

In the 1940s, a number of IBM's subsidiaries assisted the Nazi government in implementing the logistics of the Holocaust, to some extent being entrepreneurs who originated some of the ideas that made the whole thing possible. For example, every serial number tattooed to a victim's arm corresponded to a punchcard manufactured and processed by IBM. The involvement is so well documented that even IBM doesn't deny it. When Edwin Black organized the facts and wrote the story for the lay-reader in a book entitled *IBM and the Holocaust* [Black, 2001], IBM's official response was to play down the book by pointing out that it didn't say anything that a host of historians didn't already know.

But what does this piece of history say about the IBM of today? By way of discussion, and for the sake of not sounding like a crackpot (always a hazard when talking about the Holocaust), I offer a few social science approaches to the Holocaust before returning to the question of what IBM (and you) should do today.

Game theory Game Theory begins with a situation in which people have an abundance of actions they could take, but those actions depend on the actions other people choose. John Nash proved that given a few simple technical conditions, there are always equilibria, wherein everybody implicitly agrees to behave in a certain manner and is OK with that behavior. This is why he won a Nobel prize and has books and movies about his life.

The problem with Nash equilibria is that there are often many of them. One or the other may be more likely, but before the fact, they're all possible. For example, everybody in England chooses to drive on the left, whereas in most other countries the equilibrium given the same situation is for everybody to drive on the right. Why'd it happen one way or another? Historians who have studied the question can amalgamate all the random events into some compelling stories, but here's my own summary: it's basically arbitrary.

If we had asked people in the Germany of 1935 whether they would assist in mass killings, all but a handful would have said no; yet in the Germany of 1945 we found enough Germans who said yes that mass killings were efficiently and extensively conducted. Why'd Germany as a country choose this approach to getting out of the depression when other countries just chose to have people build extraneous public works? Why'd the society switch from a peaceful equilibrium to a violent one? Many thousands of pages have been written on the subject, the basic conclusion of which is: it's basically arbitrary.

To be literal about Game Theoretic examples, consider Chess. There is nothing inherent to the setup of the game that causes a given outcome. Sometimes white wins, sometimes black wins, depending on what the people playing the game do. Similarly in social situations: sometimes one side prevails, sometimes the other, and we never know which it will be until after the fact, and if we put similar people in a similar situation, the other outcome could easily prevail. Conversely, equilibria which occurred elsewhere in time or space can always crop up again; the best we can do is try to bias things in one direction or another,

by taking away black's knight, setting social norms about not killing Jews, or establishing rules explicitly outlawing hate crimes.

What the historians say Hannah Arendt wrote the seminal book on the question, *Eichmann in Jerusalem* [Arendt, 1963]. This is the book which coined the phrase 'the banality of evil' to describe people like Eichmann, who was a dull bureaucrat who didn't think twice about the implications of his paper shuffling.

The moral (one of many): any organization is capable of evil, because the size of the organization allows an action to be broken down into bite-size, palatable pieces to be farmed out to people who would never approve of the whole. Their individual roles seem trivial and relatively blameless, and just as the officers at Nuremberg claimed that they were "just following orders," everybody in an organization has somebody else they can point their finger at. Yet the end result is an equilibrium which nobody would have volunteered to bring about.

Ronald Wintrobe, in the final chapter of *The Political Economy of Dictatorship* [Wintrobe, 1998], extends the story that any individual only makes a marginal contribution by describing the bureaucrats who are entrepreneurs within the system, working hard to have a more-than-marginal influence. They advance in the bureaucracy by taking the initiative and having ideas which will help the organization achieve its goals more effectively. They do not 'just follow orders' but take action to help the world along to the evil equilibrium. Wintrobe says Eichmann was a bureaucratic entrepreneur of this sort; Black shows that the heads of IBM's German subsidiary were. Such entrepreneurs always exist, pressing the society to move toward the evil equilibrium, in a manner that creates business or influence for them.

These authors show us the structure of the evil equilibria. There will always be people who are callous to moral considerations and will attempt to shift the organization to their benefit and the detriment of the rest of the world. Then, most of the people who have to take action to bring about a bad outcome can't see the big picture and so have no idea where their actions are leading to. So the protest singers have the right idea: large organizations (IBM, the government) have a comparative advantage in implementing evil equilibria, and we need to maintain especial vigilance over them.

Within this context, the big question is: what can these organizations do to ensure that the organization won't fall into an evil equilibrium, either through manipulation by bureaucratic entrepreneurs or just by wandering into them?

The IBM question Let's return to present-day IBM, and the question of whether they're evil. Yeah, their laptops are all an evil-looking black; they make a server called The Intimidator; they're a big, blocky bureaucracy like every other big, blocky bureaucracy. But that's mere cosmetic evilness. As should be clear to this point, evil does not hit anybody over the head, and those who say that IBM's German subsidiary didn't know what the Nazi regime was up to are to some extent correct [but see Edwin Black's comments].

But today's IBM chooses to take a simple, insidious course which exacerbates its past: it tries to forget.

In a press release discussing Edwin Black's book, IBM states that it "[...] looks forward to and will fully cooperate with appropriate scholarly assessments of the historical record." This follows discussion of the logistics of which universities house IBM documents. The message is clear: nobody in Armonk, NY, would be willing to operate a gas chamber, so the matter is a "scholarly" and "historical" question.

If the important moral question were "Should IBM be held accountable and pay reparations that would affect its balance sheet?" then IBM's insistence on averting its collective eyes makes sense—the IBM of today doesn't want to have to pay the debts incurred by the IBM of yesterday. But there is a far more important question: how do we keep such things as genocides or mass internments from ever happening again? *This* is the question which affects us today, and is the question that IBM can best help to contribute to, and yet seems to go out of its way to avoid.

The above press release was written in February 2001, so IBM didn't know any better, but the follow-up of March 2002 doesn't seem to say anything to change the claim that this is a question for researchers, not the people who head today's organizations and build today's machines. IBM's business conduct guides say nothing about refusing business from parties with suspect intentions or who aim to trample the rights of citizens [as of 2 May 2003]. As far as I could ascertain from their publicly available information and from correspondence with employees, IBM has made no changes that would ensure that its bureaucracy can not re-entangle itself in those past misdeeds which it "categorically condemns."

Generalization From IBM's second press release discussing Edwin Black's book: "A review in The New York Times concluded that the author's '... case is long and heavily documented, and yet he does not demonstrate that I.B.M. bears some unique or decisive responsibility for the evil that was done.'" [Here is the full review.] I agree with the reviewer: IBM was not unique or decisive.

IBM is the paragon for this essay because their work is dull and doesn't seem related to anything we picture oppression on a mass scale to look like. Also, there is nothing hypothetical about their situation: a subsidiary did provide substantial assistance to Germany's eugenically-oriented goals, and its official statements of today do make an effort to forget that. Yet everything we could say about IBM we could say about any other organization or person: each of us is capable of assisting in evil, there are situations which would tempt any one of us to do so, and all of us are more comfortable just not thinking about it.

Many people with whom I have discussed this topic point out that government-sponsored genocide is unlikely in the USA, so the game is fundamentally different. This would be to see white win a dozen games and to assume that this means black can never win. The game may be biased toward white, but that is by no means a proof of impossibility. Over the lifetimes of our elder citizens,

the USA has gone through many periods which we collectively look back on and exclaim, ‘What were we *thinking?*’ How did Japanese citizens wind up spending years imprisoned in internment camps for no reason? How did McCarthy manage to ruin the lives of hundreds of political enemies? Forty years ago, lynchings weren’t prosecuted as crimes. No, this stuff wasn’t genocide, but it certainly wasn’t OK, either.

Others I have met contend that the situation was much more ambiguous in the 1940s than it is now, and it wasn’t so clear-cut that IBM shouldn’t have been involved. This is entirely the point. If it happens again, it will be just as not-clear-cut until after the fact, so we must plan for it before it happens.

You So ask yourself, given that you have perfect retrospective knowledge of history, what you would have refused to do. Would you have supported and aided in the registration of minorities? If not, then you should not support it now. Would you have accepted that other people around you were being imprisoned without *habeas corpus*? If not, then do not just assume that thing will turn out differently this time around. Would you be comfortable if your boss asked you to work toward ethically suspect activities? Rather than worrying about it if it happens, make sure that your organization has rules in place now to ensure that such a situation can’t happen in the future. There will always exist amoral bureaucratic entrepreneurs pushing us toward an evil equilibrium, but we can do a lot to lower the probability that they will succeed.

The game is not different. All of the ingredients of the situation of Germany or the USA in the 1940s are around today: we have bureaucracies, different races and countries, a government, and people. I’m not proclaiming that the sky is falling, and am not predicting genocides. But conversely, many people look at the horrors of the past and see them as something which was committed by monsters who are incomparable to the noble souls who populate the world now. But it was subtle, and if it happens again, it will be subtle again. Some arbitrary sequence of events could push us toward an evil equilibrium just like before, and there are no new safeguards in place. The only difference between now and then is that we have the experience of history, marking red flags along the way. To see those flags and do nothing about them would be, well, evil.

[About the author: I wrote this essay on an IBM Thinkpad—one of eight I have owned (mostly Thinkpad 560s and Thinkpad 570s). I recently refused a job interview solicited by a contractor for the Department of Homeland Security.]

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