## **Conversations with Bill Kristol**

**Guest:** Jonathan V. Last Author, *What to Expect When No One's Expecting* 

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I. The Baby Bust (0:15 - 34:21)

KRISTOL: Welcome back to CONVERSATIONS. I'm Bill Kristol. I'm very pleased to be joined today by long-time friend and colleague, Jonathan V. Last. We worked together at *The Weekly Standard* for over two decades, I guess.

LAST: Twenty-two years.

KRISTOL: Unbelievable. Good years. And now at *The Bulwark*, you're doing a fantastic job editing that. I don't really do much, except occasionally forward a piece to you, which you improve. And I don't even write the pieces, I just forward ones that come in and you improve them, and that's been terrific.

On the side, somehow while dealing with a million current events, you wrote a terrific book six years ago, I think, 2013, *What to Expect When No One's Expecting: America's Coming Demographic Disaster*. And I thought we could take a little break from Trump and everything else and talk demographics, which are important underlying facts.

LAST: The most important thing in the world!

KRISTOL: Is it? You think?

LAST: Yeah. Basically. Yeah

KRISTOL: Yeah. Moynihan used to say that "demography was destiny." I always slightly repelled by it, but I don't know why. It seemed like it was taking away too much power from us, you know what I mean?

LAST: Yeah. "Destiny" is too strong of a word. What I always say is demography shapes the contours of what's possible, if that makes sense. I think of demographics as like the tectonic plates operating under everything else. And so, you have economics, you have culture, you have politics, all those things happening, but the shape of them is always influenced in a very deep way by demographics.

And you can go too nuts on this, like you can become like a numerologist who's like, "But if you look at the number seven", and you think it's everywhere. But you can't be blind to how important demographics is.

KRISTOL: This book was very well received when it came out and is still in print, I believe?

LAST: Very much so. Buy a copy. Buy seven!

KRISTOL: Let's walk through the argument, which was surprising at the time, but I think widely accepted once people looked at the data you marshalled. And then let's update it six years later and tell them what the whole situation is.

Basically, I'll let you explain the book, not me, but when I was in college and grad school it was the population bomb, and that was going to change everything, and everything was spiraling out of control in terms of the numbers on the planet, and the country, and everywhere else. And that was in the '70s, and what, forty-five years later or so, I guess maybe fifty years later, forty years later, whatever, you wrote this book. And what did you find?

LAST: And I was right. And they were not. Here's what happened: Paul Ehrlich publishes, in 1968, *The Population Bomb* and he says that within a couple years – he is not projecting far out into the future, he's saying just in 24 months or so, hundreds of millions of people are going to starve to death, overpopulation is going to ravage the planet, there's no escaping it, there's nothing we can do. And his book, which is insane – and I would say if you read it, it is just superficially and obviously insane – turns out not just to be wrong in every particular but is wrong at the moment when the exact opposite is happening.

Beginning in about 1966, fertility rates and birth rates around the developed world start falling off a cliff. And all throughout the years, those intervening forty-five years when in popular culture everybody was worried about the population bomb, and too many people, and overcrowding, and environmental disaster. All serious academic demographers were looking at the exact opposite question, which is to say they were trying to understand the full scope of fertility decline, where it was happening, why it was happening, and how far it was going to go. And so, you had this total disconnect between the academic world and the popular world.

KRISTOL: Yeah, but the popular culture really bought on to the Ehrlich thing.

LAST: One hundred percent.

KRISTOL: Even if not quite as insane a version of it. But you think the academic world was pretty clear pretty early that that was not the case.

LAST: Yeah. Very, very clear.

KRISTOL: They just didn't bother to tell the rest of us. Or nobody wanted to hear it.

LAST: Nobody wanted to hear it. Paul Ehrlich was on The Tonight Show. Johnny Carson would give over a whole show to Paul Ehrlich, who, it is always worth repeating was not a demographer; he was an entomologist. He studied butterflies, so his entire worldview was based around the dynamics in butterfly populations. And everybody just sort of accepted that. And it fed into the calamity of the 1970s. Everything felt like it was going wrong in the 1970s, and this felt like part of that.

KRISTOL: Ok. So, what's the truth?

LAST: The truth is that beginning in the 1960s across the developed world, birth rates started going down, and this has continued basically unabated from 1968 until today.

KRISTOL: Now birth rates can go down while population continues to go up, just to be clear.

LAST: Correct. Correct.

KRISTOL: You have a huge built-in, so to speak.

LAST: There's a momentum. What you have to see is demographic momentum eventually petering out. And the golden number is always 2.1. So, the total fertility rate, which is the number of children that the average woman has over the course of her lifetime, if that's 2.1, your population's going to remain stable. If it is above that, population grows; below that, population declines. The way population momentum works is you have to wait for the last above-replacement-rate generation to die before the numbers shrink. Does that make sense? So, it's growing, and growing, and growing.

KRISTOL: If you had a higher fertility rate in the '50s and '60s, you're going to still have population growth in absolute numbers in the '80s and '90s because they had more kids.

LAST: Correct. And all those people are still alive.

KRISTOL: And there's another echo boom of those kids, I guess, also, but at some point you tip over and the actual fertility rate starts to dive.

LAST: Correct. We've been below replacement in America now since the early 1980s, late 1970s. When I wrote this book six years ago, the fertility rate in America was 1.97. Today it's 1.80. That's not a huge decline, but it's a serious decline in a very short time. And the context of it is important.

KRISTOL: That's in six years it's gone from -

LAST: Yeah.

KRISTOL: That's a big decline.

LAST: It is.

KRISTOL: Of course these numbers sound like they're close, but .17 on a basis of 1.9 is ten percent, roughly. Which is a pretty big change in less than a decade. When nothing much was happening in a certain way. It's not like we're in the middle of a depression.

LAST: The optimistic view when I was writing the book was fertility rates are artificially low right now because of the Great Recession, and once we have an economic rebound then people start having kids again. What's really marked and important about this is that the decline happens while we're in economic expansion in the last six years. And that is the context –

Again what I suggest in the book is all the available evidence suggested that the glidepath that we are on in America, and frankly in the rest of the world too, is continued decline, and we don't have any way of knowing where and when it stops. And we have no reason to think that there's a rebound coming. There is no evidence to suggest that there is a rebound, where most models sort of go and assume that eventually everybody snaps back to 2.1. And that turns out to not have any basis.

KRISTOL: People thought in the '80s and '90s we're in a little bit of a lull, but it's going to come back. And it didn't come back.

LAST: And it didn't come back.

KRISTOL: We're not really at all, you're saying. Just to get clear what this number means, 1.8 means that all in, all women including some women who have no kids and some of them who have six or whatever, the average woman in the United States in her childbearing years is going to have 1.8 kids, fewer than two kids.

LAST: Correct. Correct. And the other half of this, and we can talk more about immigration later if you want, the other rosy part of the scenario – So six years ago when I was writing this, the people who thought maybe this wasn't so bad, this was a valid argument: we have a whole lot of Hispanic immigrants in America, their fertility rates are higher, so they'll carry us through. And the other thing we've seen in the last six years is tremendous drops in fertility levels from Hispanic Americans who were at 2.35 when I wrote the book and are now under replacement; they're now just at 2.0 today.

KRISTOL: That's the total for Hispanics. Immigrants probably a little higher.

LAST: Total immigrants probably a little higher, but Hispanic-origin immigrants, such a huge percentage of the total foreign-born population of the U.S. And you could even say that it is the Hispanic drop which is really responsible for the lion's share of the total drop in the U.S. And this is something which frankly nobody saw coming. If you go back twenty years, fertility projections in the U.S. were predicated upon the idea that recent Hispanic immigrants in subsequent generations would stay at more or less the same fertility patterns of their parents. And that has not been the case. What you've seen is they've assimilated very, very quickly in terms of following the fertility patterns of native-born Americans.

KRISTOL: Has that generally been true in the developed world? My sense is that everyone assimilated faster than people thought to the modern world, the "modern world" meaning low replacement rates.

LAST: It's true almost everywhere. This is the bigger story about this when you look outside our borders, is that this is happening almost everywhere. I think it's 97% of the countries in the world are on a declining path of fertility. There's a handful of places typically in high-conflict areas like the "Stans", Uzbekistan, Afghanistan, a couple countries in Sub-Saharan African region which still have elevated fertility rates that have not fallen yet. But everywhere else, from China, to Germany, to Japan, to Greece, to Brazil, to Mexico, Iran, everyone else's fertility rates are falling. And it is a global phenomenon which has some common causes which are the same country-to-country and some unique causes which are unique to the situation politically, or economically, or culturally.

KRISTOL: If it's happening everywhere, it sounds like it's modernity thing, a technology thing, birth control and so forth, a culture thing.

LAST: It is.

KRISTOL: Women not thinking of themselves primarily or uniquely as mothers, et cetera. A modern medicine thing, where if the kid survives you don't have as many kids. You don't need to, so to speak.

LAST: Yeah. The single biggest driver in the decline in fertility is the decline in infant mortality, which is a great thing. Nobody thinks this is bad. But you see as infant mortality suddenly tightens up in the early 1900s, you see again, people just everywhere stopping having as many kids because you don't have to have ten kids to get six of them to survive.

KRISTOL: And people don't stabilize at six kids. Infant mortality, that shouldn't change it if people are being rationally calculating and they say, "Okay, if six out of ten used to survive, now it'll be six out of seven or six out of six, and so I'll have six or seven kids." But that's not actually what happened. That was like an interim moment.

LAST: Exactly. So, what we have then is the large-scale factors, the things that affect basically everybody: higher rates of women's education. The more education women get, the lower fertility rates get. Availability of contraception. Concentration in urban areas. There has, as long as we've been measuring fertility patterns, everywhere whether it's in the Roman Empire or early U.S. settlements, the people in the countryside always have more kids than the people in the city, whatever city and density means at that moment.

So, all of those things are true, but then you have particular causes, for instance, in the Soviet Union. This was something that was unexpected. When the Berlin Wall fell, you would have assumed, or maybe

you wouldn't have, but I would have assumed that Russian fertility, which had been depressed all through the Soviet Era would increase. Instead it dropped precipitously. Almost nobody could have predicted that.

You have the one-child policy in China, which drove Chinese fertility down from already a rapid decline to truly bad levels. And even though China has now, since I wrote the book, has done away with the one-child law. It was funny, one of the gripes of the book was that there was always environmentalists and foolish people in American public policy who praise China's one-child policy without realizing how bad it was for China. And in the interim China realized how bad it was for China and has done away with it. And it hasn't made a difference. We're not seeing any increases in Chinese fertility.

KRISTOL: Just walk me through the numbers briefly both in the U.S. and the world because you do have this built-in "lag", I guess you would call it, which has meant that population has gone up in this country, and has gone up around the world, and has gone up in most countries in the world, I guess, for the large majority. When do we start to tip over? Let's just say if you leave aside or just hold immigration constant, I guess, in different places, what is our situation first in the U.S.? We're at 330...whatever we're at.

LAST: We're at 330 million now. It is difficult to tell when our population tips over because of immigration. We have such massive amounts of immigration that it's hard to know. And that is something which has not been constant over the course of our country's history. We've had high immigration periods in American history and then low immigration periods.

KRISTOL: But without immigration?

LAST: Without immigration, we would be tipping over in about 30 years.

KRISTOL: Some built-in growth, so to speak.

LAST: Some places are already in contraction. Italy is losing people year on year. Japan is losing people year on year. That's really something to think about. Japan more, because Japan has no immigration to speak of. Italy has some immigration from Albania. Russia is losing people year on year.

KRISTOL: Germany maybe, I think.

LAST: Germany has a lot of immigration too. Germany is bringing in this sort of historically legacy from Turkey where they brought in a lot of Turks, but they've also brought in a lot of people in the Syrian refugee crisis.

The big, big picture of this, the models the EU uses say that we think by the end of the century world population, so in another seventy years or so, world population tops out. World population tops out somewhere between nine and twelve billion, and then starts declining.

KRISTOL: And EU population, what you call the developed world will have topped out earlier?

LAST: Much earlier. That's correct.

KRISTOL: Really Europe starts to shrink.

LAST: Yes.

KRISTOL: Now we'll get back to the question, why do some say it's a disaster and why is it bad, necessarily? That's sort of a separate question. What are the real effects and implications of that? Now what about the massive countries, China and India, where are they on this trajectory?

LAST: China is going to contract sooner. Now, China has been sub-replacement since about 1980, so they've got another 30 years or so before they contract. But China has all sorts of stuff built into its problems.

KRISTOL: So really it takes like sixty years of sub-replacement to get to diminishing numbers?

LAST: Yeah, you have to wait for that last generation to die. But China has an extra problem, which is they have a huge gender imbalance. The Chinese, because of the one-child policy, were widely practicing sex-selective abortion, where if you could only have one kid there was a huge society preference for sons. Once ultrasounds were available, it was a lot of "find out if it's a boy or girl, and if it's a girl, abort the kid." In nature, you get about 107 boys for every 100 girls that are born. In China it's about 125 for every hundred girls. So, this is not a small imbalance, it's a huge one.

And what this suggests is over the course of the next 150 years or so, you're going to have a huge population of unmarriageable men. That is, in an authoritarian country, a dangerous thing to have.

And I don't know when you want to talk about it, but when we talk about why all this stuff is dangerous, it's not dangerous in isolation. If it's just America, or just Greece, these things are fine, you can manage your way out of them. There might be some unpleasantness, there might be some sluggish growth, but it's basically fine. The problem is that when you have fertility declines happening everywhere almost at the same time, and some of these places are stable societies, and some places are very unstable. Everything becomes a powder keg. And you can see your way towards all sorts of really bad outcomes like for instance in China.

When I think of China and the foreign policy challenges China represents to us, the thing that strikes me is how precarious the situation the regime is there. And you already have the labor pool shrinking a little bit, you have no pension system to speak of, and because of one-child, they're going to have about 300 million retirees but with no social security system and no children to take care of them. What happens to those people? Do they all just become homeless? Do they get sent out to the countryside to die? This is something that a country that which did the Cultural Revolution, I think, would probably consider a policy option. But what sort of instability does that create? Everything becomes very uncertain and you need a lot of luck.

KRISTOL: If you're Japan, you can decide, I suppose, well not decide, but you can accept the fact that you're just going to be a steady state or slightly shrinking, or even not so slightly shrinking population.

LAST: Radical shrinkage in Japan.

KRISTOL: But you're wealthy, you handle it; your money goes to taking care of old people but whatever, it's an accounting question, more a budget question than a fundamental question. Maybe at some point it does become fundamental. That does get to the broader implications.

India, for another place, when I was in college and grad school, that was just "endless population, would lead to terrible things, out of control."

LAST: Yeah, they're heading the same direction as everybody else, and again, they also have sexselective abortion problems. They have more men than they know what to do with.

KRISTOL: Even the poorer parts of the world? Africa?

LAST: Most of Africa, not Sub-Saharan Africa.

Again, one of the things you see, and this is on the credit side of the ledger, one of the good things you see is that countries with declining fertility rates tend not to be especially belligerent. So, if you've got a population with a total fertility rate of 1.7, all things equal, you tend not to be belligerent. Places where the fertility rate is very high tend to be places like Yemen or Afghanistan where there is substantial, long-term

conflict. And you could even see this as literally making enough sons to run wars. This is kind of how things are there. So, yeah. Great. We're doomed.

KRISTOL: So, it all tips over, gradually over the course of the next whatever years. Because it does feel to me like it's a huge difference when you actually start shrinking the population as opposed to slowing the rate of growth of the population.

LAST: Yeah. And that's because of what happens when you shrink the population. It's important to understand that the undergirding to all of this is the age structure.

KRISTOL: Yeah, I was thinking we need to get to that next. So, how does that look different?

LAST: If I had a whiteboard, I would do this for you. We have what are called "population pyramids", graphs which show you the population in bands of age. And in a normal, let's just call it a steady state society, a 2.1 fertility rate, it's going to kind of look like an obelisk. You have the same number of five-year-olds, as ten-year-olds as twenty-year-olds. In your thirties, you start going in a little bit because some people start dying a little young. In the fifties, sixties, seventies, it starts going in, and then it really kind of comes to a point as more people die off.

When you wind up with sub-replacement fertility rates, your pyramid gets inverted. And so, you wind up with fewer people down at the bottom.

KRISTOL: And just to be clear, for most of history, and world history, and U.S. history, the pyramid was pretty...?

LAST: For most of human history, the pyramid was at an angle like this.

KRISTOL: Yes. Many, many, many more young people than old people.

LAST: Yes. We had total world population in 1750 was about 800 million people. And what happened, the real population explosion came from death control, which is just the idea of taking life spans and move them out from an average of about 35 to where we are today, where it's like seventy or so. So that is what has changed all the total population numbers. When you look at the inverted population of graphs, you see again, fewer people in those working years, in youth ages, and then lots more people at the top.

When you look at, say, Japan, it really does look like an upside-down triangle, and you wind up with many more people in their seventies, eighties, and nineties than in their teens and twenties. And that points the way to all the problems, like what happens to your economy when you have so few people working. What happens to your pools of capital? Young people need to invest capital in sort of aggressive ways because they have long time horizons. Old people are just drawing down capital. What happens with Social Security? Or whatever your country's version of Social Security or Medicare is.

KRISTOL: Or even cultural dynamism of markets in some ways. For better or worse, maybe some people don't might not like it, but the whole modernity seems too dependent on the youth having a lot of buying power to drive change, whether it's technological or cultural, or popular music, or whatever. That starts to change pretty radically if there are many, many more 70-year-olds than 15-year-olds.

LAST: Correct. And the rosy view of this has long been, "Well, don't worry about it because technology is changing so fast the old people are still going to be able to be economically useful for longer." And I understand the roots of that, as you are no longer an industrial society, you could say, "Okay, well a seventy-year-old might not be able to work in a steel stamping plant, but they could work as a computer programmer." Except it turns out to not actually work that way. If you have any 70– or 80-year-old-friends in your life that you maybe would not think would go out and learn to code. It just doesn't work out that way.

KRISTOL: So, you think it leads to economic slowdown? And there's a lot of evidence of that, I suppose?

LAST: Tons of evidence of this.

KRISTOL: You want more people coming into the workforce if you want to have a growing economy.

LAST: Yeah. This is just the nature of the beast; almost by definition, growing economies have more people in the workforce. And you see this in Japan, for instance. Japan is an industry model for this because they hit their tipping point so early. They were sub-replacement by like 1950. And because they have no immigration, they are like the perfect little lab experiment for what everything looks like. Remember all the stuff in the popular press about Japan's lost economic decade in the '90s? We're now in the year 30 of the lost economic decade, and everybody understands this is not a lost decade; this is just what a demographic winter looks like from an economic point of view.

KRISTOL: So, all that talk about the Central Bank making this mistake?

LAST: That turns out not to have been the case.

KRISTOL: Demography is fundamentally important in this respect, you think?

LAST: Yes.

KRISTOL: That's interesting. We're all going to go in that vague direction of economic slowdown?

LAST: Probably. Yeah.

KRISTOL: They have lots of innovation, I suppose, sort of, in Japan? Robotics.

LAST: They do. It's a different kind of society. So, you see like cafes. This is literally something you see: you see former daycares turning into anti-aging clinics. Because the other piece of this, of course, is that as people get older, the society is more atomized because you don't have extended families. When you only have 1.3 kids or 1.5 kids, it means that most kids are only children. There are plenty of parents who have no children whatsoever, and that changes society too. Very few aunts, very few uncles.

Japan has seen an explosion of "lonely death syndrome", which is where old people die alone in their apartment and nobody knows they've died because they have no connections. And there's a whole industry which has sort of sprouted up in Tokyo to go and clean out apartments where old people have died and been dead for two months with nobody knowing it. And that is, again, you could say, "This is the free market responding to it, and see, everything's fine." But on the other hand, I'm not sure this is an alternate realty that we really want to embrace.

KRISTOL: Is there any history of societies dealing with this, of sort of negative growth? When medicine was much, much worse, we did have plagues; people lost a quarter of their population.

LAST: No.

KRISTOL: We don't have much historical evidence to, sort of, what this kind of society culturally, economically, politically looks like?

LAST: We have seen population decline a few times in human history. It has never before been accompanied by peace and prosperity; it always looks like the Dark Ages, or the Middle Ages, or the fall of Rome, or something like that. It's possible this time could be different. I think we should never blind ourselves – this is why I rebel a little bit to demography being destiny. It's true that this time could be different, but it always makes me nervous to hang the hat on that.

KRISTOL: On the one hand, it's fewer males of war-fighting age so maybe that's good? But on the other hand, just saying other aspects of it do have a feel of instability and a kind of decadence which doesn't just go quietly and gracefully in the night; it self-explodes?

LAST: Yeah. And you wind up with misery. Again, it is one thing to confront demographic troubles in a rich country; it is very different to do it in poor country. If you are in Nigeria, or some parts of South America, or many parts of India, that is a human tragedy at a scale that we, I think, don't want to think about.

KRISTOL: It's so interesting because of course it's the opposite of what we thought all these years, which is: "if only they could get the population growth under control, they could actually accumulate capital and educate people. But if you have nine kids, that's just keeping you at the poverty line forever." In a way you're saying it's more the opposite?

LAST: The problem is it's an overcorrection. One of the things when people complain about me, they say, "You want me to have six kids." Look, it doesn't matter what I want. I don't want anything. In terms of developed countries that have adopted welfare-state-like plans to have social safety nets to take care of people, you cannot make those plans on a declining population. Maybe you don't need a growing population, but you at least need a steady state.

If you could just keep fertility around replacement, maybe you could stand up some sort of system, that maybe the taxes are higher than we would like, maybe the benefits are lower than we'd like, but you can make rational calculations that are sustainable over the long haul. You just can't make that when fertility rates are going in the opposite direction because again, age pyramid messes everything up for you.

KRISTOL: Which leads to the obvious question: how much ability do we have to influence this? These things seem to be kind of driven by things beyond normal political control. No one I know of decided it that I know of in 1967, '68, "Let's tip over the fertility rate here." You can look back and say this happened, that happened, and birth control, many things happened that led to it, but how susceptible is it to either public policy changes or even massive cultural changes? Or is this stuff, once it starts to happen, have a certain self-reinforcing character?

LAST: The answer is both, and I'll unpack that a little bit. There is an extent to which birth rates serve as a ratchet with public policy. You can push birth rates down if you want to. China showed they could do this. India showed they could do this. Singapore showed they could do this. If you are an autocratic government who is willing to kill people, and burn down their houses, and have them fired, and fire them from their government jobs, you can force people to stop having babies.

It is not clear that you can force them to have more. There have been a lot of attempts both from developed democracies, ranging from Scandinavian countries to France, to even parts of Asia, to autocratic countries like China and trying to incentivize childbearing. And that is a very heavy lift. It's easy to tell people, "Don't do this." But it's hard to say, "Go make a baby right now."

KRISTOL: You're a little skeptical if we quadruple the child deduction, and have childcare for everyone, and have every mother-friendly policies in terms of parents, parental leaves, and all the obvious kinds of things that people in both parties, that's sort of a left/right thing, right, we're talking about. You don't think that's unlikely to make a big difference?

LAST: Unlikely to make a big difference, might make some difference; certainly, worth experimenting.

KRISTOL: Some difference matters, I suppose.

LAST: Some difference matters at the edge. If we were at 1.4, then some difference wouldn't matter. But where we are, 1.8, some difference would matter quite a lot, actually, if you could get some marginal movement, that might be good. I'm very much in favor of experimenting what I like to think of as bank shots.

And we don't think of college costs as a pro-natalist measure, but I think college is a reasonably large driver because it hits on both sides. Huge college costs and student debt force people to delay family formation at the beginning. And then once they start having kids, it's an engine governor telling them, "Boy, this is too expensive. You're going to have to send this kid to college one day." So, attacking college costs. Again, it doesn't sound like pro-natalism, but it might have some effect.

There are areas like that that I think are worth expanding on. I get very nervous about saying, "You can't do this" because you can always not do it until you do. This is why policies exist. But in the main, big cultural forces of any kind, historically, tend to be resistant to policy. Again, if you would go back to 1946, you would have never been able to predict the baby boom.

KRISTOL: It wasn't like we radically changed policies in ways that led to people having kids.

LAST: No. American fertility had been declining literally since the first census was taken in 1800. So, a steady decline until all of a sudden we hit four years and it doubles, and then it stays doubled for a full generation. That was out of nowhere, and it happened not just here but across much of the developed world. Nobody can predict an inquisition. You can't predict whatever that was that got into the water and into the culture. And that isn't to say that it could not happen again.

But what I think of is this: the most promising thing is what the demographers and sociologists call "aspirational fertility." So, when you ask people in a perfect world, "How many kids would you like to have?" And here in America that number's been pretty high; it's been about 2.4 since the 1970s. It has been almost unchanged, even as actual fertility rates have gone down.

So that suggest a real gap between achieved and aspirational fertility. I would look to try to fill that gap rather than try to convince people to have kids they're ambivalent about having.

KRISTOL: The way to fill the gaps would be to take away some of the disincentives that now cause a couple presumably to say after the first kid, or after the second kid, since you're 2.4-aspirational that means almost have the people have three rather than two and a half whatever percentage? And so that's a college cost issue, and a childcare issue, and a housing issue, I suppose.

LAST: And just a family formation issue. We are now the first period in American history where the largest growth of births is coming from women over the age of 30, which is crazy. And so, this is what demographers call "the tempo effect". People want to have kids but they feel like they can't do it. They keep pushing things back further and further. And this has been enabled by technology. You have ways to have kids now when you're 40, or 41, or 42 even.

The problem is that the technological forces which have allowed people to have babies later do run up against some hard limits. The economic forces which have been pushing people to not have babies earlier run up against no limits; those are essentially unfettered.

## II: Demography and Politics (34:21 – 1:11:03)

KRISTOL: What about groups in society? One has the impression that different groups have different birth rates? This discussion so far has sort of abstracted from that, and how much the overall trends swoop over all groups and tend to make them more like one another. How much do you still get big differences between secular singles in New York and the Evangelical couples in Kentucky?

LAST: Huge differences. Yeah, huge differences. And we're not talking about extinction. It's always young people saying, "Oh, what? So, we're all going to run out of humans?" That's not the way it works because everybody's fertility is not constant.

In any population, you're going to have some subgroups with high fertility rates, and those people eventually inherit the earth. In the U.S., you can break out fertility by educational attainment, you can break it out by income, you can break it out by race, you can break it out by geography.

The single biggest driver – one of the parlor games I play is when I go out and give about demographics, I will tell somebody, "Let me ask you three questions, and then I tell you how many kids you have." And the first question I always want to know is: how often do you attend religious services? Because that is the single biggest driver, bigger than education, bigger than race, as to what your fertility patterns are going to be.

KRISTOL: Higher? More religious, higher.

LAST: Higher. And this is a new phenomenon because the patterns used to be sectarian. It used to be that Catholics had more kids than Protestants who had more kids than Jews. The sectarian differences have essentially all converged and now it's the religiosity differences that are really, really telling. I mean, 1.6 is the total fertility rate for people who don't go to church at all. People who go Christmas and Easter are at about 2.1. People who are once a month are a little bit higher than that, and then the people who are at services once a week are around 2.6.

You see very real patterns that I think wind up being suggestive of what you meant when you said, "Are there cultural differences at play here?" Because I think that's what religiosity is really about. It isn't about the textual commandment of any one religion; it's about a cultural view of one's place in the world.

KRISTOL: But even among the religious, that's gone down; the overall remains down.

LAST: Yes. Correct.

KRISTOL: But it's still much higher?

LAST: Still much higher.

KRISTOL: So, it has big effects on the internal composition of a society's politics?

LAST: Eric Kaufmann, a very smart professor at Harvard, wrote a book about this, *Shall the Religious Inherit the Earth*, in which he's looked at all the data. He looked at the pass-on rate of religion from parents to kids.

KRISTOL: If the kids of the religious remain religious?

LAST: Right. The pass-on rate is amazingly high. If you're a parent who wants your kid to be religious, you can do that, pretty much. The attrition rate is actually surprisingly low.

And then the fertility differential between non-practicing and practicing. And what Kaufmann suggested was that he thinks it's possible that we are kind of living in the high water mark of secularism in America in that we're likely to become a slightly more religiously orthodox country over the next fifty or sixty years.

And it's funny, people on the left don't want to hear that and I don't fully understand why. My buddy, Phil Longman, who is one of the smartest guys in Washington, who wrote one of the best book about demographics, and who is himself a progressive lefty, wrote an essay in *Foreign Policy*, I think, saying essentially that patriarchy is going to win unless liberals have more kids. And he was practically stoned for it. What he was saying, "Hey, if you listen to NPR, that's great. You're my kind of people. Why don't you have one more kid?"

And I make that case when I go out and talk to people. I say, "Look, I love my progressive friends. I wish there were more of you, have another kid." And they find that a very disheartening message.

KRISTOL: And it's probably not being listened to?

LAST: No. But that's okay. I don't want that on my head.

KRISTOL: But I'm saying, generally speaking, there's no evidence of much of a reversal? Is there evidence of a reversal? Is there a little bit of, "Geez, I don't want to be a part of a society that's shrinking"? Any kind of – I'm really struck by it, I had not realized since I read your book when it came out obviously, and we talked a lot about it, and we haven't talked that much about it in the last few years: 1.97 to 1.80, even if it's mostly recent immigrants assimilating to the American norm, that's a pretty big drop, isn't it?

LAST: It is. It's a really big drop.

KRISTOL: And I guess we can't just assume that it doesn't keep going – the assumption one wants to make is of course it'll stabilize somewhere. But what is the truth about that? Is there some place when we look at Russia, or Greece, or Japan where of course ultimately it sort of stabilizes? Or how low can it go, I guess is the question.

LAST: People used to think that what they called "lowest low", which was a term of art, was anything below 1.5. Since then, most of Europe is around 1.5. If you look in parts of Asia, you see 1.3 or 1.1. And I think Singapore went sub-1 to 0.9 for a year or two.

You have to understand the total fertility rate is sort of a statistical construct, it's like a snapshot in time. I always tell people don't get hung up on the absolute numbers of these things, we're always just looking at big trend lines.

The real concern is actually about what we were talking about with aspirational fertility because there are places now where aspirational fertility is below replacement level. And that is suggestive of the real – hide away, bad things are coming. Because when people don't even want to have replacement levels of kids, then the chances of having a rebound effect are almost nil.

But it also suggests that this is a norm which can re-anchor. Sociologist, for generations, thought that two would be the lowest that it could possibly go; the plurality preference for two kids was just natural; we were hardwired for it. And about ten years ago, we first saw some evidence in a couple European countries of sub-replacement like 1.9, then 1.7 as aspirational fertility targets. And we've seen more of that. We see it creeping up in a couple places in China. And what that suggests is that if you spend your whole life in the lowest low in society, you begin to think that that is ideal.

KRISTOL: This is an empirical question: has the decline slowed down? Has the curve kind of started to stabilize over the 30-40 years both in the U.S. and around the world, the developed world as a whole or is it not slowing down?

LAST: The rate of decline in the developed world has slowed down because it's so low.

KRISTOL: Yeah, it's not going to be as fast from 1.7 to 1.6 as it was from 3.2 to 3.1, right?

LAST: The rate of the curve in the developing world is still quite steep. Look at what's happening in Iran and what's happening in Mexico. Mexico's fertility rate is now peaking below replacement. The Mexican fertility rate will be below the U.S. fertility rate at some point, which is an amazing thing, which nobody on the right can believe; they think it's impossible. So, everybody's ox gets gored in this and nobody gets away clean.

KRISTOL: Speaking of Mexico, that raises the question of immigration, which comes in some of these demographic debates some. How big a difference does that make? Both the immigrants themselves of course add numbers, and they have a high propensity, you're saying at least the first generation, to have kids, so that adds a few extra numbers.

LAST: Immigration, it's tough to talk about it because the politics of immigration are so fraught. I always try to just say, "Let's put politics aside and look at the data." We have been lucky from a demographic standpoint to have immigration. We have about 40 million foreign-born people in the U.S. right now, about 25, 27 of them here legally, the rest illegally. Those folks have higher fertility rates than native-born Americans do. The undocumented people have higher than the documented people. You see, weirdly enough, relative differences between the immigrants and their sending countries, depending on the country.

What I mean to say is the people coming from Mexico, for instance, tend to have a higher fertility rate than the people in Mexico themselves. This is not true with say, Vietnamese. People coming here from Vietnam have lower fertility rates than the people who are staying behind in Vietnam, which are again, just, I think, evocative of how much of this is cultural. These things have deep cultural sources to them as well.

One of the things we look at is that our total fertility rate has been buoyed by all this immigration, which is good. Again, just as an objective measure, whatever costs and problems you want to say, because there is nothing for free, and I'm happy to stipulate to some, if not most, of them.

The problem is that those people as we said earlier are assimilating in their fertility patterns very quickly, which means if you're going to keep things close to the 1.8, 1.9 mark, you've got to add more people every year. Do you see what I'm saying? It's like when you're five games into the Major League Baseball season, you can change your batting average by going three for five one day, but by the time you're at September three for five isn't going to make a difference; you're going to have a whole bunch more at-bats. And the same is true with total numbers of immigration. And for the people who say, "Don't worry, we'll just rely on immigration", the math doesn't really work.

Eventually you wind up at a point where you've got to be having 19 million new people every single year. And even if everybody wanted to do that, just logistically you can't build a new New York City every year; you've got to build like schools, and roads, and sewers, and water treatment facilities. It just isn't even practical even if it were desirable.

And then there's a second problem: there's a supply problem as well as a demand problem, which is historically when countries go sub-replacement, they cease to be sending countries for immigration. So, if you have 1.5 as your total fertility rate in country X, you are unlikely to send a high number of immigrants anywhere; people just tend to hunker down.

KRISTOL: Or maybe the opportunities are good enough in that country because there's not that many people competing for all these jobs and positions. You think, "I'll be fine here", whereas if there's a huge lot of 18-year-olds, or 15-year-olds, or 10-year-olds, you go. Or parents send you off to somewhere more promising, right? I got the impression that was the case with a lot of American immigration, Irish, Italians, Jews from Eastern Europe, and so forth. That's interesting.

What about the politics? You've been sort of saying, you do say in the book it's a disaster. And I guess we've touched on that, but walk me through that a little more. Because I guess one could say, "Look, if this is going to change, we have to live with it." We have ways of living with things that people didn't have 50 years ago, let alone 500 years ago.

So, is it really beyond belief that we could stabilize at three hundred and, I'm making this up, eighty million Americans and maybe slide down to 370 in the next ten years after that, in 2090. And that's not going to change anything much, and the same in other countries. And we'll peak out at ten billion people in the world, and that's still a heck of a lot of people, and it's a lot more than there were. And that is impressive how much just the built-in previous growth still generates big numbers.

LAST: Yeah, right. The demographic momentum.

KRISTOL: The world existed when it was seven billion, and it exists now, I don't know what it is now, seven or eight or something, and it's going to go back to seven or eight. Why is that so terrible? Why are you being, not alarmist in the sense the numbers are correct, but alarmist in the sense that this is somehow a disaster? It's a cyclical thing, and we'd never had this cycle quite before, of course we've never had nearly this many people in the world before. Maybe it's okay to kind of –

LAST: It's just a question of getting from here to there, if that makes sense. From my perspective, all the dangers are in the transitions.

KRISTOL: I see. A world of eight billion is not worse than a world of ten billion. It's just different.

LAST: The danger is going from ten billion to eight, a period of global instability. Again, as I said, and I should say it again because I can't underscore this enough: if this was just an American situation, if this was just Mexico, if this was just Japan, I would be totally sanguine about the entire thing. I'd say, "Okay, great. We're going to reform Social Security and Medicare, and it's going to mean that a bunch of older folks take a haircut, and it's going to be unfair to them, and a bunch of younger folks have much higher taxes and that's going to be unfair to them, and economic growth will slow a little bit, but fine, whatever, nothing really is going to change."

The problem again is that it happens everywhere kind of like dominos, and that some of those places are themselves inherently unstable, like Russia, like China, like the Middle East. So, what happens if you have demographically caused instability in Iran, which is a thing we have already. You have demographic instability in China, rising power with a giant nuclear arsenal and a burgeoning blue water Navy. You have democratic instability in Russia, an autocratic country which has designs on middling in every place else in the world. And all of this is happening while you are going through the internal political instability of trying to rationalize your entitlement system.

KRISTOL: Just to be clear, instability, it could be cultural – just people aren't used to this distribution of population, it turns from the pyramid into to a diamond or into a reverse pyramid, and that has its own stresses and strains. But really, I think what you're saying, if I'm not mistaken, is just on a pure economic matter, people who are working are supporting more people who aren't working, and you're not having an added number of people into the workforce, which has all kinds of positive implications basically just in terms of actual gross numbers, producing more, but also in terms of presumably more people?

## LAST: More innovation.

KRISTOL: More innovation. If you have five million people who are twenty years old, some small percentage of them are going to make some technological breakthrough. And if you have two million people, you're just going to have fewer presumably.

LAST: Yes. This is literally what labor economics is about. Esther Bozarps [phonetic] won a Nobel Prize for this. Because innovation is additive, you don't have to rediscover everything every generation, the more people you have, the more innovation you get, and so there are advantages. Throughout all human history, the innovation stuff has tended to outweigh the costs of more people.

KRISTOL: When you talk about political instability, what you're mostly capturing – not entirely because there might be independent cultural factors and also distributions of the gender, and the sexes, and men and women – a lot of what you're capturing is just pure burden on working people compared to more dependent people, a smaller percentage of working people, which creates its own strains, and entitlements, and social services.

LAST: And on politics. Look at American politics. Look at European politics. The thing I got wrong – I was right about almost everything in the book, certainly about all the demographics – I was wrong about the politics. My view, and I literally said this when I wrote the foreword to the updated paperback edition, I said, "We amazingly enough have reached a moment where the left and the right in America have just decided they're all in for the free market. They don't care to what extent the market makes it harder for

people to have families. They don't care to the extent the free market depresses fertility rates. They just want to go out and buy their new iPhones, and they're happy with it. And there is no brake on this, and that's a shame."

And like six years later, we have the left in America "rushing headlong" is too strong but at least flirting with actual socialism. And we have the right in American more than actively flirting with nationalism. And both sides have essentially rejected the free market to a degree which I never imagined. And I feel like the guy who said to the genie, "Make me irresistible to women." And I turn out to – poof – and I look like Brad Pitt but I'm a eunuch. Like this isn't what I wanted when I said we should be a little more populist and open to trying to tinker around to make capitalism and the free markets more open to family life and people having kids. This isn't what I was asking for.

KRISTOL: And why not? Apart from particular dislike of X populist or Y socialist, but why isn't this a good thing in the sense that people now could have more of a discussion about what kind of society we want to have, and what are the burdens on childrearing, and not just have a pure kind of, "Let the market rip and don't worry about anything."

LAST: Because, and maybe I'm wrong about this too, it seems to me that illiberalism is tied very, very tightly to these notions, these anti-free market notions on both the right and the left. And people like me, who wanted a sort of more populist politics in America, thought that if we got a more populist politics in America, it would be run by Yuval Levin. And it turns out that not only is that not true this time around, but maybe it was never possible. Maybe that's just a delusion. And that when you go towards populism is it always run by demagogues, and socialists, and aspirational authoritarians. So that's a problem.

KRISTOL: Yeah. And it probably isn't even particularly good for population growth if you just get down to that.

LAST: Well, it never has been historically.

KRISTOL: You get the worst of all worlds. You get the illiberalism without the benefits, you might say, of checks on the market or family-friendly policies.

LAST: Yeah. When you look at the nationalists today who talk about demographics, they talk about it in the most idiotic way possible.

KRISTOL: Say a word about that, I'm sort of interested. Because one might superficially think they read your book, and they're learning a little bit from you, and you should be sort of pleased by some of this even if they're a little bit simple-minded.

LAST: This is me with my monkey paws. I want everybody to pay attention to my book, and they do. But they only pay attention to the parts that are not especially helpful unless you put them in context.

Yeah, I think that's true. They come out thinking, "Why shouldn't we have essentially socialized daycare?" This is like the Ivanka Trump thing, which I am fine with as an expression of values, but you just shouldn't expect it to deliver results. If you really care about results, then you've got to experiment in very targeted ways. And you have to look for bank shots and you have to pay attention to what other countries have done, and what has worked here and what has not worked. And we don't get any of that. Instead it was all like virtue signaling, we want to show we're good for the families, so we'll do X.

And the more progressive left, I think, has done almost the same, except that they can't say out loud that they – they can talk about wanting to make life easier for families, but because of environmentalism, and there's still an environmentalist hold on the party, they can never say out loud, "Hey, we want to make sure that women are allowed to have as many babies as they aspirationally desire to", which again is a weird thing. I would have thought – Elizabeth Warren's *The Two-Income Trap* almost says this explicitly.

KRISTOL: This is a book she wrote 15 years ago?

LAST: 20 years ago, I think. Fifteen years ago.

KRISTOL: I think you wrote about it.

LAST: I did. It's a great book. It's like the most conservative book written in the last thirty years. And I'm actually surprised it hasn't come up in the campaign. But she talks about finding ways to reform the market so that women can have the families they want to.

And I don't think that sort of language is welcome in liberal circles right now, purely because of just latent environmental concerns even in a moment where *The New York Times*, two or three years ago, went and did this huge expose like, "Turns out Paul Ehrlich was Wrong about Everything." And when even *The New York Times* has given up the ghost on that, it's really just the bitter-enders who are holding on to the population explosion stuff.

KRISTOL: And I imagine, one could imagine, if one could get beyond the current political moment, maybe on the right and maybe on the left too, one could imagine a grown-up discussion of the more moderate efforts to temper some of what markets have been doing.

But it does also sound to me like those moderate efforts, college costs, housing, availability of housing, school costs, especially not public schools but parochial schools and others, maybe we'll discuss that in a little bit. There's a lot of stuff that could be tinkered with to be more family-friendly or more larger-family-friendly.

LAST: Absolutely. Absolutely. If you had come to me 15 years ago before I wrote this book and said, "What is the way to incentivize people having more kids?" I would have given you essentially the Rick Santorum king-for-a-day version of, "Well, you can give people baby bonuses, you can give them tax breaks for having kids, you can set up government-sponsored 401ks where they match parental savings," and that sort of stuff. And it turns out very little of that actually works.

But what you could do, what we could at least try to do to see if it works is to attack the positional goods like housing. Housing is incredibly expensive because it's all driven by public education. Your real estate costs are entirely dependent upon the quality of your school system. This is one of the things Warren talks about in her book. She was very anti-teacher's union back then, and she says partly we've got to break the teachers union so that we can wind up disconnecting the quality of schools from the cost of real estate. That is the single biggest thing we can do to help families. I think she's probably right, at least in the diagnosis, if not in the solution.

So, those things I think could wind up being pronatalist; maybe not, you have to look at the evidence. But I think those are the better ways to attack the issue rather than just: you have a third kid, we're going to cut you a check for ten thousand dollars. Or we're going to set up universal daycare across the country so that working moms can work to cover the cost of having their kid in daycare for eight hours a day.

KRISTOL: Yeah, I think there are all kinds of structural reasons young people looking ahead think, "Gee, if I have more than two kids, you're talking about big burdens whether it's housing costs, college costs, daycare."

LAST: The costs are insane.

KRISTOL: There one could imagine policy changes because presumably those things are – you can deal with them; those are not just intrinsic to modern life; we have a certain structure of higher education and college costs that could be changed.

LAST: They are.

KRISTOL: And you're saying that could change non-trivially?

LAST: I think so. But then there is the stuff that is more immutable, and it's the cultural stuff. And this is what gets to religion. I became, after I wrote the book, kind of obsessed with this religious angle in all of this and wondering why it was that religious observance is what was the predictor of fertility and not sectarian stuff. Because I don't think it is that religion X says "be fruitful and multiply" so that's why people who go to church do it. I think it has a lot more to do with the view of one's place in the cosmos.

KRISTOL: Yeah, and a kind of longer perspective.

LAST: And here I would want to defend the young people. There's a certain type of conservative who is obsessed with this stuff who says, "The problem is that the kids these days are so selfish that they can't delay gratification."

And I think that's sometimes true but often very wrong. Think about what our high-achievers look like. They work incredibly hard in high school because they want to get into a good college. They go to college; they work incredibly hard because they want to get into a good law school. They go to law school; they're busting their asses because they want to get a good clerkship or a good summer internship. They don't even think about engaging the real world around them until they look up and they're 27 or 28 years old, and it's not because they can't delay gratification or they're living a decadent lifestyle. They're living a very highly focused achievement even almost an ascetic lifestyle where they are focused on doing something.

The difference is that the thing they're focusing on doing is deeply internal, and it's a view of the world where the world sort of begins and ends with your journey on it. And you don't really owe anything to the people who have come behind you, and you don't really have any duty to the people who come after you. I think that's the big worldview difference between the people who practice religion and the people who don't. They feel they have a debt to the future and an obligation to the past.

And that is where it comes in the sacrifice of having kids. It's not a ton of fun. It's an incredibly demanding job. It's a hard job. Before I had kids, when I would hear people talk about what a hard job it was I would roll my eyes and say, "I'm actually a pretty smart guy. I think I'm going to be okay." I thought they meant hard like in the way that organic chemistry is hard or differential equations are hard. But it's not, it's hard in the way that digging a ditch is hard. You can't outthink your way past raising kids. You can't just do it smarter than everybody else and cut 30% off the effort. It's just hard.

KRISTOL: Right. I am sort of freaked out by the drop in the last six years because these are times of a relatively decent economy, a lot of immigration, I think, a lot of foreign-born people in the country, so presumably getting some plus from that. And of course, they haven't quite assimilated yet to the lower American rate. And yet the cultural forces were so strong that it wasn't just that we stayed level, we really dropped down kind of a lot. I've got to come back to that.

And that presumably is the cultural change of people ages whatever the child bearing years are, 15 to 45 or something like that, which again, I totally agree with you. It's not that they're selfish or decadent really. It's just a different time horizon and different priorities.

And I do suppose that the sexual revolution combined with feminism has made a massive difference. Because it was the women in particular who could put a check on the male, a hundred years ago, "careerism" if you want to be simple-minded about it, and said, "Wait, wait. We have to have a family." And it was a certain division of labor which allowed this to happen.

And obviously with two-income families, as Warren pointed out, it's harder. People can try to tweak things to make it less hard, but you're in a different world than you were when this was taken for granted, I suppose, and gender roles were in a sense apportioned accordingly to a certain view of things.

But I don't think we're going to reverse feminism personally. And unless you have a comeback of let's call it that religious point of view, by which I don't mean actual necessarily religion but let's just call it a

longer view of what you are here for and what you might want to leave behind, it's a little hard to see how much this changes. It's hard to see how it changes fast anyway. It's hard to see how it changes, period.

LAST: It is. But as I said, nobody expected the baby boom either.

KRISTOL: Let's lose with that. What was that about actually?

LAST: The baby boom seems to have been about the war. They literally had just been away at the war, they were faced with existential end, and they came back and, "Let's just live life now." I'm not saying this is going to happen. I'm not saying this is likely to happen.

KRISTOL: I think it was the Depression and the war. Don't you think? My impression is from talking to people from that generation is there was a 15-year period, 1929 to 1945, America was different a little bit than other countries where people basically thought everything's falling apart. First it was we can't get a job, and then we have to go migrate someplace and work very tough jobs, then things don't seem to be getting any better. Oops, 1937, another recession, back to where we were. And then the world's blowing up, and then war. After I suppose that 15 years, the psychological rebound must have been such –

LAST: Yeah. Think about this. We're living through, I think, a real moment in America, with what has been referred to as "The Great Awokening", the super progressivization of American Youth. And at first I thought this was something happening online. I've become in more line with the view that this is actually a real movement that we will look back on as being a real thing.

It is not crazy to think that it's possible that the adult expression of this will be a return to family life and a sense of, "Hey, we are really concerned about the world around us. And the best way you can make a change is have a family, which is a positive force for the world, and raise them, and improve your one little corner at a time." And so, it's not crazy to me.

KRISTOL: For now. But the way you change the world one little corner at a time is not by putting more burden on the world, having more kids, and using more fossil fuels. It cuts the other way.

LAST: For now. These people are all like 18-years-old right now, and they think the way to change one corner at a time is to be on Twitter or Instagram. Again, not crazy to think it's possible when these people are 28, 29, 30 years old, they decide, "Actually, I just met this great girl or this great guy, and I really like my job, and I feel like I'm more enlightened than my parents were, and I think we could be really good parents, and raise a couple of kids, and make the world a better place."

KRISTOL: "Woke", the term "woke", I guess, I've never looked this up or really researched this, but as an African-American slang, a media component, which has now migrated into our culture. But really, "awakening" literally it does imply –

LAST: A religious awakening, yeah.

KRISTOL: Which is sort of by contrast with enlightenment, I always thought. Again way back, I don't know how the eighteenth, nineteenth century how much these terms were thought to be in contrast, but enlightenment is kind of a belief: you study, you learn, you know, Jefferson, science, the progress of science is enlightening us all, et cetera. And awakening is sort of a little different, it's more you wake up to a religious experience. And if the future is to be woke, maybe the religious side will become stronger as opposed to the environmental or climate change.

LAST: And again, it doesn't even have to be religious. It could be people who view it even in a secular humanist way. Can you get there from secular humanism?

KRISTOL: Do we have much evidence that that's ever really happened much?

LAST: Or it could be the robots take over much sooner than anybody anticipated, and all this becomes a sideshow to Skynet having become aware and us fighting for our lives.

KRISTOL: What about that? You actually know quite a lot about the tech stuff. Two minutes. Where are you on the perspective of machine learning sort of liberates itself from – I do think the population decline does put quite a lot of pressure on, or rewards even more, technology breaks of that kind. And it accustoms us to depending on that too.

LAST: Yes. And the combination with the software and the hardware is, I think, worrisome. This is where the Andrew Yang Universal Basic Income conversation becomes a conversation I think we actually should have in America. And you don't have to believe that Skynet is the future to be concerned about what the impact will be on automation, robotics, and machine learning, and advanced intelligence. For us, I think the best-case scenario is just that the transition takes a long time.

If it happens over the course of 40 years, you can make small adjustments on the fly. If there is a big breakthrough that means everything changes within a decade, that's when you wind up with dislocations and real problems. And in a democracy, the downstream effects of those, you can't just say, "Oh, that's just for one section of the population. That's just for truck drivers." That's not how representative democracy it works. If one large group of people has a problem, they become everybody's problem.

KRISTOL: It's hard to see how that leads to, "Hey, let's have more kids." It would seem more obvious it would lead to, "Oh my god, who knows what the future looks like? But the one thing it doesn't look like is an easy future in which to make a living or in which to plan ahead, so I think we'll just hunker down." Don't you think? And there's some historical truth to that.

LAST: I do think so. Yeah. In times of war. People stop having kids most of the time. For places that are in continual warfare that is not the case, but if you have a country where you are in hot war for five years, people just don't have kids for five years.

KRISTOL: And depressions.

LAST: And depressions will do the same thing.

KRISTOL: That's a little worrisome because we've had growth. I come back to the fact that in a time of growth, in a time of pretty high immigration, we've managed to –

LAST: Yeah. You're not supposed to run around saying we're doomed, but I think we're probably doomed.

KRISTOL: What an appropriate note to end this conversation on. Jonathan Last, thank you for taking the time and really for putting so much thought into this. I don't know if you should write another book, but you should certainly write kind of a where we are X years later because I think this conversation raises a lot of other interesting questions that you are more than capable of dealing with.

LAST: "I Was Right: The Jonathan Last Story."

KRISTOL: That'll be good. Yeah, that's always a good title. I'm sure the publisher will like that. Sell like hot cakes. Thank you for joining me.

And thank you for joining CONVERSATIONS.

[END]