Can a robot or an algorithm be racist? A simple question with a very simple answer. The reason why there is some confusion in the varied responses to this question is directly related to how much context and history is known about what goes into the computer programming. If the programmer knows little or nothing about the substance of the matter (e.g., from outside their own culture), the chances are very high that the seeming neutrality of “data in” will miss when there is racism embedded in the algorithm. Let’s take two basic elements of a democratic society: voting rights and marriage eligibility. As a heuristic tool, it will be useful to contrast the voting access and marriage eligibility of a Japanese person of Burakumin descent (in Japan) with how American citizens of recent European or African descent in the United States are affected by voting rights and marriageability.

Here are the first lines from a New York Times report of September 1, 2017: “The calls started flooding in from hundreds of irate North Carolina voters just after 7 A.M. on Election Day last November. Dozens were told they were ineligible to vote and were turned away at the polls, even when they displayed current registration cards. Others were sent from one polling place to another, only to be rejected. Scores of voters were incorrectly told they had cast ballots days earlier. In one precinct, voting halted for two hours.”

On the surface, a strong social tradition or law determining the contours of eligibility can appear neutral, but a bit of knowledge about social history can easily reveal embedded racial or ethnic bias. As many Americans know, a fine example would be the “grandfather’s clause” used in the post-Reconstruction South to prevent blacks (newly freed from slavery) from voting, as in, one can vote only if one’s grandfather voted. This grandfather’s clause had disparate impact on whites and blacks, and it is notable that in the last three decades, the right-tilting U.S. Supreme Court has substantially eroded “disparate impact” as grounds for challenging the constitutional standing of a law.

In the contemporary world of Japan, how might a parallel history provide access to (or denial of) voting rights—or marriage eligibility? Japanese parents spend several hundred million dollars every year paying detectives to
ascertain information on whether their marriage-age children should either break off an engagement or marry. Why?

The Burakumin of Japan are a pariah caste at the base of Japanese culture and social stratification, and have occupied the bottom rung for over 1,200 years! The Japanese, like the Swedes and the Icelanders, are meticulously good, even rabid, record keepers. So they have birth records that go back several hundred years. The Burakumin were restricted to living in their own cordoned-off villages until the Meiji reforms of 1868–71, when the Tokugawa-era laws were overturned. Japanese birth records reveal not just when one was born, but with further research, one can use the koseki (birth certificates for every Japanese, with more info than a U.S. certificate), to find out where one’s parents were born. So the Japanese hire researchers to surreptitiously (and illegally, since Meiji times) access the koseki and thus are able to trace back two, three, or even four generations of direct ancestry. This comes in handy, even in today’s Japan, where parents of young couples who want to get married hire detectives (at a cost of over several hundred million dollars annually) to trace the koseki—to make certain that their offspring do not marry a Burakumin.

Now imagine that the Japanese could concoct an algorithm that could do such tracing and embed koseki information into voter eligibility. It would be the equivalent of our grandfather’s clause but disguised as simply a neutral technology for tracing voter eligibility. Unless one knows about the history of the Burakumin, that machinery could be characterized as “neutral” by a computer programmer . . . and the embedded bias would be invisible without knowledge of Japanese history.

There is a parallel in the United States. Republican governors across a dozen states have pushed for voter registration that restricts access based upon “neutral” conditions such as state-issued identification cards with photos. All that would appear neutral to a computer programmer, oblivious to systemic and voter suppression strategies designed to intimidate or restrict black voters, overwhelmingly in the South, going back to the Jim Crow laws of the post-Reconstruction. A disproportionate number of blacks were affected by the grandfather’s voting eligibility—just as a disproportionate number of blacks are affected by the “neutrality” of state-issued IDs, but oh so much more subtly. Disparate impact was blatant in the law that required evidence that one’s grandfather had voted but has been “neutrally” disguised in photo ID laws. The answer to the question posed at the outset? Robots and algorithms can be as racist as the designers of the generated computer programs. Captivating Technology examines just such hidden interconnec-
tions of seemingly neutral technologies, disentangling and identifying the social and historical, illuminating how and why it infuses the not-so-neutral “machinery.”

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