fast enough. Ironically, they continued with *deforestation*, of all things.

MH: Come on! Why would they do that?

Prof. Max: We assume, there was a huge demand for land.

MH: Oh, the demand was probably due to the human overpopulation, right? You mentioned there were nine billion people around, that's more than twice of today's population.

Prof. Max: Yes, overpopulation was a serious problem. We can be truly grateful that we have not exceeded the 4 billion mark for the last few centuries. However, it wasn't just the huge number of people. It was also the rich countries' lifestyles. Nowadays we are all on a similar level, but around 2000, there were many poor and a few rich nations. The rich people kept consuming more and more stuff and throwing everything away faster and faster. In addition to that, their diet was mostly not plant-based, meaning a lot of land was used to grow food for encaged non-human animals. Eating other animals was handled very differently around 2000, than it is today. Imprisoning them was still legal at that time. But I am not an expert on the history of diets. Some colleges at university could tell you more about that.

MH: Okay, let's get back on the overpopulation topic. Why did the human world population rise to such a high number? Oh, let me guess, contraceptive methods hadn't been invented, yet?

Prof. Max: They had contraceptives, but they were rather rudimentary and the side effects must have been scary. The even bigger problem was that not everyone had access to contraception. This actually brings me to another big difference in terms of mindsets between humans back then and nowadays. Not only did they distinguish between humans and animals, they also made distinctions within the human species. About half of humanity was called "woman" and the other half "man".

MH: Another categorisation? What was that about?

Prof. Max: How it was decided in which category someone fell hasn't been completely figured out yet. What we know is that it was declared right after birth by saying "it's a boy" or "it's a girl". Those were the terms for "man" and "woman" during childhood. Most historians believe that someone's external genitals determined the category.

MH: Again so random! Didn't they realize there are more than two variations? And why should your genitals put you in a category?

Prof. Max: Good questions. Unfortunately, we don't have all the answers. There is still a lot of archive work for my colleagues and me. As far as we can tell, it was known that there are different variations. But people kind of decided that there were only two and if a baby looked different it sometimes led to an operation.

MH: What? They operated babies into two genital variations? I mean that's genital mutilation !?

Prof. Max: Not everyone was operated. But yes, there are medical records that proof that it was unfortunately really carried out.

MH: Sounds terrible. What about later in life? Did people have to show their genitals to everyone they met in order to fit in one of the categories?

Prof. Max: Thankfully not. I mean, just imagine! No, it was written on your identity card and names were also divided into two categories. In addition to that, society came up with complicated systems of external features, but since those systems kept changing over time and varied from culture to culture, it is hard to pin them down. Breasts were usually associated with the category women and beards with men. When a woman had a beard, it was seen as some kind of illness. There were times when wearing skirts or dresses and having long hair was a common look for everyone. At other times and places this was reserved for women. Speaking of clothing, for example in Europe the colour blue was associated with women for decades and pink was a man's colour. Suddenly it was the other way around and people started to dress their babies in the according colour in many different countries. As I said, it is complicated and inconsistent.

MH: It really sounds like there is so much more to find out about that time period. Before, you hinted that those categories were somehow interlinked to the growing human population?

Prof. Max: Right, thanks for the reminder. Wandering off the point usually happens to me when talking about these topics. Okay let's try to narrow it down. Just like thinking humans are ruling over other animals, some people believed that men are born to rule over women. For a long time only men were allowed to do certain things like studying, voting, driving a car, working in higher positions. Women simply had less rights and opportunities than men. Thankfully those power structures had started to crumble and more and more countries promoted equal rights. However, as I mentioned before, for too long many women didn't have access to contraception. Their bodies and lives were ruled by men. They didn't have the opportunity to choose if they want children and how many. And even in countries where contraception was available and everyone officially had equal rights, it was the social norm to have children. Whole state systems depended on that. Choosing a life without children was uncommon and those people had to face social obstacles.

MH: Honestly, I'm so glad I didn't live back then! All this reminds me of a horrible sect, which was discovered in some North American desert a few years ago. The cult was immediately shut down. I can't think of its name, I just remember that their members were forced to have a lot of children. I did research on it hoping to get an interview with someone who had been kept there against their will. After finding out that they were deeply traumatized, I didn't pursue it further because troubling them with questions seemed unethical to me.

Prof. Max: I think I have never heard about that cult. Do you remember anything else about it?

MH: Just a second, I am sure, I have my research somewhere in this folder... Here it is. Let's see. Only a handful people started the cult in 3528. They lived completely isolated from the outside world. By the time the sect was discovered they had dozens of children living under terrible conditions in a small enclosed area. Some adults who had been giving birth in the first years, stated that everything was voluntarily at the beginning, but they wanted to leave with their children when things got more and more out of hand. Then everyone was held with force on the premises by the leader who suddenly divided the people into two groups, "Adams" and "Eves". Everyone was forced to have more children, because of some predestination the leader kept talking about. Ah, here is the name of the cult. The leader called them "Fruitiplynarians".

Prof. Max: Oh, the mythological context actually rings a bell. According to an ancient creation myth, the first two humans were called "Adam" and "Eve", an almighty being told them "be fruitful and multiply". I am afraid the cult leader took that very literally. I hope the leader is behind bars now? I mean we are talking about crimes such as deprivation of liberty and forced reproduction.

MH: Yes, the statement here says that the leader will stay looked up for good. So coming back to what you said about the old belief systems... Like in the cult, people were divided into groups and they couldn't freely choose whether they wanted children. I hope things weren't really as bad 1500 years ago as in the Fruitiplynarians sect?

Prof. Max: I don't want to put humanity around the year 2000 on the same level as the sect. You are right, there are some similarities, but we shouldn't paint a too dark picture of the 2000s: There were already human rights organizations, laws in several countries included equal rights for all citizens. The power structures were problematic, yes, but not everyone was forced to have children. Nevertheless, thanks for mentioning the sect. I will certainly talk to my colleagues about it, because it's alarming that some strange fractions of historical mindsets can still lead to crimes today... I really thought those belief systems are once and for all behind us.

MH: Yeah... Let's hope there isn't a sect around promoting we aren't animals or something like that... Which brings me to a very big question: What do you think, where would humanity be today, if people had stuck to those weird categories? Animal/human, man/woman?

Prof. Max: The answer is actually quite simple: Nowhere.

MH: Not sure what you mean?

Prof. Max: We wouldn't be anywhere, because we wouldn't exist at all. Most species wouldn't. According to what we have found out about the global developments between 1900 and 2050, if people hadn't changed their mindsets – and therefore behaviours – life on this planet as we know it couldn't have continued.

MH: Phew! So, what exactly brought the change?

Prof. Max: There wasn't one single event that changed everything. We probably haven't found out everything yet, but this is an overview of what the historical research has shown so far: Climate change, loss of biodiversity and the threat of pandemics became increasingly present, so that people finally believed the scientists' predictions. There were worldwide protests for equal rights, climate justice and other pressing issues. A first feeling that we are all earth citizens was sprouting and spreading. Finally, most nations realized that instead of fighting against each other, the whole world had to fight for a future. That meant less and less resources were wasted for military purposes; a lot was invested in all kinds of research. The more species were studied, the more humans learned about them and the more illogical seemed the distinction between humans and animals. An increasing number of people realized that we are all animals and after a while the first laws and food taxes were changed, so that diets got more plant-based. It was still a long way until encaging was declared illegal globally, but they were heading in the right direction.

MH: Ok, it seems we got the animal/human categorization covered. What about the genital issue and overpopulation?

Prof. Max: In terms of human overpopulation, the most important turning point was finally establishing equal rights globally: Everyone got access to education and contraceptives. Additionally, birth control methods were constantly improved due to an increasing funding of research. Belonging to the categories woman/man became less important. Having children was no longer the ultimate life plan. People really reflected on it and made carefully considered, personal decisions. Thanks to new super-safe contraceptives, only people who wanted children had children.

MH: Were those developments enough to slow down climate change and preserve biodiversity?

Prof. Max: The first steps were successful, but of course there still was a lot to do. But that's precisely why a lower birth-rate was so important: Even though the sea levels kept rising and infertile lands were extending, the sinking world population meant that climate refugees could still find a new home. In order to safe both climate and biodiversity, various international binding agreements were necessary. For instance, we found a document stating that technical devices must have a very long warranty period and have to be repairable. Another record shows that deforestation was completely stopped by 2035. There is proof of local movements as well, such as cities using basically every available inch for plants. Surely the list could go on and of course there are historical developments we don't know about... The important thing is, most changes probably wouldn't have happened if people had stuck to their belief systems. Even though we all know humanity is still far from perfect, our ancestors managed to compensate at least for some of their biggest mistakes. Everything else is up to us now.

MH: I couldn't agree more and I couldn't imagine a better way to end the MINDING HISTORY series. Your today's explanations showed one more time how change always starts in the mind. Thank you so much for these impressive insights.