

## **Interview**

## Surveillance Capitalism: An Interview with Shoshana Zuboff

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SSC: Your thesis about surveillance and capitalism is a very wide-angle approach to questions that relate to surveillance. And, you cast your theoretical net very widely. You're arguing for a new stage of capital accumulation and comparing this with the kinds of transformations that Marx, Weber, and Durkheim were looking at in the late 19th and early 20th Century. Why is now the time for such comparisons? And for such a fundamental theoretical and empirical intervention?

**Zuboff:** Can we play with this a little bit because, I'd probably set it up a little bit differently? And, so, let's see where we find the convergence. Back in the early to mid-90's probably people started talking about "information capitalism"... to a certain extent, as the result of Castells, who argued strenuously that information capitalism was not a structural shift, not comparable to the shifts from agricultural to industrial society, but simply using digital technology to do the same thing, only faster and more efficiently. My reading of this piece of history in our field is that he said that authoritatively. And there was very little mainstream debate about that. This idea seemed to hold sway.

There were other thinkers at the time who did articulate very different perspectives. There was Tessa Morris-Suzuki, who wrote an incredibly prescient piece in mid-1980's. When I read it for the first time, maybe five years ago or six years ago, I was just knocked out by how insightful it was because I felt like I was working along very similar lines. She anticipated something, and as far as I can tell, we're seeing very little, if any, credit for her insight. She anticipated companies who had extensive digital capabilities. Essentially, lifting social information for free and commodifying it for profit, and how easily that could turn to concentration. But, you know, from the little bit of research I did on her, I think, she's now a scholar of Japanese studies. This was not a field that she pursued. There are one or two others. Another one is Sue Curry Jansen. She also wrote a really interesting critical piece on information capitalism back in the 80's.

When I wrote *The Age of the Smart Machine*, in the last chapter of that book, I wrote about division of labour and division of learning. And I thought the whole book had been structured around the dilemmas of knowledge, authority, and power. I felt like I had made it clear that this was a politically explosive occurrence. It was happening throughout the economic domain, the production domain. And this was setting into motion a new fight over knowledge that would be decided by the economic and commercial choices that people made, in the face of this explosive new event. And so, I was fascinated over the years

by how little people really picked up that challenge—I mean, in our community of scholars. There was lots of scholarship that grew out of *Smart Machine*. You know, there was a department created at LSE [the London School of Economics] around the social study of technology.

But it really didn't go toward Political Economy that much. I'm not saying there's nothing, but I began to pursue this on my own. And at that point... I had small children. So, I decided what I'm really going to do is just write about capitalism now and just see what sense I want to make of this in this context. And, that was a book that ended up with an unfortunate title of *The Support Economy*, which is a whole story in itself.

SSC: Why was that unfortunate? What would you have rather called it?

**Zuboff:** Well, actually, my original title was *Alone Together*. And, I had arrived at that title, years earlier, based on my beliefs that *The Lonely Crowd* was the best book title ever. My image in the book I was writing was that people had been abandoned by institutions. Anyway, they said it was too abstract, no-one would understand it. We had this big confrontation, and I will say, I caved, out of just sheer fatigue and frustration.

Anyway, so nobody wanted to read about capitalism. That book came out in 2002. Yeah, there was the dot-com bust, but it was all financial capital, and no-one wanted to talk about capitalism. And I was writing that we need a conversation about capitalism. No-one would pay any attention to me. It was really extremely frustrating.

Then I went back to work on it, and I began actually doing field work and interviews, a lot of them in the UK, and that's when I first started developing my thoughts around "surveillance capitalism," although I didn't name it surveillance capitalism until 2007. I had a lot of material developed on this, and I was poised to publish in 2009/2010. Then my house burned down in 2009, and very little of my material was backed up. So, basically, I lost all my work, except for what I had in my head. I mean, all my work, forever, going back to high school, whatever. You know, we just lost everything. Our house just was cremated. So, by the time I could get back to work, there was a lot of new phenomena. And, so, in a way, it was taking what I already understood but now building it up from the ground again.

I'm saying this to you in a kind of personal narrative because the book that I'm writing now would have obviously had different content, but some of the key ideas were the same. And I would have liked to have published this ten years ago, or five years ago. But that wasn't in the cards for me for the reasons that I've stated.

I think that the key thing here is that Castells was dead wrong, that that wasted a lot of time in our field, convincing people that this was no big deal, that I believed from the beginning, from the early 80's when I began this work that this was—read the forward that I wrote to in *The Age of the Smart Machine*, and you know, my first night interviewing the new Linotype operators who have gone through the switch from the hot type to cold type on *The Washington Post*. I spent my nights on the graveyard shift with those guys, interviewing them for a couple of weeks. I believed at that point that it was a structural shift from industrial to information capital and that it had this layer of consequence. I wrote it then, the way I knew how and felt was important. I felt it was important like taking a tape recorder into a factory in 1848 and getting that down before it vanished so that we would have it. And, that's really what compelled me. But it was always in the context of this kind of structural shift.

I believe that as digital capitalism began to emerge, what I've described as market forms that are inconceivable outside the digital, exploiting, leveraging the capabilities of the digital to do something that could not be done outside of that milieu, but also, as I've said repeatedly, can't just be reduced to the technical. So, I think, as this digital capitalism has been coming on stream since the early 2000's, there

have been different strands, different emergent possibilities, and that out of those possibilities, one has emerged as dominant.

I think, it has a specific biography, which has to do with the time and place, during the dot-com bust, at Google, with what I call impatient capital, venture capital, that was not only generally impatient, but in 2001, as everybody was crashing in Silicon Valley, there was a very specific urgency, and the boys at Google were essentially given an ultimatum: you find a fast way to monetization, or this is just going to be another nice try. Doesn't matter how good your search engine is. And, they had only recently come to appreciate that they had this other capability, that they had this data exhaust that had predictive potential to it. And, they started just like a little project team, trying to figure out how to repurpose this stuff that had been stored as waste on their servers.

So, anyway, there was a specific biography, and there was a convergence of time, and place, and capital, and emergency, and this thing came together. You know, just like I've written about, there was a day in the Ford Motor Company—this was in 1913—there was a day when those engineers looked up, and they looked at each other, and they knew that they had like broken through to the other side. You know, high volume, low unit cost. A new logic, a new economic logic that had never existed before. I'm fascinated by these historical specifics because I believe that there are moments when there are roads not taken that could have been taken, and they weren't. And, there are interesting reasons why they weren't.

So, you had, at one point in time, you had Apple breaking through into very new territory, with iPod, iTunes, in 2002/2003. Those were the same years that these folks at Google, these young men at Google, figured out that they had a tiger by the tail. And, they ruthlessly drove that and institutionalized it. They saw its larger projection in a way that no-one at Apple did. And, so, they were able to drive what they had toward institutionalization and, also, keep it secret so that they didn't have competition until the IPO, when finally the world learned about this extraordinary methodology that they had developed between 2002 and 2004 when there was a 3,485% revenue increase.

Then, you know, the rest is history. Sheryl Sandberg, the Typhoid Mary of surveillance capitalism, brings it to Facebook, after you know, Zuckerberg sort of had a feel for it. Tried to do it with Beacon, fell flat on his face, too much public pushback. She brought the techniques. She taught him how to do it. And, that was around 2007 because, I was at the conference in California, where they announced this.

So, what's my point? You know, my point is that the long wave of information capitalism as being a structural reformation, I think, that's a long wave that's been cresting, and cresting harder, and cresting harder, for decades. But, surveillance capitalism itself, I'm arguing, was discovered at Google in 2001/2002, tested, and elaborated, and institutionalized, and grew from there. And, that because—I do appreciate Schumpeter, and I do appreciate the illusionary view of capitalism—I think that, as in biological evolution, you know, there are lots of mutations occurring all the time. Every day there are millions, billions of mutations occurring. And some mutations are selected for further propagation, and some are not.

So, there were competing mutations, let's just say, competing variations, and surveillance capitalism in 2002/2003 was the one that was selected in this evolutionary process because this is not natural selection, this is unnatural selection, institutional vectors of power that have to do with venture capital and its aims, the very hyper characteristics of venture capital in that dot-com bust moment, in that milieu. So, this mutation won the artificial selection lottery. And it violated even the Google boys' own principles, you know, that had been clearly stated and committed to just a few years earlier. But they were desperate, and above all, they were competitive. Above all, they were competitive...

There were many other options on the table at Google at that time for how they could pave a road to monetization, many other options. Those would have required a longer period of exploration, and trial,

and error, and eventual institutionalization. But they found this thing, and it worked, and they never looked back...

But where information capitalism is a structural reformation, comparable to what Durkheim and Marx and Weber were bearing witness to, I'm not prepared to say that surveillance capitalism is that kind of structural reformation. Surveillance capitalism right now is the dominant form of information capitalism because it has given everyone a short cut.

But, I say, very explicitly, you know, this is like an evolutionary turn, and I think it's a dark turn, and sometimes evolution takes a turn that hits a wall. You know, I use the metaphor [of] the toothed bird. I think, I used it in the *Journal of Information Technology* article too. So, this could be a toothed bird. And, if we do have collective action, and if we do create law, and if we do get a hold of this thing, you know, it could pretty easily become illegal, which would make it a toothed bird. It's not going to become a toothed bird on its own. It's going to become a toothed bird because of a response from civil society and democracy.

So, I'm hoping that it doesn't represent a structural reformation. Because, I draw out the scenario for that. In my book, I talk about the form of power that is produced by surveillance capitalism. Because, I'm very worried about the fact that people talk about like, digital totalitarianism, and I think people have gotten hip to the fact that this is not Big Brother. This is not the Panopticon, blah, blah, blah, but how do we characterize this form of power, you know? Just saying, well, "To lose control," it's not enough. It's like saying "the knowledge economy" or when Daniel Bell wrote *The Coming of Post-Industrial Society*, well, okay, but that doesn't tell us anything.... I want to find out, "What does that really mean?" And, I think, we have the same responsibility. It's not enough to say, "Okay. It's control. It's modulation." No. What does that really mean?

I write about this as a specific new form of power; I call it "instrumentarian power." And I define it as the instrumentation and instrumentalization of human behaviour, for the purposes of modification and monetization. Instrumentarian power. And, I write one chapter, where I'm specifically contrasting [it] to totalitarianism and instrumentarianism to show how profoundly different they are, you know. Like, instrumentarian power does not want your blood or your sweat. It just wants the data about your blood and your sweat and the kind of social relations that that produces. And, then, I have a chapter about these social relations, and I identify what are the social relations of instrumentarian power, and I kind of reverse engineer those from a lot of these guys at MIT who are doing some pretty insane work. Specifically, people like Alex Pentland. Social Physics. It's extremely pernicious. Pentland publishes a paper called, "The Death of Individuality." No-one says anything. It's like, "Oh, yeah. Death of the individual. Please pass the salt."

How is this happening? Because, we are becoming so habituated to the implicit social relations of instrumentarian power. This is an enormous threat. I deconstruct this, and I show, sort of word for word, how Pentland reproduces *Walden Two*. Because, instrumentarian power is the fulfilment of Skinner's vision for a completely instrumented society. Skinner's vision, when he died, he died with this hole in his heart because his vision did not yet have the technological underpinnings to bring it into existence, because that was what was going to save civilization. Pentland cribs *Walden Two*, basically, word for word. It's shameless, right? It's pretty freaky. I could put up paragraph for paragraph, you know. Never mentions Skinner once in his book. Never once.

Anyway, this instrumentarian power is the logical consequence already being constituted by surveillance capitalists, for this shift that I was talking about yesterday: it's not economic; it's social. You know, it's not division of learning in a factory somewhere. This is a new principle of social ordering. They dominate it. They know. They decide. They decide who decides. And this is producing a new form of power. And this is the internet of things, and connectivity, and sensors, blah, blah, blah. It's all of that, so, a "Big

Other." It's got this material infrastructure, but it produces a form of power. And that form of power, in my view, has not been adequately named. And it's not enough just to say, "It's control."

I've spent a lot of my life, just trying to parse this out. And, my point here, what got me going on this, was to say that I feel like I've been living with what the consequences will be if this is not a toothed bird. If this actually comes to be, the principal modality of the structural transformation. But I am still hoping that that is not the case.

**SSC:** There's a lot in that answer, which is great...

**Zuboff:** I feel like, you know, this happened on our watch. I feel a tremendous sense of responsibility. And, this is not the world I want my kids to be living in. It's not the world I want their kids to be living in. And, I feel, I feel the weight of it, as you can see.

**SSC:** I'm going to pick up just where we left off. That is the structural transformation. I was wondering if could you could lay out what the consequences of surveillance capitalism would be, or could be, or where would you see the most damaging areas, in terms of social inequality?

In terms of democracy, I found it very interesting what you were saying about, if you look at this in terms of a division of learning, and how so much of that is market, it's private, it's not contestable because it is removed from the public. If you could lay out: what do you think? Where do you see the consequences? What are the consequences for democracy, right, as this sort of collision plays out?

And, third—I know this is a lot—what are the spaces of resistance? And, what complications, in terms of resistance, would you anticipate?

**Zuboff:** Well, the last one is the most fun. So, let's say social inequality. Alright, so I feel like we got on this boat, on the internet, this was going to be a solution, or at least a resource, for some of the dimensions of inequality. Certainly, there was a hope that it would be, that income inequality would be there, but even more broadly than income inequality regarding social participation, the ability to have a sense of control over one's own life, to have enough information, and access to information [so] that I can make informed choices, vis-à-vis experts in my life, who are telling me something has to be one way, or another. So, these are other dimensions of inequality that we fully expected to see improvements. And, I think we have seen improvements along many of these dimensions. So, I don't want to belittle that. It's like search, search on the web is a good thing, and nobody wants to go without that. I certainly don't.

But, specifically, surveillance capitalism has taken this in a new direction because by having exclusive capabilities, the apparatus that they're in control of, gives them exclusive capabilities to have access to behavioural surplus. I have access to the web through Google, or any other search engine now, but I don't have access to behavioural surplus; only they do. And, the only way you really get access to behavioural surplus, if you're not one of these internet companies that's constituting it, is by playing in their markets. So, there are people who want to study this who just take out ads. People are actually going and becoming advertisers in order to really see what kind of data do I get access to. So, the only way you really get access to it, if you're not part of the small group of companies that are constituting this terrain, is to play in these markets that they've created.

So, this is an enormous source of social inequality. Again, my language for that is the division of learning... I can find out a lot about the worldwide web, and lots of things that I want to research, and fantastic. But only they can see these behavioural signals, whether it's at the individual level or the organ level or the device level or the population level or the planetary level. Only they can do that.

And, democracy.... the way I make sense of what has happened... is that... there are companies who have a lot of information. And 9/11 happened, and government quickly understood, these intelligence agencies

quickly understood, they wanted to get access to that information. They were only figuring this out in 2001, 2002. They really didn't have this enormous capacity yet. And, whatever they did have, they really weren't letting on, as far as I can tell. But nonetheless, there was an interest in nurturing these young internet companies, Google being a prime target there, for what they might be able to produce. There are various sources that identify close links between the Department of Defence, DARPA, and some key Google actors. In my view, and I looked into a lot of these sources, but in my view like, there wasn't enough triangulation of the sources for me to feel comfortable, like really being able to say, "You know, this is fact." But, there's a lot of anecdotal evidence.

And I'm just looking at it more broadly and seeing a pattern. I've called it surveillance exceptionalism. The idea that the intelligence agencies, however much they did hands-on nurturing, and incubation, I think, we need to know more about that. We need to triangulate that and tell that story. But, in the meantime, there are good sources on this: the trips back, and forth to Silicon Valley, developing those relationships, understanding what they were doing, figuring out what they could use, figuring out what are the capabilities that are being developed there that we [the American intelligence services] can avail ourselves of? Because they were being developed there where they were free of constitutional discipline. And, therefore, we can avail ourselves of these things. Because, we want to really make sure that we don't get law that stands in the way of this. You know, law would be extremely convenient for us. So, any kind of regulatory conversation that begins to happen in congress just doesn't get any purchase, because, at that point, the government does not want to inhibit these developments.

And, by 2007, you have the NSA publishing this document. They're reverse engineering Google. And, they're saying, how do we be more like Google? We need to be more like Google. And, they're coming up with all these interesting things about how Google search works. And, how the analytics work. And because it was as late as 2007 that they're really trying to internalize Google-like functions, which just shows how important those were.

So, surveillance exceptionalism, I think, was democracy bending and disfiguring itself in the service of this obsession for certainty. The way I would interpret it, that certainty, it's just like there's 15% of the population that's anhedonic, and there's nothing you can do about it. There's a certain percent of human beings who are obsessed with certainty. And, of course, they're going to be more highly represented in intelligence agencies. Of course they are. But, so, now we have this certainty mania, the certainty psychosis that's taking hold that now has cover. Because, all these certainty people, who are there anyway, now they have the excuse. They have the cover of 9/11 that—Total Information Awareness. This is like a critical security priority for our country.

So, all of this gets free rein and surveillance exceptionalism is the price that we pay in that convergence. Do you see what I'm saying? So, that's one way that democracy is compromised, because no-one was at the wheel any longer, protecting us from making it a toothed bird before it even got out of the nest, so to speak.... But now further down the road, these people who are running this whole game of surveillance capitalism, we have two alternatives right now, and neither of them are good.

One is they keep on doing what they're doing. I call the relationship between surveillance capitalism and its populations a formal relationship of radical indifference. So, from the point of view of surveillance capitalism, there's a logic of accumulation: I don't care what you do. Do whatever you want, as long as I can record it, and scrape it, and predict it. Keep doing, do, do, do. I just want to have complete access to it. And, I'm going to turn it into predictions that every day are getting closer to observation, to what they call guaranteed outcomes. Because, those are the most lucrative prediction products. So radical indifference means the fundamental lack of reciprocity with populations. And, if I were taking time out now to be writing Op-eds and stuff, this is what I would be writing about. Because, the way we got Russia, with the trolls, is a result of radical indifference. Because as long as I'm monetizing that page, I don't care what's on it. This is a logic of accumulation. It's not, Facebook is broken. It's not any of the things people are

saying. It's working perfectly. As long as you understand that it's capitalism and its specific logic, it's working perfectly...

This is terrible for democracy because it is asserting control in the form of new capabilities for behavioural modification that are completely invisible to us. So, for example, I talk about laws of motion and their economic comparatives, what I call an extraction imperative.

And, then, there are two other laws of motion. One known to us, and one unknown to us. The first one is economies of scope in two dimensions. One is extension; one is depth. Economies of scope means we not only need a lot of surplus, but we need varieties of surplus sources. We need trees. We need meadows. We need your heartbeat, your bloodstream. We need your walk in the park. We need how you sleep at night.

But, there's a third law of motion, which is unique to surveillance capitalism. I call that economies of action. Because the more we can intervene in the state of play, and actually produce action, through means of behavioural modification, the more perfect our predictions are. So, if I can actually push you to take that next step, I pretty well can predict your trajectory, right? Because I've just really raised the probability that that's the direction you're going to want...

I write about economies of scope, and economies of action, as expressed in a second economic comparative that I call a prediction imperative. The competitive dynamics of surveillance capitalism are dynamics of extraction and prediction. And, therefore, they require ever more fine-grained detailed ways of achieving behavioural modification at scale. I write about three cases of this that are well-known, but I reinterpret them from this perspective of economies of action. One, are the Facebook experiments, the contagion experiments; [another] is Pokémon GO; and [the last] is Under Armour and its connected fitness platform.

Under Armour is important because it shows that you don't have to be a surveillance capitalist to become a surveillance capitalist. Pokémon GO is important because it's taking the fight to the real world. Experimenting with how you actually tune and herd populations through social spaces, toward guaranteed outcomes. I have enough of John Hanke's own statements. John Hanke, formerly, you know, inventor of Google Earth, before it was Google Earth, his company was one of the first companies that In-Q-Tel, which is a CIA venture operation, invested in. Then Google joined up and co-invested with In-Q-Tel. Then, Google took it private, into Google. John Hanke went with it. It became Google Earth, and John Hanke also spearheaded Street View. And then he went to work inside Google, developing Ingress, which was the first AR [augmented reality] thing that experimented with herding people through the streets, and [then he] established Niantic Labs. It was a shop inside Google, and then, with Alphabet, you know, that thing spun off. But its only investor is Google, so it's essentially a Google-incubated and -owned operation. This is experimenting with establishing markets for future behaviour, in real time, not advertisers, not just insurance companies, or even just retailers, but whatever the local shops, restaurants, bars, blah, blah, blah, whatever it is, right here, right now, establishing those markets, and being able to deliver those customers at 3:18 on Thursday: guaranteed outcomes. And that's what Pokémon GO achieved. And it was a dry run for a bigger project, social project, a societal project because this is instrumentarian power in action. See what I mean?

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This is not okay. This is not the direction for democracy... Google wants a Google city that controls the city and the population dynamics in the city. You know, this is a way to control population dynamics, and it is their answer to what I call the third modernity, the argument being that second modernity was inherently unstable. What I say is that instrumentarian powers answer to the instability of the second modernity. This is their version of a third modernity: control everything. Everything will be nice and smooth... All that beautiful recycling they want to put in place, everything's going to be nice and smooth,

but it's not going to be democracy. There's no exit. There's no voice. There's no withdrawal of consent. There's no mechanisms. You can't give Google feedback.

So, resistance. I talk about counter-declarations, and synthetic declarations. And, we're all, we're all busy with counter-declarations. [We're] hiding. Is this what all those years of suffering, to create a democracy, to have revolutions, [has led to]—that we're all going to be hiding? We're going to have to put on this special makeup so the cameras can't pick us up, and we're going to wear the masks and [adopt] countermeasures? We're going to just encrypt? This can't be the answer. Synthetic declaration: that's civil society. That's law. That's collective action. You know, it's going to be there. I feel like there's a lot more at stake than just, you know, targeted advertising. I feel like there's a whole future society at stake.

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**SSC:** Inside surveillance capitalism, for example, there's a possibility of different platforms, as they're called, as models. So, Google is one, right. Amazon is a whole other range, right, a kind of logistical based, very different kind of thing. Facebook is a little bit more technical material-based thing.

**Zuboff:** I'm reserving surveillance capitalism for a particular logic of accumulation, which has not been true of Amazon and has not been true of Apple. They've been doing other things. Now, it looks like Amazon is beginning to slide into surveillance capitalism, and it's unclear like, is it going to be a dual thing, with the thing they've been doing, and this new thing?

**SSC:** So, that's...what I would want you to talk about, to describe what you understand as those different kinds of platforms, whether they are surveillance capitalism, or not?

**Zuboff:** Alright, well, the thing that I meant about those futures is that the alternative, there's an alternative to radical indifference. The alternative to radical indifference is that they actually do care. That's a frightening prospect. As bad as it is for them not to care what's on their pages, for them to care is dire. Because right now people are saying like, "You guys should care." This is the wall we hit with the right to be forgotten, the idea that okay, we're going to have a right to be forgotten, but by the way guys, you're going to implement it. For them to care is an even more dangerous road.... This is an opportunity. So, this is Zuckerberg: "I'm going to go around the country, and I'm going to talk to people in communities, and we're really going to make Facebook a place for a community building." And, this is moving instrumentarian power into social institutionalization. This is a very bad direction. So, that's what I meant when [I said] we've got two futures with these guys. And, how they behave inside this logic? Not caring is bad; caring is worse. Neither of them are good alternatives for us.

As far as comparing platforms, I've been going around this forever, trying to make sense of this. It's very much a moving target. I began with the analysis that there were very promising mutations coming out of Apple, but Apple as a corporation and its leadership, going back to Jobs, was not able to exercise the artificial selection required, to really turn, to see in the iPod the promise of a larger kind of institutionalization. A larger kind of logic of accumulation. A larger kind of social relations. So, the promise of, you know, deconcentrating assets, redistributing assets, reconfiguring assets, individualizing assets, that was just kind of left for people to pick up as they would, without any clear institutionalization parameters, without any explicit theory about social relations. Even Ford, you know, had a flurry of social relations. It was \$5.00 a day: this was a theory of social relations. No point having people produce all this stuff if there aren't people who can buy it. That was a pretty profound theory of society.

There's nothing like that that came out of Apple, but so, you know, and Apple had the benefit of making things and charging high margins for the things that it made. And, so, it wasn't pushed to emergency the way Google was because Google is a data company... It had a conventional business model that worked. And, then, Amazon came on-stream, in my mind, more like, I mean there are differences, but more like Apple than like Google, in the sense that it was selling physical products. It had a different business

model, but in its case, it was making revenue not from high margins but from high volumes. Apple wanted to try both. Also, [Amazon] had Bezos, who kept an iron grip. He is a very specific kind of person who had an understanding that was profound. And, he stuck to it, despite all the pressure. He didn't care if you didn't invest because he had revenue. He didn't have profit for a long time, but he had revenue. So, if they didn't want to invest, that was okay. He's an orthogonal kind of guy, and my impression of him is that he's not really that open to influence or pressure....

Both Amazon and Apple had the benefit of a physical sales process. And even though they have different business models, both had ways, had disciplines internal to their market form, if you will, that required, and rewarded customer alignment. They couldn't afford radical indifference. They were not radically indifferent. They were in the business of deconcentrating assets and getting you the assets you want, when you want them, how you want them, and so on.

Other people went into that space, you know, Uber probably being the most famous and the best example of the consequences of that mutation not having been adequately really discussed, and understood, and institutionalized, and... the implications for social relations [not having been grasped]... You could take aspects of the de-concentration model, the distributed model, people call it on-demand... and just add it without any discipline, which is what a young cocky guy like Travis Kalanic did. He just had added basically an extension of his own personality and his own foibles.

SSC: What could one hope for within the existing corporations that you're describing?

**Zuboff:** I'm not someone who's a Luddite, even though I really respect what the Luddites were about, but I started a long time ago, in *The Smart Machine* work, being excited about the possibilities of the digital, and the democratic possibilities, and the possibilities for human development and human flourishing, and the distribution of knowledge and learning. So, I've been excited about that. And, I'm pissed that I feel like that promise has been hijacked by a rogue capitalism... I don't believe that everything that happens is inevitable. Some things happen because of these convergences, and history, moments in time where the forces go one way or another, there's a lot of contingency involved. It's not just an iron law of necessity...

When the whole idea that I expressed about market forms is that market forms, particularly once we've crossed over into a digital media, market forms are indeterminant. They are many ways of putting together, of taking the basic principles of capital, which are private property, profit, investment, and reinvestment. I mean, there are many ways of making that work. And my reading of the history of capitalism is that in this evolutionary process—and this is certainly reflected in thinkers like Schumpeter—that new forms of capitalism emerge, drawing energy from the new circumstances of populations, and the new needs of people, and the way in which people are reinterpreting their needs. And, reinterpreting, you know: what's a necessity, and what's a luxury?

So, the luxuries of one generation become the necessaries of the next, as [Adam Smith] himself outlined. So, capitalism has a way of connecting with that process and drawing energy from it and then reflecting it back in the form of products and services that are going to meet those needs. And, certainly early modern capitalism and the early factory system was doing that with the early explosion of consumption in the late eighteenth century. Mass production capitalism did that with a new population of people who wanted a better standard of living. But, at that point in time, automobiles were made one car at a time, as super luxury items, mostly for a market constituted by the richest families in Detroit.

So, there have been these breakthroughs that occur through this reconnection with populations. That's not what surveillance capitalism represents. Quite the contrary.

I do believe that there is an enormous opportunity here to do all the things that people are looking for. You know, they're looking for the individualized configuration of assets. They're looking for the ways of accessing information and other assets that give us more control, more mastery, more voice, more

sanctuary, all of those things that make us feel like we are the masters of our lives, which is a feeling that we have to have because of the time in the history of the world when we were born. Because there's nothing else to order us except what we can draw from our own inner resources, as your children seem to exhibit, and so do mine. So, I think there's nothing but opportunity for a digital capitalism that actually connects with populations.

...

[In surveillance capitalism], there's nothing that they're doing that reflects what populations really want. Yeah, we want the search, but we're resigned to it because we have no choice. Give me a real choice. Let me revert back to my baseline values, where I don't have to put all this energy into hiding. That's what we really want.

I don't use the word ontology in this book because I don't want to just turn readers off with something that they can't understand, but I write about the ontology: it's supply and demand. And, supply and demand are supposed to be linked. But, right now, we have this kind of shadow falling between them. We're begrudgingly participating because they've got us trapped. This is not how it's supposed to be. This is not healthy capitalism in my view.