

## Book Review

**Noah J. Efron, *A Chosen Calling: Jews in Science in the Twentieth Century*, Johns Hopkins University Press, 2014, 149pp., \$26.95, ISBN 1421413817**

Reviewed by **Mark Zelcer, State University of New York at Oswego, email: [mark.zelcer@gmail.com](mailto:mark.zelcer@gmail.com)**

1920s United States saw the publishing of numerous popular science textbooks in Yiddish, like Z. P. Nathans' *Populere erklerung fun Aynshtayn's relativity teorye* (*Popular Explanations of Einstein's Theory of Relativity*) and Yiddish translations of scientific classics like Darwin's *The Descent of Man*<sup>1</sup>. These were geared toward a largely bilingual Jewish audience that had strong cultural ties to Yiddish (the language of European Jewry) and also to science. But what does it mean for an ethnicity to have strong cultural ties to science and how did it get that way in this case? Put another way, why put all this effort into producing Yiddish texts for an audience, part of which could get by in English and part of which was not particularly well educated enough to appreciate them? Why would Jews put such a Jewish spin on science?

Efron's book seeks to answer a broader version of that question and explain the bond between science and Twentieth Century Jews. To be clear, though he mentions the famous theories, Efron did not write a book that proffers yet another reason for Jewish *success* in science. Nor did he write yet another book listing scientific achievements by Jews, though one does get a little of that *inter alia*. Instead we get a discussion of what I think is a more important but complementary and rarely asked question: How and why did science become so popular among Jews? What cultural forces prompted Jews of that period to identify so thoroughly with the advancement of science and the notion of scientific progress? His answer is that science was seen as a solution to the "Jewish question" that was so widely discussed in Europe until WWII: *what to do with this strange minority that lives among us?* Science, the book concludes, was at once a way for Jews to establish a *modus vivendi* with the larger societies

in which they found themselves and to reform the broader cultures so as to encourage them to accept Jews into their midst (9).

The bulk of the slim, heavily footnoted, volume is taken up with three discussions whose upshot is that in the Twentieth Century being Jewish generally meant taking science very seriously as a force for good, for progress, for hope, and for integration. There are discussions and etiologies of the popularity of science among Jews in the United States, Russia, and Palestine - three places that represented alternative routes to modernity for Jews: liberal capitalism, revolutionary socialism, and pioneering Zionism respectively (7).

In the US science provided immigrants with a meritocratic route to assimilation and hence the opportunity to "make it" in their new homeland. Science was thus touted as vital in numerous Jewish fora - from Yiddish clubs to popular books to the pulpit. This advocacy was largely consistent throughout the spectrum of American Judaism (with the exception of the ultra-Orthodox) despite the complex diverse denominational and cultural lines that otherwise separated groups of Jews. Together with promoting participation in science, American Jews also advocated a cultural scientific ethos, what the historian Andrew Jewett has called "scientific democracy," the idea that scientific values such as intellectual freedom are identical to those values needed to sustain the cultural foundations of American democracy. As part of this democracy American Jews were keen to promote public education both to obtain an education that would earn them a bench at a meritocratic scientific laboratory and also to indoctrinate the non-Jew (who

would ultimately be in a position to hire them) to appreciate the advantages of such a meritocracy. This partly explains the importance for American Jews of such cultural events as the Scopes Trial (ch.1).

Meanwhile Russian Jews went from being persecuted by persistent semi-official pogroms in the 1880s to rising to scientific prominence (though by no means dominance) by the 1930s following the Russian Revolution. This rise began during the Great War as Russia realized how dependent it was on suddenly inaccessible German technology. Russia had little in the way of indigenous research, first because there were no Russian counterparts to such scientific philanthropists as the Carnegies in the US. Also, the imperial government did not trust scientists as they too often numbered among reformers and revolutionaries. Finally, Russian scientists had a strong preference for pure science over applied. So Russian science and technology was lagging just as the revolution brought about a general distrust of the old guard, a group which, thanks to previous discrimination, included few Jews. The need for scientists thus opened opportunities for impoverished minorities who had no ties to the tsarist regime. This is exactly the brief historical moment (which lasted until around WWII) when the revolution paused much of the official and unofficial anti-Semitism and created opportunities for Jews to obtain scientific educations and jobs (ch.2).

Concurrently in Palestine science became an important part of the nascent Zionist nation building. Early Zionist utopian novels, like Theodor Herzl's *Altneuland* for example, were replete with the promise of Jewish technological development. Jewish scientists became early Zionist heroes. Einstein was thus offered the presidency of Israel after the death of Chaim Weizmann, Israel's first president and renowned chemist himself. Early Jewish Palestine made it a priority to establish universities and scientific institutes to take advantage of Jewish scientific talent coming in from Europe and Russia. Early Zionists, starting with Herzl, made every aspect of life in Palestine very self-consciously scientific: from architecture, urban planning, collective farming, and public health, to geographic, cartographic, demographic, and zoological surveys.

Science also went hand-in-hand with the Zionist claim to Palestine. Zionist rhetoric seemed to have included an almost Lockean assumption that mixing

scientific labor with the land confers ownership. Mixing land development with science, by the way, was also deemed necessary. The carrying capacity of the land was thought to be too small to hold all the new immigrants without sufficient scientific intervention (90). But more than that, there was a sense that the native peoples of the land and humanity as a whole were being benefitted by the Zionist technological and scientific engine. Benefitting humanity, especially in reaching out to third world countries with technical assistance also gave the new state an important avenue for diplomacy. A case in point is the relationship with Burma that blossomed from Israel's initial offer to send over agricultural and aeronautical experts. Internally the rhetoric of science also served to distance the new Zionists from the old shtetl Jews. The scientific ethos thus had a manifold impact on Zionist self-identity and culture (ch.3).

The book's case for the popularity of science among Twentieth Century Jews in the US, Russia, and Palestine is convincing enough and well presented, though somewhat uneven and, at least to me, not very surprising. The unevenness, for example, can be seen in the discussion of Russia where we are given little by way of mechanism for the grassroots adoption of science and we are only presented with the exogenous social forces that molded it. In the case of the US and Palestine on the other hand we are told that there were many well received popular books that extolled science and it is explained that the Einsteins and Weitzmans were turned into Jewish folk heroes from the pulpit.

But once these stories are told, the difficult and novel questions can be asked. How did this happen in all three countries simultaneously? What, if anything, do the three historical episodes have in common? Efron summarily dismisses biological and cultural explanations of "yiddisher-kupfitude" (Jewish smarts) for scientific success and tells us that it was largely luck that catapulted Jews into the scientific professions and thus prominence. First, he tells us that despite the difficulties in travel and communication, the three communities had more than trivial interactions with one another (96). Presumably this implies significant cross-fertilization of cultural attitudes. Secondly, the three communities shared a common awareness that they were participating in revolutionary change (98). Finally, the three communities had a shared experience of being in a new world, in a place that was different from the old world they came from. This gave

rise to the collective belief that science, with its insistence on meritocracy and disinterest, can forge a new paradigm for living as human beings and as Jews with equality (100).

Efron's reasons appeal to circumstance. Jews hit on science as a means to establish a rapport with the cultures they found themselves in. But this still leaves much to be explained. Are there other cultures (in other times?) which hit on similar strategies? If so, what, if anything, is special about the way Twentieth Century Judaism did? If no other cultures hit on this strategy, why not? Are there not other cultures that found themselves in similar situations with a need to assimilate and an opportunity to use science to do so (perhaps recent immigrants to the US from India)?

Also, despite the similarities of the three cases, each is unique in a way that should make us question whether it is possible to group them as a unified family of effects having anything more in common than being a manifestation of a more global *zeitgeist*. In Palestine, for example, the Jews were the majority culture, whereas in the other two cases the Jews were not. Palestinian Jews had to assimilate, perhaps, into a global culture, not a domestic one. Put that way, the *modus vivendi* story sounds weak. In the case of Russia, there was an external shift in the power structure that put the dominant Russian culture in a position to welcome any new scientific talent. In the other two cultures, there is less shifting of the official attitude toward Jews. Meaning, Russian Jews were not creating the demand for science in the way Efron describes the Jews created the demand in the other two places, especially the US. Lastly, in the case of the US there were a large number of new immigrant communities attempting to assimilate into the greater culture whereas in the other two cases there were not. Thus, the account also needs to explain why Jews developed a proclivity for science whilst other minorities found different ways to assimilate. More relevantly, can we tell similar stories about other groups of Jews around the world? If not, why?

Efron's whole discussion too applies only to European "Ashkenazi" Jews. The bulk of the influx of Jews from Arab lands for example arrived in Palestine and the US later than their European counterparts and are not represented in the book. The reasons for their absence in the narrative may be straightforward but any book subtitled "Jews in science in the Twentieth

Century" requires such qualifications spelled out and justified. This is especially important since the scholarly discussion about the biological and cultural roots of Jewish achievement, which Efron dismisses, also focuses only on European Jewery.

Importantly, this book also makes some assumptions about capabilities that seem difficult to skirt. Although the subject of Jewish talent is dismissed, it seems that regardless of how popular science is, it still requires talent. Not everyone can obtain a PhD in physics. Science is hard. Where did so many Jews find the inner talent? An explanation of the popularity of science needs an explanation of how that translated into success, not just the background forces that tell us why it did. If social forces are enough to get a culture to find its inner scientific gifts (which I suspect that Efron would be forced to concede), it does not go without saying.

In the end Efron acknowledges that science is not the only route Jews took to achieve the goals of integration (102). But could science as easily be replaced by the arts, the humanities, entertainment, or commerce? If so, science is not special and what we have is a small manifestation of a bigger issue that needs to be contextualized. Efron thus owes us a story about how science is special in some way.

These last few comments, however, about what I would have liked to see in this book should not diminish the fact that Efron provides us with an engaging account of an intriguing aspect of Twentieth Century Jewish culture intertwined with an episode in the history of science that is not usually attended to in the literature. A history of science needs to give us not just an account of the scientific discoveries or an account of the historical forces that might have precipitated the discoveries, but also an account of the social and cultural forces that made science itself popular enough to allow for a select few to emerge from the many science enthusiasts in the pool and leave indelible traces on its evolution. This is especially so when the popularity is manifested so strongly with a particular ethnicity. Efron does this well.

Efron recounts a once-popular Jewish joke: "What do you call a Jew with a Master's degree? A dropout" (11). Howard Wolowitz, a character in the popular TV show *The Big Bang Theory* exhibits in an exaggerated way every stereotype of a contemporary Jewish over-

achieving “science nerd”. A running gag on the show has the other characters making fun of him for “only having a Master’s degree”. The gag is funny because all the other scientist characters have doctorates. Efron’s book adds an additional dimension to the funniness of this gag: it is funny because despite the fact that his character appears successful as an astronaut and a NASA engineer, Wolowitz’s credentials make him, by Jewish standards, an underachiever.

## Endnote

<sup>1</sup>Thanks to Dahlia Kozlowsky and Heshey Zelcer for helpful comments on an earlier draft.