

Interview with Dr. Peter Turchin, project leader at the Complexity Science-Hub-Vienna, Research Associate at the University of Oxford, and Emeritus Professor at the University of Connecticut

Turchin's *End Times* Offers New Perspective on “Political Disintegration” in the West

By Japan SPOTLIGHT

Dr. Peter Turchin, author of *End Times – Elites, Counter-Elites, and the Path of Political Disintegration* (2023), is a complexity scientist and a founder of the field of Cliodynamics. Cliodynamics is the study of history using quantitative analysis, which investigates the causes of political and social phenomena, such as the political conflicts between elites and non-elites that is currently posing a challenge to democracy in Western nations, in particular in the United States. (Interviewed on Feb. 12, 2025)

What Is “Cliodynamics”?

JS: For my first question, could you please tell us about Cliodynamics, and in particular its merits in analyzing real politics in our times?

Turchin: History is very complex. It is also dynamic. Things change all the time, economies grow or decline, and states grow or collapse. Because it is a dynamic process, we need to study it using modern scientific methods. I am a complexity scientist, I study complex systems, including human societies. When you study complex systems, you cannot simply use the unaided human brain, you have to arm it with mathematical and analytical methodologies. (By the way, *Clio* is the muse of history in Greek mythology, and *dynamics* is the study of change.) To properly study the processes and mechanisms that lead to change, first we need to translate a variety of verbal theories into mathematical models, because we want to be sure that our predictions that we extract from models follow from the premises. Without mathematics, you will often make the mistake of thinking that your theory predicts something, but it actually doesn't do that.

Of course, theory without data is sterile, so as the second step, we need to gather large databases. Over the past 15 years, I've been involved in collecting a large historical database, Seshat. The next step is to confront different theories with each other using data to decide which of those theories makes better predictions. But it's a never-ending process, we never can get at the final truth. You can only approach it by repeating this process.

JS: Perhaps you can predict the future using a method similar to econometrics with this model?



Dr. Peter Turchin

Turchin: Econometrics is a very good discipline, but human societies are more complex than just the economic side. To understand human societies, we need to include not only economics in our theories, but also politics, culture, demography, and then such influences as climate change and things like that. The trick is not to have everything in your theory, but to have a process that determines which are the important parts and which are less important. Once systems become complex enough, they become unpredictable over the long term because of what's known as sensitive dependence on initial conditions. Even the little actions of some person in the crowd could actually lead to large consequences. Because of this, long-term predictability is

not possible. But I would argue that it is not really very useful to have just predictability of what will happen. We need a different type of predictability, that tells us if we continue doing this same thing, it will lead to a bad outcome.

The next step is to use our theory to predict what we need to do to avoid bad outcomes. That's the useful kind of predictability, and that predictability is quite possible. How a spaceship goes from Earth to Mars is actually a pretty simple problem mathematically, but because little errors accumulate, you have to constantly guide and push it so that it goes in the right way. The same thing with society. We just need to learn how to push it to go in the right way.

JS: Some parameters could be very easy to quantify, while others, like culture, are a bit difficult. How do you overcome those challenges?

Turchin: Remember that as science develops, our ability to measure

things improves. Let's take an example. You have a thermometer hanging in your room and you look at it and say, "Oh, it's 21 degrees centigrade." Today, this seems obvious, but the thermometer was only invented a few hundred years ago. Before that, people had no way to measure temperature, because your subjective feeling of temperature will depend on a lot of things. So of course, measuring opinions and attitudes is much harder. But again, the way we approach it is that we try different things, see what works, and test how well things work. Similarly, we will be able to quantify difficult-to-quantify variables as our science develops.

Usefulness of Cliodynamics

JS: My second question is about what you describe so well regarding what's going on in current US politics. Significantly, there is serious misery in the US, with poor people suffering in particular. Is that perhaps one reason for the political situation today in the US?

Turchin: This is a good question because we've been talking about complex dynamics in an abstract sense. Now let's apply it to understanding political stability and political instability. My group and my colleagues have studied nearly 200 past societies that have slid into crisis and emerged from it. What we observe is that the periods of internal stability can go on for three, four, five generations, maybe a hundred years, roughly speaking, but they always eventually end. Society slides into social turbulence and political disintegration and sometimes outright collapse. The question is why.

What we find is that three factors are especially important. The first is a decline in the well-being of the population. Secondly, there is an overproduction of elite aspirants. These elites are the people who compete for positions of power. And the third factor is the strength or weakness of the state. That has two major aspects. The first is fiscal strength, and the second is the state's legitimacy, how much people believe in the state. What typically happens during good times is that the elites, people with power, get so used to good conditions that they tend to become more and more selfish and they reconfigure the economy in their own favor.

In the US, for example, before the late 1970s workers' wages were going up together with the economy and with their productivity. But then they diverged as productivity and the economy continued to grow, whereas wages stagnated and even declined. That led to immiseration, and this was actually pretty severe immiseration. For

example, the average life expectancy for Americans started to decline a couple of years before Covid. There has been an explosion of deaths of despair from suicides, drug abuse, and so forth. Popular discontent creates one moving force for instability, but popular discontent by itself doesn't overthrow governments. You need organization.

Organization comes from elite overproduction. In the US and most modern countries the governing elites are typically a coalition between the politicians or administrators, and the wealth holders. Because of what I call the wealth pump, wages stopped growing and all the extra economic growth went to the rich. In the US over the past 40 years, we have 10 times as many people with \$10 million or more of wealth. There's a huge overproduction of wealth holders. And similarly, what happens is that the majority of the population feels that it is losing ground, and the more active, energetic, and intelligent people from this group try to escape. And how do you do that? You get an advanced degree. So now we have a huge overproduction of degree holders. Remember, especially in politics, we only have one president, 100 senators, and so on. There are a limited number of positions, but now we have three, four, five times as many aspirants for them.

Some of those frustrated aspirants, not all but some of them, turn into counter-elites. Counter-elites are people who also build power because they are organized, they have networks, maybe they have wealth, they have ideological power, but they are not content with the governing elites. We see this very clearly with Donald Trump and his power network, they're all counter-elites. They are not simple people. They have power, but they have turned their power to overthrow the established elites. That's why the weakness of the state is part of it.

JEF: Would you say that economic development is the source of these counter-elites?

Turchin: First of all, I would not call it economic development, but you have a patently unfair situation where, as the economy grows, the fruits of its growth go only to a small percentage. It's not development, it's distribution. I'm not saying that we have to divide everything equally, but there's got to be some fair process by which the fruits of economy are divided, maybe not equally, but fairly.

JS: If innovation is needed to promote continuous economic growth and development to satisfy the ambitions of a country's elites, what would be your outlook for such innovation in our society today?

Turchin: If you listen to what the world elites say at their gatherings, such as the World Economic Forum in Davos, they say that economic growth is a solution to everything. It's not, because economic growth has to work for the whole population, rather than as it has been for the last 40 years, especially in the US, but more recently in Western Europe and in Japan. We can talk about Japan's economy. It has not been producing for the median or typical worker. In Japan, the median wage has collapsed over the past 20 years by a factor of something like 20% or 25%, if I remember correctly. This has created a lot of misery, and while technology is developing, its results are not making the life of common people better. So, we need better social technologies, we need better institutions. Democracy, for example, as an institution is a very important social technology that helps, but again, there is no guarantee.

JS: You mentioned the expected contribution of democracy to mitigating this challenge. In American society, however, democracy doesn't seem to be working well. How can American society get out of this difficulty?

Turchin: I have a whole chapter in my book on American democracy, which was pretty reasonable back during the period from the New Deal until roughly speaking 1980 or so. But it has turned into a plutocracy, the rule of wealth. America is actually unusual in this respect; it's an outlier if you look at the extent to which wealth holders and plutocrats hold power in other OECD countries. You were asking if a revolution is coming. What happened is the US was in a revolutionary situation since, let's say, from 2020 or so. Now we are in an actual revolution. This is a revolution by any definition; the first hallmark of a revolution is a revolution of the elites. But also, some revolutions just end up with a different set of elites coming to power and the situation returning to the same socioeconomic status as before.

Other revolutions are transformative, the French Revolution was transformative. It changed the regime completely and eventually introduced a very different version of France. This is the declared goal of the MAGA movement. Now, whether they accomplish this or not is an unresolved question, because as you know revolutions are very contentious times. The first thing we don't know yet is whether this movement will be successful. The second question is that we don't know whether, if it is successful, it will actually make the situation better. I don't see the leaders of that movement having a clear understanding of why the US is in crisis. Many of the things

they want to do are actually counterproductive. That's why it's very, very unpredictable, because now we are in a situation where it depends quite critically on the actions of individual people. And that's actually a good thing. It means that if we can figure out what needs to be done, we as a society should be able to figure out how to achieve a better future.

Examples of How to Avoid Catastrophe Due to Political Disintegration

JS: You mentioned some examples in your book that were successful in avoiding catastrophe. Could you please explain those situations a bit more?

Turchin: As I said, most of the time societies during end times end up in a fairly violent struggle. But maybe in 10% or 15% of cases, what happens is that you still have a crisis and the governing elites become quite frightened by it. Then they typically have some prosocial leaders who see that the situation is difficult, and tell the elites that we either have revolution from below, which we don't want, or we have to do reforms, which will be painful because we will have to give up some of our privileges and wealth to avoid revolution. That was very clearly stated by Czar Alexander II in the 1860s in Russia, when Russia was in a revolutionary situation. By doing that, they avoided revolution – well, they moved the revolution 50 years into the future. And that's actually typical. None of the solutions, even a good case, is a permanent solution.

Another example is the progressive era and the New Deal in the US. Basically, the first three decades of the 20th century is when the US avoided civil war. Franklin Delano Roosevelt essentially said the same thing. He told the elites that you have to reform capitalism if you want to keep it. And they accomplished it. These are actually very hopeful examples that show that it is possible for leaders to figure out what to do, and how to solve the problems.

JS: Maybe that means progressive acceptance of reality, that progressive reform could be the answer to avoiding conspicuous catastrophe?

Turchin: Yes, exactly. It's very important not to be caught in your own echo chambers. For example, prior to the elections of last year, the Democrats were calling the American people stupid, saying that the economy is growing and everything is going well. But the journal *Politico* just published an article, and it turns out that the unemployment rate of 4% is misleading because something like a

quarter of people are either in part-time jobs or jobs that are not permanent or paying less than a living wage, so there was real suffering. And if you, as a leader, basically fool yourself, then this is what's going to happen. You will get overthrown.

JS: Today there are some people who think that democracy must be changed, otherwise we cannot solve very critical questions. Some people say that those questions should be left to some wise people like economists or something like that. Do you think that would be disastrous, and perhaps produce many more counter-elites?

Turchin: First of all, there are many types of democracy. And what's more important is that a political system should translate the wishes of the population into policy. Democratic elections are only one such mechanism. Think about autocratic societies like China, for example. I've been traveling in China since 2004, and the last time was just before Covid. It was unbelievable to see the progress in real well-being. And how was this accomplished without any democracy? It's because the Chinese leadership cannot legitimate their rule through elections. They have to legitimate their rule by providing well-being to the people. And they're very sensitive to this. I'm not arguing for autocracy or anything, I'm just saying that the political system should reflect the desires of people, not just elites but with common people included.

Now in US, the system has become broken. It has kept the democratic institutions, but they're not working. What do you do? One possibility suggested is that we give it to technocrats. But the problem with technocrats is how to ensure that technocrats make decisions that advance the well-being of the whole population rather than of a small segment. Who watches the decision-makers? That's what democracy is supposed to do. It's a mechanism for selecting those governing people who will actually do things for the whole population. But once it is hijacked by private interests, by wealth interests, it stops working.

So no, I don't have a ready solution for you. I would only say that it would be wrong to completely give up on democracy. It's just that we need to reform it.

Involving Historians in Trade War Talks

JS: My final question is about the trade war we are facing today. The study of history could perhaps be a very effective way to convince people of the negative

aspects of a trade war. How do you think historians could be encouraged to participate in policy discussions?

Turchin: I think the role of historians is key. However, I would add that traditional history is a great discipline in terms of gathering knowledge, but traditional historians have not done a very good job of translating this knowledge into policy suggestions. This is where we need Cliodynamics, because we need mathematical models to translate ideas. We need to test them to find out what's important and what's not, and then we need to have adaptive management. Speaking specifically about tariffs, there's been a ton of historical work on tariffs, and it is one of the examples where the advice mainstream economists give in the media, at least, is actually simplified and wrong. If you look at the greatest examples of economic upsweeps – the industrial revolution in Great Britain and then the rise of the US – both of those countries started by having a very stiff tariff regime that protected their nascent industries until they became so powerful that they could dominate the world market. Look at what's happening in Russia. Russia has been under incredible economic pressure. This has resulted in a very rapid process of import substitution, which has led to quite dramatic growth. The economy grew by 4% last year, whereas in Germany the economy has declined.

I'm not saying that tariffs are good or anything, it's just that this is where historical analysis is very important because it can tell us when it is good for a country and when it is not. But why are we talking about tariffs? We're talking about tariffs because Trump is using this as a tool. It's not that I'm supporting what Trump wants to do, but the point is that building the tariff threat has changed the behavior of leaders. This is a brutal policy. On the other hand, previous administrations attacked countries. We got into wars in Afghanistan, Iraq, Syria, Libya, and Vietnam before that. So in a way, maybe tariffs are a preferable club compared with a military invasion. So, my answer has several layers.

JS: I see that it's not so simple. You have to think about the historical situations and environments where tariffs are used. Thank you very much for your time, I've really enjoyed the conversation.

JS

Written with the cooperation of David S. Spengler, who is a translator and consultant specializing in corporate communications.