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## **Jews and Science**

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# JEW<sup>S</sup> AND SCIENCE



edited by

**Sander L. Gilman**

*Casden Institute for the Study of the Jewish Role  
in American Life Annual Review, Volume 20*

# Jews and Science

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## **The Jewish Role in American Life**

**An Annual Review of the Casden Institute for the  
Study of the Jewish Role in American Life**



# Jews and Science

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## **The Jewish Role in American Life**

**An Annual Review of the Casden Institute for the  
Study of the Jewish Role in American Life**

***Volume 20***

Steven J. Ross, *Editor*  
Sander L. Gilman, *Guest Editor*  
Lisa Ansell, *Associate Editor*

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*This volume is dedicated to the memory of our dear  
friend and colleague Dr. Sharon Gillerman whose  
legacy continues to inspire us today.*





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## Foreword: Jews and Science

The statistics are impressive. Between 1901 and 2021, Jews (either full, half or three-quarters Jewish ancestry) accounted for 22 percent of all individual Nobel Prize winners and 36 percent of US recipients. If we break down those statistics by scientific fields, Jews in Physics accounted for 26 percent of the world total and 38 percent of the US total; in Physiology and Medicine 26 percent of the world total and 38 percent of the US total; and in Chemistry 19 percent of the worldwide recipients and 28 percent of the US total. During that same period, Jews accounted for 38 percent of all recipients of the US National Medal of Science. A website titled “Jews Listed among the Creators of the Greatest Lifesaving Medical and Scientific Advances in History” suggests that twenty-six Jewish scientists, physicians and engineers out of a total of 105 individuals accounted for 50 percent of an estimated 5.6 billion lives saved.

Since the worldwide outbreak of Covid in 2020, Israel has been widely praised as leading the world in response to developing and administering a vaccine that has dramatically reduced death rates.

These statistics raise a series of interesting questions about the relationship between Jews and the Sciences—the subject of this year’s Casden Annual. Is there such a thing as “Jewish science”? As volume editor Sander Gilman observes in his Introduction, “Ever since the Hegelian Eduard Gans co-founded an organization dedicated to the “Science of the Jews” (*Wissenschaft der Juden*) in 1819, the linkage between things “Jewish” (no matter how defined) and the Sciences (no matter how defined) has been a constant theme in Western academic culture.” The essays in this volume explore the evolving relationship between Jews and Science from a number of perspectives: from nineteenth-century discussions of *Wissenschaft der Juden* to the twenty-first century relationship among Jews, Science and Jewish Studies. Our authors offer interdisciplinary perspectives that focus on environmental science, philosophy of science, objectivity and science, the history of health sciences, epidemiology, genetics, and recent responses to the COVID virus. Their essays explore the

historical and current relationship of Jews and the sciences as they occurred in Europe, the United States and Israel.

Taken collectively, the volume offers us cutting-edge research and perspectives on the role Jews have played in the evolution of the sciences over the past two centuries—and are likely to play in the future.

Steven J. Ross

*Myron and Marian Casden Director*

*Distinguished Professor of History*

# Jewish Studies and the Sciences

by Sander L. Gilman

**E**ver since the Hegelian Eduard Gans co-founded an organization dedicated to the “Science of the Jews” (*Wissenschaft der Juden*) in 1819, the linkage between things “Jewish” (no matter how defined) and the Sciences (no matter how defined) has been a constant theme in Western academic culture.<sup>1</sup> Whether antiquarian in its examination of Jewish beliefs and practices (pace Gans), whether biological (in “Race Science” and then again in modern genetics), whether sociological or anthropological in its examination of Jewish particularism (from studying Nobel Prize winners to modern definitions of genocide or civil rights to the study of Judaizing communities), whether historical (as in the recent reappearance in Germany of the *Historikerstreit* about the instrumentalization of the Holocaust), whether disciplinary within Jewish Studies (as in Jewish attitudes towards bioethics), the “Jews” have been the subject of examination by “scientists” from a wide range of disciplines as well as the agents for study of things Jewish. Studying the “Jew” or “Jews” seems to be a long-standing concern of our modern, self-defined “scientific” disciplines, all of which evolved in the Western caldron of Enlightenment and post-Enlightenment obsession with the Jews.<sup>2</sup> Indeed, even the most recent iteration of Jewish Studies as an academic discipline, “Israel Studies,” stresses the global cultural, economic, and social impact of Israeli science and medicine, as an extension, not of area studies, but of Jewish Studies.<sup>3</sup>

But Gans presents us with yet another iteration of this question: who is “Jewish” not only in terms of the object studied but the identity of the “scientist” examining the Jews (and therefore having the object define the object). Gans, like other middleclass Jews of his time (and here we can mention one of the most visible of the co-founders of the *Wissenschaft der Juden*, Heinrich

Heine) converted to Protestantism in order to achieve an academic position in 1822 after King Frederick William III of Prussia denied him an appointment as associate professor of law.<sup>4</sup> Does his subsequent interest in his academic specialization within law, the laws of inheritance, which seems so very distant to the “Jews,” represent a “Jewish” obsession with continuities or discontinuities or, as a German Protestant, do we then need to read his works within the radical Hegelian (read: non-Jewish) impact on the history of law in the German-speaking world?

In this volume of the *Casden Annual*, I asked a wide range of scholars to examine a series of “meta” questions that have evolved with the rise of Jewish Studies as, first an interdisciplinary, then a transdisciplinary, and then as a discipline (with its own degrees and departments or programs in universities across the world). What does “science” now mean when we address the multiple fields of Jewish Studies including Israel Studies? Do we study the role of Jews (“native” vs. “immigrant;” main-stream vs. alternative) in science and scientific training, the science of the Jews (define as you may), the Jews as subjects/objects of scientific study? Do we focus on the Jews in such cases as a clearly delimited arena of study within Jewish Studies or do we do so comparatively within other academic disciplines? What about the role of the self-defined “Jewish” scholar? When we do field work in the social sciences (or indeed in such areas in the Humanities that employ oral history) what role do we as Jewish social scientists play in our interactions with our subjects? Are we Jewish scientists when we study things Jewish even if we are not articulate about our standpoint? Certainly, when I have critiqued racist scholars such as Kevin MacDonald, his response was not based on my scholarship but on my assumed status as a Jew.<sup>5</sup> Yet when we examine the role of Jews in other disciplinary models, such as economics, criminology, or medicine, does our identification with the object change our perception or even our status as scientists? Does studying “Jewish genetic diseases” place the “Jewish” investigator in a different relationship to genetic science than a “non-Jewish” one?

Or do the claims of scientific objectivity, a contested definition well before Karl Popper, override this in any given field or with any subject?<sup>6</sup> The historian Michael Meyer observed in 2004 with a sense of irony that “Many years ago, when I was a graduate student, one of my professors, a Jew whose field was European history, told me that when he was deciding on a topic for his dissertation, he suggested to his adviser that he would like to write on the Jewish migration from Eastern Europe to the United States. His adviser rejected that idea. ‘As a Jew you will not be able to treat that subject objectively,’ he was told.

‘Why not write about the Irish migration instead?’ And so he did.”<sup>7</sup> A generation later (in the age of “Jewface”) is the question of the identity of the observer still to be treated with disdain or has it embedded itself into the very notion of the observer and their role? Can Jewish scholars really understand the Irish (some of whom are indeed Jews) or do they have both a hidden empathy for things Jewish and obligation to their Jewish students?<sup>8</sup> Modern anthropologists lead the way but scholars in Jewish Studies from all disciplines have been questioned (and self-examined) about their own “objectivity” over and over again.

That both “Science” (“Wissenschaft”) and “Jews” (“Juden”) are contested and complex notions was without a doubt true even before 1819. The very notion of the sciences in this volume as contested by the addition of the term “Jew,” show that while both are inherently unstable and when joined together can have only situational meaning, the linkage seems to be a permanent part of our modern disciplinary vocabulary. Following Kant’s “War of the Faculties” (1798) the professionalization of the disciplines has meant that every aspect of human knowledge was defined as “scientific” as it demanded specific (read as neutral) methodologies.<sup>9</sup> This implied sense of objectivity, of “nature unveiled,” comes to be contested by the late nineteenth century, across the disciplines. Thereafter “science” is the overarching term for all of the academic disciplines. “Wissenschaft,” according to Wilhelm Dilthey, covers the “natural sciences” (*Naturwissenschaften*) but also subsumes the “social sciences” (*Sozialwissenschaften*) as well as the humanities (*Geisteswissenschaften*).<sup>10</sup> In Dilthey’s *Introduction to the Human Sciences* (1883) he stressed that it is in the *perception* of these categories that our search must begin:

Only inner experience, in facts of consciousness, have I found a firm anchor for my thinking, and I trust that my reader will be convinced by my proof of this. All science is experiential; but all experience must be related back to and derives its validity from the conditions and context of consciousness in which it arises, i.e., the totality of our nature. We designate as “epistemological” this standpoint which consistently recognises the impossibility of going behind these conditions. To attempt this would be like seeing without eyes or directing the gaze of knowledge behind one’s own eye. Modern science can acknowledge no other than this epistemological stand-point. It became further evident to me, however, that it is from just this stand-point that the independence of the human sciences, as demanded by the Historical School, can be grounded. From this standpoint our

conception of the whole of nature proves to be a mere shadow cast by a hidden reality; by contrast only in the facts of consciousness given in inner experience do we possess reality as it is. The analysis of these facts is the central task of the human sciences. Thus, in accordance with the spirit of the Historical School, knowledge of the principles of the *human world* falls within that world itself, and the human sciences form an independent system.<sup>11</sup>

What is vital for Dilthey is that his notion of a scientific epistemology is in contrast to the intellectual tradition of authority, defined from the Enlightenment on, as that discipline, so vital to the medieval university and so marginalized by the modern university—THEOLOGY:

Metaphysicians, who took this difference of explanatory ground to entail a substantial difference in the objective structure of the world, struggled in vain to formulate and legitimate the objective basis for distinguishing facts of spiritual life from those of nature. Ancient metaphysics underwent many changes at the hands of medieval thinkers who brought it in line with the dominant religious and theological movements of their day. None of these changes was of more consequence than that which determined the differences between the world of spirits and the world of physical bodies, and which made the relation of these worlds to God systematically central.<sup>12</sup>

What the Humanities in the Age of the “Science of the Jews” must do is to strip this away from the core meaning and return it to an age before Theology—indeed Eduard Gans’ goal. It is a new science of meaning, the cool, distant, non-judgmental science of the Humanities colliding with the moral teaching of a secularized religion, the role that the Humanities—in opposition to the other “sciences” that arose in the course of the nineteenth century. That Jews took a central role in this debate both within and beyond the narrower confines of a Jewish community or world is not in question.<sup>13</sup> It is this core conflict that haunts “Jewish Studies” as a discipline or a Venn diagram of disciplines in our age. Does the studying of the Jews make “better” (read: more strongly identified) Jews, and what does that mean, or is it a discipline like all others, aimed at the generation and dissemination of knowledge for its own sake? Does it thus make a difference who teaches and who studies?

Theologians of the time were intensely aware of these questions well before Dilthey. In 1854 the noted Catholic intellectual (and convert) John Henry Cardinal Newman (1801–90) was appointed rector of the proposed new and very modern Catholic University of Ireland, now University College, Dublin.



Founded to answer the “godless” teaching at the nondenominational Queen’s University of Ireland, he formulated its basic tenants in his widely read *The Idea of a University* (1873), which was composed of two volumes that framed his undertaking in Dublin: *Discourses on the Scope and Nature of University Education* (1852) and the concomitant lectures he gave as the first rector, *Lectures and Essays on University Subjects* (1859). In 1855, four years before Darwin published *On the Origins of Species*, he addressed the School of Medicine on the topic of “Christianity and Physical Science.” He notes the different presuppositions of the new academic disciplines as:

We may divide knowledge, then, into natural and supernatural. Some knowledge, of course, is both at once; for the moment let us put this circumstance aside, and view these two fields of knowledge in themselves, and as distinct from each other in idea. By nature is meant, I suppose, that vast system of things, taken as a whole, of which we are cognizant by means of our natural powers. By the supernatural world is meant that still more marvellous and awful universe, of which the Creator Himself is the fulness, and which becomes known to us, not through our natural faculties, but by super-added and direct communication from Him. These two great circles of knowledge, as I have said, intersect . . . The physicist, as such, will never ask himself by what influence, external to the universe, the universe is sustained . . . If indeed he be a religious man, he will of course have a very definite view of the subject; but that view of his is private, not professional—the view, not of a physicist, but of a religious man; and this, not because physical science says anything different, but simply because it says nothing at all on the subject, nor can do so by the very undertaking with which it set out. The question is simply *extra artem*.<sup>14</sup>

For Newman, writing in the midst of August Comte’s Age of Progress: “there are branches of knowledge with respect to which the law of the human mind is progress. In mathematics, when once a proposition has been demonstrated, it is never afterwards contested. Every fresh story is as solid a basis for a new superstructure as the original foundation was. Here, therefore, there is a constant addition to the stock of truth. In the inductive sciences, again, the law is progress.”<sup>15</sup> While Comte’s positivism seemed to reject belief (and therefore was attractive to Karl Marx) Comte’s eventual answer to this conundrum turns out to be identical to Newman’s—a turn to belief. In his case “a religion of humanity;” in Newman’s case the return to Theology. This debate had

been carried out well before Newman by Gans and the other founders of the *Wissenschaft der Juden*; if we need to look for a Jewish answer to Newman, we perhaps have to look beyond the university to Samson Raphael Hirsch, also in 1854, and his “Offene Anfrage,” his public denunciation of that new educational institution, the Breslau seminary. He confronts reformers with questions about faith, not history, a faith summarized in his key points regarding Revelation, Text, Tradition and Practice: but all demand a new acknowledgment for what he defines as the core of Jewish religious thought. Not *Wissenschaft* or belief, Hirsch states, but, like Newman, *Wissenschaft* with belief.<sup>16</sup> And indeed, as I have argued in my recent book on pandemics, Hirsch countered religious objections to interventions concerning epidemic and pandemic diseases by stressing the centrality of understanding the difference between religious practice reflected in Biblical prohibitions concerning such illnesses and the realities of the world in which he found himself, the world of Pasteur and Koch, the world of microbes and public health mandates.<sup>17</sup>

But what is missing for Newman and Hirsch is the core of education, where doubt confronts belief, as Newman notes: “. . . with theology the case is very different. As respects natural religion (Revelation being for the present altogether left out of the question), it is not easy to see that a philosopher of the present day is more favourably situated than Thales or Simonides. He has before him just the same evidences of design in the structure of the universe which the early Greeks had. . . . As to the other great question, the question what becomes of man after death, we do not see that a highly educated European, left to his unassisted reason, is more likely to be in the right than a Blackfoot Indian.” While Science and Theology have different claims on knowledge: “Catholic Theology has nothing to fear from the progress of Physical Science, even independently of the divinity of its doctrines. It speaks of things supernatural; and these, by the very force of the words, research into nature cannot touch.”<sup>18</sup>

This very Catholic formulation is, of course, the key problem in relating things “Jewish” to notions of “science” in our disciplinary belief system. It has been the problem that haunts both the reception of the *Wissenschaft der Juden* as well as Jewish Studies in our contemporary university, torn as it is between Gans and Hirsch, between Dilthey and Newman. For the study of theology rather than the practice of theology marks the role that such belief systems can have in science. This is of particular importance when we turn to the general topic of the “Jews” and science, as the operative question is the self-conscious perception of things “Jewish” rather than the internal coherence of

such conceptual structures. Is it advocacy or is it observation? (I have avoided Alfred Moses' rather fraught term "Jewish Science," his 1916 parallel to Mary Baker Eddy's "Christian Science," for obvious reasons.<sup>19</sup>)

Are we thus in the twenty-first century limited in our idea of a science without moral direction, even when we add "Jewish" to its label? Andrew Delbanco, in *College: What It Was, Is, and Should Be* (2012) is typical. "[T]he questions we face under the shadow of death are not new, and . . . no new technology will help us answer them." Science's "principle of progress," does not "translate well" into other areas of human life: "Science tells us nothing about how to shape a life or how to face death . . . It not only fails to answer such questions; it cannot ask them." Delbanco knows that some scientists have predicted that in time "neuroscience will define and ensure happiness and . . . biochemistry will distinguish truth from falsity among what today are mere opinions about sex and gender," but he doubts "it will happen"; even if it does, "none of us will be around . . . and it's not clear that we would want to be."<sup>20</sup> Or, to note the recent public debate between Roosevelt Montás at Columbia University and Louis Menand at Harvard: is the role of the Humanities (or I would argue all of the *Wissenschaften*) to produce knowledge or to produce better human beings (without actually agreeing on what both of these categories mean)? Montás sees the Humanities as creating empathetic human beings through the reading of canonical texts<sup>21</sup> while Menand defines "The university [as] a secular institution, and scientific research—more broadly, the production of new knowledge—is what it was designed for. . . . Humanists cannot win a war against science. They should not be fighting a war against science. They should be defending their role in the knowledge business, not standing aloof in the name of unspecified and unspecifiable higher things."<sup>22</sup> The straw man here is a science devoid of moral accountability, which flies in the face of all of the public debates within science from the physics of the 1930s to the genetics of the 1990s. But such a utilitarian notion of science is needed if the Humanities are to be a counter moral force.

This is the dilemma of Jewish Studies in our age of academic collapse. For such a debate seems to be taking place as the very institutions that Eduard Gans and his converted Jewish contemporaries longed to join as part of a new intellectual elite tumble into the abyss of the new populism, here in the United States and abroad. If the Humanities are under siege, Jewish Studies, long supported by Jewish donors, seem somewhat less at risk, until one recognizes that the debates within Jewish/Israel studies reflect not only the overall incoherence of the field but the partisan political views of the funders, views held at bay for

the post-WII world by the claim of the neutrality of the enterprise, a claim now viewed as flawed and irrelevant. This volume is an attempt at a stock-taking: looking at new questions and new assumptions in the self-defining intersection between “Jews” and “Science.”

The essays in this volume cross a number of disciplines and a number of questions. New historical approaches, such as Environment Science and Jewish Studies; older fields, such as the Philosophy of Science; underrepresented fields in modern Jewish Cultural Studies, such as the History of the Health Sciences and some contemporary issues, such as the COVID-19 pandemic are all present here. In addition, there are some shorter presentations by both scientists who have thought deeply about the question as well as some of the senior figures in the study of Jews and science over the past decades. This volume is clearly NOT exhaustive, nor is it meant to be. It is both a type of stock-taking and a spur (I hope) to further work across fields and disciplines.

Sander L. Gilman  
Washington, DC  
March 1, 2022

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# Science, Imperialism, and Heteromascularity in the *Wissenschaft des Judentums*

by *Susannah Heschel*

**T**he group of young male Jewish intellectuals who gathered in Berlin in the 1810s and 20s to form the *Verein für Kultur und Wissenschaft der Juden*, thought that the study of Jewish history might provide a useful substitute for the role of religion in shaping Jewish identity and in overcoming negative stereotypes about Jews among Christians. But the study of Jewish history expanded quickly into a revised version of the history of Western civilization. Rather than a desiccated branch of that civilization, the scholars of the *Wissenschaft des Judentums* (WJ), as it took shape in the nineteenth century, presented Judaism as the solid, healthy tree trunk, with Christianity and Islam as its two branches whose vitality depended upon the health of the trunk itself, Judaism. That fundamental rearrangement of the West was the narrative inherent in the many varieties of the scientific study of Judaism that took shape for the following century and a half.

The argument put forward by nearly every Jewish historian, theologian, philosopher, and rabbi in Germany from the late eighteenth century until 1933 was that Judaism is the foundation of the West, having provided the Bible, monotheism, ethics, and a religion of reason that was far more compatible than Christianity with modernity's insistence on the free exercise of the mind. The "era of Enlightenment" was exemplified by Judaism, a religion without dogma, as Moses Mendelssohn, among others, proclaimed.

The WJ was not all of one piece. There were different topics, different interests, all of which were pursued outside the framework of German universities,

where there were no Jewish Studies programs nor Jewish professors teaching about Judaism. The significance of the movement lies not only in its scholarly accomplishments—gathering manuscripts, presenting narratives of the broad sweep of Jewish history, interpreting the nature of Judaism in antiquity, the medieval authorship of the Zohar—topics including Second Temple history, rabbinic literature, medieval philosophy, Kabbalah, and biblical commentaries, the origins of Christianity and Islam—these were enormous accomplishments. Yet there were also underlying political, theological, and ideological dimensions. The broad European culture of imperialism shaped the WJ just as it shaped the modern novel and other cultural productions. Imperialism was also permeated with an ideology of heteromascularity and the scholars and scholarship of the WJ constituted a masculinizing movement hoping to restore an effeminate, subservient Judaism to its manly place in world history.

What was needed was scientific method, a manly science, that would create a manly field, Jewish Studies, that could rise and conquer the exclusivity of Christian hegemony, turning Judaism into the foundation of the West. The scholars of the WJ gathered primary data, especially manuscripts, and wrote narrative accounts of Jewish history from the Bible to the present, demonstrating Judaism's influence extending far and wide: Judaism, they argued, was responsible for the creation of Christianity and Islam, ethics and monotheism, reason and scientific thinking. Clearly influenced by the mood of Europe, they created an imperialist Judaism, the “mother religion” that generated its two daughter religions. Judaism was not just for Jews, they argued further, but had a civilizing mission of bringing monotheism to the world. Philology, they believed, would demonstrate the truth of these claims. Jewish Studies, in other words, was a revolt of the colonized, a displacement of Christianity with Judaism as the great colonial white male power of Western civilization, and a field that demanded, produced, and extolled manliness.

The study of Judaism is the study of Europe's patient.

What is wrong with Judaism? That was the question raised or at least implied by the Protestant theological scholarship that spoke about Judaism in negative terms. The depiction of the first-century Pharisees was a picture of horror; contemporary Judaism no less so. The was not only about Judaism, but also about the Hebrew Bible, which was viewed as inferior to the New Testament. During the nineteenth century, a revival of Marcion was underway among Protestant theologians. Marcion was the second-century heretic who claimed that the God of the Hebrew Bible was not the same as the God of the New Testament and called for the Hebrew Bible to be removed from Christian

scriptures. Luther may have purged Christianity of the Roman Catholic church, but now was time to purge Christianity of the Hebrew Bible (“Old Testament” in Protestant terms).<sup>1</sup> Perhaps the most highly respected Protestant historian of early Christianity, Adolf von Harnack wrote:

the rejection of the Old Testament in the second century was a mistake which the Great Church has rightly avoided; to retain it in the sixteenth century was a fate from which the Reformation was not yet able to withdraw, to still conserve it as a canonical document in Protestantism since the nineteenth century is the result of a religious and ecclesiastical paralysis.<sup>2</sup>

Harnack was not an anti-Semite; he was a liberal man, politically and theologically. Nonetheless, he expressed a rejection of the Old Testament that was common and shared by a growing number of Protestant pastors and theologians who agitated for the elimination of the Old Testament and, by the 1930s, for a purge of the New Testament of all positive Jewish references. Their motivations were complex. The surge of antisemitism in Germany in the late 1870s became, by the 1890s, both calmer and more widespread, with the so-called “Jewish problem” appearing on the party platforms of most German political parties except those on the Left. In France, the Dreyfus Affair launched a right-wing, antisemitic and anti-liberal political movement that blamed Jews for modernity’s difficulties.

Within Protestant theological circles, there was a sense of shame that Christianity had originated within Judaism, along with a desire for a pristine Christianity. The Old Testament, Harnack and others argued, presented a legalistic, unethical religion, contradicting Jesus’s own teachings, and the God of the Old Testament was wrathful and punitive, in contrast with the loving father God whom Jesus presented. Protestantism was not simply a rejection of Catholicism, but a revivification of Jesus’s own faith that had been misinterpreted over the years. Luther had rejected the Papacy; now, Protestants argued, it was time to reject Judaism and whatever ways it had distorted Jesus’s message.

The clash between Old Testament and New Testament, along with the claim that each represented a different God, had been condemned by the early church in the second century C.E. Such condemnation carried little weight among Protestants, who divorced themselves from the strictures of church doctrine and any hint of Catholic normativity. While arguing in theological terms, they were no doubt influenced by political and cultural developments,

especially the antisemitism and Christian identity movements growing in Europe that soon migrated to the Christian identity movement of late nineteenth century England and then to the United States by the 1920s and 30s. Judaism was portrayed as unethical and responsible for a degenerate influence on society.

Such teachings had an impact because Protestant theology was the faculty at the German university where students could learn about Judaism; no Jewish Studies professorships existed. Understanding the origins of Christianity meant placing the New Testament within its historical context, first-century Palestine. Greek texts from the era abounded and were examined with care, and new discoveries of translations of apocryphal and pseudepigraphic texts provided additional sources for the era. What was omitted was the study of rabbinic literature—neither the Aramaic translations of the Hebrew Bible nor the Hebrew and Aramaic texts of the Mishnah and Talmud. When such texts were cited, they were contextualized negatively and tendentiously. For example, Franz Delitzsch cited a Talmudic passage which reports that Hillel taught that one should always tell a bride she is beautiful, even if she is not and conclude that the passage demonstrates that “Hillel sometimes transgressed the bounds of truth.”<sup>3</sup> As Abraham Geiger (1810–74), one of the major Jewish scholars of the *Wissenschaft des Judentums*, who monitored the presentation of first-century Judaism in his reviews of the writings of New Testament scholars, the portrayal was invariably negative. The Protestant scholar Heinrich Ewald wrote that post-biblical Judaism was “only a ruin, which gradually crumbles more and more, an activated corpse that falls into convulsions, without an inner life, however, and [is] therefore that much less capable of giving life.”<sup>4</sup> Another Protestant scholar, Adolf Hausrath, though warmly disposed to the writings of Jewish scholars, retained the old caricatures, describing the Pharisees as “religiously degenerate” and the Sadducees as “ethically wild.”<sup>5</sup>

Into that academic morass came the scholars of the *Wissenschaft des Judentums*. To them, scholarship was the vehicle for Jews to attain respect and acceptance in European society. The significance of scholarship was set by some of the outstanding historians of nineteenth-century German academia: Leopold von Ranke and Heinrich Treitschke. Von Ranke stressed objectivity: not interpretation, but the use of primary sources from archives determined the quality of scholarship, which rested on the presentation of history “as it really was.” The turn to archives was also an effort to make the field of historical study a manly field. Treitschke was the great historian of Prussian nationalism, professor at the University of Berlin, who gave academic support to the growing

antisemitism of the 1870s with articles he published in the distinguished journal, *Preussische Jahrbücher*, arguing that Jews constitute a foreign element and had no place in Germany. He complained in particular that the writings of Heinrich Graetz (1817–91) that Jews were disrespectful of Christianity, and he declared, “The Jews are our misfortune,” a slogan used by the Nazis.

### SCHOLARSHIP AS COLONIAL PROJECT

The methods of Jewish scholars were primarily philological analyses, but they were imbued with political and ideological commitments that reflected the problems of the era, including the challenges of emancipation, antisemitism, European imperialism, and colonialism. If Christian supersessionism constitutes a form of theological colonialism, the response of Jewish scholars was a revolt of the colonized. Both colonialism and colonial revolts take many forms, and the WJ responded in a variety of ways. Abraham Geiger’s argument that Jesus said nothing new or original was one form of revolt; Heinrich Graetz’s eleven-volume narrative of Jewish history combined imperialism with counter-imperialism.

Geiger’s writings on Christianity turned the tables on Christian theology and while he was excluded as a Jew from a university professorship and from publishing in Christian theological journals, his work was widely read and discussed, even if frequently with anger. The problem was that his arguments could not be refuted, and he had introduced a wide range of Jewish texts from antiquity that had been hitherto unknown to Christian scholars; with those efforts, he upended the study of Christian origins by turning it into one small, subsidiary piece of a much larger phenomenon, Second Temple-era Judaism. In this way, the WJ became not simply a presentation of Jewish history but a counterhistory of the prevailing Christian scholarship. The WJ did not merely want the study of Judaism to be added to the curriculum, but wanted to radically revise that curriculum, in an effort to resist and even overthrow the standard portrayal of Western history. At the heart of the West, according to the new German-Jewish historiography, stood not classical Greek or Roman civilization, nor Aryan culture, nor the New Testament, but the Hebrew Bible and rabbinic literature. Even modernity, Jewish historians argued, with its claims to secularized, scientific forms of knowing and its insistence on tolerance and diversity, was to be understood as the product of Judaism, not Christianity.

After all, it was Christianity that rested on dogma, whereas Judaism permitted freedom of thought, they argued. Geiger's extensive scholarly examination of Christian origins, especially the figure of Jesus, should be understood not as an effort at assimilation, but, in light of postcolonial theory, as an attempt to subvert Christian hegemony and establish a new position for Judaism within European history and thought.<sup>6</sup>

If Geiger's scholarship represents a revolt of the colonized, the work of Heinrich Graetz, his contemporary, exemplifies the ethos of imperialism, an ethos combining superiority with suffering. If not the full eleven volumes, then the abridged version of Graetz's *History of the Jews* stood on the bookshelves of middle-class, educated German Jews. His narrative was widely read and profoundly influential well into the twentieth century. He opened nearly every section of the book with depictions of Jewish suffering and persecution, pogroms and expulsions, nearly all at the hands of Christians. This was a classic of lachrymose Jewish history and struck a receptive chord with Jews, whether they were at home in Europe or the United States or committed to Zionism. Combined with the lachrymose, however, was Graetz's emphasis on the superiority of Judaism and its role in generating Christianity and Islam. Judaism gave the West the Bible, monotheism, a code of ethical behavior, and Jews, he implied, had behaved throughout the course of history with far greater decency than Christians or Muslims, though he found in Islam far greater religious tolerance than in Christianity and depicted Muslim Spain as a Golden Age for Jews, with nothing comparable in Christian Europe. Put together—his emphasis on the superiority of Judaism and the suffering of Jews—Graetz's *Geschichte* exemplifies what John Kucich has described as "imperial masochism," the mixture of superiority and suffering that Kucich says defines imperialist culture and that he finds reflected in the literature of nineteenth-century imperial Britain.<sup>7</sup> The combination of Jewish suffering with Jewish religious superiority is typical of the WJ and became foundational for Zionist thought and for much of Jewish self-understanding, especially in light of rising antisemitism.

Thus, the WJ might be viewed as combining a revolt against imperialism with an introjection of the imperialist culture of academia in the era.

### MAKING JEWISH STUDIES MANLY

Professional academic historians of the nineteenth century were nearly all men, as were university professors. *Wissenschaft* was presented as objective, reasoned, and unencumbered by emotions, a realm of men and a practice of maleness. Not only the person of the historian, but the subject matter, too, was made masculine. Nineteenth-century historiography established hierarchies that ranked philological analyses of texts and the history of diplomacy and the military above the study of home, family, and women. To be important, scholarship had to be male; this was the era of “great men” and “great ideas” historiography that also led Jewish scholars to emphasize the work of important Jewish male thinkers during the course of history, especially those who influenced or whose ideas were precursors to Christian and Muslims thinkers.

The archives that were viewed as fonts of information and that guaranteed the scientific respectability of scholarship were eroticized, as Bonnie G. Smith has pointed out: archives and texts were to be penetrated to extract their secrets and produce knowledge, a continuation of an older tradition of masculinized hermeneutics, and household, sex, and marriage provided the standard to distinguish important from unimportant.<sup>8</sup> Von Ranke described archival documents as “so many fairy princesses living under a curse and waiting to be free.”<sup>9</sup> Philological analysis, too, was a sexualized male act; Edward Said writes, “Philology placed the scholar in the position of the European expert delivering to a European audience the exotic fruits of foreign adventures, surveying, “as if from a peculiarly suited vantage point the passive, seminal, feminine, even silent and supine East, then going on to articulate the East, making the Orient deliver up its secrets.”<sup>10</sup> Philology was the study of the text as the body, a “decarnalization, as the flesh of the text is organized into a corporate vessel of ideas, thoughts, and expression.”<sup>11</sup> Philology could also be understood as a Christian act, an analysis of the meaning as spirit incarnate in the word, the classic distinction from the Pauline epistles onward between Jewish carnality and Christian spirituality. In either case, as a (metaphorical) sexual act or an act of Christian belief, philology undertaken by Jews carried a valence of the transgressive. For centuries, Christians had examined Judaism; now, the gaze was reversed and Christianity was being examined by Jews and placed in the historical framework of Judaism: key passages in the New Testament were presented as expressions of rabbinic debate, so that Christianity was not a new or unique religion. Refuting Jewish arguments required knowledge of rabbinic literature, which very few Christians had.

As historical scholarship took shape in the nineteenth century, it became simultaneously a disciplining of gender, separating men from women, Judaism from Christianity. Given the reigning understandings of maleness and femaleness, it would have been extremely difficult for a woman to enter the field. While Geiger had argued for women's rights in Judaism in 1837, criticizing the position of women in Jewish law, he continued to insist that the husband would "always remain master of the house"; "the husband will be the one who gives, the wife the one who receives."<sup>12</sup> On this point, Geiger, although one of the major advocates for liberalizing Judaism, was no different from his Orthodox rabbinic colleague Samson Raphael Hirsch, who wrote, "This will-subordination of the wife to the husband is a necessary condition of the unity which man and wife should form together."<sup>13</sup>

Scholarship would enhance manliness. Just as R. G. Collingwood stated, "I study history to learn what it is to be a man,"<sup>14</sup> Geiger wrote, "we became men and wanted manly fare, we wanted *Wissenschaft*."<sup>15</sup> Some male Jewish scholars, emerging from Orthodox religious homes, such as Geiger, found religious observance emasculating and scholarship liberating: "All too frequently, the task of nurturing the seedlings of earnest manly faith and conviction has been made bitter for me" wrote Geiger as a young man in 1846 to Leopold Zunz, one of the towering Jewish scholars of the era.<sup>16</sup> Those gendering practices continued well into the twentieth century. Gershom Scholem (1897–1982), the twentieth-century scholar of Jewish mysticism, argued against the reputation of mysticism as feminine; Jewish mysticism, kabbalah, "is a masculine doctrine, made for men and by men."<sup>17</sup> Making Jewish mysticism "masculine" was important for Scholem to justify why he would devote his life to analyzing it; historiography transforms what might appear feminine—mysticism—into a masculinizing scientific undertaking. Needless to say, Jewish historiography until a few decades ago told us next to nothing about the lives of Jewish women, apart from idealized images of Jewish housewives and mothers who raised children devoted to Judaism and disparaging images of Jewish women who converted to Christianity, conversed with Christian men, and preferred to lead lives of public intellectuals.

Collingwood and Geiger realized what Smith articulates: "part of the appeal of these new [historical] practices was the way in which they proposed a masculine identity worthy of and equal to the arduous quest for objectivity."<sup>18</sup> Yet that masculinity was not flaunted, but transformed into the alleged universal and transcendent; the historian's maleness was made invisible yet was the ruling voice, as was his whiteness and Europeaness. As Charlotte Witt



writes, “patriarchal thinking attempts to achieve universality by repressing sexual difference.”<sup>19</sup> In this case, it is not difference that is repressed, but women. Scholarship was the male presenting himself (Judaism) as the transcendent power of world history, a claim reiterated in philosophical terms by the German Jewish philosopher Hermann Cohen in his identification of *Deutschtum* and *Judentum*. In the words of Fustel de Coulanges, “It is not I who speak, Gentlemen, but History who speaks through me.”<sup>20</sup> The struggle of male Jewish scholars was not only to occupy the position of “I” among Jews, but also whether they might occupy the “I” among historians. To that end, Judaism had to be presented as ultimately triumphant, despite persecution, and the ideological configuration of triumph led to the claim that Judaism’s monotheism had triumphed over paganism to assure the morality of history, and that despite the persecution, the great miracle was the survival of the Jews. Historicism did not offer an alternative to liturgical memory, but simply presented memory in a different linguistic configuration. The historian was the voice of history speaking, much as the biblical prophets convey the voice of God speaking.

How does a woman who is without will, who is subordinate to men, and who functions as a receptive vessel, flourish in the world of scholarship? Scholarship requires solitary hours of study, but also collegial discussions, seminars, and lectures; travel to archives, archeological sites, libraries, and manuscript collections that are sometimes privately held, usually by men wealthy enough to purchase them, and some of which depend upon close personal relationships and even friendship: all dominated by men. Academic careers have long been shaped by the kindness of a professor and the intellectual atmosphere of one’s colleagues. To be female or to be a Jew in nineteenth-century Germany was to exist on the margins of the academy, at least physically and socially.

## ENDING CHRISTIAN HEGEMONY

A driving purpose throughout modern Jewish thought and modern Jewish scholarship is to challenge the hegemony of Christianity without disrupting the imperialism of Europe. This was accomplished in different ways. Jacob Emden (1697–1776), a powerful Orthodox rabbi of the eighteenth century, place Judaism, Christianity, and Islam together as a “community for the sake of heaven.”<sup>21</sup> Not Christianity alone, but the three monotheisms constituted

the distinctiveness of the West, a formulation that simultaneously constructed the non-monotheistic, “pagan” religions as ripe for the colonization that would bring them “civilization and culture.” Other modern Jewish thinkers used monotheism as a cudgel against Christianity’s doctrine of the Trinity, aligning Judaism with Islam as the only two monotheistic religions that also rejected anthropomorphism and possessed a divinely revealed ethical law. With these arguments, the “Law of the Father” was no longer Christianity alone, but a triangulated collaboration that included Judaism and Islam.

That Judaism had given rise to Christianity and Islam, its two “daughter religions,” as they were invariably labeled, was demonstrated using philological methods to analyze the Qur’an and the New Testament and demonstrate their lack of originality and their borrowings from Judaism—specifically, from rabbinic texts. Jewish scholars were not oblivious to the polemical nature of their arguments. Moritz Steinschneider (1816–1907), for example, who pioneered the study of Kabbalah, described the Zohar as a Trinitarian doctrine whose purpose was attacking Christianity.<sup>22</sup>

Not only did they open new avenues of understanding the origins of those two religions, they also placed rabbinic literature, long held in contempt by Christian scholars, at the center of their scholarly work. The scholars of the *Wissenschaft des Judentums* thought of their work as strictly objective, unbiased, and uninfluenced by external factors, though they were quick to point out biases in the scholarship on Judaism of Christian colleagues. Only through knowledge of rabbinic literature were the similarities with the Qur’an apparent, opening a new avenue for understanding the origins of Islam, and the *Wissenschaft des Judentums* put central emphasis on the study of rabbinic texts as the key to understanding Judaism, Christianity, and Islam.

The extraordinary breakthrough of Leopold Zunz (1794–1886), one of the founding members of the *Verein*, was to define Judaism as consisting of all the productions by Jews in every field, from mathematics to biblical commentaries. Judaism was not limited to religious texts and ideas but encompassed all intellectual engagements by Jews, a spectrum that demonstrated Jewish productivity in every discipline. This would be true *Wissenschaft*, Zunz believed. His friend and colleague in the *Verein*, Isaac Marcus Jost (1793–1866), published several narratives of Jewish history, offering a broad sweep of Jewish experience, yet his presentation reflected many of the same denigrating attitudes toward aspects of Judaism that Christian theologians had long perpetuated—for example, that the Talmudic rabbi interpreted Jewish religious observance in narrow-minded, hairsplitting terms.

A major breakthrough in Jewish scholarship came with the 1833 publication of the book by Geiger, *Was hat Muhammad aus dem Judenthume aufgenommen?* Geiger examined the Qur'an and demonstrated parallels between the Qur'an's readings of biblical passages and the Midrashic and Talmudic interpretations. He found texts from the Mishnah in the Qur'an and explained that the biblical stories in the Qur'an are actually derived from the Midrash, not the Bible. He also demonstrated similarities in the legal rulings and religious prescriptions of the Qur'an and rabbinic literature, and he described Muhammad as a genuine religious personality, using language far more sympathetic than was necessarily common in Europe at the time.

While arguing that Islam was, essentially, derived from late antique Judaism, Geiger also argued that the differences in Islamic religious practices were instituted by Muhammad deliberately to distinguish his movement from that of the Jews. Divorce, for instance, differs sharply between Deuteronomy 24:1 and Sura 2:230. At the same time, Geiger also pointed to striking parallels between Qur'anic regulations regarding prayer and those of biblical and rabbinic Judaism. Studying the parallels also opened a window into Jewish religious practice and belief in Arabia, and to the availability and transmission of rabbinic thought to the Arab world.

Geiger's book was hailed all over Europe as a breakthrough contribution to the study of the Qur'an and the origins of Islam, a field that did not exist until his book was published; there were no critical editions of the texts he discussed, no concordances or scientific dictionaries—he created the field *ex nihilo*. To this day Geiger is hailed by scholars of Islam as the person who inaugurated the field. Most of the Jewish scholars trained in Arabic admired the Qur'an, arguing for an alliance between Judaism and Islam as two religions that preserved monotheism, rejected anthropomorphism, and believed religious law was foundational for ethics, while viewing Christianity as intolerant and dogmatic. Jewish theologians without training in Arabic or Islam tended to ally Judaism with Christianity, viewing Islam as the outlier. By the turn of the century, as Germany's colonial undertakings moved into Islamic regions, some Jewish scholars participated in a variety of ways. Josef Horowitz became a professor of Arabic at the Aligarh Muslim University from 1907–14; Eugen Mittwoch, professor of Semitics at the University of Berlin and director of its Oriental Institute, trained students for diplomacy or financial undertakings in colonized regions of Asia, the Middle East, and Africa.

Geiger did not remain focused on the study of the Qur'an. Instead, he turned his remarkable talents to a wide range of scholarly topics, including

medieval Jewish Bible commentaries, but his magnum opus, published in 1857, was his study of Second Temple-era Judaism, one of the most sophisticated and daring books in the field of Jewish Studies. Given the paucity of direct evidence for the era, Geiger made use of careful philological analyses of translations of the Bible into Aramaic, Greek, and Syriac, to determine how the translation of particular words and phrases might reveal information about the social, political, and religious nature of the era. He then drew broad conclusions about the religious tensions in Palestine, before and after the Roman occupation, between two competing Jewish factions: the Sadducees, priests in the Jerusalem Temple who considered themselves the Jewish aristocracy and promoted assimilation into Greek society, and the Pharisees, interpreters of biblical law who sought, Geiger argued, a democratization of Jewish religious practice, what he claimed was a “priesthood of all believers.” Ultimately, the Pharisees prevailed after the destruction of the Temple in 70 C.E. and the end of the priesthood. That background inspired Geiger to offer a new interpretation of the origins of Christianity. Jesus, he wrote, was a rabbi who said nothing new or original but repeated the teachings of his fellow Pharisees and sought, like them, a reform of Judaism and a revival of piety, not the creation of a new religion. Paul, Geiger claimed, created Christianity as a religion about Jesus, departing from Jesus’s own faith, which was liberal, progressive Pharisaic Judaism.

However tame Geiger’s arguments might seem to us today—after all, nearly any textbook of early Christianity will say that Jesus was a Pharisee—his words aroused rage among German Protestants in his day. Julius Wellhausen wrote that even the earliest stratum of rabbinic literature, the Mishnah, was redacted in the mid-second century and therefore could not serve as a source for understanding first-century Judaism (or Jesus). That the Gospels were written and redacted long after the death of Jesus and might also be an unreliable source of Jesus’s teachings was not considered by Wellhausen. Other scholars were somewhat daunted by the parallels Geiger demonstrated between Jesus’s teachings and those of the rabbis but concluded that the parallels were transcended by the unique nature of Jesus’s inner religious consciousness. Franz Delitzsch accused Geiger more sharply: “Why do you hurt the feelings of Christians with such cutting words?” Comparing Jesus to the Pharisees, Delitzsch wrote, “is to me ten times more horrific than the Crucifixion.”<sup>23</sup>

For Jewish scholars to place Christianity under the microscope of Jewish *Wissenschaft* felt aggressive, destructive, and even insulting to Delitzsch and to most of his Christian colleagues. To them, Christianity was a fulfillment of

the prophecies of the Hebrew Bible, while Judaism was a new phenomenon, disconnected from the Hebrew Bible. Israelite religion had come to an end, replaced by priestly and rabbinic legalism, they claimed, whereas Jesus was heir to the great tradition of classical prophecy. What had horrified Delitzsch—identifying Jesus as a Pharisee—clearly made some Christian theologians squirm. Committed to historical-critical method, it was not possible to ignore the parallels outlined by Geiger, but the problem was now theological: how could the uniqueness and originality of Jesus be preserved in the face of historicism?

By the end of the nineteenth century, with the growth of racial theory, some theologians began to suggest that while Jesus's teachings were similar to those of other Palestinian Jews, they carried a different spiritual valence that was unique, reflecting, they suggested, that he was not a Jew by race, but an Aryan. Identifying Jesus as an Aryan grew in popularity during the early twentieth century, until it became the doctrine of the *Deutsche Christen* (DC), a movement within the Protestant church that supported Hitler and sought to Nazify Christian teachings. Ultimately, the DC formed an institute in 1939 to carry out the dejudaization of Christianity by eliminating the Old Testament from the Bible, purging the hymnal of Hebrew words and hymns authored by Christians of Jewish background, and writing theological treatises and a catechism depicting Jesus as seeking the destruction of Judaism, an effort, some claimed, that Hitler was now fulfilling. Some DC theologians, trained in historical-critical philological methods, revised the text of the New Testament, removing passages in which Jesus participated in Jewish religious practices, and claiming that these had been inserted by Jews to deliberately falsify the text of the New Testament. Philology was now the method to purge the Christian Bible of Judaism to make it “racially pure” for a *Judenrein* Nazi Germany.

## CONCLUSION

Nineteenth-century philologists compared language to rocks. “There is no science,” Friedrich Max Muller wrote, “from which we, the students of language, may learn more than Geology.”<sup>24</sup> Another disagreed: language was superior because it could speak its own truth. Still, philology insisted on its objectivity, its independence from politics, theology, and ideology—despite, as Geoffrey Harpham has pointed out, the deep investment philology developed in race.<sup>25</sup> Philological distinctions between Greek, Latin, and Sanskrit as

the Indo-European family of languages and Hebrew and Arabic, the Semitic family, led to pronouncements regarding cultural differences between the two families. Race expanded linguistics into a theory of culture and then into a political theory that left Germans concerned about purifying Germany from Semitic influences. The gulf that opened divorced Europe from Judaism and Islam. If Judaism was not European, where did that leave Christianity, a religion derived from Judaism? By the end of the nineteenth century, claims were heard that Jesus was an Aryan, not a Jew, and that the Old Testament, a Jewish book, should be eliminated from the Christian Bible.

In the process of shaping itself as a unified nation, Germans turned to a rejection of Jews and Judaism as a tool to solidify Christian nationalism, and unify differing regional customs, political views, even dialects. For Jewish scholars, philology remained the method of choice, declining only slightly in the latter decades of the twentieth century. Jewish historians sought to combat the German rejection of Jews by demonstrating that Jews had been present on German soil since the third century, that Judaism was foundational to Christianity, that Jews were not a separate nation, and that Judaism's prophetic teachings were the same as those of Germany.

Caught between striving for acceptance by the Christian hegemony of the European academy and the desire to revolt against it, Jewish Studies was trapped in an epistemological glass closet, confined and visible, the object of the Christian gaze and the place of the Jewish effort to reverse the gaze. The closet is the place of enclosure of the epistemic revolt of the colonized seeking liberation and the place of (mis)representation.<sup>26</sup> For centuries, Christians had placed Judaism under its theological gaze, drawing sharp contrasts and using a negative depiction of Judaism to demonstrate Christianity's superiority. Now Jewish scholars were examining Christianity, demonstrating parallels between the New Testament and rabbinic texts, and concluding that Christianity was not original or unique and certainly not superior. Historicism, which quickly came to define all the disciplines, including theology, became by mid-century the foundation of theology, now defined as the historical search for the origins of Christianity.

The *Wissenschaft des Judentums*, although aware and engaged with the academic debates of its era, became its own epistemic space, bringing a variety of lenses and always inflected by contemporary concerns and assumptions: political debates over the emancipation of Jews; an ongoing discourse in which Jews were labeled "oriental" and Judaism denigrated as unsuitable for German Kultur; the rise of colonial fantasies in Germany and its emergence

as an imperial power; and theories and methods of scholarship, drawn primarily from Classics and biblical studies.<sup>27</sup> While some of their methods and conclusions may be viewed today as dated and untenable, of broader interest is the way their scholarship negotiated the political and theological debates of their era, mapping a triad of monotheistic religions, turning Christianity and Islam into vehicles for defining modern Jewish thought, creating a masculinized imperialist history of the West, and locating the place of Judaism within that map. Indeed, in this multivocal epistemic space of nineteenth-century German scholarship, Judaism should be seen not simply as a passive receptacle of scholarly dissection, but as an active voice in the ongoing discussions over religion, secularism, scholarly method, and the nature and history of the West. Even as Christians regarded rabbinic literature as the sick patient of Europe, Jewish scholars transformed those rabbinic texts into the crucial philological foundations for understanding Western history, an act of reversing the gaze as a colonial revolt. The price of that revolt, however, was the assumption of the male “I” for scholars and scholarship and the denigration and exclusion of women and the female from one of the most important developments in Jewish self-definition.

## Notes

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1. Adolf von Harnack, *Marcion: The Gospel of the Alien God*, trans. John Steely and Lyle Bierma (Durham: Labyrinth Press, 1990): ix.
2. Von Harnack, *Marcion*, 134.
3. Franz Delitzsch, *Jesus und Hillel: Mit Rücksicht auf Renan und Geiger* (Erlangen: Verlag von Andreas Deichert, 1866), 178.
4. Abraham Geiger, Review of Heinrich Ewald, vol. 7 of *Geschichte Israels. Jüdische Zeitschrift für Wissenschaft und Leben* 7 (1869): 196.
5. Adolf von Hausrath, *Neutestamentliche Zeitgeschichte. Erster Teil: Die Zeit Jesu* (Heidelberg: Basserman, 1868), 145.
6. Susannah Heschel, "Revolt of the Colonized: Abraham Geiger's *Wissenschaft des Judentums* as a Challenge to Christian Hegemony in the Academy," *New German Critique* 77 (Spring/Summer 1999): 61–86.
7. John Kucich, *Imperial Masochism: British Fiction, Fantasy, and Social Class* (Princeton: Princeton University Press, 2007). Kucich points, for example, to Joseph Conrad's novel, *Heart of Darkness*, that describes the conviction that British civilization is superior to all others combined with a description of the suffering entailed in bringing that civilization to the savages of Africa.
8. Bonnie G. Smith, *The Gender of History: Men, Women, and Historical Practice* (Cambridge: Harvard University Press, 2000), 71.
9. Bonnie G. Smith, "Historiography, Objectivity, and the Case of the Abusive Widow," *History and Theory* 31.4 (December 1992): 18.
10. Edward Said, *Orientalism* (New York: Vintage, 1978), 138.
11. John T. Hamilton, *Philology of the Flesh* (Chicago: University of Chicago Press, 2018), 6.
12. Abraham Geiger, "Die Versammlung zu Leipzig und die zu Philadelphia," *Jüdische Zeitschrift für Wissenschaft und Leben* 8 (1870): 12.
13. Samson Raphael Hirsch, *Judaism Eternal*, vol. 2, trans. I. Grundwald (London: Soncino, 1956), 58.
14. Smith, "Historiography," 19.
15. Ludwig Geiger, "Aus Leopold Zunz' Nachlass: Abraham Geiger, Letter to Leopold Zunz 13 October 1833," *Zeitschrift für die Geschichte der Juden in Deutschland* 5 (1892): 248.
16. Ibid.
17. Gershom Scholem, *Major Trends in Jewish Mysticism* (Jerusalem: Schocken Publishing House, 1941), 37.
18. Smith, *The Gender of History*, 105.
19. Charlotte Witt, "Feminist History of Philosophy," in *Feminist Reflections on the History of Philosophy*, ed. Lilli Alanen and Charlotte Witt (Dordrecht: Kluwer Academic, 2004), 7.



20. Smith, "Historiography," 18.
21. Jacob Emden, *Lechem Shamayim: Commentary on Prike Avot 4:11* (Amsterdam, 1751).
22. Moritz Steinschneider, "Jüdische Literatur," in *Allgemeine Enzyklopädie der Wissenschaften und Künste*, ed. J. S. Ersch and J. G. Gruber (Leipzig: Gleditsch, 1850), Section 2, vol. 27, 357–471.
23. Franz Delitzsch, Letter to Abraham Geiger, in *Jüdische Zeitschrift für Wissenschaft und Leben* 10 (1872): 309.
24. Friedrich Max Müller, *Lectures on the Science of Language*, 2 vols. (1864; London: Routledge/Thoemmes Press, 1994), 2.14.
25. Geoffrey Galt Harpham, "Roots, Races, and the Return to Philology," *Representations* 106 (Spring 2009): 44.
26. C. Riley Snorton, "Trapped in the Epistemological Closet: Black Sexuality and the 'Ghettocentric Imagination,'" *Souls: A Critical Journal of Black Politics, Culture, and Society*, 11.2 (2014): 94–111, <https://www.tandfonline.com/doi/full/10.1080/10999940902910115>.
27. Daniel J. Schroeter, "Orientalism and the Jews of the Mediterranean," *Journal of Mediterranean Studies* 4.2 (1994): 183–96; Axel Stähler, "Orientalist Strategies in a German 'Jewish' Novel: *Das neue Jerusalem* (1905) and Its Context," *Forum for Modern Language Studies* 45.1 (2009): 51–89.

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# Philosophers of Catastrophe: Early Twentieth-Century Jewish Proponents and Opponents of Objectivity in Science

*by Steven Gimbel and Stephen Stern*

**T**he Second World War ended with the exposure of the Nazi death camps and the threat of global nuclear annihilation. The former disclosed the depths of human depravity and the latter warned us about the severity of the consequences that could await us as a result. The grimness of each, much less both, had the effect of shielding from our collective consciousness the equally dire warnings from the First World War that had occurred only a couple of decades earlier.

World War I was catastrophic. Twenty million died. Millions more were wounded. The nations of Europe were left in social, political, and economic shambles. But what truly left a sense of crisis on the Continent were not the results, but the means that achieved them. Munitions were dropped from the sky. Chemical weapons wafted across the battlefield causing soldiers' lungs to bleed so that they would drown in their own blood. Technologically advanced weapons were able to destroy more human life in a flash than would be claimed in weeks of combat a century before. Trench warfare had replaced the icon of the brave, noble warrior with the miserable, cold, wet, starving animal hiding in a hole until ordered to charge, at which point they would be mercilessly slaughtered with no strategic advantage gained.

When the fighting ceased and reflection could begin, what arose was not only horror at what Europe had done to itself, but culturally a sense of utter bewilderment as to how this could have happened. Pre-war, the Continent congratulated itself on being the pinnacle of sophistication. In all elements of

human endeavor—art, architecture, science, technology, philosophy, economic output—it seemed as if Friedrich Hegel was correct that they were on the verge of the end of history. Combining Hegel’s dialectic with Darwin’s theory that suggested progress, to many on the Continent, it seemed that humanity had evolved to its ultimate form. The purpose of all previous history had been to produce this generation. They, the turn of the century Europeans, were the ultimate expression of the perfection of God and science.

And as if in the time of a single heartbeat, the zenith of cultural development had devolved back to savage barbarians. Surveying the bloody battlefields and the social-political chaos after the Great War, Europe was left grappling with the self-reflective question, “How did *we* do this?” It would make sense, in their minds, to see such mindless carnage from the East or from the Americas where such ruthless brutality would be expected from their supposed inferiors, but this happened in Europe. How could Europeans have done this?

Those who wrestled with this question included Jewish philosophers,<sup>1</sup> some of whom, like Franz Rosenzweig and Hans Reichenbach had served in the war. But this commonality of experience did not result in similar analyses. Indeed, quite the opposite. Rosenzweig, and other thinkers like those of the Frankfurt school, argued that science, with its supposed objectivity, had allowed us to see people as mere objects and this dehumanization was the cause of the moral depravity of the war. To undermine the notion of objectivity and re-elevate subjectivity was the key to rehumanizing ourselves. Reichenbach and others, like Karl Popper, saw the objectivity of science as essential to creating a post-nationalized future in which we would all become fellow citizens of the world with equal claims to dignity. When technology fell into the hands of nationalists, the result was the tragedy of the Great War. One set of Jewish philosophers considered undermining the claimed objectivity of the scientific worldview to be necessary for a better future, whereas the other set argued exactly the opposite, that the embracing of the objectivity of science contained the seeds of a more humane tomorrow.

That leaves us with an intellectual context in which Jews are disagreeing with other Jews, hardly a novel predicament. The standard Hellenic-inspired epistemic approach leads us to the question, “Who wins?,” that is to say, which of these mutually exclusive alternatives is superior and to be celebrated as the fact of the matter and which is deficient and thereby eliminated? We contend that this is the wrong question, based on the wrong approach. Rather, we ought to alter our epistemological standpoint and adopt a pilpul-inspired orientation, what we term a “neo-Talmudic” approach, wherein we no longer see each

fundamental metaphysical *Weltbild* as excluding the other, but instead as a participant in an unceasing dialogue contributing ineliminable, but frustrating insight with which the other conversant must wrestle. It is the debate between the embrace and rejection of objectivity in science, not the conclusion of the argument and the awarding of the trophy, that allows us to glimpse facets of the wisdom we seek.

### OBJECTIVITY AND THE UNIFICATION OF HUMANITY

The patron saint of humanistic objectivity is its greatest practitioner, Albert Einstein.<sup>2</sup> Shortly after the end of the Great War, Einstein wrote the following:

At a sitting of the [Prussian] Academy [of Science] during the War, at the time when nationalism and political infatuation had reached its height, Emil Fischer spoke the following emphatic words, 'it's no use, gentlemen, science is and remains international.' The really great scientists have always known this and felt it passionately, even though in times of political strife they may have remained isolated among their colleagues of inferior caliber. In every camp during the War, this group of voters betrayed their sacred trust. The International Association of Academies was broken up. Congresses were and still are held from which colleagues from ex-enemy countries are excluded. Political considerations, advanced with much solemnity, prevent the triumph of the purely objective ways of thinking without which our great aims must necessarily be frustrated.<sup>3</sup>

Science, the epitome of objective thought, Einstein held, served as a bulwark against the sort of irrational destruction that was the War. Nationalism and religious fervor are based on the belief that the accessibility of truth depends upon group membership and national origin. It was this sort of rejection of objectivity that he considered to be the preconditions to the possibility of armed conflict.

The objectivity of science provided a model that should be followed for all human belief in two distinct ways, one epistemological and one sociological, both of which served the cause of global peace and human progress. Epistemologically, science contrasts the natural with the artificial, elevating the meaningfulness of the former. Natural laws, like that governing gravitation, are not affected in the slightest when one crosses national boundaries. The rate at

which a one-kilogram weight accelerates when dropped from a height of one meter is the same in Berlin and Paris. Man-made laws, on the other hand, like those governing the employability of Jews at governmentally funded institutes, will be radically different when one takes but a single step over a border. This shows the weakness of the subjectivity that guides politics in its ability to be influenced by passions that appeal to our lesser selves. Science is impervious to passion and fashion, to bias and hatred, to pride and side taken in any political conflict.

Sociologically, this objectivity provides the template for cooperative progressive human endeavors. The international scientific congresses and conferences Einstein mourns the loss of demonstrated how influence and collaboration could cut across geo-political lines. Einstein, of all people, was no Pollyanna when it came to conflict within science. He was the most well-known lightning rod of intellectual disagreement of his time. But some of those who opposed him the most passionately were among his countrymen and some of those who defended him (and were also among his best personal friends) would be seen as enemies in Germany. Whether Einstein was right or wrong about his theory of relativity had nothing to do with the passport he held and everything to do with the way the universe itself worked. The global partnership of scientists demonstrated that cooperation and unification across social and religious boundaries was possible; shallow political divisions could be put aside for a greater shared human goal.

But, that, of course, was not a view shared by all scientists. Two German Nobel laureates, Phillip Lenard and Johannes Stark, were among the leaders of the Aryan physics movement that objected to relativity theory on the grounds that it is Jewish physics, that is, that Einstein's work was based upon inferior Semitic forms of thought. A superior approach is to be found in German physics, "I could have said Aryan physics, or physics of the Nordic type of peoples, physics of the probers of reality, of truth seekers, the physics of those who have founded scientific research."<sup>4</sup> We rightly mock this sort of sentiment today. But in doing so, we implicitly nod at Einstein's argument concerning the power and meaning of scientific objectivity.

### *Hans Reichenbach*

Einstein's first seminar on his general theory of relativity was held in 1919 at the University of Berlin and was attended by eight students. One of them was Hans Reichenbach. Originally trained as a civil engineer, he came to realize that his



real interests were more ephemeral, laying at the intersection of mathematics, physics, and philosophy. He turned his studies to the theoretical, learning from some of the greatest minds of history: Max Planck, David Hilbert, and Ernst Cassirer. He finished his doctoral dissertation on the foundations of probability theory in 1915.

As a newly minted doctor, before he could turn to the Academy, geopolitics intruded.

... the war broke out and I myself was a soldier for 2½ years. However, already at that time I viewed the war as a great tragedy and I have always felt since that scientific-minded people have the particular duty to fight the spirit which breeds such catastrophes for humanity.<sup>5</sup>

Reichenbach served on the Russian front in the army radio troops' signal corps until a serious lung illness (from which he would suffer after-effects for the rest of his life) led to his being stationed back in Berlin. There, he worked as a radio scientist while taking courses at the University. That led him to Einstein's classroom at a time when Einstein had not yet garnered international fame. The two would become friends and it would be a relationship that changed his life and changed philosophy.

Einstein's seminar had led Reichenbach to realize that the new relativity theory undermined Kant. This was during a period where the neo-Kantian movement led by Hermann Cohen and championed by Hermann von Helmholtz seemed to offer the most promising approach to understanding the new world being exposed by modern physics. But even that approach did not seem capable of handling the radical conceptual shift Einstein was demanding. The understanding of the universe that emerged from relativity theory was not only revolutionary for science, it exposed the need to completely rebuild the foundations of all human knowledge.

In his first two books, *The Theory of Relativity and A Priori Knowledge* and *An Axiomatization of the Theory of Relativity*, Reichenbach (working closely with Einstein) sought to set out the objective grounds on which one should rationally accept Einstein's work (remember that at this time, Einstein's views were not widely, much less universally held, even in the scientific community).

He accepted the Kantian challenge to the possibility of objectivity and modified the concept of the synthetic *a priori* into what Michael Friedman has called the "relativized *a priori*."<sup>6</sup> Reichenbach agrees with Kant that there must be *a priori* categories that form the precondition for the possibility of experience, but instead of implanting these in the structure of the mind rendering

them necessary and unrevisable in light of evidence, they become theoretical presuppositions, that is, essential parts of specific scientific theories. The theory is an intertwined combination of elements that are theoretical and those that are empirical, and the empirical content makes a scientific theory objectively testable as a cohesive unit. The job of the philosopher of science is to separate out and make explicit the theoretical *a priori* elements from the empirical elements and thereby explicating the grounds on which a theory would be supported or undermined by observable evidence. So, we have a sort of theoretical holism that allows us to objectively assess the fit between theory (as a whole) and the world.

On the basis of this work, Einstein tried to get Reichenbach a position in the philosophy department at the University of Berlin. But two factors led to a strong denial. The first is that the department did not recognize philosophy of science, especially technical philosophy of physics, as philosophy. But the other reason is that Reichenbach earned a reputation at Berlin having been the leader of the University's Socialist Student Party, the author of their platform, and of their manifesto, *Socializing the University*. His leftist political activities made him philosophically radioactive in the period between the wars. Ultimately, Einstein pulled some strings and got Planck to create a chair in the foundation of physics in the physics department and appoint him there, where he stayed until Hitler's election to be Chancellor, at which time he fled to Turkey.

But in his time in Berlin, he was a subterranean political force. This aspect of Reichenbach is not usually stressed in the scholarly literature, partly because Reichenbach is read almost exclusively by analytic philosophers of physics only interested in his work on physics, but also because the route he took to political influence became indirect.

Reichenbach was, like Einstein, a non-Marxist socialist. He argues that while socio-economic class is certainly an explanatory factor in sociology and politics, the Marxist picture is grossly oversimplified. Humanity is simply more complex than Marx describes. From *Socializing the University*,

The materialist conception of history is the view that the evolution of spiritual and intellectual values is a direct function of economic conditions. Politicians who espouse its principles rest content with improving economic conditions, for they are convinced that a spiritual transformation then will follow and that battles for intellectual reform are therefore superfluous, serving merely to dissipate available forces. Their outlook begins with the fact that stratification of human beings according to their education and culture essentially

coincides with stratification according to their standard of living; and they seek to employ for the purposes of social reform the sociological law which gives the expression of this fact. That the existing state of affairs is as described must be conceded. However, exception must be taken to the way in which it is interpreted in historical materialism, for this sociological law has validity only as a proposition about average conditions. The intellectual and spiritual variety within each social stratum is so great that a poverty of intelligence and cultivation is encountered as frequently among the rich as cleverness and creativity among the poor.<sup>7</sup>

This is written in 1918, just three years after his dissertation on the foundations of probability.

To understand the connection, one must understand the place of probability in the physics of the time. Just before Einstein's revolutionary theories of relativity, the cutting edge of physics was statistical mechanics and the question of atomism. The notion of the atom was controversial in the scientific community because explaining observable behaviors on the basis of unobservable entities seemed not only unscientific in its reference to a metaphysical entity, but also impractical, because if atoms existed, there would be so many of them that we could never accurately describe their interactive behavior. The mathematics describing such a system would be beyond human capability.

But a generation or so before Einstein and Reichenbach, the work of Rudolf Clausius and Ludwig Boltzmann showed that we could build statistical models that described the behavior of gases in increasingly accurate and sophisticated ways. The deterministic equations we inherited from Newton had to be replaced with newly derived statistical methods that accounted for average kinetic energy and mean distance between collisions for large ensembles of particles. Before Reichenbach sought to give an epistemic foundation to relativity theory in 1920, he was seeking to give an epistemic foundation to this statistical approach to nature in 1915.

In a gas, you had particles moving at different speeds, in different directions, but it was their collective behaviors that gave us observable properties like temperature, pressure, and volume. In the same way, societies were comprised of people of different socio-economic class and different cultural and moral proclivities. Just as we could only speak of the macroscopic properties of a gas using statistical means, we would need to approach the sociological in the same way. In every socio-economic class, there would be those who could be elevated if given the proper boost. We can affect the system as a whole, by

effecting those human molecules who are given less than what they need from their socio-economic condition.

How can these individuals be affected? Education. But the formal means of education were controlled by the State and the bureaucracy of the institution, neither of which had an interest in the broader effect. So, Reichenbach decided he would need to find informal means of educating the public.

He had a background in radio, so he began there. He became a broadcast personality with a radio program where he explained the science of the day in layman's terms. Professors in Germany were figures of immense status and the image was of a staid, stuffy, arrogant intellectual above the rabble. But Reichenbach was described by his students as playful, laid-back, incredibly clear in his explanations of difficult ideas, and always having a gleam in his eye. This translated well to the airwaves. He filled a role much like Carl Sagan in the 1980s or Neil deGrasse Tyson today. In addition to radio, he wrote popular science articles for magazines and books aimed at a general audience. Bringing the objectivity of science to the populace was a political act. It was not only designed to be informational, it was designed to be transformational.

This side of Reichenbach is largely ignored because, again, he is generally considered by philosophical technicians doing technical philosophy. But it is also the case that, especially in the United States, this sort of popularizing is seen as "selling out," as not doing "real" work. The place and importance of the public intellectual has been greatly diminished. But for Reichenbach, it was the political work required of intellectuals if we were to avoid catastrophes like the Great War.

He had done his "serious" philosophy showing where the most important scientific theories of his day must be understood as giving us objective truth about the universe. But this was only half the job. We also needed to use that to improve society. In learning about the world, we can make the world better. He says so himself in his popular book *From Copernicus to Einstein*:

Why do we need to know whether the sun revolves around the earth or vice versa? What business of ours is it, anyway? Can this knowledge be of any use to us? No sooner have we asked these questions than we become aware of their foolishness. It may not be of any use to us, but we want to know something about these problems. We do not want to go blindly through the world. We desire more than mere existence. We need these cosmic perspectives in order to be able to experience a feeling for our place in the world. The ultimate questions

as to the meaning of our actions and as to the meaning of life in general always tend to involve astronomical problems.<sup>8</sup>

The objective truths of science give us an orientation towards the universe that shapes our notion of humanity and is essential for constructing a more perfect society.

### *Karl Popper*

Sharing Reichenbach's politics and belief that objectivity and education in science was the key to overcoming class oppression and creating the social conditions for global peace after the Great War was Otto Neurath in Vienna. Where Reichenbach took his message to the airwaves and the popular press, Neurath focused on a different sort of educational medium—working people's science museums. Where Rosenzweig's approach to adult education was the lecture hall, and classroom and Reichenbach's engaged the media of leisure-time entertainment, Neurath sought to construct self-guided places of self-education.<sup>9</sup>

He knew that the language of science was mathematics and that the language was too intricate to teach to those with limited background. So, he sought a new means of mathematical communication. Instead of the formal symbolic language of equations, he would use pictures and graphs that could convey the quantitative relations to anyone. For this, he developed a pictorial language, isotype. When you look at the symbol for men and woman on a restroom door or see the symbols on a light at an intersection telling you when it safe or unsafe to cross, you are looking at Neurath's isotype.

Neurath was a founding member of the Vienna Circle of Logical Positivists, the Austrian outpost of the movement Reichenbach was launching in Berlin. The group included some of the most important intellectuals of the time, such as, Moritz Schlick, Rudolf Carnap, and Kurt Gödel. It was, however, very exclusive and one of the people it excluded was a younger Viennese scholar who would perhaps go onto be the most famous and influential of them, Karl Popper.

Popper was the son converted Jewish lawyer and was raised in what he described as a bookish environment. His father was politically active, engaged in social welfare projects that included opening a home for homeless families (one of its tenants briefly was the family of a young Adolf Hitler). This orientation toward the needy was one that Popper shared, describing himself as a

child as a “softy,” moved deeply by the poverty around him and having “fallen in love” in kindergarten with a girl who was blind.

Popper was the only of the figures discussed here who did not fight in the Great War. He was slightly too young, the war having begun on his twelfth birthday, but its effects on him were profound.

I was twelve, then, when the First World War broke out; and the war years, and their aftermath, were in every respect decisive for my intellectual development. They made me critical of accepted opinions, especially political opinions.<sup>10</sup>

He had been political in his youth, attracted to the political left because of its concern for the poor, but noticed to his dismay how those who seemed to share his pacifistic and social justice-based concerns in peacetime rapidly bought into the war furor.

Before the war, many members of our circle had discussed political theories which were decidedly pacifist, and at least highly critical of the existing order, and had been critical of the alliance between Austria and Germany, and of the expansionist policy of Austria in the Balkans, especially in Serbia. I was staggered by the fact that they could suddenly become supporters of that very policy.

Today I understand these things a little better. It was not only the pressure of public opinion; it was the problem of divided loyalties. And there was also fear—the fear of violent measures which, in war, have to be taken by the authorities against dissenters, since no sharp line can be drawn between dissent and treason. But at the time I was greatly puzzled.<sup>11</sup>

What stayed with Popper was the way in which emotions could sway people away from reasoned positions, supported conclusions they had strongly attached themselves to intellectually before the influence of the passions drove them away from their own reasoning.

But Popper’s own emotions were also engaged by the war.

My mother still took us for our summer vacation to the Alps, and in 1916 we were again in the Salzkammergut—this time in Ischl, where we rented a little house high up on a wooded slope. With us was Freud’s sister, Rosa Graf, who was a friend of my parents. Her son Hermann, only five years my senior, came for a visit in uniform on his final leave before going to the front. Soon after came the news of

his death. The grief of his mother—and of his sister, Freud's favourite niece—was terrible. It made me realize the meaning of those frightful long lists of people killed, wounded and missing.<sup>12</sup>

Popper only indirectly experienced the catastrophe, but even as a teenager he recognized it for what it was and his thought, both that connected to his philosophy of science and his social-political thought was an integrated whole informed by the irrationality of those during the War and dedicated to eradicating the preconditions that made the War possible.

The problem, according to Popper, is ideology (ideology from any part of the political spectrum). When one is beholden to a worldview based on interest, emotion, or group membership, the resulting need to maintain it in the face of counter-evidence, what we now call “confirmation bias,” leads subjective desires to corrupt objective reasoning. And this undermines human social progress.

Only political power, when it is used to suppress free criticism, or when it fails to protect it, can impair the functioning of these institutions, on which all progress, scientific, technological, and political, ultimately depends.<sup>13</sup>

We can progress as a society and a species only when we allow objectivity to flourish. It is only when we are open to a free exchange of ideas and the ability to freely compare, evaluate, and criticize ideas in the search for objective truth that human flourishing and the avoidance of war is possible.

. . . civilization . . . is still in its infancy, and . . . continues to grow in spite of the fact that it has been betrayed by so many of the intellectual leaders of mankind. It attempts to show that this civilization has not yet fully recovered from the shock of its birth, the transition from the tribal or ‘closed society’, with its submission to magical forces, to the ‘open society’ which sets free the critical powers of man. It attempts to show that the shock of this transition is one of the factors that have made possible the rise of those reactionary movements which have tried, and still try, to overthrow civilization and to return to tribalism. And it suggests that what we call nowadays totalitarianism belongs to these movements, which are just as old or just as young as our civilization itself.<sup>14</sup>

Where Einstein sought to use science and scientific discourse as a template, as a model for political discourse, Popper takes the next step and equates them. The scientific method, the approach that gives science its objectivity is

not only like the sort of reasoning we need in the political realm. It is identical to it.

For Popper, the only statements (scientific, political, or otherwise) that are meaningful are those with testable empirical content. This is entirely independent of subjectivity.

. . . subjective experience, or a feeling of conviction, can never justify a scientific statement, and that within science it can play no part but that of an empirical (a psychological) inquiry. No matter how intense a feeling of conviction it may be, it can never justify a statement.<sup>15</sup>

Meaningful claims in science and politics must be objective.

. . . the word 'objective' indicate[s] that scientific knowledge should be *justifiable* independent of anybody's whim: a justification is 'objective' if in principle it can be tested and understood by anybody. . . . Now I hold that scientific theories are never fully justifiable or verifiable, but that they are nonetheless testable. I shall therefore say that the *objectivity* of scientific statements lies in the fact that they can be *inter-subjectively tested*.<sup>16</sup>

For Popper, the foundational insight is that, like Socrates, we know nothing. We can never be certain of anything. Certainty is the hallmark of ideology and thereby the bane of humanity. As humans, we are always and necessarily fallible. Everything we believe might be (and will eventually shown to be) wrong.

But that does not mean there are not rational beliefs. There are, but they require the ability to be shown to be wrong, falsifiability. A proposition is falsifiable (and therefore meaningful) if there is some observation that would (if observed) show the belief to be false. The bigger the set of potential falsifiers, the riskier the claim, the better it is and the higher the belief status when it successfully avoids falsification. A boxer can only become the reigning champion if he beats the current champ and all challengers. The more challengers he beats, the more ingrained he is as the champ. In the same way, the more challenges a proposition has and the more it successfully meets, the more we think it likely true. But these challenges, like prize fights held in public and televised around the world, are open to all.

The pseudoscientist and the totalitarian both proclaim "truths" that cannot be challenged. The connection of the Divine right of kings to earlier totalitarians and untestable race theory to the rising National Socialists of the time demonstrated for Popper the connection between science and politics.



The rejection of science and the yoking of human progress and the opening of human society in its ability to scientifically test propositions and human flourishing both show that the objectivity of science and human well-being and moral governance must be seen as inexorably intertwined.

### SUBJECTIVITY AND THE RESTORATION OF HUMANITY

Max Scheler, in his book *On the Eternal in Man*, voiced a common view in the aftermath of the Great War. Humanity had conquered nature in its grasp of science and technology and congratulated itself on its wisdom, intelligence, and ingenuity. Humanity used this success as evidence of its superiority and then it turned around and used its advances to destroy itself.

The war, unlike all previous wars in history, was no longer within humanity, no longer in one of its sections. Humanity itself was in the war. . . . Humanity itself was suffering violence committed by humanity. . . . For it is in the whole of humanity itself and it *is* humanity itself, suffering the violence upon violence which it inflicts upon itself. Where is the whole, which when a part strayed into evil ways could lead the part back, teach it and educate it? Nowhere! For mankind has learned how to master everything *beneath* it—plants and animals, sunlight and all kinds of energy—but one thing alone it has not learned to master: *itself*.<sup>17</sup>

All of the knowledge of the world and the way it worked, all of the objective truth it had amassed, had the effect of turning humanity itself into an object. Objectivity was not the peak of humanity, it was the bane of humanity. Humans were stripped of their specialness, their privileged place as subjects of lived lives. In the still smoldering ruins of the war, the essential philosophical project was rehumanization.

Teetering on the edge of history between the hell of war behind and the uncertain future ahead, the subjective philosophers of catastrophe took up positions as front and rear guards. Franz Rosenzweig in the front sought to move humanity forward, to redeem humanity. Herbert Marcuse and the Frankfurt School protect the rear and sought to understand how to keep humanity from slipping backward into dehumanization.

*Franz Rosenzweig*

Franz Rosenzweig was raised in a secular Jewish house. His beloved cousins, like so many others, had converted and so he planned to join them. But he was under the sway of Hegelian philosophy which possesses a stepwise picture of history. Christianity is an essential development in world history, moving beyond the immaturity of Judaism's external imposed laws. If Rosenzweig was to fully realize himself, his personal journey should mirror that of the cosmos. He would thereby briefly embrace his Judaism on the way to his conversion so that he might be truly completed with his baptism.

But that step was never to be. Sitting in *erev* Yom Kippur services, he had a transcendental experience. He contacted his cousins. He would forever be Jewish.

His Judaism came into focus in the trenches of World War I. In the mud and the blood of the trenches, the rats and corpses emitting stench, with bombs and bullets actively seeking to rob him of his being, he realized that he had not only been abandoned, but betrayed by philosophy. Philosophy asserted the primacy of metaphysics. It was the soul that was real, the disembodied essence that was the source of all Being and knowledge. But in the trenches, wet, cold, and hungry, all concerns were diminished before the ever-present fear of death. It was the clinging to life of the living that was the real first truth.

. . . From death, it is from the fear of death that all cognition of the All begins. Philosophy has the audacity to cast off the fear of the earthly, to remove from death its poisonous sting, from Hades his pestilential breath. All that is mortal lives in this fear of death; every new birth multiplies the fear for a new reason, for it multiplies that which is mortal.<sup>18</sup>

The "All" is understood in Western philosophy as a metaphysical concept that must be approached objectively, external to the experiences of subject. But this embrace of the objective and rejection of the subjective is exactly the errant first step. Life and its living, that is, ethics, would have to replace the barren metaphysics of Western philosophy as the starting point and foundation of all discussion. It was failure to do so that led to the death and destruction of the war and his realization deep in its trenches was the primacy of the experience of the will of the individual to live in the moment, in the particular, for me to not get hit by that bullet. We strive to know the All, but can only do so from the perspective of our own life.

Standard Western philosophical metaphysics begins with the essence. For Plato, Aristotle, and Hegel, the essence is the eternal, the unchanging,

the perfect, the real. This is contrasted with the material, the ephemeral, the lived, the subjective. The search for the essence forces our eyes upward, into the blank heavens, away from meeting the eyes of the other. Metaphysics is the vain search for that which lays beyond life, thereby deflecting our eyes from life, from the real lived joy and suffering of actual human beings. In its yearning for the ultimate real, it forces us away from the actual. "The terms of life are not essential, but real. They concern not essence but fact."<sup>19</sup>

Truth emerges from the experience of the subject. In a letter to Martin Buber, quoted by Nahun Glatzer, Rosenzweig writes,

I readily believe that a Philosophy, to be adequate, must rise out of the thinking that is done from the personal standpoint of the thinker. To achieve being objective, the thinker must proceed boldly from his own subjective situation. The single condition imposed upon us by objectivity is that we survey the entire horizon; but we are not obliged to make this survey from any position other than the one in which we are, nor are we obliged to make it from no position at all. Our eyes are, indeed, only our own eyes; yet it would be folly to imagine we must pluck them out in order to see straight.<sup>20</sup>

All thinking begins in the world, in life, in experience. But that experience is never atomistic. We live always and necessarily in the company of the other.

To gain insight into the ultimate truth, we should not turn to those who claim to seek it—the Western metaphysicians. Rather, the key to it may be found in the symbol of Judaism, the six-sided star of David. It is created by two interlocking triangles, one pointing up and one pointing down. Each represents different elements of the real.

The three vertices of the upward pointing triangle represent God, World, and Man. The three are necessarily interconnected and for Man to get to God, it must be through the mediation of the world. But this does not mean by understanding the world objectively. It is not a scientific investigation because the world is not furnished with mere things, but with others. We engage the world and thereby engage with God through our engagement with others in the world. It is by hearing the calling of the other, by responding to it with love. Just as we stand face-to-face with death, so too we must stand face-to-face with each other.

Where the upward pointing triangle is comprised of entities, the downward pointing triangle is the conceptual. Its vertices represent creation, revelation, and redemption. Creation is not merely God's construction of the world,

but is mirrored in the individual through the building of loving relations in community. The creation of such relationships forces the self out of its subjective bubble. But it is not toward objectivity, but toward a shared subjectivity, an inter-subjectivity, that gives an understanding of the world of another self. This multiplicity is a shock to the "I" and the relation to the other forces it to the realization, the revelation of the breadth of the world beyond itself. It recognizes its freedom and in embracing that freedom. It is through a choice of loving relations within its inter-subjective community that humans are capable of redemption.

The false idol of objectivity caused Western thought to subjugate ethics, the living of the human life, to cold metaphysics. This, as the Great War showed, is a path to ruin. Rosenzweig contended that we must put the ethical before the metaphysical (the essentialist), an ethical that emerges from the "we." His contemporary Martin Buber put the relationship between I and Thou as primary, but Rosenzweig objects that it is not I and Thou as atomistic entities, but rather the creation of the we. This creation of community, of the subjective self-embedded within something larger than itself leads to revelation that allows it to relate to the we with love and care.

It is that that, in turn, placing the ethical before the metaphysical, elevating the subjective as central to existence, offers the sole possibility of human redemption after the horrors of World War I. For it is the subject who is able to encounter the divine direction. It is Rosenzweig's demand that God not be rejected by enlightenment ideals that makes empiricists queasy, and it should. Their resistance to this language-game means Rosenzweig's subject doesn't own the conversation or even the imminent epistemology of the conversation.

### *Herbert Marcuse*

Rosenzweig's *Star of Redemption* not only paints the positive picture sketched above which seeks to provide the roadmap to human redemption, but at great length criticizes all elements of prior Western philosophy. The criticism is so withering that Rosenzweig saw himself as having no choice but to abandon the academic philosophical project. Human redemption required a spiritual element that would never be part of the purely intellectual process and so he launched a new sort of institutional project aimed at it: *Die Freie Jüdische Lehrhaus*, a new sort of college, a free institute of Jewish learning in Frankfurt. Lecturing there were some of the great minds of the Jewish world: Martin Buber, Gershom Sholem, and Leo Strauss among them.

Three years after the founding of the *Lehrhaus* in Frankfurt, a second intellectual academy opened in Frankfurt, *Die Institut für Sozialforschung*, known commonly as the Frankfurt School. Like Rosenzweig's, it was based around a project dedicated to the critique of Western thought and peopled by Jewish intellectuals. Some, like Erich Fromm worked at both. But the Frankfurt School had a different orientation, Marxist social criticism. Among its major figures were Max Horkheimer, Theodor Adorno, Walter Benjamin, and Herbert Marcuse.

Like Rosenzweig, Marcuse was in the German Army in the Great War; but unlike Rosenzweig, he avoided the trenches of the front, stationed safely in the horse stables of Berlin. Like Rosenzweig, he received his Ph.D. in philosophy at Freiburg. But where Rosenzweig was there before WWI and worked with the neo-Kantian Heinrich Rickert, the younger Marcuse studied there between the wars under Edmund Husserl and Rickert and Husserl's student, Martin Heidegger, becoming Heidegger's assistant until he joined the Nazi Party leading Marcuse to relocate to Frankfurt.

Marcuse, like Rosenzweig, was deeply affected by the war in a fashion that caused him to radically change his philosophical orientation away from Hegel and traditional metaphysics. But where this drove Rosenzweig back toward Judaism, it took Marcuse in the direction of social criticism. Both laid the blame for the destruction of culture and human wellbeing at the feet of the technologized society. Science and the technology it created were dehumanizing factors that allowed for the barbarism of the war. Rosenzweig aimed to lay out the path to redemption, where Marcuse sounded the alarm that the modernist forces that gave rise to the catastrophe were still very much active.

The crisis that made the Great War required a combination of a "Warfare state" and a "Welfare state" capable of mass dehumanization. The capacity for this was, in turn, based upon the ability of contemporary industrial society to penetrate the subjectivity of the individual and replace the mind of the true Self—the locus of authentic individual needs, interests, and desires—with false consciousness, that is, with implanted beliefs that no longer address the goals of the individual and, instead, focus on the needs, interests, and desires of the society itself.

Like a parasite, industrial society penetrates the consciousness of the individual and eliminates its negative capacity for thought, its ability to criticize the status quo, its ability to imagine alternative social structures and ways of life, its ability to project itself into the world in any fashion that is contrary to the interests of the State. The subjectivity of the subject, its own self-ness,

is supplanted with an internal orientation that makes the self the slave of the organized social structure without the ability to recognize or question is enslavement.

Introjection suggests a variety of relatively spontaneous processes by which a Self (Ego) transposes the 'outer' into the 'inner.' Thus, introjection implies the existence of an inner dimension distinguished from and even antagonistic to the external exigencies—an individual consciousness and an individual unconscious *apart from* public opinion and behavior. The idea of 'inner freedom' here has its reality: it designates the private space in which man may become and remain 'himself.'

Today, this private space has been invaded and whittled down by technological reality. Mass production and mass distribution claim the *entire* individual, and industrial psychology has long since ceased to be confined to the factory. The manifold processes of introjection seem to be ossified in almost mechanical reactions. The result is, not adjustment but *mimesis*: an immediate identification of the individual with *his* society and, through it, with the society as a whole.<sup>21</sup>

The quintessence of the individual is difference. To be who you are is to be unique, to have your own perspective, your own preferences, your own experiences. But in providing easy access to pleasure and embedding the individual with an all-encompassing mass media, self-knowledge is replaced with mimesis forcing the individual's own thoughts to mirror the interests of the modern industrial society.

The social structure provides the individual with an addictive mix of easy pleasure and propaganda focused on the belief that any consideration of alternative ways of organizing ourselves is a threat to the pleasures now enjoyed. This belief in social progress entails that anything that opposes it must be a threat to pleasant living. This becomes the essence of reason itself.

The impact of progress turns Reason into submission to the facts of life, and to the dynamic capability of producing more and bigger facts of the same sort of life. The efficiency of the system blunts the individual's recognition that it contains no facts which do not communicate the repressive power of the whole.<sup>22</sup>

Since the imperative of serving the interests of industrial society is taken as the first principle of reason, science, that project seen as the epitome of reason and objectivity, also becomes corrupted.

The trend may be related to a development in scientific method: operationalism in the physical, behaviorism in the social sciences. The common feature is a total empiricism in the treatments of concepts; their meaning is restricted to the representation of particular operations and behavior . . . the radical empiricist onslaught thus provides the methodological justification for the debunking of the mind by the intellectuals—a positivism which, in its denial of the transcending elements of Reason, forms the academic counterpart of the socially required behavior.<sup>23</sup>

Science provides the thoughts you are required to believe and these, then, provide justifications for the ways society forces you to act. As such, science becomes a weapon of modern industrial society's fight against true needs, against subjectivity, against authentic being.

The society bars a whole type of oppositional operations and behavior; consequently, the concepts pertaining to them are rendered illusory or meaningless. Historical transcendence appears as metaphysical transcendence, not acceptable to science and scientific thought. The operational and behavioral point of view, practiced as a 'habit of thought' at large, becomes the view of the established universe of discourse and action, needs and aspirations. The "cunning of Reason" works, as it so often did, in the interest of the powers that be. The insistence on operational and behavioral concepts turns against the efforts to free thought and behavior *from* the given reality and *for* the suppressed alternatives. Theoretical and practical Reason, academic and social behaviorism meet on common ground: that of an advanced society which makes scientific and technical progress into an instrument of domination.<sup>24</sup>

Once dominated, the subjugated non-subjects become drones that self-enforce the needs of the technologized industrial society.

Now, it is precisely this new consciousness, this 'space within,' the space for transcending historical practice, which is being barred by a society in which subjects as well as objects constitute instrumentalities in a while that has its *raison d'être* in the accomplishments of its overpowering productivity.<sup>25</sup>

If there is a threat to the society, the dehumanized subject becomes not only capable of atrocities, but atrocities become rational. With the loss of one's own subjectivity, replaced with the interests and needs of the structure, anything that threatens the structure, threatens the Self. To make sure that the

differential between the true interests of the Self and the false needs of the society do not come into focus within the mind of the individual, a constant threat level from an enemy (internal or, more often, external) forces the attention to constructed conflict with threatens to destroy the comfort produced by the technological state. In this way the welfare state also becomes a warfare state.

Free institutions compete with authoritarian ones in making the Enemy a deadly force *within* the system. And this deadly force stimulates growth and initiative, not by virtue of the magnitude and economic impact of the defensive 'sector,' but by virtue of the fact that the society as a whole becomes a defense society. For the Enemy is permanent. He is not in the emergency situation but in the normal state of affairs.<sup>26</sup>

The construction of the warfare state forces reason to accept its presuppositions and in doing so what would otherwise be considered irrational becomes obvious and necessary.

. . . the insanity of the whole absolves the particular insanities and turns the crimes against humanity into a rational enterprise. When the people, aptly stimulated by the public and private authorities, prepare for lives of total mobilization, they are sensible not only because of the present Enemy, but also because of the investment and employment possibilities in industry and entertainment. Even the most insane calculations are rational: the annihilation of five million people is preferable to that of ten million, twenty million, and so on. It is hopeless to argue that a civilization which justifies its defense by such a calculus proclaims its own end.<sup>27</sup>

War is a natural result, Marcuse argues, of the elimination of human subjectivity. When we embrace the objective, it not only smothers the subjective, but replaces it. The logic of the objective disregards the individual, seeing humans as mere cogs in the grueling and relentless process of maintaining itself. Human life becomes meaningless, satisfied by vapid pleasures and ready to support atrocities to maintain them. Rosenzweig argued in the shadow of the Great War that the rejection of the objective and embrace of the subjective are essential for the redemption of humanity through love, redemption required by the atrocities it committed; Marcuse contends that not following this path and allowing the objective to replace the subjective necessarily results in one-dimensional humans, incapable of seeing alternative, better ways of life and condemned to become mindless drones of a military-industrial culture



doomed to continue to commit such atrocities again and again, convinced of its own rightness in so doing.

### A NEO-TALMUDIC PRESCRIPTION

The split between those who championed the objectivity of science and those who sought to undermine its centrality in the European worldview (which roughly maps onto the Continental and Analytic philosophy) has been a methodological and political schism that has dogged the discipline for a century. What has been argued here, and sadly overlooked by those on all sides, is that both of these movements arise out of the concern to heal the world after the cancer of the Great War.

While they stem from a common desire, they differ. There is no denying that fact. The Continental subjectivist approach lays the dehumanization necessary for the War at the feet of the objectivity of science. By objectifying people, removing their humanity and turning them into mere bodies, they are denied the dignity that accompanies the meaningfulness of the lived experience. The Analytic objectivist approach, on the other hand, sees flawed political presuppositions that draw artificial lines that meaninglessly separate people from each other and facilitates the framing of false narratives of us vs. them which cause otherwise rational people to form frenzied mobs seeking to employ violence against those they wrongly see as different. The key to avoiding future war and allowing for human flourishing, the Continentals argue, requires embracing dialogic subjectivity and rejecting objectivity. The Analytics argue the converse.

The Hellenic-Christian intellectual tradition gives us two options in such a situation: logical or dialectic. The former holds that of the competitors one and only one must be the case. The latter contends that we need a synthesis, some Hegelian combination or Aristotelian middle-path resulting in a single unified approach that incorporates the strengths of each to compensate for the weaknesses of the other, that is, a sort of intellectual group hug, a conceptual kumbaya moment. But the Jewish intellectual tradition offers a third way, a different approach to this pair of conflicting views. In the Talmudic tradition, insight from diverse interpretations and distinct methodologies is unproblematic. It is the unceasing discussion, pilpul-like movement, that is of importance. The need to either settle the dispute or broker a compromise robs us of the

valid insights that both provide and thus this approach necessitates an open-ended pilpul process of always becoming, a give and take that never finds home in “truth.”

Talmudic thought begins from a fixed point, Halakhic law. No one questions the legitimacy of the halakha. But the law itself is general and requires interpretation in the multifaceted complexity of the real world full of lived lives and unforeseen contexts. This intricacy leads to a multiplicity of interpretations by wise sages. The passionate discourse around the different answers and reasonings generates wisdom. And it is this wisdom, not some artificial ceasing of disagreement that is important.

This epistemic approach may be generalized into what we term “neo-Talmudic thought” using the Talmudic approach as a template, but replacing the fixed point. Any text or conceptual presuppositions may be selected as a fixed point. The goal of neo-Talmudic discourse is to wring wisdom from the multiple perspectives of a wide range of interpreters, each contributing insights that would not be gotten from other treatments.

This, we contend, is how one should treat the four figures engaged here. The fixed point is the avoidance of war in the shadow of the Great War and the move toward human flourishing. All four share a complete commitment to this. But just as we may glean insights from both the treatments of Hillel and Shammai, so, too, we should approach the question of subjectivity and objectivity in relation to society. Rather than discounting any of these great scholars, we must find the wisdom contained within their disparate treatments. It is from the ceaseless discussion of this question, how shall we arrange ourselves to maximize human well-being, that we may begin to find the wisdom that may lead to real flourishing. Nevertheless, we admit we do not see able discussion or dialogic engagement between these two camps.

This lack of relation between the two directions must be sustained for each language-game is able to do what these thinkers were aspiring to do, resist fascism. Here is where we find the connection between these camps, not in how they philosophize, but in what is driving them to philosophize. Hope. Hope is realized when resisting dehumanization. Each approach is needed. One may get drunk on subjectivity and confuse it for objectivity. The empiricists help us avoid such drunkenness while risking or confusing their resistance with having truth. Dialogic epistemology worries about belonging and hospitality and response for the other. Simply, like the Derash method, dialogic philosophy ushers in a narrative approach to philosophy. Like the Peshat method, the empiricists worry that narrative produces unhinged dreams capable of wreaking

havoc on our understanding by confusing desirable falsity for difficult truth. Like Peshat, the empiricists demand we stick to the context, the language, the facts so to speak, and stop changing the context by adding imported meaning to the text, meaning that robs the text of its actual context and thereby its content. Each method demands human honesty that gets lost without the other method, not because they go together, but because they will never go together. It is this unending conflict that creates the preconditions for resisting the sort of conflict that leads to the mass murder of WW1. The avoidance of destructive conflict is not based upon finding stable harmony, but rather upon the sort of constructive conflict we find in Talmudic thought. Safety comes not from reconciliation, but continued conversation from a multiplicity of perspectives.

## Notes

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1. We do not limit our definition of “Jewish Philosopher” to those who philosophize from Judaism, but intentionally employ a broader sense that also includes those who were socially-shaped by having been Jewish, rather than just those coming out of, directly influenced by, or responding to Jewish intellectual traditions.
2. Steven Gimbel and Stephen Stern, “Einstein’s Jewish Science,” *Journal for Cultural and Religious Theory* 10, no. 3 (2010): 25.
3. Albert Einstein, *Ideas and Opinions* (New York: Crown, 1954), 83.
4. Phillip Lenard, “German Physics,” in *Physics and National Socialism: An Anthology of Primary Sources*, ed. Klaus Hentschel (Basel: Birkhauser, 1996), 100.
5. Hans Reichenbach, *Selected Writings, 1909–1953*, ed. Maria Reichenbach and Robert Cohen (Boston: D. Reidel, 1978), 2.
6. Michael Friedman, *Reconsidering Logical Positivism* (Cambridge: Cambridge University Press, 1999), 68.
7. Reichenbach, *Selected Writings*, 140.
8. Hans Reichenbach, *From Copernicus to Einstein* (New York: Dover, 1942), 11.
9. Elisabeth Nemeth and Friedrich Stadler. *Encyclopedia and Utopia: The Life and Work of Otto Neurath* (Boston: Kluwer, 1996).
10. Karl Popper, *The Unended Quest: An Intellectual Autobiography* (New York: Routledge, 1992), 9.
11. *Ibid.*, 9–10.
12. *Ibid.*, 11.
13. Karl Popper, *The Open Society and Its Enemies* (London: Routledge, 1945), 2:206.
14. *Ibid.*, v.1, 1.
15. Karl Popper, *The Logic of Scientific Discovery* (New York: Basic, 1958), 46.
16. *Ibid.*, 44.
17. Max Scheler, *On the Eternal in Man* (London: SCM Press, 1960), 109.
18. Franz Rosenzweig, *The Star of Redemption* (Madison: University of Wisconsin Press, 2005), 9.
19. Franz Rosenzweig, *Understanding the Sick and the Healthy: A View of World, Man, and God*. Cambridge: Harvard University Press, 1999.
20. Nahum Glatzer, *Franz Rosenzweig: His Life and Thought* (New York: Schocken, 1953), 179.
21. Herbert Marcuse, *One-Dimensional Man* (Boston: Beacon, 1964), 10.
22. *Ibid.*, 11.
23. *Ibid.*, 12–13.
24. *Ibid.*, 15–16.
25. *Ibid.*, 23.
26. *Ibid.*, 52.
27. *Ibid.*

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# Medical History: A Blank Spot in Jewish Studies?

by Robert Jütte

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## TRIKING DISCONTINUITIES

*The Oxford Handbook of Jewish Studies*, edited by Martin Goodman, was published in 2002. It is still the most comprehensive and authoritative guide available. The introduction by the editor claims that handbook covers all the main areas currently taught and researched as part of Jewish studies in universities throughout the world, especially in Europe, the United States, and Israel. The first half of this volume covers the major periods of Jewish history; in the second half topics have been assigned by theme, “reflecting current trends both in research and in teaching.”<sup>1</sup> There we find chapters, for example, on Art, Music, Theatre, Folklore, Sociology, Demography, and last but not least also on Women’s Studies, but none on the Jewish aspects of the history of science or the history of medicine.<sup>2</sup> This blank spot is surprising as these two areas have received some attention, not only in the past decades but within the last two hundred years as result of the movement called *Wissenschaft des Judentums* (“Science of Judaism”), which promoted the analysis of Jewish literature and culture with the tools of modern scholarship. This gap also reflects a disregard of the high number of Jewish Nobel laureates in the fields of science and medicine.

A leading member of the “Association for Culture and Science of the Jews” was Immanuel Wohlwill, alias Wolf (1799–1847). In the first issue of the association’s magazine, which was edited by Leopold Zunz (1794–1886), a programmatic essay from his pen appeared in 1823, in which it says, among other things: “When we talk about a Science of Judaism, it goes without saying

that here the word Judaism is taken in its most comprehensive meaning, as the epitome of the entire conditions, peculiarities and achievements of the Jews in relation to religion, philosophy, history, law, literature in general, civil life and all human affairs—but not in that restrictive sense in which it only means the religion of the Jews.”<sup>3</sup> One of the “human affairs” mentioned by Wohlwill is medicine.

Thus, it is not surprising that some proponents of the “Science of Judaism” early on studied the contribution of Jews to medicine.<sup>4</sup> Previously, almost exclusively Christian authors had dealt with this topic. In 1850 the Jewish educator and scholar Reuven Joseph Wunderbar (1812–1868) stated in the introduction to his scholarly work on Biblical-Talmudic medicine: “Gone is the time when in the Jew one did not honor man at the same time; Gone is the time when a great gulf separated the Israelites from general science and national languages. [. . .] And so it has been reserved for the present to gain a scientific side from the long-despised Talmud, and for some time now we have had not only valuable monographs in the field of linguistics, the history and geography of the Talmud, but also Medicine already enjoys some excellent treatment.”<sup>5</sup>

One of the most brilliant exponents of the “science of Judaism” in the second half of the nineteenth century is Moritz Steinschneider (1816–1907). The knowledge of the Talmud he had acquired at a young age and a wide-ranging study of history and the Semitic languages predestined him for his later meticulous source studies, which covered a wide variety of fields, from philosophy to medicine and astronomy to mathematics. He was best known for editing the catalogs of famous collections of Hebrew manuscripts and not least for his 1,100-page epoch-making work on the Hebrew translations of the Middle Ages and the Jews as interpreters (1893).<sup>6</sup> In the last-named work, Steinschneider, as he emphasized in the introduction, was concerned with the proof of the “participation of Jews in Christian literature in the fields of philosophy, medicine, mathematics and folk literature,” which hardly anyone had seen or wanted to see before. A look at Steinschneider’s long list of publications shows that more than two hundred deal with topics that are more or less relevant from a medical-historical perspective.<sup>7</sup> The spectrum ranges from the oldest medical work in the Hebrew language to Maimonides as a doctor to the Samaritan doctors. Steinschneider always took the standpoint of “pure” science. His motto was: “I write about Jews, but not for them, not *pro domo*. One does not teach enemies of Jews, at least through history.” Steinschneider also did not see his studies as a kind of “auxiliary science of Jewish theology.” On the contrary: he never tired of emphasizing that Jewish literature, like Chinese



or Arab literature, is not merely a theological one. Not least his medical and scientific history studies testify to this sobriety and philological rigor, but also to the tremendous diligence of research and universal education.

A recent volume of studies on the life and work of Moritz Steinschneider sets out to modify the traditional view of Steinschneider as a “mere bibliographer” by pointing out also other dimensions of his scientific personality. The book highlights the continued significance of his work for Jewish studies and its lasting impact on contemporary scholarly practice.<sup>8</sup> But this does not mean that Jewish Studies programs all over the world also reflect his strong interest in the field of history of medicine.

### LEARNING FROM OTHER DISCIPLINES

Jewish studies are thus lagging behind gender history which since the 1970s has included history of science but also the history of medicine, both in teaching and research.<sup>9</sup> *The Stanford Encyclopedia of Philosophy*, for example, contains a chapter on “Feminist Perspectives on Science,” which underlines the importance of history of science for Gender Studies: “Feminist perspectives on science therefore reflect a broad spectrum of epistemic attitudes toward and appraisals of science. These perspectives range from urging the reform of gender inequities in the institutions of science by calling attention to the underrepresentation of women or neglected questions while still embracing the standards and practices of the sciences they engage, to critical and constructive alternative programs of research that, to varying degrees, aim at transforming the framework assumptions, methodologies, substantive content, and epistemic ideals that shape the sciences.”<sup>10</sup>

History of science and medicine needs more studies from a Jewish perspective, building upon the already existing bulk of research in these field since the nineteenth century. But so far work in medical history, for example, plays only a marginal role in Jewish studies. Yes, there a few exceptions: The Sidney M. Edelstein Center at the Hebrew University of Jerusalem promotes advanced research in the history and philosophy of science, technology and medicine. It offers post-doctoral fellowships, and short-term graduate support, and engages in an active program of seminars and workshops. According to their website the “Center constitutes a nexus between the faculties of Humanities, Social Sciences, Science, and Medicine. Particularly strong is the interaction

through faculty and students with the program in the History, Philosophy, and Sociology of Science, and the departments of philosophy and history, as well as of physics, at The Hebrew University.”<sup>11</sup> Also the Katz Centre for Advanced Judaic Studies in Philadelphia has in the past invited study groups working on different themes in the history of science and medicine, e.g., in the academic years 2015/16 and 2017/18.<sup>12</sup> In 2014 a conference entitled “Defining Jewish Medicine,” organized jointly by the Institute of Jewish Studies and the Jewish Medical Association at University College London focused on the question how to define “Jewish medicine” throughout its long history, discussing different aspects of research on Jewish medicine—its origins, its historical context, how medicine could be influenced by Jewish law and custom (*halakhah*) and how the role of the Jewish doctor has evolved over the centuries.<sup>13</sup>

But despite such singular events and research efforts the fact is that medical history is still not an integral part of Jewish Studies. At present, the majority of younger and senior scholars who have worked in the field of Jews and medicine are not affiliated with a Jewish Studies Program. They come from a broad array of disciplines in the faculties of Humanities, Social Sciences, Science, and Medicine. Especially cultural, literary and social historians who have a special interest in Jewish History play a significant part in this field.

In order to foster future research on the Jewish perspective on medicine and health one might learn from the still striving Gender Studies and the innovative concepts developed there. As early as 1999 the Women’s Caucus of the History of Science Society (HSS) compiled a syllabus sampler for courses on the history of women and gender in science.<sup>14</sup> This first database shows the variety and complexity of those courses, either defined chronologically, by discipline, or by special topic.

A similar effort should be undertaken in the field of Jewish studies. A periodically-updated syllabus collection could provide a resource for enhancing or developing courses, units, or modules on the role of Jews in medicine.<sup>15</sup> Such a tool can help to show the diversity of ways in which the study of the Jewish perspective on medicine and health can contribute to transforming the practice and teaching of history for a broad body of students. Such a collection of courses taught in various disciplines can serve as a guide to ongoing developments in teaching and research, provided this collection is updated on a rolling basis. Collectively, these syllabi will represent a “classroom-tested” set of sources and pedagogical tools that can inspire and encourage interested scholars and teachers. Teaching Jewish medical history from an interdisciplinary perspective, benefits from a fecund dialogue with history of knowledge,

science and medicine and contemporary critical science studies. Prospective topics range from more general issues (role of the physician, the Jewish body, religious traditions that relate to a healing of body and soul) to very specific aspects (e.g., euthanasia, sterilization, plastic surgery, genetic screening, organ transplantation, HIV/AIDS, etc.). This also explains an overlap with the discourse on Jewish medical ethics and bioethics. Unfortunately, most discourse in this field can be described as not primarily based on historical or philological research. Putting history back in the focus, not only in research but also in teaching, can prevent a whiggish view of Jewish medicine.

## Notes

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1. Martin Goodman, ed., *The Oxford Handbook of Jewish Studies* (Oxford: Oxford University Press, 2002), 2.
2. For more general aspects, see Robert Jütte, “Die Welt der ‘Jüdischen Studien’ von außen betrachtet,” *Aschkenas* 13 (2003): 513–17.
3. Immanuel Wolf, “Ueber den Begriff einer Wissenschaft des Judenthums,” *Zeitschrift für die Wissenschaft des Judenthums* 2 (1823): 17–18.
4. Robert Jütte, “Die jüdische Medizingeschichtsschreibung im 19. Jahrhundert und die ‘Wissenschaft des Judenthums,’” *Aschkenas* 9 (1999): 431–45.
5. Reuben Joseph Wunderbar, *Biblich-talmudische Medizin* (Riga and Leipzig: Häcker, 1859), IV.
6. Moritz Steinschneider, *Die hebräischen Übersetzungen des Mittelalters und die Juden als Dolmetscher. Ein Beitrag zur Literaturgeschichte des Mittelalters; meist nach handschriftlichen Quellen* (Berlin: Bibliogr. Bureau, 1893).
7. Fielding H. Garrison, “Bibliographie der Arbeiten Moritz Steinschneiders zur Geschichte der Medizin und der Naturwissenschaften,” *Archiv für die Geschichte der Medizin* 25 (1932): 249–78.
8. Reimund Leicht and Gad Freudenthal, eds., *Studies on Steinschneider. Moritz Steinschneider and the Emergence of the Science of Judaism in Nineteenth-Century Germany* (Leiden: Brill, 2011).
9. Ludmilla Jordanova, “Gender and the Historiography of Science,” *The British Journal for the History of Science* 23 (1993): 469–83.
10. Sharon Crasnow, Alison Wylie, Wenda K. Bauchspies, and Elizabeth Potter, “Feminist Perspectives on Science,” in *The Stanford Encyclopedia of Philosophy* (Spring 2018 Edition), ed. Edward N. Zalta, accessed January 18, 2022, <https://plato.stanford.edu/archives/spr2018/entries/feminist-science>.
11. Sidney M. Edelstein Center for the History and Philosophy of Science, Technology and Medicine, “About,” accessed September 25, 2020, <http://edelstein.huji.ac.il/about>.
12. Herbert D. Katz Center for Advanced Judaic Studies, “Scholarly Programs Past Years,” accessed September 25, 2020, <https://katz.sas.upenn.edu/scholarly-programsinternational-fellowship/past-years>.
13. University College London, “Defining Jewish Medicine,” accessed September 25, 2020, <https://blogs.fu-berlin.de/babylonianmedicine/files/2014/06/Defining-Jewish-Medicine.pdf>. See also Lehmann, Lennart, ed., *Defining Jewish Medicine. Transfer of Medical Knowledge in Jewish Cultures and Traditions. Peer-reviewed proceedings of a one-day panel-section at the X. Congress of the European Association of Jewish Studies (EAJS), 24.07.2014, at Sorbonne Université/École Normale Supérieure (ENS), Paris* (Wiesbaden: Harrassowitz, 2021).

14. Women's Caucus of the History of Science Society, "The Syllabus Project," accessed September 25, 2020, <http://hsswc.weebly.com/syllabus-project.html>.
15. A few pertinent syllabi, however, are available online, e.g., Hilit Surowitz-Israel, "Jews and Medicine 563:228 (tentative Syllabus)," accessed January 18, 2022, <https://jewishstudies.rutgers.edu/docman/syllabi-fall-2014/616-563-228-jews-and-medicine/file>; Rebecca J. Epstein-Levi, "JS 2700 Jews and Medicine (Abbreviated Syllabus)," accessed January 18, 2022, <https://hcommons.org/deposits/item/hc:32333/>.

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# Jewish Scientists and Scholars at the University of Vienna from the Late Habsburg Period until the Early Post-War Years<sup>1</sup>

by *Mitchell G. Ash*

**R**ESearch ISSUES AND PREDOMINANT NARRATIVES

The aim of this essay is to confront three standard narratives with one another, while challenging them at the same time. The first, and oldest, of these narratives is the tale of Jewish history as a vale of tears, the modern version of which leads to the Shoah. In Austria, this narrative is often linked with a tale of Austrian history as a path into the abyss, formerly ending with the “Anschluß” in 1938 and continuing for some years after 1945. Both of these narratives can be linked in turn with a third, that of the history of universities, sciences and scholarship in Austria as a tale of decline, beginning with high international standing around 1900 and ending in self-inflicted provincialism after 1945. All three of these narratives have a certain plausibility; the sociologist and science journalist Klaus Taschwer has skillfully combined them in a recent study of the University of Vienna, in which he makes antisemitism directly responsible for the university’s decline.<sup>2</sup> However, each narrative oversimplifies in its own way, and the connections between them are not always obvious. Whether and how the “self-provincialization” narrative in university history actually relates to the other two stories is the question that underlies the following analysis.

More important for Jewish studies is another question, implicitly addressed in section two: are assimilated Jews and people identified as Jews by antisemites who were not or may never have been Jews part of Jewish studies? Much has been written about that question by others, so I will simply say that

anyone who thinks that Jewish studies is or should be only about people who lived Jewish lives and studied Jewish topics need read no further.

My remarks are divided into six parts. After a brief discussion of the fundamentally important topic of who is or should be regarded as a “Jewish” scientist or scholar, the third section addresses the period of the late monarchy, including though not limited to the first appointments of Jewish scientists to full professorships in Vienna and the heated debates that ensued, beginning with the widely-known affair ignited by Theodor Billroth. The fourth section discusses the radical changes in the situation of Jewish scientists and scholars during the First Austrian Republic, which was often marked by violent riots and antisemitic discrimination. The fifth section compares the situation during the first Austrian dictatorship (1934–38) and the impact of Nazi rule from 1938 onward. The sixth section briefly discusses the reasons for the nearly complete absence of Jewish scientists and scholars from the University of Vienna in the immediate postwar period. The conclusion returns to the three narratives named above.

### ABOUT WHOM ARE WE SPEAKING?

Before proceeding any further, it is necessary to ask two important questions: who exactly “counts” as a scientist or scholar, and who “counts” here as “Jewish”? The answer to the first question in this text is that not only full professors, but all officially certified (Habilitation) teaching staff at the University of Vienna, and also many researchers who worked outside the University of Vienna but occasionally taught there are included, but not the students. Excluding students may seem artificial, since antisemitic discrimination directly affected students’ chances of becoming scholars or scientists in the first place (more on this below). However, the vast majority of university students, then as now, had no intention of pursuing such careers; their history deserves separate treatment.<sup>3</sup>

Absolutely central to the second, surely more controversial and difficult question are two further questions: first of all, whether with the designation “Jewish” descent, ethnicity, or religious belief (*Konfession* in German) was meant, and second *by whom* and on what basis the identifying label was or is now assigned. In public memory discourse in Austria, as in Germany, the label “Jewish” is rather often assigned quite carelessly according to the criteria used

by the Nazis, with little or no reflection on the potential epistemic or moral violence being enacted by doing so. Of course, it is important and morally right to acknowledge the memory of all those who were persecuted by the Nazis and their helpers, as well as those persecuted, exiled or murdered on religious or folkish grounds in earlier decades. Yet it is also important and morally right to remember that a great many of those so ill-treated did not consider themselves to be Jews any longer, either because they had converted to Christianity or because their primary loyalty was political; others may never even have been Jews at all, because they were the children of converts. Motivations for conversion in this period were multiple and complex.<sup>4</sup> Many scholars and scientists and people in other professions as well may have viewed conversion, rightly or not, as a path to at least nominal acceptance in the scientific and scholarly communities; others, however, converted for personal rather than career reasons (for examples see below). In fact, nearly all of the high-ranking scientists and scholars whose memories are now celebrated in the public sphere in Austria were not in fact Jews at the time they were persecuted. I cite here only the following examples:

- Karl Landsteiner (1868–1943) was awarded the title of Associate Professor of Pathology in Vienna in 1911. He lived and worked in New York from 1922 onward (see below), but his photo nonetheless graces the main entrance hall of the University of Vienna because he was awarded the Nobel Prize for Medicine and Physiology in 1930 for the discovery of blood groups, which took place in Vienna. He converted to Catholicism in 1890.<sup>5</sup>
- Julius Tandler (1869–1936), Professor of Anatomy at the University of Vienna from 1913 to 1934, better known in Vienna as the chief health official of “Red Vienna” in the 1920s, who was responsible for the city’s famous public housing program, converted to Catholicism in 1899.<sup>6</sup>
- Elise Richter (1865–1943), the first woman to earn the right to teach at the University of Vienna (Habilitation 1905), and also the first woman appointed to a professorship there (in Romance Languages in 1921), converted to Protestantism together with her older sister, the anglicist Helene Richter (1861–1942), in January of 1911, at the age of 41.<sup>7</sup>

- Lise Meitner (1878–1968), the second woman to receive a doctoral degree in Vienna (in Physics) in 1906, worked from 1911 onward at the Kaiser-Wilhelm-Institute for Chemistry in Berlin and was from 1913 a Scientific Member of the Kaiser Wilhelm Society. She converted to Protestantism in 1908, one year after moving to Berlin.<sup>8</sup>
- Charlotte Bühler (1893–1974), appointed Associate Professor of Psychology in Vienna in 1929 over strong opposition (see below), was head of the Department for Child and Youth Psychology and de facto Director of the Vienna Psychological Institute with her husband Karl Bühler. As a young girl she was by her own account “baptised and educated as a Protestant, as was generally customary in the assimilation period.”<sup>9</sup>

These examples should suffice to counter the widespread assumption that Jews who converted during these years did so in order to advance their careers. Elise Richter wrote in an autobiography published after her death in Theresienstadt that she and her sister Helene were raised “superconfessionally” (*überkonfessionell erzogen*), and that she had wanted to convert to Protestantism for religious reasons since she was 13.<sup>10</sup>

Many other scientists and scholars of Jewish background or descent remained Jews despite the obnoxious treatment and outright discrimination they experienced, and nonetheless achieved significant positions in their fields at the University of Vienna. However, even the description “remained Jewish” is by no means a simple matter!

Sigmund Freud (1856–1939) was awarded the title of Associate Professor in 1902 and the title of Full Professor in 1920, each time after long delays. Freud called himself a “godless Jew” and spoke with his usual well-honed irony at times about “our race.”<sup>11</sup> And yet, despite his sharp critique of religion he joined the Jewish men’s club B’nai B’rith and wrote in his autobiography of 1925: “My parents were Jews, and I have remained a Jew.”<sup>12</sup>

Perhaps best known are those in this group who retained their ethnic identities but refused to affiliate with religious Judaism due to their political commitments, for example, socialists such as Victor Adler, or the much younger Paul B. Lazarsfeld und Marie Jahoda, both of whom worked at the Research Center for Economic Psychology of the Vienna Psychological Institute. Jahoda later wrote that “Jewishness first became my true identity with Hitler,”<sup>13</sup> but

Elana Shapira notes that Jahoda had begun to consider issues of Jewish identity before she left Austria.<sup>14</sup>

Rarely celebrated in public memory discourse, but significant for this study, is the considerable group of scholars and scientists at the University of Vienna who were and remained members of the official Jewish community, or at least did not withdraw their membership, whether they were religious Jews or not. I name here only the musicologist Guido Adler (1855–1941), founder of the Musicological Institute at the University and its head from 1898 to 1927, the biologist Hans Przibram (1874–1944), who with Leopold von Portheim and Wilhelm Figdor founded the Biological Research Laboratory “Vivarium,” was named titular Associate Professor for Zoology in 1913 and became budgetary Associate Professor at the Zoological Institute of the University of Vienna in 1921; his brother, the physicist Karl Przibram (1878–1973), who was named titular Associate Professor in 1916 and budgetary Associate Professor of Physics in 1926; and the younger physicist Marietta Blau (1894–1970), who was an unpaid research associate at the Radium Institute of the Austrian Academy of Sciences from 1923 until her forced migration.

After all this it seems justified to ask whether or how this extraordinary variety of identities and biographies, of self-ascribed and pinned-on Jewishness, can be brought together with the narrative of Jewish history as a vale of tears. I will return to this question later, but turn now to a discussion of Jewish scholars and scientists at the University of Vienna during the late Habsburg monarchy.

## IN THE LATE HABSBURG MONARCHY

Two broader historical developments form the context for this discussion:

1. The emergence of a German-Austrian nation after 1848, at first in the form of a supranational state, and then, especially after the creation of the Dual Monarchy in 1867, in reaction to and interaction with the movements to establish Slavic “cultural nations” (*Kulturnationen*) in Cisleithania, all of which was part of the ethnicization of politics;<sup>15</sup>

2. The granting of citizenship without consideration of religion in the constitution promulgated in the same year. This opened up to Jews at least formally the possibility of academic careers—an opportunity that became more realistic after the abrogation of the Concordat with the Holy See in 1870.

For Jews in the German-speaking part of the monarchy, especially in the capital city Vienna, who sought to become scientists or scholars, the only path to success was active participation in German-language scientific or scholarly culture. In contrast to the so-called “free” professions such as law, journalism, or the cultural fields, however, Jews seeking academic careers also faced the obstacle of achieving civil service status, since professorships were state appointments. As we will now learn, those who succeeded achieved this goal in very different ways.

### ***The First Appointments before, during, and after the “Liberal Era”***

The first Jew awarded the right to teach at the University of Vienna was Jakob Goldenthal, who became Privatdozent for Hebrew and “rabbinical languages” there already in 1848, and was named Associate Professor the next year; in 1848 he was also elected to corresponding membership in the newly-founded Imperial Academy of Sciences.<sup>16</sup> In this period no one of Jewish belief or descent was appointed to a full professorship, due mainly to the abovementioned Concordat signed in 1855. Goldenthal was actually proposed for such a rise in rank by the Philosophical (Arts and Sciences) Faculty in 1860, and again in 1868, but the Ministry refused to approve such an appointment, supposedly because his student enrollments were too low.

The situation changed fundamentally after the constitution was promulgated in 1867 and the Concordat was abrogated in 1870. A prominent example of the change was Adolf Lieben (1836–1914), a chemist who was appointed full Professor of Chemistry and Director of the Second Chemical Institute in Vienna in 1875. Lieben, son of a wealthy family of Jewish merchants and bankers, had been awarded the Habilitation by the Philosophical Faculty in 1861. In the same year Hermann Zeisel became the first Jew awarded the title of Associate Professor in the Medical Faculty.<sup>17</sup> Lieben himself later wrote that he understood that “under the rule of the Concordat it was impossible for me as a Jew to achieve a professorship in Austria.”<sup>18</sup> He therefore went to Paris in 1862, was appointed from there—to his own surprise—to a professorship in Palermo

in 1865, and was called to Turin in 1867. He overcame the opposition that he at first encountered due to the Austro-Italian War with the clarity and high competence of his lectures. Only in 1871—after the end of the Concordat—was he appointed in Prague, after which he was finally called to Vienna in 1875, having been preferred by the Ministry over two candidates from Germany.<sup>19</sup> When he died in 1914, he was a popular and respected Ordinarius.

However, Lieben's appointment and that of other Jewish scientists and scholars to full professorships after 1875 hardly put an end to academic anti-semitism in Vienna. Instead, the issue soon entered the public sphere, without leaving the corridors of power.

### ***The Billroth Affair and Thereafter***

In the year following Adolf Lieben's appointment an event occurred that has entered history as marking the turn in Austrian politics from liberalism to folkish German antisemitism. This was the scandal caused by remarks in the book "On Life and Learning in the Medical Sciences at Universities of the German Nation, including General Remarks on Universities: A Cultural-historical Study" (*Über das Leben und Lernen der medizinischen Wissenschaften an den Universitäten der deutschen Nation nebst allgemeinen Bemerkungen über Universitäten: eine kulturhistorische Studie*), by Professor of Surgery Theodor Billroth.<sup>20</sup> In this work Billroth questioned the scientific capabilities and therefore the academic potential of Jewish medical students from the eastern provinces of the monarchy, especially Galicia and the Bukovina, due to their supposedly different and inferior educational and cultural backgrounds. Billroth was a Prusso-German nationalist who thought he was bringing true German culture to Vienna. Historian Oliver Rathkolb and others take note of Billroth's use of the word "blood" in a footnote and argue that his position was not only nationalist and folkish, but cleverly disguised racism.<sup>21</sup>

Billroth was celebrated as a hero by German nationalist students, but this was not entirely uncontroversial even in such circles. Interestingly, Billroth himself thought that he had been misunderstood by the students. In his reply to an encomium from their reading club (*Leseverein*)—to which Sigmund Freud and Victor Adler then belonged—he emphasized that he only wished to spare students of poor backgrounds from misery (*Trübsal*); he claimed to have written his book from a national standpoint (in the sense of the German *Kulturnation*), but not from a party political or religious position.<sup>22</sup> In the 1890s Billroth was a proponent of the "Association in Defense Against Antisemitism" (*Verein*

zur Abwehr des Antisemitismus) founded by Bertha von Suttner, and was even elected Honorary Member (*Ehrenmitglied*) in 1893.<sup>23</sup>

In any case, there was also significant public opposition from Jews to Billroth's position. As an example I cite here an article by "State Councilor (*Regierungsrat*) and Assessor" Ferdinand Horn, in which he wrote: "Permit me to declare to you that I will never allow you to make me a foreigner in my own fatherland."<sup>24</sup>

The Billroth affair was only the beginning of the struggle over folkish nationalism within and beyond the sciences.<sup>25</sup> The situation came to a head again at the university toward the end of the century in the controversy over the pedagogical methods of the Professor for Experimental Pathology, Salomon Stricker, in the 1890s. However, when Stricker's lectures were disturbed by German nationalist students in 1892, the current Dean of the Medical Faculty, neurologist and psychiatrist Julius Wagner-Jauregg, intervened. The doors of the lecture hall were locked and students were required to confirm by handshake (a gesture of honor) that they would not disturb the lecture before being allowed to enter.<sup>26</sup> The fact that the students submitted to this requirement shows that the authority of the faculty, meaning the full professors (*Ordinarien*), remained unbroken at that time. This situation would soon change (see below, section four).

### ***Around 1900—Academic Mobility and Its Limits***

In his important book on universities in Imperial Austria, Jan Surman provides the most extensive account now available of the mobility of academics amongst the universities in Cisleithanien from 1848 to 1918, and includes the role of religion (*Konfession*) in his survey.<sup>27</sup> Unfortunately, the available data and archival material do not allow Surman to state the percentage of Jews or Protestants involved, the way Andreas Ebert was able to do for individual faculties of the Prussian universities in the same period.<sup>28</sup> Like others before him—and like Ebert for Prussia—Surman makes clear that there was indeed a "glass ceiling" for Jews. Although Jewish scientists and scholars during the monarchy could earn the habilitation and either the title of Associate Professor or actual appointments at that rank, it was much more difficult for them to become full professors. Surman speaks of an "invisible ghetto wall" that limited career chances for Jewish scientists and scholars even in places with high numbers of Jews such as Prague and Vienna.<sup>29</sup> In addition, he shows that officials of the Ministry of Education actually considered whether someone of Jewish faith (*jüdischer Konfession*) would be well placed in a particular discipline or



a specific institution. For this reason the historian Alfred Prizbram was not appointed to a chair in Vienna when he was first proposed in 1899; in 1913, he finally received a professorship in Vienna *ad personam*, meaning that no successor would be appointed.<sup>30</sup>

Another example from chemistry reveals how discrimination worked more specifically. Josef Herzig, a chemist from Galicia, was proposed by the Faculty for the title of Associate Professor in 1893, but was refused despite his outstanding qualifications. Among the opponents in the Philosophical Faculty was the mineralogist Gustav Tschermak, who claimed that Herzig's achievements were insufficient, but who consistently opposed the appointment of Jews to professorships. In 1897 Herzig nonetheless became Associate Professor, and shortly thereafter he was named provisional head of the First Chemical Institute, a position he held until the appointment of Rudolf Wegscheider in 1902. According to Robert Rosner,<sup>31</sup> neither Herzig nor Guido Goldschmiedt, whom the Faculty had ranked equally in first place alongside two other candidates, was considered for this chair, because the Ministry did not wish to appoint a second Jew in chemistry alongside Adolf Lieben.

Surman also reports, citing Steven Beller,<sup>32</sup> that the ratio of full professors of Jewish *Konfession* (as indicated by registered membership in the Jewish Community) at the University of Vienna at the end of the nineteenth century, approximately 10 percent, corresponded to the percentage of Jews in the population of Vienna. However, he adds that the percentage of Jews among the habilitated teaching staff in 1910 was far higher—51.2 percent in the Medical Faculty, 37.5 percent in the Faculty of Law and 21.6 percent in the Philosophical Faculty.<sup>33</sup> In the same period, the percentage of Jews among students of medicine varied between 25 and 33 percent.<sup>34</sup> These figures belie claims made at that time and since that Jews were “underrepresented” in German-speaking university faculties. Instead, I suggest that they are indicators of the rapid rise in social status of the Jews in Vienna following the grant of citizenship, which also occurred in Prussia during the same period.

What this meant for the content of the sciences or scholarship was a central topic of the debate between the psychologist of art Ernst Gombrich, himself an émigré from Vienna, and the much younger historian Steven Beller, just cited, in 1996. Beller argued that the high number and importance of Jewish “contributions” to the cultural explosion called “Vienna 1900” is explained by the dynamics of cultural assimilation. Jews were better equipped than other out-groups to become so actively involved in the sciences, scholarship and culture, in Beller's view, because either their Talmudic training or the turn by

adherents of the *Haskalah* to secular learning placed cultural resources in their hands that other ethnic groups in Vienna did not possess to the same degree.<sup>35</sup> With barely suppressed rage Gombrich denied the claim that there was anything “Jewish” about the culture of Viennese modernism and denounced Beller’s position as “megalomaniacal” and “a reversal of the claims of the anti-semites.” Goethe was the main influence for his generation, he insisted; “For these members of the bourgeoisie their allegiance was to culture—or *Bildung*—not to a Jewish tradition, but to the tradition of German humanism.”<sup>36</sup>

Ironically, by taking this position Gombrich actually provided a clear example of Beller’s argument. Beller’s claim was, in essence, that Jews’ effective assimilation (today we would say acculturation) made their participation in Vienna modernism possible. Many of the Jewish scholars and scientists named in section one were children of the economic elite or the educated upper middle classes, went to elite secondary schools, and were or later claimed to be educated “supraconfessionally,” all of which was normal in liberal circles. They had thus acquired the cultural resources of the German *Bildungsbürgertum* (including for some *Kulturprotestantismus*), and had adopted the corresponding *Denkstil* and behavior patterns so thoroughly that their primary allegiance was to German *Kultur* and *Wissenschaft*, rather than to the religious culture of their past. The Richter sisters, the Przibram brothers and many others not mentioned here belonged to this elite.

Seen in retrospect, the undoubted success of scientists and scholars of Jewish descent in this period inevitably takes on a tragic patina for two reasons. First, the Jewish academic elite itself shared Billroth’s disdain for Jewish immigrants from the eastern provinces of the monarchy, due to the alleged lack of culture; the Nazis made no such fine distinctions. Second, and surely more important in the end, is that even the freely chosen identities of the Jewish educated elite were rejected not only by folkish and racist nationalists, but by many other non-Jews as well. As Gombrich bitterly put it: “It took Hitler to make them [the Jewish elites] realize their mistake.”<sup>37</sup>

## AFTER 1918—CRISES AND CONTINUITIES

We now turn to the wrenching changes that came following World War I, when the monarch was no longer there to serve as guarantor of the rights of Jews. I preface this section with an example of the turn to liberal meritocracy late

in the monarchy, the career of the pathologist Karl Landsteiner. Landsteiner was awarded the title of Associate Professor in 1911—fully eight years after his Habilitation—and his primary position remained that of head of dissections (*Prosektor*) at the Wilhelminenspital in Vienna. After it became clear to him that his chances of advancing further were low, he left Austria to take a position as *Prosektor* of a small hospital in Den Haag in 1919, and then went to the United States in 1922, where he rose to become Professor of Pathology at the Rockefeller Institute in New York. His decision to emigrate is good evidence for the thesis already advanced by medical historian Michael Hubenstorf in the 1980s, that the migration of scientists and physicians from Austria began not in 1934 or 1938, but much earlier.<sup>38</sup>

Jewish scholars and scientists who remained in Vienna confronted increasing aggression due to the repeated, often violent agitation of German nationalist students against their Jewish and leftwing colleagues, which has been documented in detail elsewhere; among other things they demanded a limit on the enrollment of Jews in Austrian universities, as well as the appointment of Jews to professorships.<sup>39</sup> Klaus Taschwer has detailed the impact of this conflict on the awarding of the Habilitation and the appointment of professors in Vienna.<sup>40</sup> Particularly egregious were the activities of paleontologist Othenio Abel, a German nationalist who led a conspiratorial group of professors from the Philosophical Fakultät, which called itself the “Bear’s Cave” after the windowless seminar room in Abel’s institute where they met. Taking advantage of a provision in the university statutes that named “personal suitability” alongside academic qualification as a criterion for promotion, and using numerous other pretexts, this group sought to prevent the habilitation of many qualified younger Jewish researchers, among them the biologists Paul Kammerer and Paul Weiss.

With his pioneering work Taschwer has made a significant contribution to the study of antisemitism at the University of Vienna. Nonetheless, it remains unclear whether such conspiratorial circles of professors were also active in the University’s other Faculties.<sup>41</sup> Even in the Philosophical Fakultät, habilitation and even professorial status remained possible for Jews between 1918 und 1934 despite antisemitic intrigues, for example in mathematics and above all in chemistry (see below). In the latter case this appears to be due at least in part to the influence of Ernst Späth, Professor of Chemistry and director of the Second Chemical Institute since 1924, who was apparently not an antisemite and worked to maintain high standards.<sup>42</sup> In addition, the long-running controversy over the refused Habilitation of physicist Otto Halpern, discussed in detail by Taschwer,<sup>43</sup> shows that such practices encountered public opposition.

Awareness of antisemitic activities at the university surely contributed to the emergence of networks and discussion circles outside the university, which had begun to form before 1914 and might well be termed niches of innovative thinking and research.<sup>44</sup> Well researched examples are the circle surrounding the philosopher Wilhelm Jerusalem that helped to found the discipline of sociology in Austria, the economists around Ludwig von Mises, the psychoanalysts around Sigmund Freud, and the individual psychologists around Alfred Adler, as well as the Vienna circle in philosophy of science that formed around philosopher Moritz Schlick and mathematics professor Hans Hahn, which was mainly active outside the University.<sup>45</sup> It seems clear that because the University was perceived to be a bastion of clerical fascists and German nationalists, scientists and scholars of Jewish background took refuge in such niche-like groups. This may well be the case for many of them, but is this the whole story?

Alongside the continuing impact of the Jewish professors appointed during the liberal era, such as the musicologist Guido Adler, mentioned earlier, and their students, we can also cite here the Vienna Psychological Institute, founded in 1922 and led by Karl and Charlotte Bühler.<sup>46</sup> Many of the students and coworkers of the Böhlers were social democrats of Jewish background, such as Paul Lazarsfeld and Marie Jahoda, already mentioned, or actually Jewish, such as Else Frenkel (later called Else Frenkel-Brunswik after her marriage in the United States to Karl Bühler's assistant Egon Brunswik), well known as a coauthor of the classic study *The Authoritarian Personality*. Thus, even in the Philosophical Faculty it was possible for scholars and scientists of Jewish descent to earn higher qualifications and carry out research, despite the activities of the "Bear's Cave" group.

### 1934/1938—ONE SMALLER AND ONE DISASTROUS BREAK

After the takeover of power by Engelbert Dollfuss in 1933, and especially after the brief civil war and final move to dictatorship in February 1934, Austria experienced political purges for the first time in the twentieth century.<sup>47</sup> In certain cases, for example the dismissal and brief internment of the Socialist Julius Tandler,<sup>48</sup> antisemitism may also have been at work. However, these were mainly political firings of the classical kind, which eventually led to the emigration of younger scientists and scholars with similar allegiances, such as Paul

Lazarsfeld. In addition to Socialists, a number of professors and students who were Nazis or Nazi sympathizers were also dismissed after the attempted coup in July 1934, in which Dolfuss was killed. In any case, as Taschwer shows,<sup>49</sup> far more professors were dismissed or forced to retire early by the financial crisis of the time. The expulsion of the social psychologist and Socialist resistance worker Marie Jahoda in November 1936, after she was captured in a raid at the Research Center for Economic Psychology (which the revolutionaries had used as a mail drop), was a rare exception. After international interventions she was tried and convicted of high treason, but then released on the condition that she leave the country immediately.<sup>50</sup> Thus in this case, political policing, not antisemitism, was the primary motive.

The majority of Jewish scholars and scientists in Vienna appears to have shared Sigmund Freud's assessment of the situation immediately following the defeat of the Socialists in February 1934: "The situation is uncertain: either an Austrian Fascism or the twisted cross. In the latter case we must leave: (but) we will accept a certain amount from the local Fascism, since it will hardly treat us so badly as its German cousin will. It (the Austrian version) won't be pretty either."<sup>51</sup> Freud was not entirely wrong in this evaluation, despite the irony and resignation with which he expressed it. He and many other scientists and scholars, and not only the Jews among them, decided to remain in Austria during these years. Charlotte Bühler noted in her autobiography, adding a pinch of self-criticism, that during her trips to the United States, England and France in 1935, "Unfortunately I did not listen to the warnings of my émigré German colleagues." When she and her husband received offers of positions at Fordham University in New York City in 1937, she wanted to accept them, but "this time Karl was not interested, because he had established himself again in Vienna and hoped that Austria would hold against Hitler."<sup>52</sup> When the couple were forced to emigrate in 1938 (see below), the positions were no longer on offer.<sup>53</sup>

Following the Nazi takeover of power in Austria and the annexation of the country to the German Reich in March 1938, political and racist purges began in earnest. At the University of Vienna the number and percentage of faculty dismissed were by far the highest among German-speaking universities in the Nazi era, because two laws imported from the Reich took effect in Austria at the same time. The Reich Civil Service Law of 1933, which came into force via the "Decree for the Reordering of the Austrian Civil Service" of the Reich Interior Minister of May 31, 1938, excluded both "non-aryans" and political undesirables from state employment. In Vienna the more strictly political purges applied mainly to teaching staff and employees affiliated with

the previous Austrian dictatorship, such as Ludwig Adamovich, professor of law, a member of the Austrian Constitutional Court and the last Justice Minister of the former regime. Socialists had already been purged by the former regime. In addition, the Nuremberg laws of 1935, which excluded “non-aryans” from Reich citizenship, also took effect in Vienna in May 1938; on this basis so-called “*jüdisch Versippte*” such as Karl Bühler were now also subjected to persecution. The eager collaboration of hastily appointed local leaders like Rektor Fritz Knoll and faculty Deans Viktor Christian (Philosophical Faculty), Eduard Pernkopf (Medicine) and Franz Schönbauer (Law) lent these purges the appearance of academic legitimacy. With their assistance the still-serving Austrian Minister of Education, Vienna Professor of Prehistory Oswald Menghin, could dismiss 252 members of the university’s teaching staff as soon as April 22, 1938, even before the Civil Service Law took effect. However, this was only a first step.

According to data for habilitated teaching staff provided by then university archivist Kurt Mühlberger,<sup>54</sup> a total of eighty-two Professors (37 percent) and 233 Dozenten (49 percent) were dismissed from the University of Vienna between 1938 and 1945; that is 45 percent of the habilitated teaching staff. Andreas Huber reports that 39 percent (303 of 765) of teachers of all ranks were removed.<sup>55</sup> Thus, the University of Vienna lost not only more faculty members, but also a higher percentage of its teaching staff than any university in Nazi Germany, including Berlin.<sup>56</sup>

However, comparing the impact of these dismissals across disciplines yields a different picture. By my count (based on the data in Mühlberger<sup>57</sup>), most strongly affected were the Law Faculty (55 percent of habilitated teaching staff) and the Medical Faculty (53 percent); the impact in the Philosophical Faculty was high, but considerably less (36.3 percent). More interesting still is the variation among single disciplines. In the natural sciences the damage was greatest in chemistry (ten of twenty = 50 percent), physics (nine dismissals = 32 percent), and mathematics (five dismissals = 36 percent),<sup>58</sup> while mineralogy and petrology had only two dismissals each, geology and meteorology one each, and paleontology, the field of Othenio Abel, lost no one. In the humanities the scale ranges from philosophy (ten dismissals, thirteen including psychology and pedagogy) and history (nine dismissals) to archeology and English (one each). Michael Hubenstorfer<sup>59</sup> noted a comparable variation amongst medical disciplines long ago: among the roughly 180 dismissals in the Medical Faculty, the variation runs from history of medicine (two of two = 100 percent) and neurology and neuropathology (nine of ten = 90 percent)

to anatomy, the discipline of Eduard Pernkopf, with only one dismissal (= 10 percent).

What these lists of dry numbers tell us can be summarized in two points:

1. Not all of those dismissed were Jews, for two reasons. First of all, the vast majority of those dismissed on racist grounds were only deemed to be Jews on the basis of the Nazis' racist criteria, meaning their ascribed "descent," and not according to their religious affiliation or cultural self-identification. The shock of being denied both citizenship and employment on such a basis was deep. Second, most of those dismissed according to political criteria in the ordinary sense were not Jews either, but had been affiliated with the previous authoritarian regime. Mühlberger<sup>60</sup> took note of "the problematic character of this mixing" and writes that the radical antidemocratic philosopher and political scientist Othmar Spann and the scientists and scholars dismissed because they were defined by the Nazis as Jews "are not to be understood as victims in the same way."<sup>61</sup>

Now it is time to raise a difficult question: If indeed there was a systematic effort to prevent the habilitation of scholars and scientists of Jewish descent, as Klaus Taschwer has shown, then why were there still so many Jews to dismiss in 1938? Taschwer tries to answer this question for the Philosophical Faculty by showing that about two thirds of the members of this Faculty who were dismissed in 1938 were not Jews at all, but were adherents of the previous dictatorship.<sup>62</sup> In contrast, the Medical Faculty accounted for more than half of those dismissed on racist grounds, while the Law Faculty was more evenly split, with eighteen faculty dismissed on narrowly political and twenty-six on racist grounds.<sup>63</sup>

2. In any case the wide variation in dismissal numbers across disciplines says less about the Nazis than it does about the relative openness of some disciplines for merit-based appointments or about structural antisemitism in other fields before 1938. It is incorrect to take extreme cases like the nearly complete destruction of psychoanalysis in Vienna *pars pro toto*. Doing so in the past has made it far too easy to avoid considering more carefully what sort of science and scholarship was possible at the University of Vienna *after* 1938 or after 1945.<sup>64</sup>

Of course, this cruel history did not end in 1938. If we take a moment to consider individual cases, a number of bitter ironies come to the fore. I provide only two examples here:

Elise Richter was seventy-three years old when she was denied the right to teach in April 1938. Her application to “temporary” Dean Viktor Christian to change the regular financial support that had been provided to her into a permanent pension was denied. After her departure from the University, Richter continued her phonetical and phonological work at the Phonogrammarchiv of the Academy of Sciences, until she was forbidden to do so by Walter Ruth, the assistant there and a Nazi party member who was appointed head of the institute after the dismissal of Walter Hajek.<sup>65</sup> She refused to emigrate because, as she wrote, “I was too deeply rooted” in Vienna.<sup>66</sup> Later, she and her sister were evicted from their villa after sharing it for a time with Nazi colleagues from the English Department, and were later deported to Theresienstadt, where they died.

Another example of the fate that awaited scholars and scientists who did not emigrate or go underground is the case of Albania specialist Norbert Jokl. The Associate Professor for Indogermanic Studies was among those dismissed in 1938, but he remained in Vienna. His application to leave for Italy in 1941, where he claimed that research possibilities might be available to him, was denied; he was deported to Maly Trostinec in 1942 and apparently died during one of the transports. Viktor Christian, Nazi Dean of the Philosophical Faculty and a “trusted man” (*Vertrauensmann*) of the Ahnenerbe SS, quickly reported great interest in acquiring Jokl’s valuable library for his institute, but it was awarded instead to the Nationalbibliothek.<sup>67</sup> A contrasting case is that of physicist Stefan Meyer, who was dismissed from the University and also as head of the Radium Institute of the Academy of Sciences in 1938, but repaired to his family residence in Bad Ischl and survived the war there unharmed, for reasons still to be determined.<sup>68</sup>

According to Mühlberger,<sup>69</sup> eleven faculty members of the University of Vienna died or were murdered in the Shoah.<sup>70</sup> Among them was the jurist Josef Hupka, who emigrated illegally with his wife to Holland, only to be caught in the Nazis’ net after they overran that country.<sup>71</sup>



**AFTER 1945—VIENNA UNIVERSITY (NEARLY) WITHOUT JEWS**

In 1924, Hugo Bettauer's film, *Die Stadt ohne Juden*, caused something of an uproar in cultural circles, before it and its creator were consigned to oblivion. Bettauer's phantasmagorical fantasy became a reality during the Shoah, and the University of Vienna has remained largely, though not entirely, without Jewish faculty, since 1945. How the University has fared without Jews is also, or should be, a topic for Jewish studies. I can address only three issues here: how and why Jewish scientists and scholars were excluded a second time from Austrian academic life, this time by a democratic regime; how the few *rémigrés* came to be appointed at all; and how Jewish, or rather Semitic, studies were nonetheless established as an academic discipline at the University of Vienna, initially also without Jews.

***A Second Exclusion***

The accepted narrative about this topic in public discourse is represented quite clearly by the title of a recent, popular scientific volume: "They did not bring us back" (*Sie haben uns nicht zurückgeholt*).<sup>72</sup> With respect to the University of Vienna the story runs as follows: after "Reich Germans" appointed after 1938 were dismissed by law from the Austrian civil service in July 1945, academic power was acquired by a cabal of colleagues who had served the Austro-Fascist regime, most notably Richard Meister (Prorektor 1945, then holder of multiple offices at the university and Vice-President, later President, of the Academy of Sciences) and Ludwig Adamovich, mentioned above, who was Rektor from 1946 to 1950. The professors who were hired or reinstated then were mainly Catholic conservatives who had either been loyal supporters of the first dictatorship or politically indifferent; this group worked to reinstate colleagues with similar views. Already during the early phases of denazification and continuing through the various amnesties of the late 1940s, the same group then chose from among the former Nazi colleagues with whom they felt able to collaborate. Given these priorities, those who held academic power after 1945 and their partners in the Ministry of Education saw no need to invite their former Jewish colleagues to return. Christian Fleck described the result some time ago in sociological terms as "autochthonous provincialization."<sup>73</sup> I have pointed out that the resulting continuities did not simply happen, but were deliberately constructed.<sup>74</sup>

Told in this way, the story fits well with the narrative of Austrian university history as a path from a glorious past around 1900 into freely chosen

provincialism beginning long before 1945. This narrative is generally correct but needs to be modified in certain ways. For example: as the case of Karl Bühler shows, not only Jewish scientists and scholars were prevented from returning.<sup>75</sup> Recent research has also shown that the obstacles to remigration were not entirely due to deliberate government strategy. Other factors such as travel restrictions by the Allies, were also involved.<sup>76</sup> Furthermore, famous cases like that of the Germanist Josef Nadler, as well as those of Nazi Rektors Knoll and Pernkopf, Dean Christian and later Konrad Lorenz show that certain colleagues who were particularly prominent in the Nazi era were not allowed to return to the university either.<sup>77</sup>

That the political focus on recruiting prominent returnees involved a certain level of antisemitism is shown by the case of physicist Erwin Schrödinger, recommended by Federal President Karl Renner as “an Austrian and an Aryan.”<sup>78</sup> Far more important, however, is the fact that many of those who had been forcibly expelled by the Nazis refused to return to the “land of the murderers.” Physicist Viktor Weisskopf, for example, was fond of saying that he would have preferred to have been asked as a sign of respect, as he had been in Göttingen, but would then have derived satisfaction from refusing.<sup>79</sup>

Nonetheless, a few émigrés of Jewish descent did in fact return to the University of Vienna. The only one in the Medical Faculty was Hans Hoff, who was appointed Professor for Psychiatry and Neurology in 1950 after the originally appointed non-Jewish colleague suddenly died. That Hoff was politically left-wing was known to his colleagues. However, he was also a student and former assistant of Julius Wagner von Jauregg; apparently the Faculty hoped that he would continue the work of Jauregg’s “school.”<sup>80</sup> How the few returnees came to terms with their numerous colleagues who had been members of the Nazi party is an open question that has yet to be studied for Austria.

***Kurt Schubert and the Institute for Jewish Studies (Judaistik): Jewish Studies without Jews?***

Whether all of this is actually an issue for Jewish studies depends, of course, on how that field is defined (see Introduction), but by any definition the story of how Jewish or Semitic studies came to be established in Vienna without Jews is surely relevant. Dirk Rupnow raised this issue in connection with his pioneering work on *Judenforschung* in the Nazi era.<sup>81</sup> As he pointed out already in 2008,<sup>82</sup> Kurt Schubert, who founded the Vienna Institute for Judaistik in 1966, completed his doctorate in 1945 under Viktor Christian, an Orientalist

and, as stated above, “trusted man” (*Vertrauensmann*) of the Ahnenerbe SS, a fact he openly acknowledged from the mid-1950s onward. He had actually studied Old Testament and ancient Hebrew with Catholic priest Johannes Gabriel in the Catholic-Theological Faculty, but remained loyal to his teacher, working with him on Qumran scrolls and even suggesting that Christian had been a “philosemitic Nazi” because he had supported research on ancient Judaism.<sup>83</sup> Schubert himself was a Catholic anti-Nazi who said in an interview that he had chosen Semitic studies as an act of solidarity with the persecuted Jews, in order to learn Hebrew without attracting suspicion.<sup>84</sup> He later actively engaged in Christian-Jewish cooperation and is revered by his successors in Vienna. Rupnow<sup>85</sup> emphasizes Christian’s actual commitment to anti-semitic *Judenforschung* and points to this discomfiting aspect of the history of Jewish studies in Vienna, while also acknowledging Schubert’s own, clearly philosemitic position. In contrast, Susannah Heschel’s unfortunately erroneous misattribution to Schubert of Christian’s appropriation of books from the libraries of Jews was portrayed by the institute’s librarian as an attack on Schubert’s reputation and by extension on that of the institute.<sup>86</sup> The controversy was left unmentioned during the celebrations of the Institute’s 40th anniversary in 2016.

## IN CONCLUSION—THE NARRATIVES REVISITED

This paper began by stating the intention of critically reflecting on three standard narratives: Jewish history as a vale of tears, with terminus ad quem in the Shoah; Austrian history as a road to the abyss named “Anschluß”; and Austrian university history as a path from glory around 1900 to deliberately chosen provincialism (without Jews) after 1945. In conclusion, I will try to summarize how the findings of recent research impact these narratives.

The tale of Jewish history as a vale of tears places the undoubted success of Jewish scientists and scholars in the late Habsburg monarchy under a nostalgic halo, while at the same time lending their stories a tragic character by imposing a negative teleology ending for most of them with the forced migrations of 1938 and for some with death in the Shoah. After all that has been said here it should be clear that while this perspective is unavoidable, it is not the only possible story. In a properly historical account it should be possible, indeed obligatory, to note that many scientists and scholars who were identified,

or identified themselves, as Jews held fast for good reason to the culture in which they had been raised, and that neither they nor the antisemites who plagued them had any idea of the true dimensions of the horror that would engulf them later. The same warning against negative teleologies applies also to the narrative of Austrian history as a path into the abyss. Though it is surely correct that the First Republic was widely rejected, the rejection was hardly universal. Jews, academics or not, had good reason to favor and be loyal to it; and neither of the following dictatorships was widely predicted in the 1920s.

The warning also applies to the narrative of university history as a path to provincialism, for four reasons. First of all, the shift in the center of world-wide science from Europe to the United States began at the latest in the 1920s, before the era of dictatorships in Austria. The voluntary migrations of those years and the forced migrations of 1938 undoubtedly accelerated but did not cause that shift. Second, the antisemitic activities of people like Theodor Billroth or the professors of the “Bear’s Cave” encountered public opposition, and the “Bear’s Cave” faced opposition within the Philosophical Faculty as well. As a result, third, it was possible for Jewish scientists and scholars even in the Philosophical Faculty, and to a greater extent in the Legal and Medical Faculties of the University of Vienna to gain academic credentials and even to be appointed to professorships in the 1920s. Indeed, the Dean of the Medical Faculty elected in 1923 and 1924, Alfred Fischl, was of Jewish descent. Fourth and finally, although the path to provincialism began long before 1938, it was not inevitable, but was, rather, confirmed by the deliberate decision to continue academic life largely without Jews after 1945. In any case, stubborn adherence to methodological or intellectual traditions had led to international marginalization in certain fields even before the Nazis came to power, for example in radiation studies and nuclear physics.<sup>87</sup>

At the beginning of this paper, I noted that research on this topic was surprisingly sparse for some time, and started to grow only recently. We now know much more about academic life and antisemitism at the University of Vienna than before, but much remains to be learned. At least equally important is the need for more critical reflection on the selective character of current memory politics. The fact that, with the exception of Sigmund Freud, the most prominent academic icons of public memory culture in Vienna today were not in fact Jews at the time of their persecution, but were defined as Jews by the Nazis, has remained unexamined for decades. Most contemporary memory culture continues to enact the epistemic and moral violence articulated by Karl Lueger and Joseph Goebbels, to both of whom the infamous saying “I decide

who is a Jew” has been attributed, only with the moral plus and minus signs reversed.

The still-current tendency in much of public discourse to separate “Austrians” and “Jews” suggests that this position, though polemical, must be taken. Apparently it is still necessary to remember that the scholars and scientists persecuted by the Nazis were *Austrians*—some of whom were proudly Jewish, many of whom were not—and that those who were subjected to dismissal, persecution and death suffered these fates primarily at the hands of other *Austrians*. I, for one, would be satisfied if this minimal level of justice could be achieved not only in historical discourse, but in public memory culture as well.

## Notes

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1. This is a thoroughly revised, updated and drastically shortened version of a lecture first presented in Vienna in 2012 and originally published in German (Mitchell G. Ash, “Jüdische Wissenschaftlerinnen und Wissenschaftler an der Universität Wien von der Monarchie bis nach 1945. Stand der Forschung und offene Fragen,” in *Der lange Schatten des Antisemitismus. Kritische Auseinandersetzungen mit der Geschichte der Universität Wien im 19. und 20. Jahrhundert*, hrsg. Oliver Rathkolb [Göttingen: V&R unipress, Vienna University Press, 2013], 87–116.), PDF available from the author. Source references in this version are limited largely, though not entirely, to works published since 2013, to save space. An earlier revised version entitled: “Not Only Freud: Jewish Scientists and Scholars at the University of Vienna from the Habsburg Era until the Early Post-War Years,” was presented as the Selig Brodsky Memorial Lecture at the University of Leeds on November 12, 2018. I gratefully acknowledge the constructive remarks addressed to me on both occasions.
2. Klaus Taschwer (*Hochburg des Antisemitismus. Der Niedergang der Universität Wien im 20. Jahrhundert* [Vienna: Czernin Verlag, 2015]) presented a brief overview of his study as an invited lecture at the celebrations of the 650th anniversary of the founding of the University of Vienna in the fall of 2015, thus providing an excellent example of the current awareness that purely celebratory jubilees are no longer possible in this part of the world. See Mitchell G. Ash (“Die Universitätsgeschichtsschreibung an der Universität Wien im Jubiläumsjahr 2015—Zwischen historischer Reflexion und Event-Kultur,” in *Universitätsgeschichte schreiben. Inhalte—Methoden—Fallbeispiele*, hrsg. Livia Prüll, Christian George, und Frank Hüther [Göttingen: V&R unipress, Mainz University Press, 2019], 319–37).
3. See Herbert Posch, Doris Ingrisch, und Gert Dressel, Hrsg., “Anschluss” und Ausschluss 1938. *Vertriebene und verbliebene Studierende der Universität, Emigration—Exil—Kontinuität*. Schriften zur zeitgeschichtlichen Kultur- und Wissenschaftsforschung 8 (Münster: LIT, 2008).
4. For an overview see Anna L. Staudacher, “Meldet den Austritt aus dem mosaischen Glauben.” *18.000 Austritte aus dem Judentum in Wien, 1868–1914: Namen—Quellen—Daten* (Frankfurt am Main: Peter Lang Verlag, 2009).
5. *Ibid.*, 349, cited from “Karl Landsteiner,” Wikipedia, accessed May 10, 2012, [http://de.wikipedia.org/wiki/Karl\\_Landsteiner](http://de.wikipedia.org/wiki/Karl_Landsteiner).
6. Monika Löscher, “Julius Tandler (1869-1936),” in *Wissenschaft und Forschung in Österreich. Exemplarische Leistungen österreichischer Naturforscher, Techniker und Mediziner*, hrsg. Gerhard Heindl (Frankfurt am Main: Peter Lang, 2000), 90.
7. Elise Richter, *Summe des Lebens*, Neuaufl. (Wien: WUV Universitätsverlag, 1997); Astrid Schweighofer, “Jüdische Konversionen zum Protestantismus in Wien um 1900. Zur Religiosität von Arnold Schönberg, Otto Weininger, Victor Adler,

- Egon Friedell und Elise Richter” (Diplomarbeit Universität Wien, Fakultät für Evangelische Theologie, 2007), Kap. 9.
8. Ruth Lewin Sime, *Lise Meitner. A Life in Physics* (Berkeley, CA: University of California Press, 1996), 6; cf. “Lise Meitner,” Wikipedia, accessed February 2, 2013, [http://de.wikipedia.org/wiki/Lise\\_Meitner](http://de.wikipedia.org/wiki/Lise_Meitner).
  9. Charlotte Bühler, “Charlotte Bühler,” in *Psychologie in Selbstdarstellungen*, Bd. 1, hrsg. Ludwig Pongratz, Werner Traxel, und Ernst G. Wehner (Bern—Stuttgart—Wien: Huber Hans, 1972), 9.
  10. Richter, *Summe des Lebens*, 58–59.
  11. Peter Gay, *A Godless Jew: Freud, Atheism and the Development of Psychoanalysis* (New Haven: Yale University Press, 1987).
  12. Sigmund Freud, *Selbstdarstellung (1925)*, in *Gesammelte Werke*, XIV (Frankfurt am Main: Fischer Taschenbuchverlag, 1999), 34.
  13. Marie Jahoda, “‘Für mich ist mein Judentum erst mit Hitler eine wirkliche Identifikation geworden.’ Gespräch mit Marie Jahoda,” *Ästhetik und Kommunikation* 51 (1985): 71.
  14. Elana Shapira, “Marie Jahoda Deconstructing Freud,” in *Freud and the Émigré: Austrian Émigrés, Exiles and the Legacy of Psychoanalysis in Britian, 1930s–1970s*, ed. Elana Shapira and Gabriele Finzi (Basingstoke: Palgrave Macmillan, 2020), 195–216.
  15. Pieter M. Judson, *The Habsburg Empire: A New History* (Cambridge MA: Harvard University Press, 2016); on the nationalization of the sciences in this period see Mitchell G. Ash and Jan Surman, eds., *The Nationalization of Scientific Knowledge in the Habsburg Empire 1848–1918* (Basingstoke: Palgrave Macmillan, 2012).
  16. “BLKÖ: Goldenthal, Jacob,” Wikisource, accessed February 28, 2022, [https://de.wikisource.org/wiki/BLK%C3%96:Goldenthal,\\_Jakob](https://de.wikisource.org/wiki/BLK%C3%96:Goldenthal,_Jakob).
  17. G. Wolf, *Studien zur Jubelfeier der Wiener Universität im Jahre 1865* (Vienna: Herzfeld und Bauer, 1865), 188; Jan Surman, *Universities in Imperial Austria, 1848–1918: A Social History of a Multilingual Space* (West Lafayette, IN: Purdue University Press, 2019), 235 + 366, fn. 100.
  18. Adolf Lieben, *Erinnerungen an meine Jugend- und Wanderjahre* (Sonderdruck aus: Adolf Lieben, *Festschrift zum fünfzigjährigen Doktorjubiläum und zum siebzigsten Geburtstag* [Leipzig: C. F. Winter’sche Verlagshandlung, 1906]), 7–8.
  19. Surman, *Universities in Imperial Austria*, 240.
  20. Theodor Billroth, *Über das Leben und Lernen der medizinischen Wissenschaften an den Universitäten der deutschen Nation nebst allgemeinen Bemerkungen über Universitäten: eine kulturhistorische Studie* (Wien: Gerold, 1876; first published Berlin 1875).
  21. Werner Hanak-Lettner, Hrsg., *Die Universität. Eine Kampfzone/The University: A Battleground* (Vienna: Picus Verlag, 2015), 76, n. 2.
  22. Billroth, reply to the Address of the Leseverein 1875, cited in Felicitas Seebacher, *Das Fremde im “deutschen” Tempel der Wissenschaften. Brüche in der Wissenschaftskultur*

- der Medizinischen Fakultät der Universität Wien* (Wien: Verlag der Österreichischen Akademie der Wissenschaften, 2010), 117–18.
23. Felicitas Seebacher, “‘Der operierte Chirurg.’ Theodor Billroths Deutsch-nationalismus und akademischer Antisemitismus,” *Zeitschrift für Geschichtswissenschaft* 54 (2006): 335.
  24. Cit. in Seebacher, *Das Fremde im “deutschen” Tempel der Wissenschaften*, 117–18.
  25. For a detailed analysis see Surman, *Universities in Imperial Austria*, chaps. 5–6.
  26. Seebacher, *Das Fremde im “deutschen” Tempel der Wissenschaften*, 337.
  27. Surman, *Universities in Imperial Austria*. Surman’s study includes information for the Philosophical and Medical, but not the Law or Theological Faculties.
  28. Andreas D. Ebert, *Jüdische Hochschullehrer an preußischen Universitäten (1870–1924). Eine quantitative Untersuchung mit biographischen Skizzen* (Frankfurt am Main: Mabuse-Verlag, 2008).
  29. Surman, *Universities in Imperial Austria*, 233.
  30. *Ibid.*, 239.
  31. Robert Rosner, *Chemie in Österreich 1750–1914. Lehre, Forschung, Institute*, Beiträge zur Wissenschaftsgeschichte, 5 (Wien—Köln—Weimar: Böhlau, 2004), 233.
  32. Steven Beller, *Vienna and the Jews 1867–1938: A Cultural History* (Cambridge: Cambridge University Press, 1989; German edition: *Wien und die Juden 1867–1938* [Wien—Köln—Weimar: Böhlau, 1993]).
  33. Surman, *Universities in Imperial Austria*, 239; Beller, *Wien und die Juden 1867–1938*, 36, Table 3.
  34. Beller, *Wien und die Juden 1867–1938*, 36.
  35. *Ibid.*, Part I, esp. 43–70.
  36. Ernst H. Gombrich, *The Visual Arts in Vienna c. 1900: Reflections on the Jewish Catastrophe*, Occasions. The Austrian Cultural Institute 1 (London: Austrian Cultural Institute, 17. November 1996; German edition: *Jüdische Identität und jüdisches Schicksal. Eine Diskussionsbemerkung*, Mit einer Einleitung von Emil Brix und einer Diskussionsdokumentation von Frederick Baker [Wien: Passagen-Verlag, 2001]). Unfortunately, the cited text has no page numbers. Gombrich was probably not responding to Beller’s book (*Wien und die Juden 1867–1938*), but to the brief summary of Beller’s position that had just appeared (Steven Beller, “Was bedeutet es, ‘Wien 1900’ als eine jüdische Stadt zu bezeichnen?” *Zeitgeschichte* 23 [1996]: 274–80).
  37. Gombrich, *The Visual Arts in Vienna c. 1900*.
  38. Michael Hubenstorf, “Vertriebene Medizin—Finale des Niedergangs der Wiener Medizinischen Schule?” in *Vertriebene Vernunft, ertriebene Vernunft. Emigration und Exil österreichischer Wissenschaft*, hrsg. Friedrich Stadler (Münster: LIT, 2004), 776.
  39. Herbert Posch, “Studierende und die Universität Wien in der Dauerkrise 1918 bis 1938,” in *“Anschluss” und Ausschluss 1938. Vertriebene und verbliebene Studierende*



- der Universität, Emigration—Exil—Kontinuität. Schriften zur zeitgeschichten Kultur- und Wissenschaftsforschung 8, hrsg. Herbert Posch, Doris Ingrisch, und Gert Dressel (Münster: LIT, 2008); Taschwer, *Hochburg des Antisemitismus*, Chap. 3.
40. Taschwer, *Hochburg des Antisemitismus*, chap. 4. See also Klaus Taschwer, “Geheimsache Bärenhöhle. Wie eine antisemitische Professorenclique der Universität Wien nach 1918 wissenschaftliche Exzellenz vertrieb,” in *Alma mater antisemitica. Akademisches Milieu, Juden und Antisemitismus an den Universitäten Europas zwischen 1918 und 1939*, 221–42 (Vienna: New Academic Press, 2016).
  41. For multiple indirect indications of antisemitic influences on University appointments see Andreas Huber, Linda Erker, and Klaus Taschwer, *Der deutsche Klub. Austro-Nazis in der Hofburg* (Vienna: Czernin Verlag, 2020).
  42. Wolfgang L. Reiter, *Aufbruch und Zerstörung. Zur Geschichte der Naturwissenschaften in Österreich 1850 bis 1950* (Vienna: LIT Verlag, 2017).
  43. Klaus Taschwer, “Der verlorene Schlüssel des Otto Halpern,” *Der Standard*, Online-Ausgabe, October 31, 2012, accessed February 28, 2013, <http://derstandard.at/1350259804295/Der-verlorene-Schluessel-des-Otto-Halpern>.
  44. Johannes Feichtinger, *Wissenschaft zwischen den Kulturen. Österreichische Hochschullehrer in der Emigration 1933–1945* (Frankfurt am Main: Campus-Verlag, 2001), chaps. 6–7.
  45. Friedrich Stadler, *Studien zum Wiener Kreis. Ursprung, Entwicklung und Wirkung des Logischen Empirismus im Kontext* (Frankfurt am Main: Suhrkamp, 2001).
  46. Gerhard Benetka, *Psychologie in Wien. Sozial- und Theoriegeschichte des Wiener Psychologischen Instituts 1922–1938* (Wien: WUV Universitätsverlag, 1995).
  47. A long overdue detailed study of this period came to my attention after completion of this chapter: Linda Erker, *Die Universität Wien im Austrofascismus. Österreichische Hochschulpolitik 1933 bis 1938, ihre Vorbedingungen und langfristigen Nachwirkungen* (Göttingen: V&R unipress, 2021).
  48. Birgit Nemeč states correctly that “as a Social Democrat, Tandler was temporarily jailed and then forced to retire in 1934.” Birgit Nemeč, “Julius Tandler,” in *Universität—Politik—Gesellschaft*, hrsg., Mitchell G. Ash and Josef Ehmer (Göttingen: V&R unipress, 2015), 262.
  49. Taschwer, *Hochburg des Antisemitismus*, chap. 6.
  50. Benetka, *Psychologie in Wien*, 259–60.
  51. Sigmund Freud to Ernst Freud, February 20, 1934, in Sigmund Freud, *Sigmund Freud Briefe 1873–1939* (Frankfurt am Main: S. Fischer, 1968), 434.
  52. Bühler, “Charlotte Bühler,” 28.
  53. On Karl Bühler’s arrangement with the Austrofascist regime in Vienna, see Benetka, *Psychologie in Wien*, 261–63.
  54. Kurt Mühlberger, *Vertriebene Intelligenz 1938. Der Verlust geistiger und menschlicher Potenz an der Universität Wien von 1938 bis 1945*, 2. verm. Aufl. (Wien: Archiv d. Universität Wien, 1993), 9.

55. Andreas Huber, *Rückkehr erwünscht. Im Nationalsozialismus aus "politischen" Gründen vertriebene Lehrende der Universität Wien* (Vienna: LIT Verlag, 2016), 18, Table 1. For a detailed study, see Andreas Huber, "Die Hochschullehrerschaft der 1930er und 1940er Jahre. Sozialstruktur und Karrierewege vor dem Hintergrund politischer Zäsuren," in *Universität—Politik—Gesellschaft*, hrsg. Mitchell G. Ash and Josef Ehmer, 649–96 (Göttingen V&R unipress, 2015).
56. On Germany, cf. Michael Grüttner und Sven Kinas, "Die Vertreibung von Wissenschaftlern aus den deutschen Universitäten 1933–1945," *Vierteljahreshefte für Zeitgeschichte* 55 (2007): 123–86.
57. Mühlberger, *Vertriebene Intelligenz 1938*, 9.
58. Reiter, *Aufbruch und Zerstörung*.
59. Michael Hubenstorf, "Ende einer Tradition und Fortsetzung als Provinz. Die Medizinischen Fakultäten der Universitäten Berlin und Wien 1925–1950," in *Medizin, Naturwissenschaft und Technik im Nationalsozialismus. Kontinuitäten und Diskontinuitäten*, hrsg. Christoph Meinel und Peter Voswinckel (Stuttgart: Verlag für Geschichte der Naturwissenschaften und der Technik, 1994), 37.
60. Mühlberger, *Vertriebene Intelligenz 1938*, 8.
61. For extended discussion of this issue see Huber, *Rückkehr erwünscht*.
62. Taschwer, *Hochburg des Antisemitismus*, 212.
63. *Ibid.*, 211, based on Huber, *Rückkehr erwünscht*.
64. On this topic see Mitchell G. Ash, "Die Universität Wien in den politischen Umbruchzeiten des 19. und 20. Jahrhunderts," in *Universität—Politik—Gesellschaft (650 Jahre Universität Wien, Vol. 2)*, hrsg. Mitchell G. Ash and Joseph Ehmer (Göttingen: V&R unipress, Vienna University Press, 2015), 129–34.
65. Marlene Wahlmüller, "Consequences for the Academic Personnel: The Case of Leo Hajek," in *The Academy of Sciences in Vienna 1938 to 1945*, ed. Johannes Feichtinger, Herbert Mathes, Stefan Sienell, and Heidemarie Uhl (Vienna: Verlag der Österreichischen Akademie der Wissenschaften, 2014), 69–76.
66. Richter, *Summe des Lebens*, 221.
67. On the controversy over whether Christian denounced Jokl in order to acquire his library, see Irene Maria Leitner, "'Bis an die Grenzen des Möglichen.' Der Dekan Viktor Christian und seine Handlungsspielräume an der Philosophischen Fakultät 1938–1943," in *Geisteswissenschaften im Nationalsozialismus. Das Beispiel der Universität Wien*, hrsg. Mitchell G. Ash, Wolfram Nieß, und Ramon Pils (Göttingen: Vienna University Press, 2010), 56 and the literature cited there.
68. Wolfgang L. Reiter, *How Did Meyer Survive? Wie der Physiker Stefan Meyer die NS-Diktatur überlebte* (Vienna: Czernin Verlag, 2022).
69. Mühlberger, *Vertriebene Intelligenz 1938*.
70. Ash, "Die Universität Wien in den politischen Umbruchzeiten," 117; cf. Taschwer, *Hochburg des Antisemitismus*, 229–30.
71. Taschwer, *Hochburg des Antisemitismus*, 225–29.

72. Isabella Ackerl und Ingeborg Schödl, “*Sie haben uns nicht zurückgeholt.*” *Verlorene Intelligenz. Österreichische Wissenschaftler 1918–1945* (Wien: Holzhausen, 2005).
73. Christian Fleck, “Autochthone Provinzialisierung. Universität und Wissenschaftspolitik nach dem Ende der nationalsozialistischen Herrschaft in Österreich,” *Österreichische Zeitschrift für Geisteswissenschaften* 7 (1996): 67–92; idem, “Österreichs Universitäten am Beginn der Zweiten Republik. Entnazifizierung und Nicht-Rückkehr der Vertriebenen,” Vienna, 2002, last access March 1, 2022, <http://nbn-resolving.de/urw:nbn:de:0168-ssoar-234782>.
74. Ash, “Die Universität Wien in den politischen Umbruchzeiten,” 156. Some professors of Jewish descent such as the physicists Felix Ehrenhaft and Karl Przibram, who had managed to survive in Europe, returned to Vienna and were reinstated (ibid., 153). For a comparison of the University of Vienna with other Austrian institutions in this period, see Mitchell G. Ash, “Die österreichischen Hochschulen in den politischen Umbrüchen der ersten Hälfte des 20. Jahrhunderts,” in “*Säuberungen*” *an den österreichischen Hochschulen 1934–1945. Voraussetzungen, Prozesse, Folgen*, ed. Johannes Koll (Vienna: Böhlau-Verlag, 2017), 65–66.
75. Gerhard Benetka, “Entnazifizierung und verhinderte Rückkehr. Zur personellen Situation der akademischen Psychologie in Österreich nach 1945,” *Österreichische Zeitschrift für Geisteswissenschaften* 9 (1998): 188–217.
76. For a general overview of US military government in Austria and the implications for higher education policy see Christian H. Stifter, *Zwischen geistiger Erneuerung und Restauration. US-amerikanischen Planungen zur Entnazifizierung und demokratischen Neuorientierung österreichischer Wissenschaft 1941–1955* (Vienna: Böhlau Verlag, 2014), esp. chaps. 3–4. See also Thomas König, “Irrfahrer und Dulder, Titanen und Halbgötter. Eine empirische Analyse eines Samples von HochschullehrerInnen von 1949 bis 1964,” *Zeitgeschichte* 38 (2011): 108–29; Ingrid Arias, “Die Medizinische Fakultät von 1945 bis 1955: Provinzialisierung oder Anschluss an die westliche Wissenschaft?” in *Zukunft mit Altlasten. Die Universität Wien 1945 bis 1955*, hrsg. Margarete Grandner, Gernot Heiss, und Oliver Rathkolb (Innsbruck: StudienVerlag, 2005), 68–88; idem, “Die Wiener Medizinische Fakultät 1945—Zwischen Entnazifizierung und katholischer Elitenrestauration,” in *Wissenschaft macht Politik. Hochschule in den politischen Systembrüchen 1933 und 1945*, hrsg. Sabine Schleiermacher und Udo Schagen (Stuttgart: Franz Steiner Verlag, 2009), 247–62.
77. Irene Ranzmaier, “Germanistik—kontinuitätsstiftende Ansätze der Wissenschaft und die Bedeutung kollegialer Unterstützung,” in *Geisteswissenschaften im Nationalsozialismus. Das Beispiel der Universität Wien*, hrsg. Mitchell G. Ash, Wolfram Nieß, und Ramon Pils (Göttingen: Vienna University Press, 2010), 449–50; Johannes Feichtinger, Herbert Mathes, Stefan Siennell, and Heidemarie Uhl, eds., *The Academy of Sciences in Vienna 1938 to 1945* (Vienna: Verlag der Österreichischen Akademie der Wissenschaften, 2013); Margarete Grandner, Gernot Heiss, und

- Oliver Rathkolb, Hrsg., *Zukunft mit Altlasten. Die Universität Wien 1945 bis 1955* (Innsbruck: Studien-Verlag, 2005) on a Nazi allowed to return in Jus.
78. Stifter, *Zwischen geistiger Erneuerung und Restauration*, 362, n. 1540; Ash, “Die Universität Wien in den politischen Umbruchzeiten,” 152, n. 491.
79. Reiter, *Aufbruch und Zerstörung*, 342.
80. Arias, “Die Medizinische Fakultät”; idem, “Die Wiener Medizinische Fakultät 1945”; for other examples in history and ethnology see Friedrich Engel-Janoszi, “. . . aber ein stolzer Bettler.” *Erinnerungen aus einer verlorenen Generation* (Wien: Verlag Styria, 1974), 241–66 and Andre Gingrich, “Remigranten und Ehemalige: Zäsuren und Kontinuitäten in der universitären Völkerkunde Wiens nach 1945,” in *Zukunft mit Altlasten. Die Universität Wien 1945 bis 1955*, hrsg. Margarete Grandner, Gernot Heiss, und Oliver Rathkolb (Innsbruck: StudienVerlag, 2005), 260–72.
81. Dirk Rupnow, “Brüche und Kontinuitäten—Von der NS-Judenforschung zur Nachkriegsjudaistik,” in *Geisteswissenschaften im Nationalsozialismus. Das Beispiel der Universität Wien*, hrsg. Mitchell G. Ash, Wolfram Nieß, und Ramon Pils (Göttingen: V&R unipress. Vienna University Press, 2010), 79–114; idem, *Judenforschung im Dritten Reich. Wissenschaft zwischen Politik, Propaganda und Ideologie* (Baden-Baden: Nomos, 2011).
82. Dirk Rupnow, “Pseudowissenschaft als Argument und Ausrede. Antijüdische Wissenschaft im ‘Dritten Reich’ und ihre Nachgeschichte,” in *Pseudowissenschaft*, hrsg. Dirk Rupnow, Veronika Lipphardt, Jens Thiel, und Christina Wessely (Frankfurt am Main: Suhrkamp, 2008), 297–99.
83. Cit. in Rupnow, “Brüche und Kontinuitäten,” 103.
84. Ibid.
85. Ibid.
86. Monika Schreiber, “A Response to Susannah Heschel,” *Review of Rabbinic Judaism* 13, no. 2 (2010): 231–35; for replies see Susannah Heschel, “Response to Monika Schreiber,” *Review of Rabbinic Judaism* 13, no. 2 (2010): 236–49; Dirk Rupnow, “A Response to Monika Schreiber,” *Review of Rabbinic Judaism* 13, no. 2 (2010): 250–52.
87. See Reiter, *Aufbruch und Zerstörung*, and Silke Fengler, *Kerne, Kooperation und Konkurrenz. Österreichische Kernforschung im internationalen Kontext (1900–1950)* (Vienna: Böhlau Verlag, 2014).

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# “Questions Remain”: Racism, Geneticism, and the Continuing Lure of Jewish Essentialism

by *Mitchell B. Hart*

**D**

## DEFINING GENETICS TODAY

Those who think about the implications of current research into human genetics and genomes speak of a “genetic self,” and of the way in which genetics has become for us the key to understanding human nature and the human soul. Accordingly, science is said to have fully replaced religion as the language with which we comprehend and explain ourselves to ourselves. Is it any wonder, writes Paul Root Wolpe, a bioethicist at Emory University, “[t]hat we have relinquished the Bible to a new set of sacred letters, which, when rearranged in the right way, when interpreted by our revered experts, when manipulated through complex rituals of micro-pipette, polymerase chain reaction, and delivery vector, will create the perfect life, the perfect personality, the perfect society?”<sup>1</sup>

The genetic self, according to Wolpe, is an answer to the postmodern self. The genetic self is the essential self, “written into the genome.”<sup>2</sup> But science also holds out the possibility of the malleable self, through technological manipulation and better science. However, Jewish selfhood, for Wolpe, stands in healthy contrast to this strong genetic essentialism. “Jews have always understood that identity is chosen, is to some degree the product of moral choice.”<sup>3</sup>

Have Jews always understood identity as something that is chosen? That is, to put it in familiar terms, have Jews always come down on the side of culture rather than biology, nurture over nature? And does that really hold true today? Do Jews maintain a healthy suspicion or even repudiation of genetic

essentialism? Or do many of them, as I argue in this essay, embrace genetics as a true and meaningful way of discovering, or we might say both rediscovering and constructing, a Jewish identity? And if this is so, then how might we begin to account for this? What is it about what I will call “geneticism” that is so attractive? What epistemological and cultural needs does it fill? And how do we square this recent Jewish enthusiasm for geneticism with the history of racial, genetic, and eugenic thinking that played such a crucial role in modern anti-Semitism, Nazism, and the Holocaust? Or, as Sander Gilman asked in 2006, “What happens when a biological definition of identity becomes a compelling aspect of community self- definition? What happens when the ‘Jews’ or ‘African Americans’ or ‘Asians’ begin to think of themselves as a virtual family interconnected by their biological inheritance?”<sup>4</sup>

## DEBATES ABOUT INHERITANCE

Genetics and culture are usually set at odds with each other, as in Wolpe’s analysis, as strategies of identity formation: nature versus nurture, biology *or* environment. These are dichotomous terms, casting individual and group identities in terms of either/or. I am not speaking here of the reality of individual identity, which is no doubt a product of a combination of genetics and culture. I am referring to discursive strategies, to the stories we tell ourselves or that we are told and believe about what makes us what we are. The dichotomy between genetics and culture is a false one, of course, since the very act of constructing narratives about ourselves, including our genetic selves, is fundamentally a cultural act. Geneticism is this story about identity, history, and the present told with the tools of genetics. It is dependent on the reality of genetics and on the epistemic and scientific status of genetic research and findings, but it is different from genetics.

Geneticism emerges alongside culture (and in this I include religion or the reinvention of tradition, though culture encompasses much more) as a choice. Geneticism (rather than genetics) as a choice is not the paradox that it might at first appear. We do not, of course, choose our genetic make-up; that is, indeed, inherited.<sup>5</sup> But each of us can choose to make this genetic identity (or, in this case, a “genetic identity” that has been imagined by others—scientists, scholars, journalists, religious leaders, film and television producers) part of a larger narrative about our connection, as individuals, to some collective past,

present, and future. This is an act of the imagination, even if it is constituted in part out of genetic or biological data.

In the case of the Jews, individual choice is one the hallmarks of Jewish modernity as it emerged and developed over the course of the last three centuries. Thus, for Jews, like for everyone else, choice is indeed a fundamental aspect of identity. In contrast to Wolpe, however, I would argue that this is not a choice that posits a biological determinism against an environmental or cultural determinism, in which Jews have chosen to repudiate genetic essentialism. Rather, they have chosen genetic essentialism as one possible way to tell themselves and others the story of their Jewish selves (and by implication of “the Jewish people”).

Jewish geneticism constructs its narratives out of two main realms of genetic research: medical research into genetic diseases such as Tay-Sachs and breast cancer, and DNA research into ancestry and community or belonging. The former is without doubt of enormous import in the immediate lives of large numbers of Jews, and I want to be absolutely clear that I am not suggesting a parallel or conflation between the genetics of disease and the genetics of ancestry. It is difficult, probably impossible, to argue that the former, while it can and does produce narratives of identity and community, is anything but real and the utmost import. This is not to deny that historically medicine was absolutely vital to racial and eugenic thinking, both scientific and popular. Nor does it mean that race and racial thinking play no part today in the diagnosis and treatment of disease. Indeed, an ongoing debate exists regarding the continuities and discontinuities between “the old eugenics and the new genetics.”<sup>6</sup> Much of this debate centers on questions of individual choice versus state or societal compulsion: a “liberal genetics” that developed after 1945 and was rooted in choice and the needs of the autonomous individual, and the older eugenics impelled by the needs of the society, whether authoritarian or democratic.

This essay also focuses on matters of choice but does so through the issue of ancestry. It examines the way in which Jews have taken up the genetics of ancestry and used it to construct narratives of Jewish identity that confirm or perhaps disrupt the normative Jewish story of origins, and continuity over time and place.

As Nadia Abu el-Haj makes clear in her study on the epistemology and politics of the contemporary Jewish engagement with genetic science, the power of what she calls anthropological genetics lies in the gift it offers of “origins”: “Not only are we (still) defined by our origins, in the rhetoric of anthropological genetics those origins never go away. The task of this science, as was the task

of various sciences before it, is to render origins legible.<sup>77</sup> The challenge, then, is how to write historical narratives out of biological data. The reward is a narrative of individual and collective identities that are politically or ideologically charged while at the same time appearing neutral because it is scientific.

In the end, both medical genetics and anthropological genetics work together to validate the task of geneticism and the idea of a Jewish genetic self. A striking example of this can be seen in the opening pages of Jon Entine's 2007 book *Abraham's Children: Race, Identity, and the DNA of the Chosen People*.<sup>8</sup> Entine, a journalist and author, and one of the founding directors of the Genetic Literacy project, begins his book with a visit he took to Israel, "a deeply personal journey, spurred by the tragedy that DNA visited upon my family." Many of his near relatives had suffered from ovarian and/or breast cancer, and this had not only reinforced his conviction about the significance of genetics but had sent him to Israel in search of his genetic past.<sup>9</sup> Genetic differences, however slight, are highly significant; "they are defining. They contain the map of my family tree back to the first modern humans. They catalog my extended family's vulnerability to many diseases. And they mark me indelibly as a Jew."<sup>10</sup> While Wolpe suggests that genetics has replaced religion as the language in which we speak about identity, Entine, and many other Jews like him, demonstrate that the one has not replaced the other; rather, religion and genetics in fact validate and reinforce one another. "[T]his book suggests," Entine writes, "that religious identity extends beyond beliefs. Our genes carry meaning. This ancient script now being deciphered is literally lifting the curtain on God or Nature's plan. While often at odds, religion and science are spinning an inter-related narrative."<sup>11</sup> After very briefly relating the story of God's covenant with Abraham found in the book of Genesis, Entine asks "What of this story is true? What evidence exists to support the central narratives of the Hebrew Bible . . . ? After all, no existing records other than the Hebrew Bible refer to Abraham, a sizable Israelite presence in Egypt, or even the Exodus. . . . Questions remain. Were Abraham, Moses, and David real people? What happened to the Twelve Tribes? Can some modern Jews actually trace their ancestry as Jewish priests to Aaron?"<sup>12</sup>

For Entine, and professional geneticists such as Karl Skorecki, Michael Hammer, Neil Bradman among the others who have done the genetic testing on Jewish ancestry, science does not come to disabuse Jews of their sacred stories. Rather, it supplies the evidence that written or archaeological records cannot provide. Throughout his book, Entine repeats the idea that the Bible itself and other historical documents are not much help in answering fundamental

questions about Jewish identity. And while he introduces certain moments of skepticism or doubt about particular assertions and conclusions, the overall thrust of the book is that DNA holds the key to answering the crucial questions of Jewish continuity over the millennia.

Entine is certainly not alone in making such arguments. Like Entine, David Goldstein's quest to uncover the genetic history of the Jews, and his own place in the Jewish genetic line, begins with a fascination with the State of Israel. Goldstein, a geneticist by profession, thinks of joining the IDF during Desert Storm, learns Hebrew, marries the woman who first helped him with the language, and falls in love with Israeli popular music. He learns the secret of Jewish survival and community, how the Jews "remained a people," while attending a concert by the Israeli pop star Yehuda Poliker. "I often think back to that concert and those kids taking off their shirts and swirling them around, those Cohen Y-chromosomes and varied mitochondria that may have started there and somehow found their way back after two millennia. For me, that is still a major part of what this is all about: The imponderable magic of it all."<sup>13</sup> Goldstein, like Entine, reminds his readers that very little is actually known about the Jews in antiquity. "Surprisingly, little is known about the ancient Hebrews."<sup>14</sup> For the most part, everything is a matter of "speculation."<sup>15</sup> This is why genetics is essential.

Goldstein's work is a search for Jewish continuity and essential difference, maintained over thousands of years. He objects to Richard Lewontin's influential argument that genetic variation between groups is meaningless, that race and ethnicity do not really exist and that "we are all the same."<sup>16</sup> Evidence of this meaningful difference can be found, according to Goldstein, in the genetic research carried out by Neil Bradman and his colleagues in Great Britain on the inheritance of a so-called priestly chromosome, or a variation in the Y-chromosome, which offers irrefutable evidence that present-day Cohens are genetically descended from members of the ancient Jewish priesthood, or *kohanim*. It was in fact research on the *kohanim* that, as Noa Sophie Kohler and Dan Mishmar have written, was able "to capture the public's interest and bring genetics into the forefront of identity shaping factors."<sup>17</sup> Goldstein explores other specific examples of genetics shedding invaluable light on issues of Jewish identity and belonging, including the well-known example of the Lemba in Africa. "Beyond these more specific questions," he concludes, "the large-scale genetic analyses that are now possible may finally allow us to address quantitatively just how separate Jewish populations have been from their host populations." We are, Goldstein insists, in "a new age of discovery."<sup>18</sup>

Yet in the end, it remains unclear just what it is about connecting some Jews today with some Jews (or ancient Hebrews or Israelites) thousands of years ago that seems so important, to both the researchers and the subjects of the studies. An essentialist notion of Jewishness would hold that there is some unchanging Jewish essence that is ahistorical, that transcends time and place, and connects Jews one with another. Genetics, then, can serve to unveil that essence for those who were unaware of it, whether these be modern day descendants of kohanim or non-Jews who carry around “Jewish blood” or “Jewish genes” and thus, suddenly discover that they are “Jews.” While this genetic identity would appear to be a “given,” something that only needs to be discovered through genetic testing, in the end an individual must choose to participate and believe in this sort of essentialist idea of identity and community.

Jews such as Goldstein and Entine have clearly made a choice to embrace a narrative about self and identity that in fundamental ways makes choice about identity irrelevant. Entine, for example, insists at one point that “For Jews, ancestry is destiny. The more one tries to abandon his or her Jewish roots, the more Jewish he or she becomes.”<sup>19</sup> How do we reconcile this embrace of genetic identity, this geneticism, with what the American historian David Hollinger and others have identified as post-Jewishness, the shift from Jewishness as a given identity to one of choice; or, as Hasia Diner writes, the fact that “by 2000 almost all American Jews are Jews by choice”? Hollinger, for instance, speaks of “revocable consent” as the new model of identity, for Jews and others. Jews have a choice as to “just how Jewish they want to be,” how and where and when they wish to express this, if at all.<sup>20</sup> In other words, if this argument is correct, the subjective has almost completely overtaken the objective in determining Jewish identity.

Ironically, perhaps, it is precisely the subjective nature of identity building that allows for the embrace of the “objective” genetic or essentialist ethno-racial component of Jewish identity. Revocable consent produces irrevocable descent, even if those of us looking at this from a certain distance may understand the latter as a cultural and intellectual construct.

### **JEWIS AND GENETICS; JEWISH GENETICS?**

Jews did not begin thinking about Jewish identity and difference in what we would call bio-genetic and essentialist terms only in the late twentieth century.



Some have argued that such a definition reaches back to ancient times, though of course the understanding of how heredity works—the language and images used to convey the idea that reproduction does in some significant way reproduce traits—changed substantially over time. European, British, and North American Jewish elites were deeply engaged in and committed to racialized research and thinking in the late nineteenth and into the twentieth century. This included racial thinking about identity and difference generally and about Jews more specifically. Jewish thinkers and leaders, as products of their time, absorbed the contemporary lessons of science, and thus spoke the language of race and eugenics. Nearly a century before Entine and others read the Hebrew Bible through the lens of genetics, an American rabbi, Max Reichler, published a book titled *Jewish Eugenics and Other Essays* (1916). Reichler drew on biblical and Talmudic examples to show that ancient Judaism had already, thousands of years ago, produced a eugenic code and system to rival the modern ones advocated by the likes of leading eugenicists Francis Galton and Charles Davenport (both of whom Reichler lauded). Eugenic principles, he insisted, were to be found in the earliest biblical accounts. “The very founder of the Jewish race [Abraham] recognized the importance of certain inherited qualities.” Hence, he insisted that Isaac’s wife come not from the Canaanites, but from “the seed of superior stock.”<sup>21</sup> For the Anglo-Jewish physician William M. Feldman, writing in 1939, Jews in the ancient world had a clear-cut understanding of the principles and significance of eugenic thinking. Jews were highly concerned with remote as well as proximate genealogy, and thus “foreshadowed Galton’s law of ancestral heredity.” Ancient Jews maintained special pedigree books or scrolls “in which the genealogical trees of people were recorded.” And the Bible, of course, records genealogical tables “of such minuteness of detail as would rejoice the heart of the most ardent eugenicist.” The ancient Hebrews combined “judicious selective mating with intelligent antenatal and postnatal care,” and thus “succeeded in rearing a race, not indeed of supermen, but one which is probably the most virile that ever lived, and which has survived at times when many other apparently stronger races, not subjected to anything like the same persecution and physical as well as mental stress and torture, have perished.” Judaism was so committed to eugenic principles, Feldman wrote [in 1939!], that “it is permissible for a woman to be sterilized if she is likely to bear children who are going to be tainted with physical or mental disease.”<sup>22</sup> This sort of interpretation of Jewish tradition and eugenics did not vanish from Jewish scholarship with Nazism and the Holocaust.<sup>23</sup>

To be sure, not all celebrations of the eugenic impulse in the Hebrew Bible and Talmud included such enthusiasm for sterilization and other negative eugenic notions. Many were often accompanied by disclaimers that the Jewish tradition repudiated these barbaric ideas. Isidore Simon, a French medical doctor and founder of the *Revue d'histoire de la Médecine Hébraïque*, insisted that, unlike the Greeks, who clearly understood the laws of eugenics, heredity, and selection, and who employed “radical methods” to insure “*l'amélioration de la race*,” the Hebrews “did not approve of ‘selection’ or rather, the suppression of the weak and feeble . . .” (*n'adméttaient pas la 'selection' ou plutôt la suppression des faibles. . .*). Nonetheless, even Simon, writing in 1949, was quick to add that the Jewish sacred writings demonstrate an intense interest in matters “that we today would call eugenics and heredity.”<sup>24</sup>

This sort of acknowledgment and even enthusiasm for eugenic and genetic thinking in Judaism was already widespread in the early twentieth century, when numerous Jewish scholars, including rabbis, celebrated what they perceived to be the eugenic elements in biblical and Talmudic law, and the foresight of Moses and the rabbis in understanding the influence of genetics on the body and the mind. Thus, by the early twentieth century at the latest, significant numbers of Jewish thinkers had come to embrace elements of a genetic essentialism and determinism. In his 1903 work *Darwinismus und Sozialwissenschaft* (Darwinism and Social Science), the influential German Jewish social scientist Arthur Ruppin insisted “[w]e cannot free ourselves of [our genetic load] just as we cannot escape our own shadow by way of a leap.”<sup>25</sup> Ruppin’s insistence on the inescapability of one’s genetic fate would be modified over the years as he wrote about contemporary Jewry and the myriad forces that acted upon it, chief among these global capitalism and liberalism. Nonetheless, throughout his writings he remained committed to the idea that the Jews constituted a race, both in the past and in the present; that they possessed particular characteristics on account of this; and that many, though certainly not all, of these traits, racially or genetically determined, were to be celebrated. They were, Ruppin often repeated, what distinguished the Jews from other peoples or nations and gave them what he and other Jewish thinkers at the time called the Jews’ “racial worth.”

Ruppin was hardly alone among Jewish scholars in his belief in a Jewish race, an identity that could be traced back to ancient Palestine and tracked through the diaspora into contemporary times. His and others’ insistence on such a Jewish racial identity can be explained by a number of historical factors, including the need to respond to a racialized anti-Semitism, the politics of

Zionism and assimilationism, and the intellectual and cultural validity granted racial and eugenic thinking by the scientific establishment of that period. In sum, Jewish scientists, scholars, and popularizers evinced interest in each and every scientific theory about bio-racial identity and difference, from the anthropological and anatomical to the Mendelian, blood grouping, genetics and eugenics.<sup>26</sup>

### **THE PROBLEMS TODAY**

Perhaps it is not difficult to understand, ultimately, the attraction that racial and genetic-eugenic thinking held for Jews in the nineteenth and early twentieth centuries. It held that attraction for large numbers of thinkers, scholars, writers and others, Jewish or not; it was normative, even mainstream, if not universal. It spoke to questions and problems regarding Jewish identity that were theoretical but also political and practical. What is perhaps more difficult to understand and explain is why this attraction has resurfaced in the late twentieth and early twenty-first centuries. Why have so many Jews embraced a set of ideas rooted in notions of inheritance and descent, ideas that no so long ago were deemed anathema, fundamental as they were to the construction of a racialized anti-Semitism and to the systematic annihilation of European Jewry?

In some ways, the factors involved in the contemporary engagement on the part of many Jews with genetic identity are not much different from the racial thinking that captured the imagination of Jews a century or more ago. Jewish geneticism, like Jewish racialism, draws from a set of general ideas, scientific theories, facts, and technologies that are 'universal,' and employs these to evoke and prove particular differences. In the case of geneticism, however, the desire to demonstrate particularity and difference requires that Jews, like everyone else, participate in a set of discourses and practices that are usually presented as evidence of a marked absence of difference. Thus, genetics alone is insufficient to do the sort of identity work that Jews desire; it must be wedded to myth and history.<sup>27</sup>

For instance, Jews in the United States, like others, have participated in the search for their Personal Genetic History, the search for a genetic connection with one's Jewish ancestry among the ancient Temple priests or *Kohanim*. Jon Entine relates the story of how a disparate group of geneticists, in the United States and the United Kingdom, produced the data used by those Jews

who wish to trace their lineage back to biblical times; it is also used by others to “prove” the Jewish or Israeli claim to the land of Israel, since it ostensibly disproves the claim, made most recently by Shlomo Sand, that the European Jews who colonized Palestine in the nineteenth and twentieth centuries were biogenetically *unrelated* to ancient Hebrews, and thus have no genuine claim to be returning to a land their ancestors once inhabited.<sup>28</sup> The investigation into the relation of the Y-chromosome of today’s Cohens and the ancient Hebrew priesthood was, in Entine’s words, “an opportunity to examine the fate of one of Western civilization’s oldest lineages! Here was a chance to test the belief that the Jews of modern Israel were actual descendants of the ancient Hebrews, returning to reclaim their homeland after centuries in the diaspora!”<sup>29</sup>

“Could anyone,” Entine asks rhetorically, “really hope to trace their ancestry back dozens of generations to biblical times? Could a distinct lineage have been maintained throughout the long exile of the Jewish people? What would confirming this connection mean to Jewish identity?”<sup>30</sup> The results of the research affirmed just such a genealogical connection. “Embedded in the data was pure dynamite: almost every one of the Cohanim, regardless of whether he came from the Middle East, India, Africa, Europe, or the Americas—98.5 percent of those tested—had a signature mutation pattern. The marker was found in only about 3 percent of the general Jewish population.” 98.5% of the Jewish males tested, who claimed to be descended from the ancient Jewish priesthood, showed a distinct genetic marker that linked them with one another across geographic space and with the ancient Cohanim across the long distance of time. That this marker did not appear in the DNA of all other Jews meant that what came to be called the “modal haplotype of the Jewish priesthood” could not be explained with reference to Jewishness in general, but only with reference to the very limited genetic pool of those Jews claiming priestly descent.<sup>31</sup>

Abu el-Haj has shown clearly that the impulses driving this research are complex: personal, religious, political, and economic. My interest here is in exploring further the attraction that genetic ancestry holds not for producers or distributors of genetic research and testing, but the consumers, and considering its significance culturally. What, we might ask, does the search for a link to the biblical past actually provide evidence of? It may be that geneticism offers evidence of identity and difference, but this may not be the sort of identity and difference the individual is after.

Genetic history seems to de-emphasize national boundaries and histories. Genetic material does not remain confined within national borders, certainly not in a world in which migration and resettlement are such

commonplace phenomena. Genetic material drifts, it travels. What relation, then, does genetic history have to national history? What impact does it have on the categories historians employ to narrate the story of the Jews in a particular country or region? Is genetic history a parallel history? A shadow history? How is it to be integrated into the larger narrative?

The problem or challenge does not lie at the level of discourse. As a more or less coherent interpretive framework, with its own ideological impulses, its own method and foci, etc., genetic history can be fairly easily integrated into the intellectual and cultural history of the Jews. As a collection of narratives it can be situated at the “end” or actually the contemporaneous moment of a long history of narratives about Jews that have used the findings of biologists, geneticists, statisticians and other scientific researchers, and produced accounts of the Jewish past and present. DNA, rather than blood or anatomical traits, is now the material that reveals the secrets of collective Jewish identity; proponents of genetic narratives would insist that this is a genetic, rather than a racial, identity being revealed.

Nonetheless, contemporary geneticism resembles earlier racial thinking in some significant ways. Personal Genetic Histories, like racialized narratives, depend on history; that is, on historical narratives, memories, imagery. There exists an assumption of historicity; genetic histories make a claim about the very real connection of the present and past, and in order to do this they of course must assume the historicity of the past. The notion of the historicity of the past might seem like a tautology. However, in certain cases the reality of “the past” that is claimed is highly contentious. For instance, genetic histories seek to demonstrate a connection between Jews living today and figures from the ancient biblical narrative, including the patriarchs. Historians are hardly unified in their opinions on whether such figures existed, on just when the Bible offers us reliable historical evidence and when it must be taken as mythological. Yet, genetic histories, as they must, assume the historicity of the Bible, including the most problematic books such as Genesis and Exodus.

At the same time, the genetic impulse seems to bypass historical change, leaping back as it does over thousands of years to construct or discover a material link between the present and distant past that is immutable: mitochondrial DNA and the Y-chromosome, both of which are passed down unchanged over the generations.

One of the effects of this construction of a Jewish identity rooted in genetic continuity is the erasure of actual historical difference, of the enormous transformations wrought by the passage of time that produced the profound

difference between “Jews” (Hebrews) of the Temple period and Jews today; suddenly invisible is just how utterly strange many of the ancient biblical or Hebrew practices appear. The Temple must have been, in practice, an awe-inspiring and horrendous place: the severe hierarchy of priests and Israelites, the brilliance of the architecture, the gold and silver, jewels, etc., the sights, sounds, and especially smells of daily sacrifice—the blood, offal, waste, screams of the animals. Since Jews, like anyone else, are the beneficiaries of the long civilizing process, in which the individual and social thresholds of disgust have been heightened and deepened, producing a fundamental transformation in psychological and emotional structures, we can assume that our distance and alienation from the day-to-day reality of Temple life would be profound, even if we obviously remain intellectually fascinated by the ancient world’s radical difference.

We might play the game of mentally imagining ourselves in the Temple, lining up to offer some sacrifice to Jehovah; but most of us, as civilized beings in the twenty-first century definition of the term, would probably decline the opportunity to actually live then and there. Our ability to tolerate that physical, material environment would simply not exist, much in the same way, as Huizinga pointed out, a medieval man or woman could not bear to live amidst the ordinary noise of a modern city.

All this raises again, at least for me, the question of what Jews today are connecting to when they celebrate their genetic descent from and continuity with this ancient Jewish world? Perhaps, though, this desire for a noble genetic ancestry has less to do with ancient Israel and more to do with contemporary America. I would argue that the search for and belief in a genetic connection with the ancient Kohanim offer not evidence of a genuine connection with “ancient Jews,” but rather unequivocal proof of one’s own national identity, for instance Americanness; additionally, it displays an Americanness that is of a certain economic or occupational niche. It is the *desire* for ancestral knowledge and connection that is the genuine, or at least certain, connection here; but it connects the seeker not to some (mythical or actual) ancient past, but to an American present in which all types of individuals appear in need of this genetic knowledge. As one recent discussion on this general phenomenon put it, it is clear “that an increasing number of members of new world populations are seeking more information on their Old World ancestries.”<sup>32</sup> A genetic connection to the ancient priesthood offers a certain pedigree. Just as important, there is nothing in this genetic particularity that violates the American racial identity of Jews as White. One can continue to enjoy the benefits of American

whiteness while simultaneously enjoying the cultural capital that comes with genetic particularity.

One large question for historians, anthropologists, social scientists and others in general is “why this desire?” Is it a product of availability? Is it that the technology that is fast becoming available in the form of affordable ancestry-testing kits is in fact producing the desire and legitimacy of the knowledge it creates?

Before suggesting some possible reasons based on the content of geneticism, I want to point out two major contextual differences that might help explain this resurgence of a genetic Jewish identity.

If Jews are again being racialized or geneticized, it is important to note that for the most part, it is Jews choosing to racialize themselves; it is not being done to them, and when it is—by non-Jewish researchers, for instance—it is within a very different, and we can agree, far more benign environment than central Europe in the early twentieth century. The point hardly needs making that genetic testing or screening for breast cancer in twenty-first century North America or Great Britain is not the same thing as genetic experimentation done on Jews and others during the 1930s and 40s. And, as we shall see, while there are interesting and important continuities between the older racial search for Jewish origins and identity and current genetic narratives, the discontinuities are just as if not more significant.

True, many Jewish thinkers, and probably not a few other Jews, chose to racialize themselves in the late nineteenth and early twentieth centuries. While the reasons for this were complex and multifaceted, without doubt one of the main motivating factors was reactive, the need to respond to the negative images and ideas produced by antisemites using racial arguments. A Jewish racial discourse about Jews was in part a direct response to an anti-Semitic racial discourse about Jews, a discourse that used racial and genetic arguments to challenge the self-understanding of Jews. Racial antisemites challenged the Jews’ understanding of themselves as members of the nation-state, as members of a civilized and cultured faith and fate community, and at times as members of the human family. While there are undoubtedly still antisemites out there who continue to maintain that the Jews are not legitimate members of the nation-state, that at best they ought to be second-class citizens, such opinions are clearly understood to be objectionable and illegitimate by the vast majority of citizens. Indeed, any public pronouncement deemed anti-Semitic in terms of challenging the rightful place of the Jews in the country is immediately denounced by politicians and those in the media. This is true regardless of the

changes brought about by the ability of anyone with a computer and access to the internet to express a negative opinion about Jews.

Thus, unlike in the early twentieth century, the current Jewish engagement with genetics, and a revived sort of ethno-racial definition of Jewish identity, cannot be explained in part as a response to anti-Semitism. Indeed, what might be most startling and revealing is that personal DNA testing that tells a particular consumer that he or she has “Jewish genes,” is more often than not embraced as provocative in a good or productive way. It allows that person to embrace and celebrate their own previously unknown diversity in a culture that places great value on such diversity. Thus, we might suggest that for both Jews and non-Jews, geneticism in this regard participates in and extends the construction of America as a multicultural society.

The other major point of difference, related to the first, between the racialized discourse about Jews in the early twentieth century and the genitized discourse of the early twenty-first is the social and cultural position of the Jewish researcher or scientist. While Jewish scientists were certainly active participants in European and Anglo-American research and teaching institutions in the first half of the twentieth century (or at least until racial laws passed in the 1930s in Germany and elsewhere in Europe forcibly removed Jews from such positions), their numbers and influence were nonetheless limited in significant ways by their Jewishness.<sup>33</sup> Certainly, when it came to fields central to the interests of race scientists and eugenics, the Jewishness of a researcher raised questions about objectivity and self-interest on the part of biased, often antisemitic commentators. This stands in stark contrast to the world of research and teaching in which Jewish scientists find themselves today. The visible presence of Jews in major and minor universities, research labs, hospitals, etc., is indisputable. In the context of this discussion, this matters because it may help us understand and explain the ease with which so many Jews appear to accept and employ genetic research related to questions of Jewishness.

The relative numbers of Jews involved in science is a matter not only of knowledge but also of power. What gets written and disseminated about Jews, like any other group, in respected scientific journals and then in popular forums, is of course the product of a whole host of factors—intellectual, cultural, and political. Just as, if not more, important is what is deemed unacceptable. This changes over time, a process again that has much if not more to do with external pressures as it does with shifts in scientific knowledge. The increased presence of Jews (or Blacks, women, or other historically marginalized groups) on academic faculties and in research institutions means a greater voice in



editorial choices. Surely, at least some of the unproblematic acceptance that many Jews evince towards genetic research aimed at Jews must reside with the belief, even if subliminal, that a community of scientists in which Jews are fully a part will not or cannot be turned to nefarious purposes. Nonetheless, we still ought to reflect on the position of the Jewish geneticist vis-à-vis the scientific research about Jews and genetics. Is the story these scientists tell with DNA and the genome more objective, less imbued with personal bias, desire, or fantasy, than earlier scientists, including both Jews and nativists, bigots, and antisemites?

Like Jewish racial thinking in the early twentieth century, Jewish geneticism necessarily participates in the larger, general intellectual, social, and cultural environment from which it emerges. It makes use of contemporary technologies of testing and advertisement in order to make the search for one's ancestry faster, cheaper, and more easily amenable to producing "communities" that connect an individual biologically across time and space. Dory Fox has shown in ample detail the ways in which American Jews have utilized home testing DNA kits and popular forums such as Youtube to construct genetic narratives that reveal or reinforce identity. "Reveal videos," as Fox calls them, allow individuals to confirm or discover their Jewish ancestry after making use of recent DNA testing kits available for home-use.<sup>34</sup>

Today many Jews are using genetic knowledge and technologies to discover or invent (depending on one's take) physical, biological connections to other Jews, either in the present or in the near or far-distant past. But, again, should we not pause and consider how curious it is that many Jews are increasingly turning to ancestry and "bloodlines" as evidence of identity and belonging? After all, even if we leave aside the central role that such ideas played for racial ideologies and regimes in the early twentieth century, for centuries before this it was notions of ancestry and blood, pure or impure, that justified the exclusion of Jews from "respectable" realms of society. By no means am I questioning the truth of genetics, or more specifically the importance of genetic research for understanding and treating disease. My interest is in the meaning individuals and groups assign to certain types of genetic research. In this, then, we can identify a deep continuity between racialism and geneticism. Racial thinking, including racism, is not the mere recognition of anatomical or physiological differences; those exist, as anyone can see. Racial thinking is assigning meaning and significance to such differences: insisting that skin color or other physical traits signify differences at the mental or moral or spiritual levels, and then creating hierarchies of worth. Genetic identities and differences exist, of

course, as biological realities. However, the meanings assigned to this, and the narratives one might then construct around these biological realities, is something else. We might say that genes don't announce their own significance or meaning; these must be constructed and created.

What, then, is the attraction and benefit for Jews in a genetic understanding of Jewish identity, one that takes ideas of a Jewish ancestry reaching back to biblical times seriously? Perhaps the great attraction for some Jews of a genetic definition of Jewishness is that this then becomes an identity that is truly given and, at the same time, can never be lost or forfeited. It is truly given, and a given, because it is passed on from one's ancestors—it is literally *what you are*, since it resides within you—in blood, genes, DNA, molecular make-up. It is as fundamental or essential as individuals get. This is an ideal notion of Jewish identity for Jews who have never been or have ceased to be Jewish in observance (though this is not to say that observant Jews cannot or do not participate in geneticism; they are certainly involved in medical genetics). There is nothing that needs be done or indeed can be done when identity is defined genetically. In this way, as in others, today's geneticism mirrors or echoes earlier racialized definitions of Jewish identity.<sup>35</sup> Nor can this identity be lost or lessened, regardless of what the individual does or believes. It is not a matter of doing or believing. The *mitzvot* don't matter; neither would religious conversion, or unbelief. In addition, genes are portable, like the Torah. They do not depend upon any particular place or piece of land, any particular city or country for their validity. Perhaps for Jews who may have some connection with the land and state of Israel, but who cannot or will not live there, a genetic definition of Jewishness offers an ancestral link to the "homeland" without the burden of actual residence.

Another of geneticism's great attractions is its invisibility. Older nineteenth century notions of race insisted on external anatomical traits such as skin color, nose shape, eye color or hair texture as essential markers of identity, revealing, as it was believed they did, some "inner" spiritual or moral quality or characteristic. By the early twentieth century, this anthropological and psychological definition of racial identity was being challenged and eventually supplanted by Mendelian genetics, at least in the realm of scientific discourse. Genes reside inside the body, invisible to others yet always present. Genetic identity is pliable as a marker. It can be deployed or articulated by the individual when desired, ignored or even denied if necessary (at least for now). Again, in the context of the American racial system, the vast majority of Jews can enjoy the benefits of Whiteness, yet claim a Jewishness distinct from that

Whiteness when desired. A genetic Jewishness, invisible yet always present, does not disturb this on-going negotiation of identities.

### FACTICITY

One of the profoundest challenges in all this is that, for us, genetics is *true*. It does not matter in the end whether we accept that it is true in some absolute objective way or in the Rortyan sense of being true because as a community or society we accept it as true. In either case, in the early twenty-first century, genetics is true for us. It is true in the same way physics is true for us when we board an airplane: whether we understand how the laws of physics allow engineers to construct planes that fly, they do, and this knowledge works in the world. We are compelled by its facticity. The laws of physics are visible in their application, and thus they are true for us. So, too, genetics. An individual's genetic load is a reality whether one believes it or not. However, as so many commentators and critics have pointed out, the truth of a science, the fact that it works in the world, in no way means that it is morally neutral, let alone "good." The complicated history of eugenics/genetics is one of the clearest examples of this.

In the end, what *is* the problem or danger with continuing to think with blood or genes? Clearly, it makes a great many people, academics included, quite nervous. But why? The first quick impulse of many, if not most of us, will be to invoke the recent past; in the case of the Jews, the European past. As we all know, in the middle of the twentieth century Jews, Slavs, Roma and Sinti, Jehovah Witnesses, gays, members of suspect or oppositional political groups, criminals, prostitutes, the mentally and physically ill—all were targeted in the name of racial or genetic purity. Many of these groups themselves were not "racial" even by the definition of the period, a definition that itself was quite fluid and confusing; yet, in one way or another these groups were deemed to pose a threat to the social and racial body of the German Volk, the *Volksgemeinschaft*. At the heart of the Nazi racial project was not only a preoccupation with a mythical German racial past but a purified racial future, a Nazi racial empire that relied on scientific inquiry into genetic descent and eugenic policies and practices.

In the case of the Jews, their danger to the superior German race and Volk stemmed from the Jews' own purported degenerate racial nature.

Hundreds, thousands of books and articles were published, in many languages, over a century and half, in which scientists and scholars probed not just the difference, but the pathological difference and inferiority of Jews and others. In the nineteenth century, this Jewish difference was visible; physical traits marked the Jew. The twentieth century witnessed a gradual, at times contentious and not universal, shift to genetics as the means of identifying Jewish difference. Ultimately, racial discourse, either anthropological or genetic or a combination of both, disseminated the belief that Jews, and members of other suspect groups, were a danger in one way or another to the health of the nation. Solutions to the “problem” posed by so-called degenerate, impure races and social groups were proffered—the best known among them was eugenics or racial hygiene—and in those countries in which a sympathetic political party came to power, such policies were put into place by governments.

All of this is well-known; indeed, it might be all that many people know of the 1930s and 40s in Europe. The impulse to invoke this past and then to insist that bio-racial thinking, broadly defined, contains within it, essentially, the potential for oppression, violence, even genocide, and is, therefore, illegitimate is tempting. But is it convincing? What counts today as racial thinking? Is the search for ancestral Jewish DNA “racial,” and if so, is it harmful in some way, if not at present then perhaps in some unforeseeable future?

Perhaps it is the medical side of this research that should concern us more? Certainly, those concerned with the social and ethical implications of genetic research invoke the history of eugenics and racial experimentation and label the new genetics as a “backdoor” to a neo-racism and eugenics. As Gilman has asked, “What happens when the ‘Jews’ or ‘African Americans’ or ‘Asians’ begin to think of themselves as a virtual family interconnected by their biological inheritance? And what happens when the markers for such affiliation are shared diseases?”<sup>36</sup>

Already in the 1950s (in some cases as early as the 1930s), scientists launched a concerted attack on racialism, separating biology from culture, and over time insisting on the “unreality” of race as a determinant of intellectual, spiritual, or cultural achievement or potential. Nonetheless, the shift from race to genetics has, it seems, brought biology and culture back together for many people, some geneticists included. On the one hand, the human genome research project seems to have demonstrated that human beings are overwhelmingly similar in their genetic make-up, and that “race” is all but meaningless in a biological sense. On the other, the genetic difference or variation, albeit small, is being used to mark off population groups—African, Asian, European,

North American—and “reinscribe” race as real and meaningful through “ancestry-informative markers.”

The lure of essentialism is beguiling: the notion that one’s identity, and one’s belonging to a longer history and a larger group, reaching back perhaps to antiquity, an identity that can be demonstrated by objective factors, rooted in biology, and revealed by science, is powerful. Those such as Entine and Goldstein don’t deny that there is more to Jewish self-understanding and identity than simply genetics; history and culture certainly play a part. Yet these are not sufficient. Nor it seems is Judaism, the belief in and observance of *mitzvot* and the communities formed around this. Genetics, it seems, is necessary in the case of ancestral DNA testing to verify or reinforce the bonds, or for some, to discover or reveal an ancestry previously unknown.

In the end, Entine, Goldstein, and other Jews who have embraced genetics as the key to Jewish identity are indeed correct in arguing that this identity is a product of a combination of history, environment, culture, and biology. But I would argue that the relationship between these various factors, and especially biology and culture, hinges on a culture of geneticism far more than it does on the biological. The biology of genetics must be folded into the culture of geneticism: the narratives Jews are constructing with the given genetic data, and the ways in which this new knowledge is used to reinforce and remake identities. Genetics is real, and the variations and differences produced by genetic inheritance are real. However, as with “race”—i.e., anatomical or phenotypical traits and differences—whether or not one assigns meaning to genetic variation, the meanings assigned, and the stories one tells, are what ultimately matter. And this is a matter of choice.

## Notes

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1. Paul Root Wolpe, "If I Am Only My Genes, What Am I? Genetic Essentialism and a Jewish Response," *Kennedy Institute of Ethics Journal* 7, no. 3 (September 1997): 220. For a more general, and overall positive, representation of the evolving relationship between genetic research and notions of self, see Carlos Novas and Nikolas Rose, "Genetic Risk and the Birth of the Somatic Individual," *Economy and Society* 29, no. 4 (2000): 485–513.
2. Wolpe, "If I Am Only My Genes," 221.
3. *Ibid.*, 223.
4. Sander Gilman, "Introduction: Race and Contemporary Medicine," *Patterns of Prejudice* 40, nos. 4–5 (September, 2006): 297.
5. Though of course genetic and medical technologies have made external intervention, i.e., genetic manipulation, increasingly possible, so that the line between individual choice and genetic make-up is no longer necessarily absolute.
6. Merryn Eckberg, "The Old Eugenics and the New Genetics Compared," *Social History of Medicine* 20, no. 3 (August, 2007): 581–93; Lene Koch, "The Meaning of Eugenics: Reflections on the Government of Genetic Knowledge in the Past and the Present," *Science in Context* 17, no. 3 (September, 2004): 315–31.
7. Nadia Abu El-Haj, *The Genealogical Science: The Search for Jewish Origins and the Politics of Epistemology* (Chicago: University of Chicago, 2012), 29.
8. Jon Entine, *Abraham's Children: Race, Identity, and the DNA of the Chosen People* (New York: Grand Central Publishing, 2007).
9. *Ibid.*, 5.
10. *Ibid.*, 8.
11. *Ibid.*, 8. It is worth pointing out that Jews are hardly alone in embracing this sort of discursive strategy in which ethno-religious texts and history are juxtaposed with science, and end up—even if unintentionally—mutually reinforcing the other. Arguably, whether aware of it or not, Jewish geneticists and others are probably working off of a discursive script developed by Christian European and Anglo-American elites. Thus, Entine and others are part of a much larger story of Western secularization and the central role played by religious texts and ways of thinking in the secularization of racial thinking. For an extended discussion and analysis, see Terence Keel, *Divine Variations: How Christian Thought Became Racial Science* (Stanford: Stanford University Press, 2018).
12. Entine, *Abraham's Children*, 9–10.
13. David Goldstein, *Jacob's Legacy* (New Haven: Yale University Press, 2008), xiii.
14. *Ibid.*, 1.
15. *Ibid.*, 3.
16. *Ibid.*, 9f.
17. Noa Sophie Kohler and Dan Mishmar, "Genes as Jewish History? Human Population

- Genetics in the Service of Historians,” in *Race, Color, Identity: Rethinking Discourses about Jews’ in the Twenty-First Century*, ed. Efraim Sicher (New York and Oxford: Berghan Books, 2013), 237.
18. Goldstein, *Jacob’s Legacy*, 119.
  19. Entine, *Abraham’s Children*, 18.
  20. David Hollinger, “Communalist and Dispersionist Approaches to American Jewish History in an Increasingly Post-Jewish Era,” *American Jewish History* 95, no. 1 (March, 2009): 30.
  21. Max Reichler, *Jewish Eugenics and other Essays* (New York, Bloch Publishing Co., 1916): 9.
  22. W. M. Feldman, “Ancient Jewish Eugenics,” *Medical Leaves* 2 (1939): 28–37. Feldman’s reference is to Francis Galton, *Hereditary Genius: An Inquiry into its Laws and Consequences* (London: Macmillan and Co., 1869). See also the examples provided in Raphael Falk, “Eugenics and the Jews,” in *The Oxford Handbook of the History of Eugenics*, ed. Alison Bashford and Philippa Levine (Oxford: Oxford University Press, 2010), 462–76.
  23. For a more recent example see the article by the eminent Jewish historian of medicine Fred Rosner, “Judaism, Genetic Screening and Genetic Therapy,” *The Mount Sinai Journal of Medicine* 65, nos. 5–6 (October/November 1998): 406–13.
  24. Isidore Simon, “La Gynécologie, L’Obstétrique, L’Ébryologie et la Puériculture dans la Bible et le Talmud,” *Revue d’Histoire de la Médecine Hébraïque* 4 (1949): 35–64. Reproduced in *Melanges d’histoire de Médecine Hébraïque*, ed. Gad Freudenthal and Samuel Kottek (Leiden: Brill, 2003): 26.
  25. Arthur Rupp, *Darwinismus und Sozialwissenschaft* (Jena: G. Fischer, 1903): 102, cited in Amos Morris-Reich, “Arthur Rupp’s Concept of Race,” *Israel Studies* 11, no. 3 (Fall, 2006): 7.
  26. For recent scholarship see, for instance, Amir Teicher, *Social Mendelism: Genetics and the Politics of Race in Germany, 1900–1948* (Cambridge: Cambridge University Press, 2020), especially 109–15; Rachel Boaz, *In Search of “Aryan Blood”: Serology in Interwar and National Socialist Germany* (Budapest and New York: Central European University Press, 2012). On the United States, Eric Goldstein, *The Price of Whiteness: Jews, Race, and American Identity* (Princeton: Princeton University Press, 2006). For Great Britain see Gavin Schaffer, “Dilemmas of Jewish Difference: Reflections on Contemporary Research into Jewish Origins and Types from an Anglo-Jewish Historical Perspective,” *Jewish Culture and History* 12, nos. 1–2 (2010): 75–94; Todd Endelman, “Anglo-Jewish Scientists and the Science of Race,” *Jewish Social Studies* 11, no. 1 (Autumn, 2004): 52–92.
  27. See Abu el-Haj, *The Genealogical Science*, on this process, and the technologies and economics involved.
  28. Shlomo Sand, *The Invention of the Jewish People* (London: Verso Books, 2008).
  29. Entine, *Abraham’s Children*, 74.

30. Ibid., 65.
31. Ibid., 78–79.
32. Mark D. Shriver and Rick A. Kittles, “Genetic Ancestry and the Search for Personalized Genetic Histories,” in *Revisiting Race in a Genomic Age*, ed. Barbara A. Koenig, Sandra Soo-Jin Lee, and Sarah S. Richardson (New Brunswick: Rutgers University Press, 2008): 202.
33. For examples of Jewish researchers in the biological sciences, including blood types and eugenics, see Anne Cottebrune, “Franz Josef Kallmann (1897–1965) und der Transfer psychiatrisch-genetischer Wissenschaftskonzepte vom NS-Deutschland in die USA,” *Medizinhistorisches Journal* 44, nos. 3–4 (2009): 296–324; Boaz, *In Search of “Aryan Blood.”*
34. Dory Fox, “Jewish Genetic Potency: The Meaning of Jewish Ancestry in the 21<sup>st</sup>-Century United States,” *American Jewish History* 104, no. 1 (January, 2020): 59–86; idem., “We Are in the First Temple: Fact and Affect in American Jews’ Emergent Genetic Narrative,” *Shofar* 36, no. 1 (March, 2018): 74–107.
35. See the extended discussion in Abu el-Haj, *The Genealogical Science*, particularly chapters 1–2.
36. Gilman, “Introduction: Race and Contemporary Medicine,” 297.



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# Science, Sovereignty, and Diaspora: Alternative Genealogies and DNA Research on Jewish Populations

by *Yulia Egorova*

**I**n 2012, medical geneticist Harry Ostrer published a book *Legacy*, where he sought to provide background for the research that, in his own words, “demonstrated a biological basis for Jewishness.”<sup>1</sup> The research, also described by Ostrer as the Jewish HapMap Project,<sup>2</sup> culminated in a paper set out to assess the degree of different Jewish communities’ “genetic” relatedness to each other and to their non-Jewish neighbors, and to explore whether the origin of contemporary Jews could be traced to the Middle East. The paper examined seven Jewish populations and concluded that their “comparison with non-Jewish groups demonstrated distinctive Jewish population clusters, each with shared Middle Eastern ancestry” and “refuted large-scale genetic contributions of Central and Eastern European and Slavic populations to the formation of Ashkenazi Jewry.”<sup>3</sup> The web-page of the Jewish HapMap Project stated that it would “substantially contribute to our understanding of the genetic histories of all three [Jewish] groups [Ashkenazi, Sephardi, Mizrahi] and could improve the efficiency of future genetic discoveries within these populations.”<sup>4</sup>

Ostrer’s project was an addition to a growing body of genetic research into Jewish history that has been widely commented on in the mass media and broader non-academic sources, and has attracted the attention of social anthropologists providing wide-ranging theoretical perspectives on the issue. Nadia Abu El-Haj discussed in her monograph on the history of Jewish scientists’ engagement with biological research on Jewish origins how recent

projects in genetic Jewish history conducted by Jewish scientists could be thematised as “self-studies,” “born out of practices of self-definition and often self-celebration.”<sup>5</sup> The present author has argued that both within and outside the context of Jewish history, attention needs to be paid to the rhetorical dimension of the use of historical genetic research, which is interpretive and can provide discursive ammunition to support conflicting historical narratives.<sup>6</sup> Noah Tamarkin focused on DNA tests conducted on the Lemba of southern Africa and introduced the concept of genetic diaspora to theorize the new sites of political belonging that studies in genetic history have effected.<sup>7</sup>

My chapter will contribute both to this literature and to the theme of the edited volume by exploring how Jewish populations have been studied through the use of DNA techniques by Jewish scientists and community members against the backdrop of genomic mapping exercises conducted outside the context of Western Europe and North America, which have been described as stemming from an awareness of subalternity,<sup>8</sup> broadly understood as positionality that is outside of boundaries of hegemonic social or political power. My interest here is two-fold. First, I will argue that the case of “Jewish genetics” highlights how prominent the discourses of subalternity have become at all levels of collective and individual genetic history knowledge production, from nation-wide exercises in genomic mapping to individual pursuits of DNA ancestry testing. I will suggest that those studies that were conducted by scientists who identify as Jewish and explicitly state that the objective of their work is to help their community to improve their health care or prove a particular historical narrative can be thematised as an example of researchers pursuing a project akin to the efforts of scientists and officials in different parts of the world to “preserve” and “protect” perceived national genomes. The latter political agenda has been described by some of these actors as genomic sovereignty—a concept that, as I will discuss in the following section, has been fruitfully explored in social sciences. I will also argue that it is not only the work of Jewish geneticists who initiated and conducted these studies that could be considered through the prism of theoretical insights on genomic sovereignty offered in anthropology and social studies of science scholarship, but also the responses of multiple Jewish publics both within and outside Western Jewish constituencies, who have deployed knowledge stemming from genetics to propose and defend their own genealogies and notions of belonging. I will suggest that both in the narratives of Jewish geneticists and other Jewish commentators, genetic research emerges as an example of an endeavour to achieve genomic sovereignty that seeks to protect a particular account of collective or

individual origin narratives and modalities of self-identification, a genetic affirmation of which is seen as socially, culturally and politically empowering. In addition, I will propose that this perceived empowering and emancipatory potential of narratives of genetic difference, which, in accordance with Abu El-Haj's analysis,<sup>9</sup> stems from projects of self-definition and self-celebration, is often born out of relationally subaltern statuses and self-perceptions and concerns about inequality, and should also therefore be theorized as a quest for social, cultural and political recognition aimed to challenge numerous and diverse hegemonies.

However, at the same time, I will also argue that these quests for recognition sediment existing ethno-national boundaries or create new ones in ways that have the potential to disenfranchise those Jewish constituencies that lack the authority to have their own genetic histories heard. It is not my objective to argue for a hierarchy of subalternities or to suggest that some communities' or individuals' claims to subordinate statuses are more valid than others. However, I will use the material presented in the chapter to propose that in the case of using genetics in matters of identity arbitration or social advancement, some actors, whose engagement with genetics stems from awareness of subalternity, have the latitude to determine the parameters of exercises in genetic self-determination, while others are put in a position where they are placed under pressure to use DNA testing as a mechanism of identity arbitration.

## GENOMIC SOVEREIGNTY

The notion of genomic sovereignty emerged in the context of studies in genomic mapping which began in Mexico at the beginning of the twenty-first century. What stood behind these studies was the desire of the Mexican state to define and protect the perceived genetic uniqueness of its population, construed to be the result of long-term processes of racial admixture. The very expression "genomic sovereignty" was coined in the negotiation process preceding the establishment of the National Institute of Genomic Medicine in Mexico.<sup>10</sup> In 2008, a *Nature* supplement<sup>11</sup> introduced the notion of genomic sovereignty to wider audiences, framing it as a project of the states of the global south to protect what was thematised as their national genomes.<sup>12</sup>

As Ernesto Schwartz-Marin demonstrated in his study of the development of genomic maps and their promotion as sovereign resource in Mexico,

this notion emerged as a boundary object at the intersection of the domains of political sovereignty and genomic mapping.<sup>13</sup> The claim about the biological uniqueness of the Mexican nation was publicly supported through discourses invoking historical experiences of dispossession and the need to prevent the appropriation of national resources by foreign researchers. It was argued that in the future, genetics could be turned into a tool of oppression for potential consumers in emerging economies and that it was therefore imperative for Mexican publics to prevent national DNA material leaving the country and to support the development of their own genomic science.<sup>14</sup>

Mexico offers a prominent example of a country in the global south embracing the idea of the importance of preserving national genetic profiles; however, its conceptual blueprints also appear in other national contexts which were left out of the International HapMap Project, and where local researchers and policy makers began to assert the trope of multiple national genomes<sup>15</sup> and/or frame their scientific policy agendas with reference to Mexican sovereignty discourse.<sup>16</sup> India provides one such context where significant attention has been paid to the development of biotechnology in general<sup>17</sup> and to supporting national exercises in genetic mapping, such as the Indian Genome Variation Consortium, and where like the proponents of the genomic sovereignty agenda in Mexico, scientists have expressed concern that local populations were not adequately represented in world-wide genomic mapping initiatives.<sup>18</sup>

Back in Latin America, genetic research became employed to discern and protect the biological diversity of Colombia, to decode its human history and to support claims for singularity of Colombian cultural and biological identities.<sup>19</sup> In China, genetics has been mobilized by the state to construct a discourse about a unity of Chinese populations,<sup>20</sup> while in Taiwan, conversely, it was deployed to define the perceived specificity of the Taiwanese genome.<sup>21</sup> At the same time, in both countries, ideas about alleged biological specificity of their respective populations informed scientific anxieties about being deprived of the alleged therapeutic promise of genomics, if national based research is not developed. As Liu's discussion of stem cell science in Taiwan demonstrates, local scientists strive to create stem cell lines with "Taiwanese genetic characteristics" to ensure that in the future the Taiwanese would not miss out on the potential therapeutic dimension of stem cell research.<sup>22</sup> Similarly, in China, scientists had expressed doubts about the usefulness of the Human Genome Project for their country, as it involved sequencing the genome collected from the blood of Caucasian employees of the US National Institutes of Health, and subsequently developed a number of projects focusing on the "Chinese DNA."<sup>23</sup>

Could genetic studies on Jewish populations, conducted by Jewish scientists, as well as individual and community-level genetic ancestry tests commissioned in wider Jewish groups, be seen as an attempt at establishing “genomic sovereignty” of a perceived Jewish community, aimed at supporting a particular socio-historical record, or an individual claim in matters of identity arbitration? I suggest that the broader context of genetic research on the Jews, which involves both work conducted by Jewish scientists and responses to this work provided by (the tested) Jewish publics, provides a fruitful site for anthropologists to take theoretical discussion of the concept of genomic sovereignty one step further by applying the analytical prism developed to examine nationwide initiatives described earlier to interrogate not only national but also community-level and individual DNA-based quests for social, political and cultural self-determination. Research on genomic sovereignty initiatives underscores both the subaltern context of many such quests and, as I will discuss in the penultimate section of the chapter, the pitfalls of promises of political or social emancipation.

### THE JEWISH GENOME?

The most widely publicised DNA studies on Jewish communities include those that have investigated genetic relatedness of different Jewish groups worldwide,<sup>24</sup> research on the *Kohanim*, or Jewish priests,<sup>25</sup> and studies of Jewish communities, whose origins have been theorized as “unclear.”<sup>26</sup> Ostrer’s research,<sup>27</sup> which I used as a starting point for this paper, belongs to the first type of genetic work in Jewish history. To note a study appearing at the same time, a paper by Doron Behar and colleagues was published in the same month producing similar results.<sup>28</sup> Both papers set out to assess the degree of Jewish communities’ “genetic” relatedness to each other and to their non-Jewish neighbours, and to explore whether the origin of contemporary Jews could be traced to the Middle East. Atzmon et al. examined seven Jewish populations and concluded that their “[genetic] comparison with non-Jewish groups demonstrated distinctive Jewish population clusters, each with shared Middle Eastern ancestry, proximity to contemporary Middle Eastern populations, and variable degrees of European and North African admixture.”<sup>29</sup> Behar et al.’s study genotyped individuals from fourteen Jewish diaspora groups and suggested that their findings traced the origins of most of them to the Levant.<sup>30</sup>

Just like in Mexico and India the rhetoric of the projects emphasized that the research needed to be done for the benefit of national populations. In the case of studies of Jewish populations, some (though not all) of the scientists who have been prominent in this research not only identify as Jewish, but have also explicitly stated their personal interest in conducting research on their own community and for its benefit.<sup>31</sup>

Scholars have described genomic mapping exercises conducted in the context of the global south as “a postcolonial biopolitics in which the nation state is reasserted rather than diluted.”<sup>32</sup> But, as Schwartz-Marin has put it, this is a form of biopolitics, in which the connection between sovereignty, race and nation is based “on an awareness of subalternity”<sup>33</sup> both in the global arena of biomedical research, and in the wider context of colonial and postcolonial history of their respective nations.

In the case of the Jewish HapMap project started by Ostrer, the rationale for conducting research is explained in terms of the alleged genetic specificity of the Jewish people, a need for their biological empowerment, and subalternity, too. The project web-site, which describes the Jewish people as “remarkable for maintaining continuous genetic, cultural, and religious traditions over 4000 years, despite residence all over the world,” states that the Jewish community of New York is a “population isolate.” It asserts that the Project “could improve the efficiency of future genetic discoveries within [Jewish] populations,” and calls on potential Jewish participants both to donate DNA samples and to contribute financially, as no support was forthcoming from governmental bodies.<sup>34</sup>

The dimension of subalternity comes out also in some of the responses that Jewish genetics received from wider Jewish audiences. It is not at all my contention that the rhetoric about the alleged “biological basis for Jewishness”<sup>35</sup> is dominant either in American or wider Jewish congregations. However, I suggest that some of the responses to studies that promote the idea about the genetic specificity of Jewish populations were positive precisely because they were seen as emancipatory in relation to multiple and diverse epistemological regimes and cultural and political hegemonies both within and outside Jewish constituencies.

For instance, John Efron demonstrates in his paper on the historical context of genetic studies of Jewish origins, that the USA-based white supremacist web-site Stormfront.org has positively referenced genetic research that has emphasized the similarities between Jewish communities and their neighbours<sup>36</sup>—a reaction that can highlight the subaltern dimension of the acceptance of the arguments about the alleged biological basis of Jewishness and



the common Middle Eastern origin of the Jewish people. At the same time, in some examples of Jewish commentators' engagement with ancestry tests, the gene emerges as a site of self-determination not in relation to the non-Jewish parts of society, but vis-a-vis specific understandings of what it means to be Jewish within Jewish communities. Shelly Tenenbaum and Lynn Davidman thus point out that biological discourses of Jewishness were conceptualized as liberating by their non-affiliated American Jewish interviewees who embraced them due to what they saw as a promise of recognition no matter what modality of being Jewish a person of Jewish ancestry chose to embrace: "If Jewishness is a matter of genes, then Orthodox Jews are no more Jewish than secular Jews, endogamous Jews are not more Jewish than those who intermarry, and Jewish activists are not more Jewish than are Jews who do not affiliate with any ethnic or religious institutions."<sup>37</sup>

Some of the genetic studies specifically engaged with the question of the so called "emerging" Jewish communities, whose origin narratives were considered to be unverifiable through conventional historical sources and who have struggled to have their claims to Jewish status widely recognized in Israel and in Western Jewish groups. In the mid 1990s, a study was conducted by Amanda Spurdle and Trefor Jenkins to determine whether the Lemba of southern Africa, some of whom had embraced different forms of Jewish identity earlier in the century, may have genetic markers pointing to a partly non-African origin, and concluded that there was a general Middle Eastern contribution to the Lemba gene pool.<sup>38</sup> To provide a more detailed account of the Lemba genetic heritage a further study was conducted by Mark Thomas, which suggested that the most senior and most important for ritual purposes Lemba clan, the Buba, carried the Cohen Modal Haplotype,<sup>39</sup> a pattern of genetic markers on the Y chromosome, which, according to earlier studies, was carried by a significant proportion of Cohens from different groups.<sup>40</sup>

This research, which positioned the Lemba as part of the perceived universal Jewish community, introduced them to western Jewish publics,<sup>41</sup> turning DNA into a novel and potentially sought after marker of Jewish identity for communities who struggle to have their Jewish descent narrative recognized in established Jewish congregations. I witnessed this during my fieldwork conducted among the Bene Ephraim Indian Jewish community of Andhra Pradesh.<sup>42</sup> During my visits to Andhra Pradesh in 2010–11, community leaders on a number of occasions expressed a wish to arrange for DNA tests to be performed in their congregation to help them prove to other Jewish communities that they were part of the same lineage. In 2012, they shared with me that

they succeeded in attracting the attention of scientists from an Indian molecular genetics laboratory and had their DNA analysed for the purposes of establishing their ancestry. The results of this research do not appear to have been published, but one of my Bene Ephraim interlocutors told me that the study had traced part of his community's genetic profile to the Middle East and for him it constituted proof of their Jewish descent. He was adamant that neither his overseas Jewish co-religionists, nor Israeli authorities could be expected to believe his family's claims to Jewish descent in the absence of evidence, because their practice was different from that of "mainstream" Jewish groups.

Another community member I spoke to recognized the reductionist agenda of DNA research, but nevertheless saw it as a potent rhetorical weapon to use against those who have raised doubts about their Jewishness, and as a last resort to prove their origin narrative. Drawing on the concept of "situated dis/empowerment," introduced by Barbara Prainsack and Victor Toom, which highlights the "simultaneity of both empowering and oppressive effects" of technology,<sup>43</sup> I argued that in this case, DNA emerged both as a vehicle for transmitting a time-old naturalizing discourse about the alleged Jewish difference, and as a new, subaltern, means for social empowerment. The Bene Ephraim would struggle to provide material artefacts evidencing their Jewish or Israelite background; however, they profess that they have their DNA, which is an inalienable part both of their bodies and of their Jewish selfhood.<sup>44</sup>

The biological reductionism of genetic anthropology or DNA ancestry tests has been theorized by the tested as imbued with liberatory potential in a number of other ethnographic contexts too. For instance, Michael Kent has discussed the collaboration between the Uros, an indigenous group living on artificial floating islands on Lake Titicaca in Peru, and researchers of the Genographic Project. The islands' inhabitants claim descent from the ancient Urus, who are recognized as the first major ethnic group to have settled on the Andes, and the leader of the Uros have employed their differentiated identity in a territorial conflict with the Peruvian State. In 2007, the Uros took part in the Genographic Project's research on ancestry and history of human migration, which revealed that their DNA samples contained a significant differentiated genetic component, which could have been derived from the ancient Urus.<sup>45</sup>

As Kent points out, the Uros had found in geneticists rare allies, as their claims to being the most ancient community in the Andes had been routinely dismissed not only by their political opponents within the state, but also by local anthropologists and tour guides. The favourable results have had positive social consequences for the Uros in that local officials abandoned attempts

to question their differentiated identity<sup>46</sup> and in this sense their case could be compared to that of the Bene Israel of India, whose collaboration with geneticists had also produced perceived positive results, and led to some forms of self-empowerment, if not wider social recognition.<sup>47</sup> However, as I will discuss in the following section, in many national and community-specific contexts, including the context of genetic research conducted among Jewish groups, the emancipatory potential of these studies has been severely limited due to power inequalities between different tested groups and differentiated access that they have had both to the genetic research and to decision making stakeholders. Moreover, I will argue that in some cases DNA tests emerge as a practice of identity arbitration imposed on disenfranchised groups even if at first reading these groups appear to have embraced them voluntarily.

### **GENOMIC DIVERSITY?**

As I suggested in the beginning, it is not only initiatives, such as the Jewish HapMap project, but also individual and community-level projects seeking a genetic affirmation of specific histories and identities that could be explored through the prism of research on genomic sovereignty. What each of the cases that I discussed earlier has in common with projects such as the Mexican Genome Diversity Project is not only that they aim to affirm a particular account of individual or collective selfhood (an account of Mexican genetic uniqueness, an account affirming a connection to a universal Jewish community, an account delinking Jewishness from Christian tropes of religiosity, or even from halakhic understandings of who is a Jew) but that their search for this genetic affirmation stems from an awareness of subalternity.

At the same time, as social science researchers remind us in respect of genomic sovereignty projects in the context of the Global South, relations of domination within these very countries undermine the project of uplifting the entire population.<sup>48</sup> Although these policies are designed to promote academic and economic independence for “local” hubs of science and technology, they are also embedded in global networks and processes of knowledge production. They naturalize national populations in the name of postcolonial empowerment, but at the same time borrow practices and conceptual tropes from the wider context of “genetic labelling” to reinforce already existing categories<sup>49</sup> and, while at first glance various results of genetic studies may appear

empowering to disadvantaged groups, whether their particular genetic stories will be heard depends on the distribution of power and resources in the fields where their claims are contested.<sup>50</sup> Indeed, as Schwartz-Marin and Restrepo have argued, the idea that genetic profiles belong to a nation-state or perceived ethnic groups is a product of genetically reified racialization of human diversity, which could best be theorized as biocoloniality, because despite its ostensible promise of emancipation, the emergence of “genetic identities” and legal schemes that purport to protect them reinforces racialized dualisms and elements of coloniality.<sup>51</sup>

Earlier genomic mapping exercises had already attracted severe criticism from different publics. The Human Genome Diversity Project, which was set up to provide a populations-based counterpoint to the Human Genome Project, became seen by the World Council of Indigenous Peoples as an expression of colonial exploitation, as its organizers could not guarantee that it would not produce commercially profitable pharmaceutical products.<sup>52</sup>

In Mexico, the project of national genomics only reinforces the contradiction between the sacralisation of the nation’s indigenous roots and the day-to-day denigration of indigenous communities.<sup>53</sup> Similarly, in Colombia, genomic mapping allowed both to put an emphasis on the mestizo nature of the population and to re-inscribe the inhabitants of specific regions as the other.<sup>54</sup> In Brazil, genetic research set out to emphasize the mixed ancestry of self-identified white Brazilians and was presented as a potential antidote to racism in Brazilian society, but subsequently was used to criticize race-based affirmative action policies.<sup>55</sup> In India, DNA studies of the history of the caste system provided conceptual space to reaffirm the theory of Aryan migration, to naturalize and pathologize caste groups, while ostensibly asserting the theory about all castes being genetically mixed.<sup>56</sup> In the USA, where some of the Native American communities have begun to incorporate DNA tests into identity-making practices, genomic definitions of relatedness threaten to prevail over indigenous knowledge claims.<sup>57</sup>

Finally, one could ask, if this research has the capacity to extend beyond the role of an idiomatic tool and be deployed by any political actors to effect policy change on the ground. It appears that recently some of the research in Jewish genetic history has made a potential claim to one such kind of usage that can go beyond the boundaries of rhetorical quests for genetic self-determination.

In 2017 the Eretz Hemdah Institute for Advanced Jewish Studies in Jerusalem, which provides training for rabbinic scholars, issued a collection of responsa, advising that it should now be possible to determine the Jewish sta-

tus of a person on the basis of testing their mitochondrial DNA, a segment of DNA that is transmitted maternally.<sup>58</sup> The ruling is based on a scientific study which claims to have established that about 40 percent of Ashkenazi Jews are descended from four women. According to a report commissioned by Eretz Hemdah, there is a 90 percent to 99 percent certainty that a person bearing specific genetic markers is descendent from one of these women. It is suggested that the new ruling will be promoted as a solution for hundreds of thousands of Israeli citizens from the former Soviet Union who have had difficulty proving their Jewish status for the purpose of marriage and a range of other processes that require one being Jewish in Israel,<sup>59</sup> but that it cannot be used to revoke someone's Jewish status even if they were not found to have the required markers, as only 40 percent of the general Ashkenazi Jews have them.<sup>60</sup>

It appears that since 2017, the theoretical suggestion about the potentiality of using mtDNA tests as a source of evidence of Jewish descent for claimants from the FSU who struggle to document their ancestry, has turned into practice. In 2019 *The Times of Israel* reported that Rabbi Isroel Barenbaum, based in Moscow, who was fully supportive of this initiative, was using such tests in his rabbinic court, and made attempts to convince rabbinical judges in Israel and Europe to adopt the same practice, arguing that his suggestion is that DNA evidence should only be used to confirm somebody's Jewishness rather than revoke it. In Israel, at the same time, the rulings attracted sharp criticism from a wide range of political commentators, including critics from Israel Beteinu, the party of Russian speaking repatriates, who contended that this practice was bound to be discriminatory in the way it was targeting specifically persons from the FSU. At the same time, the possibility of doing such tests was welcomed by some Russian-speaking *olim* who struggled to provide other forms of evidence and saw DNA as the last resort to give them hope.<sup>61</sup>

It is not my intention to challenge the scientific content of the genetic research that the ruling is based on. Nor is it to question the halakhic analysis of Rabbi Carmel, who, referring to a number of rabbinic sources, thoughtfully states that in determining the status of the Jew it is possible to rely on *rov* (the indication of majority) and a *siman muvhak* (particularly compelling sign). In the *parashat hashavua* (weekly portion of the Torah) section of the Eretz Hemdah web-site issued several months before the ruling was unveiled in the mass media in October 2017, Rabbi Carmel suggested that “[i]f it is possible to say that the mtDNA test is a reliable indicator of matrilineal Jewish descent or at least a strong *rov*, then it would be possible to halachically rely upon it, if the check is done by a reputable genealogical laboratory.”<sup>62</sup>

It can be suggested that the ruling is imbued with rhetoric of liberation. Indeed, its stated aim is to help a group of *olim* who due to historical and political reasons had found themselves in a subaltern position both in their country of origin, where they had been deprived of an opportunity to practice their religion openly, and in the State of Israel, where they cannot take part in some very important social and personal status processes due to not being able to prove maternal Jewish descent. Rabbi Carmel notes that Eretz Hemdah have been working with a *beit din* (rabbinic court) in the former Soviet Union and with scientists “to research the evidence on this matter intensively and responsively.”<sup>63</sup> It also makes it clear that this practice will not disenfranchise any applicant who may be lacking the required marker—“no aspersions whatsoever can be cast on someone who lacks a link to these four women. Most Jews in the world do not have the gene code in question, so not having it does not at all preclude Judaism.”<sup>64</sup> However, of all communities who identify as Jewish but would struggle to provide material evidence of Jewish status, it makes the genetic route of recognition available only to Jews from the former Soviet Union.

It is not my contention that rabbinic scholars from the Eretz Hemdah Institute were biased in favour of Russian-speaking Jews or prejudiced against other communities struggling to prove Jewish descent, but it appears that groups like the Bene Ephraim would be at a disadvantage due to a lack of access to rabbinic authorities and to scientific laboratories in Israel that would be willing both to explore their genetic profile and to consult authorities such as Eretz Hemdah. What prompted Rabbi Carmel to consider the use of mtDNA in determining Jewish status was a communication that Eretz Hemdah received from a rabbi based in Europe seeking guidance about a case of a woman who claimed that her maternal grandmother was Jewish, and in the absence of any conventional evidence of her claim, produced a mtDNA analysis confirming that she was a descendant of one of the four founding mothers of Ashkenazi Jews.<sup>65</sup> As the religious authorities of the Bene Ephraim are not recognized by Israeli rabbinic specialists, their community would not be able to make use of this line of communication to make their congregations’ genetic or other claims to Jewish status known to policy making bodies in Israel should they wish to do so. Indeed, as Nathan Devir has importantly observed in his study of the responses of policy-makers and religious authorities in Israel to the potentiality of the use of genetics in matters of Jewish identity arbitration, how these tests may (or may not) be used in Israel in relation to communities from the Global South would provide an ethics litmus test for this practice.<sup>66</sup>

Reflecting on the implications of genetic research conducted among the Lemba, Tamarkin has argued that “genetic data has enabled a novel way of imagining and enacting diaspora” and developed the concept of genetic diaspora “to theorize how new connections, marked by inequality, and tenuously forged through national, racial, and religious differences imagined to be the same.”<sup>67</sup> At the same time, he points out that only very few Jewish people visited the Lemba during the months of his fieldwork in South Africa, suggesting that “genetic diaspora is a failed project of connection.”<sup>68</sup> The recent ruling of Eretz Hemdah might serve as an indication that in a different geopolitical context this project may still succeed after all, effecting the emergence of genetic claims to Jewishness and therefore to membership in the world-wide Jewish diaspora in the countries of the former Soviet Union.

At the same time, I also suggest that both the case of the Eretz Hemdah proposal and of the tests conducted among the “emerging” Jewish groups point to the conservative potential of genetic test usage in matters of identity arbitration even in those cases when such tests are commissioned by the disenfranchised groups or individuals themselves. As the Nigerian lawyer and academic Remy Ilona put it in an interview with the *Times of Israel*, commenting on the DNA tests conducted among the Igbo, who like the Bene Ephraim, have claimed the Israelite descent, the reason why some Igbo subjected themselves to such tests was because they were aware that due to their African origin, their claims were bound to be “viewed with scepticism.”<sup>69</sup> Similarly, in the case of Russian Jews, prior attempts of the Israeli State to use DNA tests to verify a biological connection between a potential repatriate from Russia and a Jewish parent or grandparent had been described by some Jewish commentators from the former Soviet Union as racist.<sup>70</sup> In both cases, the tested were put in a position where they had to prove their claims to Jewish status to a political and epistemic regime which out of all sources available to these groups that could potentially evidence their Jewish decent, privileged their DNA.

## CONCLUSION

The agenda of constructing and protecting national genomes has been exposed as highly problematic, as the genetic uniqueness of any population proved to be impossible to delimit. As Schwartz-Marin and Arellano Mendez have argued, the “Mexican genome” turned into an “elusive entity,” with scientists involved

in the project themselves asserting that it could not be either defined or separated from other populations of the world.<sup>71</sup> In India, a number of scientists from the Indian Genome Variation Consortium soon had to admit that social communities often did not map onto DNA-generated groupings, and that the term “Indian” was a misnomer in population genetic studies, as it obscured the human diversity of the sub-continent.<sup>72</sup> Nevertheless, in both countries respective projects continued to develop, and, as Benjamin insightfully observed, “[i]n this process, biological notions of race are resuscitated in service to new kinds of biopolitical regimes that have received little critical attention partly because of the emancipatory rhetoric in which they come packaged.”<sup>73</sup>

Genetic studies into Jewish history provide a similarly intricate cultural site where multiple and colliding modalities of self-identification are asserted to contest wide-ranging and often conflicting social and political hegemonies and epistemological regimes. I argued that varying incarnations of historical genetic research on the Jews are akin to programmes in establishing genomic sovereignty which in the past two decades have developed outside Western Europe and North America, in that they are often born out of an awareness of subalternity, even though this awareness is relational, plays out at different registers in different contexts, and indexes diverse Jewish socialities.

At the same time, the material presented here underscores not only the subaltern dimension of the genetic quests for self-determination, but also the internalized pressure to subject oneself to such tests to be able to tell one’s own story of origin. The case of the mtDNA ruling is a poignant example that indexes both the complexity of claims to subalternity put forward by disenfranchised groups in pursuit of genetic self-determination and the dynamics of power relations embedded in such quests. On the one hand, Jews from the former Soviet Union are undoubtedly at a disadvantage when trying to prove halakhic Jewish status to the religious authorities in Israel, and the proposed test can rhetorically be construed as a tool of emancipation for them. However, as the comparison with the Bene Ephraim case suggests, it is the relative position of power and acceptance in contemporary Israeli society that would allow them in some instances to use such tests to their advantage. I argue that such cases also highlight that alternative genealogies and epistemological regimes which emerge as a result of these contestations should not be viewed in a hierarchical way irrespective of the levels of political power that their proponents hold. In this respect, I am in agreement with the argument put forward by Tamarkin that the narratives which the tested communities develop in relation to the science produced by geneticists could be seen as theorizations of genetic



knowledge that are just as epistemologically valid and significant as theorizations produced by scientists themselves.<sup>74</sup> However, I also suggest that for both groups such tests could be read as a tool of subordination, even in those cases when the tests were initiated by the group members themselves, and that the readiness to use genetic information to affirm preferred modes of self-identification is a symptom of wider socio-political tendencies that privilege naturalist accounts of human difference.

Finally, how should a critical reader of genetic studies of Jewish populations respond to scientists' claim of advancing the knowledge of human history? I suggest that the material presented in this chapter reminds us that, as Yosef Hayim Yerushalmi famously observed in *Zakhor*, "[t]he notion that everything in the past is worth knowing "for its own sake" is a mythology of modern historians, as is the lingering suspicion that a conscious responsibility towards the living concerns of the group must result in history that is somehow less scholarly or "scientific."<sup>75</sup> In the case of Jewish genetic history, this responsibility will have to be extended not towards one group but many.

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## Notes

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# The Fusion of Zionism and Science: The First Two Decades—and the Present Day?

by Amos Morris-Reich and Danny Trom

**I**t is well-known that the Zionist movement was very heterogeneous; its history can be read like an unintended division of labor between currents that were sometimes opposite, sometimes complementary. Within this framework, socialist or labor Zionism, led mainly by Russian and Polish leaders, played a crucial role in the early Zionist movement, while it was mainly Austro-Hungarian and German Zionists who gave the movement its scientific and technical coloring. As Amos Funkenstein pointed out, “without science and technology—such was the almost general consensus among Zionists—there can be no normalization. . . . It is indeed a telling point that of all the dreams of Herzl in his *Altneuland*, the most daring technological ones were those realized nearly in their entirety. The book reminds us of Jules Verne’s ‘Electric City.’”<sup>1</sup> And while the socialist legacy has gradually faded, the question that is at the heart of this article has to do with the other legacy, the legacy of science and technology, and the extent to which it has endured and permeates Israeli society to this day.

Because they pursue a modern project, all modern national movements have a strong relationship with science. Zionism, understood as a national movement of the Jewish people (as institutionalized by the Zionist Congresses, beginning in 1897), is no exception in this regard. But Zionism’s relationship with science and technology is nonetheless singular in certain respects. Why and in what sense is this so? Our argument in this article is threefold. First, that relationship was established with the very inception of the Zionist movement. Second, it is characterized by a duality, a tension between a highly pragmatic

scientific attitude, on the one hand, namely science conceived as “engineering,” as the principal instrument of national construction, and simultaneously, on the other hand, science understood as working with the most fragile and inaccessible “materials” or “building blocks.” Here, the creativity of the Zionist movement lies in the arrangement of very disparate capacities and the orientation of the available expert knowledge toward a goal that remains vague enough to ensure broad participation. We will suggest, the Zionist movement was characterized by the quintessential place of programmatic and detailed planning and of striving towards pragmatically defined goals; at the same time, however, Zionism’s ultimate goal, idealistic, utopian, and always just out of reach, remained unstated. While our article only aims to establish this intellectual structure for the first two decades of the Zionist movement, we want to suggest, thirdly, that because this structure was embedded in the socialization processes of Zionism from its very earliest phase, it remains critically important, in spite of the many additional historical events that followed, for the understanding of key facets of Jewish, and later Israeli, society to this day.

We will begin by articulating science’s dual status within the Zionist movement, as established by Herzl in his two main documents on Zionism, the treatise *The Jewish State (Der Judenstaat)* and the novel *Old-New-Land (Altneuland)*. Then, focusing on *Altneuland*, the expert journal of the Zionist movement (named after Herzl’s novel), we show that that duality characterizes the earliest phase of the Zionist movement. We go on to give two further, partially interconnected examples from the first and second decades of the twentieth century, involving the sociologist Franz Oppenheimer and the sociologist, demographer, and Zionist functionary Arthur Ruppin. Finally, in conclusion, we touch briefly on what we consider to be aspects of this intellectual and social structure in contemporary Israeli society and politics.

### **THE JEWISH STATE AND OLD-NEW-LAND**

It is a commonplace today that the nation-state is a modern historical construction. However, even though construction is a metaphor here, there are cases where it should be taken literally: it is not historical sociology that reveals the constructed character of the nation-state, but the historical actors who thematize it in this way. “In Basel, then, I created this abstraction which, as such, is invisible to the vast majority of people,” Herzl notes in his diary.<sup>2</sup> Sociologists

and engineers alike know that any construction has to be built from the building blocks that are available. In the case of a national movement, these usually include a territory and a more-or-less-homogeneous population, endowed with a language, customs, and a high culture even before they are targeted by a political intention. But in *The Jewish State*, Herzl, like a magician, signals that an abstraction will soon become concrete before our eyes: when the curtain is lifted, the edifice that is now invisible will suddenly impose itself on everyone's view. The construction material being of the most fragile, even inaccessible, kind, the artifice turns out to be pure artifact. The Zionist movement did not attempt to mimic the illusion of a "natural" national blossoming leading to the nation-state form. Instead, it based itself on an abstraction and a goal with no counterpart in reality: it would line up the parts with which it would have to make do in order to assemble its mechanics.

Any project relies on the realism of its promoter. And any project must be achievable. Of course, the history of the Zionist movement's emergence goes beyond Herzl, and the linguistic, literary, and scientific renaissance of Jewish culture in Poland in the second half of the nineteenth century and the political history of the Labor Movement in Palestine in the first decades of the twentieth history are especially important in the context of the Zionism-science nexus. The Jewish renaissance and the Labor Movement both touch on the Eastern European sources of the Zionist movement, whereas, focusing on science involves rather the Austro-Hungarian and German contexts, as the singular status of science in the Zionist movement owes its social-intellectual structure to Herzl's two most important Zionist documents. The project of Zionism, which was first conceived according to a carefully developed plan, then had to be made into reality. With the two works that Herzl devoted to framing that reality, he endeavored to enlist as many allies as possible. *Der Judenstaat* (*The Jewish State*), a programmatic work published in 1896, poses the necessity of creating a state for the Jews and methodically sets out the means that are necessary to achieve that. *Altneuland* (*Old-New-Land*), published in 1902, is a novel in which Herzl imagines the future state, which is not actually a state but rather a federation of cooperatives (*Genossenschaftssiedlung*).

*The Jewish State*, the product of Herzl's legal imagination, is "projective": it sets out the concrete modalities for realizing its objective by deploying the mediations through which the *state* will be concretized. *Old-New-Land*, the product of his literary imagination, assumes the fictional dimension of a *society* to come, a society that is capable of doing without the state. While, in a way, these two visions are compatible and complementary, they also stand in

tension and even contradiction with each other. In the one, Herzl elaborates the means of building a state for the Jews, and in the other, he describes a Jewish society without a state. As we will attempt to show, the singular role of science in Zionism cannot be understood without considering the tension between the two visions.

*Old-New-Land* is part of a series of utopian essays with a Zionist tone that flourished beginning in the last quarter of the nineteenth century. Notably, it was not the futuristic novel *Old-New-Land* that came under fire when it was published in 1902, but instead *The Jewish State*, some six years earlier. It is not surprising that a proto-Zionist utopian literature should have flourished, since the hope of a forthcoming assembly of the Jews in Jerusalem is embedded in the daily Jewish liturgy and known even to Jews who have never opened a prayer book. The actual project, on the other hand, the setting up of mediations toward the realization of an objective that is not fully defined and is held to be unattainable,<sup>3</sup> is what carries all the subversive charge here. Judged harmful, unrealistic, impossibly grandiose, *The Jewish State* was systematically maligned and dismissed. In short, in the common opinion, (literary) utopia is routine, maybe even repetitive, while it is the program, supported by an executable plan, that is truly subversive (unrealistic, and therefore qualified by its detractors as utopian).

In Herzl's oeuvre, a realistic utopia coexists with a fantasy project. The realized society named "Altneuland" owes everything to its Jewish engineers from Europe, to the most modern scientific, economic and social technology at hand, presents itself as a fiction, but Herzl's *Judenstaat* was seen as the most unrealistic thing that could be.

*The Jewish State* and *Old-New-Land* are in a relationship of mutual contradiction, and the charge of subversion, generally carried by the utopian genre, is transposed onto the program. Herzl is aware of this contradiction. In his foreword to *The Jewish State* he notes: "I wrote this utopia only to show that it is not a utopia. There are enough utopias, before and after Thomas More. No sensible person has thought of realizing them. They entertain but do not take."<sup>4</sup> While the emigration of Jews to a specific land would appear to have been a technically feasible task in those times of international migration and colonial planning, in the eyes of Herzl's readers, especially his Jewish readers, it seemed an impossible and demiurgic plan. For this reason, the place of assembly remains undetermined in *The Jewish State*, although Herzl locates *Old-New-Land's* "New Society" in Palestine, while noting that it could exist anywhere.



**ALTNEULAND. MONATSSCHRIFT FÜR DIE  
WIRTSCHAFTLICHE ERSCHLIESSUNG PALÄSTINAS**

Herzl's two books are thus situated at the crossroads of two series. On the one hand, Austrian liberal progressivism, which advocated a profound social reform of the Habsburg monarchy, permeates *The Jewish State*. A technocratic, plan-oriented elitism runs all through Herzl's project. It is here that a very particular link between Zionism and science/technology is established. Herzl, in *The Jewish State*, reasoned using a problem/solution framework. The problem was the persistence of antisemitism in Europe, in spite of emancipation; the solution was a state for the Jews. To bring about that solution, the Zionist movement would have to rely entirely on scientific and technical explorations, as the solution (a state for the Jews) was precisely an aim (solving the Jewish problem in Europe). The reason for this is that the Zionist movement proceeds *ex nihilo*, it was necessary to first find a territory, then assess the feasibility of the project on the ground, and mobilize all possible science and technical know-how to make it feasible, to transfer plans into practice.

Thus, early on, the Zionist movement created functional branches intended to fulfill the specific tasks that were indispensable to the execution of the project. The journal *Altneuland. Monatsschrift für die wirtschaftliche Erschließung Palästinas. Organ der zionistischen Kommission zur Erforschung Palästinas*,<sup>5</sup> was founded during the Sixth Zionist Congress, held in Basel in 1903. Strangely, the journal named after Herzl's literary text was to become a place of scientific expertise, dedicated to the practical realization of the building of a productive Jewish society in Palestine and covering topics such as methods of financing the settlement of migrants, the purchase and regulation of landed property, the cooperative organization of labor, water management, the adaptation of modern agricultural techniques to marshy or desert terrain, the development of infrastructure in the acquired lands, as well as numerous scientific subjects that would, at first glance, appear too esoteric for the practical realization of the project. It is made clear in the programmatic text published in the first issue (1904) that science will occupy a cardinal place in the journal:

That the will may become a saving, redeeming deed: this purpose must be served, above all, by that which is the most powerful force of our time: science. We must know exactly the ground on which the house of Ahasver is to stand; we must work through the building plan to the last and smallest detail; we must recruit and train the builders who are to carry out the plan; we must ensure that the inhabitants

know how to amply earn their bread in honest, creative work, so that they also retain the time and strength to direct their gaze upwards toward higher human goals.<sup>6</sup>

Herzl not only formulates the project: he stands at the epicenter of a vast socio-technical network, a network of experts each of whose specific knowledge contributes to the plan. The journal engages the whole panoply of available knowledge: from social planning to the study of soils, from demography to botany, from ethnographic knowledge about indigenous populations to knowledge about endemic disease, from the economic behavior of populations to hydraulic science. By science, then, we mean all the disciplines, including the social and political sciences, taken together, made coherent, and organized by a network of experts.

#### FRANZ OPPENHEIMER

In 1902, when Herzl read Franz Oppenheimer's article "Jüdische Siedlungen" in *Die Welt*, he immediately imagined that the Zionist movement would have to engage in social experimentation in Palestine. Oppenheimer's public endorsement of Zionism, published in *Die Welt* in 1903, inaugurated a phase in which all of the knowledge of agrarian reform and social engineering, in particular the knowledge developed within the *Verein für Socialpolitik* in Germany,<sup>7</sup> would converge and be mobilized to carry out a social experiment in vivo, outside Europe. The fact that Herzl managed to place himself at the heart of the network did not, however, mean that every element within the network shared his vision. Oppenheimer, the German patriot, believed that the solution offered by the colonization of Palestine was exclusively a solution for the *Ostjuden*, the Eastern European Jews. It is on the *Ostjuden* that he wanted to perform his sociopolitical science experiments, in a space that, while it was certainly not virgin, was not affected by the contractions of capitalism, on which he was a renowned expert. His participation in the Zionist network offered him an opportunity to experiment as an engineer, taking advantage of the absence of laws of gravity to build an ideal social edifice. Between Herzl and Oppenheimer, there was thus a kind of dialectic. Oppenheimer adhered to the platform of Basel the First Zionist Congress, which Herzl had convened. In *Old-New-Land*, Herzl, in turn, was strongly inspired by Oppenheimer's social theory and reformist recommendations.

Within this circle, utopia became a practical matter, the execution of a plan by all available modern means.

The dual nature that already characterized the science of this early phase of the Zionist project can be gauged from the fact that the journal devoted to the colonization of Palestine was named *Old-New-Land*, rather than *The Jewish State*—as if only the utopian goal could carry the full, realistic load of the science and technology put to use to carry it out. Here, utopia was translated into the technical language of all possible sciences, disclaiming its own utopian-ness. The technical knowledge of engineers was the foundation on which Zionist practice was built.<sup>8</sup> There is an affinity here between Herzl and Jules Verne, since the anticipated reality is always based on the potentialities of the present world, which are vertiginously numerous. *Old-New-Land's* Palestine is a kind of mysterious island, the occasion of a realistic Robinsonade, driven by technological progress. And in *The Jewish State*, the Jews are really embarked on the Nautilus, the submarine in *Twenty Thousand Leagues Under the Sea*, which, after its scientific inventory of the seabed, has to figure out where to emerge. The ability to project oneself into the future depends entirely on the means at one's disposal, and these means, at that time, were thought to be limitless. It is here that utopia becomes altogether realistic. The mobilization of all possible scientific and technical means, the articulation and association of all available knowledge and know-how, opens the way to the realization of a project. From a simple abstraction, from an imagined plan inscribed on land, the project becomes objective: it is progressively loaded with layers of reality. Ever more concrete, it is transferred, on the way from Europe to Palestine, into reality.

### ARTHUR RUPPIN

An abstraction progressively weighted with layers of reality: this is a good definition of the task undertaken by Arthur Ruppin, who is widely recognized as a principal figure in Zionism's pre-World War I era. Ruppin's centrality to the Zionist ethos can be seen in the fact that every Israeli city has a street named after him. But Ruppin differed from other leaders: he was not a political leader, but something closer to a "project manager" on behalf of the Zionist organization. Ruppin's ability to plan, on the one hand, and to execute plans, on the other, is an expression of the quintessential and tension-riddled role that planning occupied in the Zionist movement from its very

inception—the tension between the pragmatism of *The Jewish State* and the utopia of *Old-New-Land*.

Ruppin wore many hats. He was a social scientist, a sociologist, a statistician, a demographer of the Jewish people, a prominent functionary of the Zionist movement, and a planner and executor of plans, but what held these roles together, and is important for us here, is the highly scientific, pragmatic approach toward problem-solving that characterized much of his activity. A “realist,” he conceived of problems in factual terms, the way that reality presented them to him. He approached them technically, seeking a solution for each problem, and science was the most powerful instrument at his disposal. In a certain way, Ruppin was apolitical, a highly efficient functionary of the Zionist movement who attempted to remain above politics and never belonged to any Zionist faction.

And Ruppin epitomizes the tension between *The Jewish State* and *Old-New-Land*: as the director of the Palestine Office of the Zionist Organization, he was an efficient functionary of the Zionist movement, working in a rational scientific mode: developing plans, experimenting with them to see how they worked in the real world, and then fully executing them, in a long teleological chain. The ultimate goal, however, towards which all these solutions were geared, was not fully formulated or articulated—at least not until much later, after the 1929 Arab massacre of Jews in Hebron, when Ruppin finally admitted that the Zionist movement had to strive for a state for the Jews. We suggest that it was in fact critically important for the pursuit of the solutions that the goal *not* be articulated: it had to remain open, at least somewhat vague, and utopian.

In a way that was typical of German Zionism, Ruppin’s participation in the Zionist movement was not due to its diplomatic goals but because he wanted to transport to Palestine the German, and actually very Jewish German, idea of *Bildung*: the idea of self-transformation and human improvement. At the same time as he had a highly practical orientation to planning and carrying out those plans, when it came to the ultimate goal of Zionism, Ruppin—like his much more idealistic German Jewish colleagues in the Brit Shalom group, such as Gershom Scholem and Hugo Bergmann—conceived of it in terms of culture and *Bildung*. The state itself was understood not as a condition for the realization of the ideal, but rather as an obstacle to it. Ruppin, then, was a scientific “materialist” in terms of attitude, orientation, and activity, but his Zionism was, in the end, a profoundly idealistic project.

Unlike Oppenheimer, who considered Zionism to be for the Eastern European Jews, not the German Jews, Ruppin thought of it as being for German

Jews as well, even though he considered the state to be superfluous—a cumbersome legacy of Europe, synonymous with domination, which one could gladly do without. Ruppin's and Oppenheimer's relationships to the Zionist movement differed in other ways as well: Ruppin moved to Palestine, while Oppenheimer never intended to move there, and Ruppin devoted his entire life and career to the Zionist movement, while Oppenheimer was involved in the Zionist movement from a subjectively much more external place, lending his scientific expertise to the Zionist movement. (In fact, the differences between Ruppin and Oppenheimer display some of the diversity found in the scientific network connected to the Zionist movement from the outset.) Oppenheimer also founded and edited the *Altneuland* journal, together with Otto Warburg and Selig Soskin. But the relationship between Ruppin and Oppenheimer was nonetheless deeper, or perhaps we should say more structural, than these contrasts might make it appear.

Both Oppenheimer and Ruppin viewed the Yishuv (literally “settlement”), the emerging Jewish society in Palestine, as a social-scientific “experiment” that had to do, at its core, with the possibility of establishing a society *without* a state. And why would one want to establish a society without a state? Because only such a society could evade the contradictions that characterize modern states. Some of the settlement activities for which Ruppin is most renowned were experiments that he carried out following Oppenheimer's sociological ideas. Ruppin's aim was to establish a reformed society, a healthy, productive society. As Oppenheimer argued in the *Verein für Socialpolitik*, the agrarian reform in Prussia, responding to the social problems there, should be the model for Zionist activity: in this reformed society, the land would not be run by a class of landowning aristocracy (Junkers), employing a large, landless population of poor foreign (Polish) laborers. We should emphasize that Ruppin wanted not only to avoid the creation of these two classes among the Jewish settlers, we should emphasize; he was also opposed to the creation of a class of Jewish landowners who would employ non-Jewish Arab workers. In fact, one of the features of Ruppin's planning process was that it included the study, mapping, and modeling of the best ways to maximize the use of the land for the benefit of both the Jewish and the Arab peoples.<sup>9</sup> His plan was intended to establish Jewish settlements in which the owners and the workers would be one and the same class. Oppenheimer used capitalism, in terms of ownership of land in equality and with solidarity (*Genossenschaft*), to develop the sociological and economic models.

This kind of social engineering experiment, Ruppin and Oppenheimer agreed, could only be carried out outside of Europe, and only outside of the state. Why was that? Because the experiment was intended to evade Marxist philosophy and doctrine. It was an experiment in creating a new society without going through class struggle and revolution, that is, sidestepping the structures and challenges that characterized European history. And this experiment could only take place outside of Europe because it relied on the creation of a spontaneous movement, not a process conducted by a state. It is easier to evade Marxism and revolution when you go to an entirely new place, because if you can create a new structure, you do not have to revolutionize an existing society and you can avoid having to overturn an existing social order.

This experiment was a form of social reformation based on science, and it was carried out based not only on scientific reasoning but also on a highly technological process, in the sense of technology as a process intended to achieve a certain end. Ruppin employed and applied Oppenheimer's ideas, for instance in establishing of Merhavia.<sup>10</sup> And the goals and the process—the ends and the means—were very closely integrated: the process, establishing agricultural settlements as part of the new Jewish society, served the goal of creating settlements where ownership would be in the hands of the settlers themselves, in order to avoid the creation of two classes, of owners and of workers.

In Ruppin's attempt to establish settlements, following Oppenheimer's ideas, we can thus see an engineering project that we could call *ex nihilo*, a process that starts from nothing. None of the elements that are expected to be found in the end construct are available or in place at the outset. Each one of them, and all of them together, must be planned and built from the ground up, from A to Z, beginning with the idea of the form the intended settlements should take, and continuing through all the empirical facets of locating land, determining whether it is feasible for its intended purpose, creating the financial means to purchase it, actually purchasing it, establishing the settlements, seeking and attracting settlers, and populating the settlements with settlers. This is a national movement in which planning is the be-all and end-all. While Herzl's *Jewish State* positions the state for the Jews as its aim, Ruppin's whole experiment of creating a new society is only possible, and justifiable, *without* the existence of a state. Because if the state already exists, such a venture takes on quite a different color and form, almost by definition a coercive form rather than a spontaneous and voluntary one. Ruppin, in this sense, exemplifies the tension between Herzl's two Zionist "poles": the scientific engineering of a solution, and the utopian. The spirit of rational state-building is a legacy of *The*

*Jewish State*, but the vision of a harmonious society without a state is a legacy of *Old-New-Land*.

### THE FIRST TWO DECADES AND TODAY?

In this article we have argued, focusing on the first two decades of the Zionist movement, that from the very inception of the movement, science played a critical role in it. We have suggested that the basic social-intellectual structure of science in the Zionist movement was established by Herzl's two main books on Zionism, *The Jewish State* and *Old-New-Land*. *The Jewish State* projected a state for the Jewish people as a pragmatically attainable project. This document reasoned in terms of a problem and a solution: the problem was the "Jewish Question" in Europe, and the solution was a state for the Jews outside of Europe. The main instrument for achieving the solution was rational, methodical planning. *Old-New-Land*, however, imagined a future utopian Jewish society in which a state did not feature. In the present article, we have argued that while in certain respects *The Jewish State* and *Old-New-Land* could be seen as not only compatible but in fact complementary, in other respects they set up a tension in the Zionist project. We illustrated this argument with three interconnected examples: *Altneuland*, the journal of the Zionist Organization; Franz Oppenheimer's involvement; and Arthur Ruppin's activity in Palestine. In all three examples, a similar tension was shown to be at work: on the one hand a highly pragmatic, scientific, and technological orientation, very closely following the model established in *The Jewish State*, was accompanied, on the other hand, by work towards a goal that was *not* a state and that was also *not* fully articulated. In other words, a tangible, solid, realistic, scientific "engineering" orientation, but in the service of an open, idealistic, utopian goal.

The State of Israel was thus literally cobbled together, like a large, complex technical object that was nevertheless "loved" enough to materialize (unlike Bruno Latour's Aramis, the automated urban tramway that failed because it was not loved enough<sup>11</sup>). Here, "love" is not simply the emotional dimension that carries any political project: in the language of the sociology of science,<sup>12</sup> love refers to the intensity of investment and the capacity to attract individuals, attach allies, enlist operational knowledge, initiate and expand a network, insert the project into a teleological series, articulate it, and materialize it. The abstraction was progressively weighted with layers of reality—declarations of

intent, plans, reports, accounting, action programs, technical committees, in vivo experiments—by an indissociably political and socio-technical network, until the abstraction, finally, *became* reality. If it had not gained concreteness and objectivity, the “object” would have stagnated in an uncertain state or regressed to the state of a project, or even to the status of utopia or the rank of pure chimera.

The world, including the Jewish world, has changed in dramatic ways since the first two decades of the Zionist movement and the establishment of Israel in 1948. Contemporary Israeli society, and the roles of science and technology in that society, have been shaped by numerous events and processes external to the subjects of this article. Yet here, for just a moment, we would like to fast-forward to the present, the third decade of the twenty-first century, and briefly discuss two issues that nonetheless are related to the intellectual structure established in the Zionist movement’s first two decades.

The first issue we wish to discuss is the counterpart to the strong scientific and technological orientation built into Zionism from its inception. *The Jewish State*, we noted, was based on problem/solution reasoning. Moreover, even though from its inception the Zionist movement involved the widest range of scientific knowledge—from geology and agronomy to ethnology and folklore—its scientific model was the hard sciences, an idealized Science that is very close to engineering and technology. There is an Israeli disposition (and an ingenuity in doing so) to frame things in terms of problems and to seek technological solutions to those problems. It is easy to illustrate this using the history of Israel’s discussions about defense against missiles or attack tunnels from Gaza or from Lebanon, for instance. This disposition incorporates a certain blindness to the fact that many, if not most, social and political problems cannot be addressed through technology and, even more essentially, that some subjects cannot even be articulated in terms of problems, much less problems that can be solved by technological, rather than political, means. The historical roots of this intellectual structure can be found in the status of science in the first two decades of the Zionist movement.

More generally, however, we have seen that from the inception of the Zionist movement, science was conceived as the most important means for advancing the goal of a state for the Jews. We want to end, therefore, with the second question: the question of the way in which the Zionist movement persists today in the State of Israel. To what extent did Israel inherit *The Jewish State*, the problem/solution approach to the Jewish problem in Europe, and to what extent is it *Old-New-Land* that has lived on, the open goal of social utopia,



the experimental-utopian project to solve the contradictions of capitalism in Europe? *The Jewish State* and *Old-New-Land* articulate these two dimensions, respectively, without it being exactly clear where one ends and the other begins. But one thing is certain: if the Jewish problem persists in Europe, the logic of *The Jewish State*, via Israel's Law of Return, continues to permeate the state of Israel as the solution to that problem. And if the utopia has gradually collapsed, as it has everywhere else, its traces in Israeli society still remain in the form of a scientific and technological version of utopia.

## Notes

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1. Amos Funkenstein, "Zionism, Science, and History," in *Perceptions of Jewish History* (Berkeley: University of California Press, 1993), 342.
2. Theodor Herzl, *Vision und Politik. Die Tagebücher Theodor Herzls* (Frankfurt am Main: Suhrkamp, 1976), entry for September 3, 1897.
3. The most common critical argument of Zionism has been that it sets an unrealistic goal (see Walter Laqueur, "Zionism and Its Liberal Critics, 1896–1948," *Journal of Contemporary History* 6 [1971]: 161–82).
4. Theodor Herzl, *Der Judenstaat. Versuch einer Lösung der Judenfrage* (Leipzig: M. Breitenstein's Verlags-Buchhandlung, 1896).
5. *Old-New-Land*. Monthly Journal for the Economic Development of Palestine. Organ of the Zionist Commission for the Exploration of Palestine.
6. *Altneuland. Monatsschrift für die wirtschaftliche Erschließung Palaestinas. Organ der zionistischen Kommission zur Erforschung Palästinas*. Hrsg. von der Zionistischen Kommission zur Erforschung Palaestina, Jahrgang 1 (1), Berlin 1904, S.1.
7. The German Economic Association (literally, "Association for Social Policy"), which produced a considerable number of studies of land reform in East Prussia.
8. Derek Jonathan Penslar, *Zionism and Technocracy: The Engineering of Jewish Settlement in Palestine* (Bloomington: Indiana University Press, 1991).
9. Arthur Ruppin, *Three Decades of Palestine: Speeches and Papers on the Upbuilding of the Jewish National Home* (Jerusalem: Schocken, 1936), end maps.
10. Margalit Shilo, *Experiments in Settlement: The Palestine Office, 1908–1914* (Jerusalem: Yad Izhak Ben Zvi, 1988), 146ff. [Hebrew].
11. Bruno Latour, *Aramis, or the Love of Technology* (Cambridge, MA: Harvard University Press, 1996); idem, "Transférer les projets dans la réalité," in *Savoir-faire et pouvoir transmettre*, ed. Denis Chevallier (Paris: Éditions de la Maison des Sciences de l'Homme, 1991), 152–65.
12. Derek Jonathan Penslar, "What's Love Got to Do With It? The Emotional Language of Early Zionism," *Journal of Israeli History. Politics, Society, Culture* 38, no. 1 (2020): 25–52.

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# Israel as a Laboratory in the Time of COVID-19

*by Sander L. Gilman*

**I**n the fall of 2021 my colleague Zhou Xun and I published our “*I Know Who Caused COVID-19: Pandemics and Xenophobia*.”<sup>1</sup> In that volume we looked at a series of case studies of groups that were blamed for or blamed others for being responsible for the pandemic. We looked at groups that were traditionally accused of such acts as part of a collective demonization and asked what happened during COVID-19 when some of these groups, or at least those labeled as belonging to such groups, turned out to actually be responsible on one level or the other for transmitting the virus or at least creating situations which could have been mass spreaders. One group we examined in detail was Ultra-Orthodox Jews in the United States, Great Britain, and Israel.<sup>2</sup> The complex political network of such groups, their own symbolic reading of the pandemic and the political response of governments in all three countries illustrated how diverse community identity was able to both transcend as well as reenforce both opposition to multiple means of intervention as well as compliance with public health requirements. All of these taking place across time as well as national borders as the pandemic spread and a wide-range of responses, including at the beginning of 2021, vaccines, and therapies for COVID-19. One observation in the book was that not only was the global mobility of Haredi communities a factor but also the rapid spread of information across social networks, both in opposition to and in support of a wide range of measures, some valid, some marginal. That banners in demonstrations across Europe and the Middle East were in English as well as in the local languages was one litmus test that COVID-19 had created a new and

one can add much more fluid context for our comprehension of the pandemic. Thus, we have the appearance of the “Gadsen” flag, appropriated by the radical American right wing even before the “Unite the Right Rally” in Charlottesville, Virginia in 2017, with its motto “Don’t Tread on Me,” at anti-mandate demonstrations in Berlin (August 29, 2021); the appearance of both Confederate Battle flags and Canadian flags adorned with swastikas at the truckers’ “Freedom Convoy” demonstration in Ottawa (January 29, 2022). This essay builds on the theoretical as well as material work done in our earlier volume, bringing up to date, at least through 2022, a new narrative in this global discourse.

By the beginning of 2022, the role that Israel, both under the Benjamin Netanyahu government at the close of 2021 and subsequently under Naftali Bennett (and his Minister of Health Nitzan Horowitz) had as a “living laboratory” in combatting COVID-19 had become a commonplace. As early as 2020, “Chaim Sheba [Medical Center’s] innovation center . . . put out a call to entrepreneurs in Israel, which has a large digital health sector, and around the world for proposals for new solutions to test and treat patients with coronavirus. ‘Word has gotten out that we have this group of people here and we have gotten so many emails from startups offering us their solutions,’ [Its director Eyal] Zimlichman says, ‘This is like a living lab here.’”<sup>3</sup> Very early on, Israel came to be thought of, there and abroad, as the test site for dealing with most aspects of the pandemic.

Somehow the gross ineptitude of both the Israeli government and the public health sector in permitting wave upon wave of COVID-19 infections, outlined in our book, was quickly relativized by this new claim, a claim as with many during the pandemic, which was quickly wide-spread on social media. By having purchased a wide range of vaccines in advance, by having a comprehensive reporting mechanism through the (sometimes faulty) linkage of competing public health care delivery systems with deep and comprehensive data bases reaching back decades, and by strongly advocating for testing and vaccination, at least among the Jewish population of Israel and the West Bank, public health authorities in Israel reported relatively high rates of antibodies to both the Delta and subsequently to the more contagious Omicron strains of the virus. The marginality of non-Israeli Arabs, especially in the West Bank communities and the sporadic resistance of some Israeli Arab groups, as with the heightened resistance of Haredi communities, was quickly replaced in the global press with the notion that Israel was the testing site for those measures that would defeat the pandemic. When the Ministry of Health proposed a fourth booster in January 2022 for health care workers and those in the population

over sixty, the Israeli government was seen as on the cutting edge of global public health response. “Preliminary data [had] showed a drop in antibodies as early as three months after the third dose. Once again, Israel will function as a living laboratory that can provide important information to other countries around the world.”<sup>4</sup> As a health reporter for one of the Anglophone Israeli newspapers commented at the time: “When *The Times of Israel* began covering COVID-19, we had no idea that our small beat would become such a central part of the global story. Who could have known that Israel would be first at nearly every juncture of the vaccination story—and generate the research that’s so urgently needed today?”<sup>5</sup> That Israel, renowned globally as a “hi-tech” economy, could see itself as a “living laboratory” to test the various public health approaches to COVID-19 surprised few there. For as early as 1962 the American cardiologist George C. Griffith, described Israel as “the unique laboratory for the study of heart disease” to no little degree because of “the capability and very high standard of knowledge, ingenuity and energy.” He also noted, of course, the heterogeneity of the population, which made comparative studies somewhat easier in Israel.<sup>6</sup> Yet Israel seems to be a “living laboratory” (according to such accounts) not as much because of the nature of its medical culture, but rather a reflex of the character attributed to the “smart” Israeli.<sup>7</sup> That is part of the construction of the image of Israel as a “living laboratory.”

The trajectory of the Israeli global image in the years before the pandemic, certainly under Donald Trump and his “Abraham Accords,” was to stress the technological contributions that Israel could provide to its Arab neighbors (in contrast to Iranian expansionism). Israel was seen as a Jewish state (even more after the 2018 law so designating it) that succeed by its innate character, summarized in the title of one recent volume as “chutzpa.” “Israeli chutzpa, a determined approach to life, which might seem to some as rude and opinionated, or, to other, seen in a more positive light, as preferring directness to political correctness for the sake of achieving one’s goals.” The author dismisses (with a wink) “the long-standing Jewish traditions of study and questioning” as the source of such character, but he re-discovers its source is the “tribe-like community and . . . a childhood full of challenges and risks, that is at the root.”<sup>8</sup> In other words, the classic image of the *shtetl*, the Eastern European Jewish community, not the pioneers’ *Kibbutz*, has been now transformed into the model for a multicultural, modern Israel. Israel is thus a type of “an experimental model, where every day, every exercise, and every piece of information is evaluated and debated in a culture that resembles an R&D laboratory.” Indeed, “the economy of Israel and many of those in the Arab world are living laboratories

for the economic theory of clusters and more broadly what it takes for nations to generate—or stifle—innovation.”<sup>9</sup> The generation of innovation is the quality to be found in the “Jewish” character of the Israeli “living lab”; unstated is the assumption that Arab states stifle innovation, because of “Arab” character.

Yet “Israel as a sort of laboratory for COVID-19” was not universally heralded as a positive statement in Israel. When Philip Dormitzer, trained at the Hebrew University, then the chief scientific officer at Pfizer, made this comment to a Zoom gathering of academics in September 2021, anti-vaxxers in Israel immediately leapt on this as revealing the complicity of the Israeli government in treating its subjects as “lab rats.” Dormitzer stated that “Early in the pandemic we established a relationship with the Israeli Ministry of Health where they used exclusively the Pfizer vaccine and then monitored it very closely, so we had a sort of laboratory where we could see the effect.” One of the claims of the global anti-vaccination movement in 2021 was that this was actually a conspiracy driven by the pharmaceutical industry. The then Health Ministry Director General Nachman Ash rejected the claim that Israel had any sort of exclusive deal with Pfizer. “There is no exclusivity with Pfizer in any shape or form. Currently, those over 18 who are getting vaccinated are prioritized to receive the Moderna vaccine.” He defended the government’s public health policy and noted “the world certainly learns from [the statistics generated by his office], but I am not prepared to use the word ‘laboratory.’ Yes, the company is learning from us about the [effectiveness] of the third dose, but there is no connection to harming the interests of Israeli citizens.” And Pfizer felt the negative impact of the image of the “laboratory” and released the following statement: “Pfizer is aware of a video clip featuring an interview with one of our scientists who unfortunately misspoke on a key point we wish to clarify: We are grateful for the cooperation between Pfizer and the Israeli Health Ministry. It is not a clinical research study. This is a non-interventional ‘real world’ evidence data collection collaboration.”<sup>10</sup> No laboratory here; only Israeli efficiency.

While technological innovation may have its attraction, it also has a downside. Mishana Hosseinioun, a lecturer in International Relations at the University of Oxford noted in a critique of these arrangements: “The normalization efforts undertaken by Arab states, and facilitated by the US, since the autumn of 2020 have frequently resembled quid pro quo agreements designed to confer upon these states greater international legitimacy and open the door to economic cooperation with Israel’s robust, hi-tech economy.”<sup>11</sup> Yet access to this technology has predated the Trump era. One can note here the global



revelations at the same moment about the wide use of Pegasus, the spyware from NSO Group, an Israel-based company that licenses software to governmental clients in dozens of countries that allows them to secretly steal files, eavesdrop on conversations and track the movements of its targets. Such collaboration between Israeli intelligence and the NSO group, where the software was also used to hack into 'phones within Israel itself as well as other Middle East states, including Saudi Arabia, tracking oppositional figures, such as the murdered Jamal Khashoggi, well antedates the "Abraham Accords." Technology is never a singled-edged sword. There were Israeli sceptics about the role that Israel was to play as a Living Laboratory in regard to the pandemic, as Anshel Pfeffer wrote in *The Spectator* about Netanyahu:

Only he could have personally phoned up the CEOs of Pfizer and Moderna to secure early shipments of the vaccines to a small country in the Middle East. The numbers don't lie, they cry, as they post the latest graphs on their social media accounts, showing Israel on track to emerge from the pandemic months ahead of the rest of the world. So was it Netanyahu's persuasive phone-calls that has put Israel on the vaccination superhighway? Or simply the prospect of having easy access to the medical data of an entire vaccinated country that convinced the pharmaceutical giants to expedite shipments to Israel? Choose the narrative that suits your political views.<sup>12</sup>

Not only is the question of whether or not, but what type of "laboratory" did now a resurgent Israel represent?

Yet the idea of a "laboratory" does imply that the population was to understand itself as at some risk from the experimentation undertaken first on them. This was certainly the implications of the rather quick turnaround we discussed concerning Pfizer and its Israel-trained scientist Philip Dormitzer. Laboratories as metaphors are spaces that have played a major role during the COVID-19 pandemic, and not always for the better. What does being a subject in a living laboratory mean: bravely volunteering to be part of a vital experiment or having experimental (read: risky) procedures imposed on you, willing or not. This debate is one that has its roots in the rise of modern medicine in the nineteenth century. Who is the best "guinea pig" for experimental vaccines? In 1796 Edward Jenner used James Phipps, the eight-year-old son of his gardener to test whether cowpox really provided a means of resisting smallpox. By the nineteenth century self-experimentation, such as that undertaken by Jesse Lazear for yellow fever, with fatal results, came to be more and more frequent, as the idea of the subject of laboratory experiments becomes inexorably

connected to concepts of risk. Such researchers “may be driven by an altruistic desire to accept the same risk that they would ask of other volunteers of research; they may be driven by a concern of the inequity of the participation of some subjects, such as prisoners, in research; they may seek to avoid the bureaucratic ‘red tape’ of scientific or ethics review; they may seek fame, fortune and academic advancement from rapid scientific progress; or, more likely, they may be driven by an insatiable scientific curiosity and a need to participate closely in their own research.”<sup>13</sup> That experimenters have multiple, often times contradictory motives are clear.

If you employ “subjects,” whether the undergraduates recruited for psychology experiments (pace the Yale Milgram experiment in 1961 or the Stanford Prison Experiment in 1971) or convicts, moral as well as altruistic questions arise. Should we permit those who have no true agency, such as undergraduates, to be used without any transparency or those who violated societal norms, such as convicts, to recuperate their moral standing by volunteering for such experiments while incarcerated? The latter sounds better than the former, until you ask whether prisoners are truly free to choose such a course or whether the very fact of their incarceration precluded them from any free choice. Prisoners in the United States, mainly people of color, who were often prime targets for (voluntary or involuntary) human experimentation, with rewards running from remuneration to the amelioration of sentences, were no longer eligible to volunteer by the 1980s, except in very limited circumstances, as they were considered to be unable to give informed consent. But African-Americans and Women (two clearly overlapping categories) were included in ever greater numbers after the same period necessarily to broaden the scope of the experiments both in the United States and Great Britain. Inherent to such shifts, as Sir William Osler in 1903 declared, is recognizing the assumptions inherent in the distinction between researcher and subject: “Perhaps no sin so easily besets us as a sense of self-satisfied superiority to others . . . more often it is an attitude of mind which either leads to bigotry and prejudice or to such a vaunting conceit in the truth of one’s own beliefs and positions, that there is no room for tolerance of ways and thoughts which are not as ours are.” In this Osler is dismissive of the “educated classes” but even more so of the “fool multitude . . . in which it is pandemic.”<sup>14</sup> And indeed the confluence between expert in fact and the expert on the social media in our times is often disconcerting. But at each and every turn history, or at least history reimagined, plays a role in rethinking what the “laboratory” is for good or for ill.

There are also other players in this world of our contemporary laboratory experimentation, ones without whom such experiments could not even be conceived. Yes, we have experimenters and subjects; there is also the agent, one that has been often ignored in debates about vaccination, masking, distancing, and their relation to “freedom.” Viruses have a sort of blind agency. They are visible in their effects globally but not in their essence; that appears only in the laboratory. Bruno Latour illustrated this in his account of Louis Pasteur and anthrax:

Pasteur adds to all the forces that composed French society at the time a new force for which he is the only credible spokesman—the microbe. You cannot build economic relations without this “tertium quid” since the microbe, if unknown, can bitter your beer, spoil your wine, make the mother of your vinegar sterile, bring back cholera with your goods, or kill your factotum sent to India. You cannot build a hygienist social movement without it, since no matter what you do for the poor masses crowded in shanty towns, they will still die if you do not control this invisible agent. You cannot establish even innocent relations between a mother and her son, or a lover and his mistress, and overlook the agent that makes the baby die of diphtheria and has the client sent to the mad house because of syphilis. You do not need to muckrake or look for distorted ideologies to realize that a group of people, equipped with a laboratory—the only place where the invisible agent is made visible—will easily be situated everywhere in all these relations, wherever the microbe can be seen to intervene. If you reveal microbes as essential actors in all social relations, then you need to make room for them, and for the people who show them and can eliminate them. Indeed, the more you want to get rid of the microbes, the more room you should grant Pasteurians. This is not false consciousness, this is not looking for biased world views, this is just what the Pasteurians did and the way they were seen by all the other actors of the time.<sup>15</sup>

In the world of COVID-19 the virus is ubiquitous and omnipresent; yet simultaneously does not exist or exists only because of a conspiracy, a conspiracy of the pharmaceutical industry, of the laboratory at the Wuhan Institute of Virology, of Bill Gates, of the 5G networks. The laboratory too is the site of both innovation and treatment, harnessing the virus, rescuing humanity; or it is the site of its origin and the means by which the masses are duped or even massacred.

We have a wide repertoire of “laboratories,” “actors,” and “subjects” to choose from and the fly in the historical ointment in the time of COVID-19,

was the instrumentation of the Holocaust by those political figures in the West who compared any and all interventions to mitigate the pandemic, whether masks or vaccines or lockdowns, to medical experimentation in Nazi Germany.

Such analogies proliferated in opposition to a wide range of measures taken to combat the pandemic. Old line anti-vaxxers such as Robert F. Kennedy, Jr. (on the Left, at least on environmental issues) had long compared mandatory vaccination to the Holocaust in 2015, as in his screed, against California's limitations of opt-outs to the state vaccination requirements.<sup>16</sup> In 2022 he unself-consciously repeated his analogy: "Even in Hitler's Germany, you could cross the Alps to Switzerland. You could hide in an attic like Anne Frank did . . . the mechanisms are being put in place that will make it so none of us can run and none of us can hide."<sup>17</sup> Del Bigtree, of rightwing, anti-vax group ICAN, appropriated the rhetoric about the Third Reich in June, 2019 at "an informed consent educational seminar." "Bigtree linked vaccines to the Holocaust and then to child sacrifice. He compared them to Nazi experimentation on unwilling Jewish medical subjects, then to the intentional ritual murder of children, in an effort to debunk the scientific consensus that a critical mass of vaccinated people, or herd immunity, means that even those who cannot be vaccinated for genuine medical reasons will have some protection from getting sick. 'It's hard to imagine what it would be that would let you accept killing an innocent child,' he said. 'What if I presented to you that this would make it worth it? This is the argument, right? Herd immunity. Herd immunity is the reason we're allowed to kill some children.'<sup>18</sup> Not merely Nazis but very specifically one particular Nazi. Fox News' commentator Laura Logan stated this about the Head of the Division of Allergy and Infectious Disease at the National Institute of Health, Dr. Anthony Fauci that "people all across the world" [were] telling her that America's top infectious disease expert is just like Josef Mengele, the notorious Nazi doctor known as the 'Angel of Death.'<sup>19</sup> So the laboratories we seem to be speaking of here are those at Auschwitz after 1943 when Mengele was transferred to the death camp.

Indeed, the instrumentalization of the Holocaust in this connection has somewhat longer reach in regard to Anthony Fauci. Fauci had been excoriated by Larry Kramer and ACT-UP for Ronald Reagan's policy of suppressing information about the spread of HIV and was labeled by him and others as "equal to Hitler and his Nazi doctors performing their murderous experiments in the camps—not because of similar intentions, but because of similar results."<sup>20</sup> And Fauci, then as now head of the National Institute of Allergies and Infectious Diseases, was—in this rhetoric—equal to the Nazi war criminal

Adolf Eichmann. While Fauci was at the NIH in the 1980s, his response, after much debate, was to include People with AIDs in all of the public health discussions at the time. One of the most virulent of these was the response to the ability, using the Western Blot Test, to identify those with HIV. Should the spread of HIV then be controlled through one of the oldest means available, the central registering of those who tested positive at the Medical Information Bureau and then contact tracing (as had been the case with syphilis)? Mark Senak, legal director of the Gay Men's Health Crisis, a New York AIDS services organization, who had had open confrontations with NIH and Fauci, rejected this notion: "A positive test result, if disseminated, is like being branded with a yellow star. It not only marks an individual as uninsurable, but can have a devastating impact on that person's ability to obtain housing, employment, and financial services."<sup>21</sup> All, by the way, quite true as, to even a much greater extent than under COVID-19, the fear of HIV/AIDS was a galvanizing factor within public opinion. The argument was not effective and HIV quickly became a reportable disease, much as COVID-19 did.

In Israel the definition of the laboratory as the place that the innocents were murdered was little different. The epidemiologist Hagai Levine said "that he received phone calls and comments online in which he was compared to Nazi war criminal Josef Mengele, who performed medical experiments on humans."<sup>22</sup> Needless to say, Holocaust survivors, come to be the witness of a fixed historical truth, the experience of the camps, one that they have born witness to, such as "Vera Grossman Kriegel, who was subject to cruel human experiments as a child by Nazi doctor Josef Mengele at Auschwitz, said she found comparisons between Mengele and vaccination advocates 'deeply disturbing,' adding: 'Today we get injections to live, during the Holocaust we got them to die.'<sup>23</sup> But eye-witnesses, even of genocide, are, as we learned with the Frankfurt Auschwitz trials, in which only two medical orderlies were tried, in the 1960s, not infallible. They too lived in the present, remembering the past, as Peter Weiss portrayed in his 1965 dramatization of the trial, *Die Ermittlung*. And by 2021 their numbers were diminishing.

When in December 2021 the Likud member of the Knesset Gadi Yevarkan denounced the institution of the so-called "Green Pass" available only to Israelis who have received a coronavirus vaccine booster dose or been vaccinated or recovered in the past six months since "millions of Israelis are without one; you're leaving out millions of citizens. . . . Do like they're doing in Austria, that's what you want to do. All that's missing is concentration camps," he was ordered from the hearing room and when he refused to leave

was forcibly removed.<sup>24</sup> The very notion of the laboratory thus is one that has inherently contradictory symbolic meanings in the regime of responses to the pandemic. One needs to understand that such references are not new. Rather the COVID-19 frame has altered their acceptability in Israel, as a recent commentary notes: “Holocaust awareness and discourse are not limited to the Holocaust as a historical event. Since the establishment of the State of Israel mentions of the Holocaust and Holocaust terminology have remained an integral part of public discourse on unrelated topics such as security, politics, and ethnicity.”<sup>25</sup> Yet it is simultaneously true that such use reflects a deep and insistent symbolic register as, whether directly impacted or not, either by age or geographic origin, “Within Israeli society, the Holocaust and Nazi medicine are the ‘benchmark’ for collective trauma, and thus they can be used to shift the traditional power balance. In other respects, this can serve to historicize public health interventions and policies along the continuum from ‘normal’ to Nazi medicine, or from public health to eugenics measures.”<sup>26</sup> “Laboratories” are part of that register.

Laura Otis in her brilliant book on the history and reception of the idea of the laboratory as a space for science, argues that the very idea of a modern “laboratory” is fraught with its own complex of issues, including what the ethical goal of such spaces should be. Otis both expands and deepens the sociological claims of Bruno Latour and Steve Woolgar in 1979 about the complex social interaction within the laboratory and between the laboratory and the greater world of science as a site for the accumulation of symbolic capital.<sup>27</sup> In Otis’ study of one of the first modern scientists at the first research university, the polymath Johannes Müller, whose students dominated nineteenth century German science, it was clear that Müller’s laboratory existed more in the minds of his students than in reality.<sup>28</sup> Her book, *Müller’s Lab*, noted that all of his students, from the physicist Hermann von Helmholtz to the physiologist Rudolf Virchow, had very different accounts of Müller as a researcher and his laboratory, when Müller himself actually did not have a physical laboratory in the modern sense at all. Hers is an exercise in how historical memory is constructed, quite different than the obsessive note taking of Latour and Woolgar’s bench scientists.<sup>29</sup> Perhaps “Fauci’s Lab” might be the symbolic space in which we should begin to understand the conflicted responses to the pandemic, especially in Israel. Is the laboratory one that is a sign of modern Israeli technological innovation or one of the recurring nightmares of the Nazi past?

The now global account of “Israel as laboratory,” however, was matched by the continued resistance on the elements of the Israeli community (not

necessarily the leadership) to vaccination. Many did not wish to define their unwilling role as the “subjects” of what they considered as an evil experiment as voluntary or positive. Physical attacks against vaccination centers were widely reported in Israel as elsewhere in the world. In December 2021 in Beersheva a man attacked a public health nurse providing vaccinations for children, an encounter that was videoed:

“Who gave them permission to enter with all this poison?” the man shouts. “Who let you in here, who are you? Murderers! Villains! Killing children in cold blood!” “Dogs, dogs,” he shouts as the woman walks to her car. “Let’s see where you’re going, sweetie, let’s photograph your car, your details.” When another Health Ministry employee begins to film the man, he shouts: “You’re a bunch of murderers!”<sup>30</sup>

It is the character of the public health authorities that is questioned here. Not the entrepreneur with *chutzpa* seeking to expand the laboratory to the glory of Israeli science, but now the villainous conspirator, following the claims of Qanon, engaged in the most deviant of acts against defenseless children. Not vaccine, but poison. The attacks on the public health physicians mirror such claims. Dr. Sharon Alroy-Preis, the Health Ministry’s head of public health, reported that these attacks go “to some very dark places—murder, hanging, doing bad things to my children, comparisons to the Nazis, there’s no end to it.”<sup>31</sup> How can one imagine the psychic space in which both the role of science as positive, indeed, exemplary, and the role of science as pernicious, indeed demonic, can function.

One can gesture in general toward an instrumentalization of the Holocaust in the course of COVID-19 on the political right, such as on Fox News in the United States and by Likud political figures in Israel. But the evocation of the Holocaust and its repercussion has neither just been on the Right nor limited to specific cultural spaces. It reappears consistently and globally. The claim that vaccine mandates, a commonplace since the eighteenth century and part of global public health certainly by the early twentieth century, violated the Nuremberg Code put in place after the “Doctor’s Trial” of accused Nazi perpetrators in 1947 to state the limitations on medical experimentation. (One needs to note here that Josef Mengele, the notorious doctor who undertook horrific experiments in Auschwitz, escaped justice not only at Nuremberg but completely, dying in Brazil in 1979.) Social media immediately generated claims that all pandemic responses violated this: “It is our duty to know our rights and hold these tyrants accountable! #Nuremberg2.0” and goes on to list

key points under the words “Nuremberg Code,” including “Voluntary informed consent,” “Fruitful result for the good of society,” and “Participants may freely end the experimentation.” Among the comments on the post were: “They’ve failed all!!! Bring on the trials,” I said this when this mandate started! This goes against the Nuremberg Code!” and “The Nuremberg Military Tribunals—Permissible Medical Experiments. The Great Awakening has begun. BRING ON THE TRIALS.”<sup>32</sup> By the winter of 2022, it was clear who was meant by these attacks, as leaflets bearing a Star of David, were found in Florida, California and Texas stating that “every single aspect of the COVID agenda is Jewish,” and limiting leaders of the fight against the pandemic, from the head of the CDC to the president of Pfizer. “Remember . . . those who argued that ‘If you’re against lockdowns, you’re against state power’ were literally *Shabbos Goy* (sic) carrying out the *will of the Jews*, wittingly or unwittingly.” Here the Jews were held responsible for the singular loss of liberty of the population through the very invention of the pandemic.<sup>33</sup> That some Haredi and Orthodox Jewish responses to the pandemic were identical to virulently anti-Semitic (Qanon) beliefs even while blaming one another is one of the findings of our earlier study. Consistency is not merely the hobgoblin of little minds; it is also the essence of all conspiracy theories.

In Israel groups, including the so-called “Anshei Emet” Fellowship, “a fellowship under establishment, in which the members are attorneys, physicians, public and general activists,” early filed a charge with the International Criminal Court in The Hague claiming a violation of the Nuremberg Code “as they made a choice to exercise their democratic right not to receive the experimental medical treatment (Corona Immunization), and who feel that great pressures, hard and illegal, are exerted upon them on behalf of the Government of Israel, members of the Knesset, ministers, senior public elected representations, heads of cities and more.” Evoking the “Patient’s Rights Law,” the petitioners see the early arrangement of the Netanyahu government with pharmaceutical companies, such as Pfizer, as proof of the violation of the Nuremberg Code and Israeli law “as he will receive a huge quantity of millions of vaccine portions, and with a preference over other countries, and in consideration, the vaccinated (residents of Israel) will serve as ‘Experimenters’ for the pharmaceutical company. It was agreed that the pharmaceutical company would receive from Israel all their medical, personal secret information without their knowledge or consent in advance.”<sup>34</sup> Now any one can lodge such a petition but what is clear from the language used is that the attempt to vaccinate the Israeli population was seen through the lens of Nazi atrocities. Central



to this was the idea of “informed consent” which gave agency to the patient or to the subject of the experiment.

One needs to note that this was analogous to the shaping of informed consent after WWII in the United States and subsequently in the State of Israel, through the Patient’s Rights Law of 1996. One can note the rather late integration of these standards into Israeli law. While the Israeli Basic Law: Human Dignity and Liberty (§4) provides that the government has an obligation to protect the life, body, and dignity of every individual, health is not recognized as a basic right. Health as an abstract, as Thomas Hobbes argued, is very different than health conceived of as an immediate and existential need, as in a pandemic. Ironically the relevant law is The Public Health Ordinance (§19) enacted in 1940. “In any town, village or area where an infectious disease assumes or is likely to assume an epidemic character or where there exists in the neighborhood infectious disease such as in the opinion of the Director constitutes a danger to the public health of such town, village, or area, the Director or Medical Officer may proceed to take such measures to protect the inhabitants thereof from infection as he considers necessary and may for this purpose inter alia subject the inhabitants of such town, village or area to such prophylactic inoculation or vaccination as in his opinion is necessary to limit the spread of infection. Any person who willfully refuses to submit to inoculation or vaccination under this section . . . is guilty of an offence and is liable to a fine not exceeding five pounds or imprisonment for a term not exceeding one month.” §20 of the Ordinance is an emergency powers provision which relates to a formidable epidemic, or to an endemic or infectious disease which threatens “any part of Palestine” and empowers the High commissioner to order “any such matters or things as may appear advisable for preventing or mitigating such disease,” including “the prophylactic inoculation or vaccination of the general public.”<sup>35</sup> British colonial law, rooted in William Blackstone’s summary of common law and his Hobbesian understanding of the obligations of the state to protect, as far as possible the individual, from epidemic remains the core of Israeli public understanding, much as it does throughout the Western world.

As late as 2013 there was a major debate addressing the differences in Israeli policy between emergency and prophylactic public health measures in the context of polio vaccines when wild polio virus was discovered in sewage. Should everyone be prophylactically revaccinated with an attenuated oral polio vaccine in order to preserve Israel’s record as “polio free” even in anticipation of an outbreak? Even with massive public health advertising and strong governmental involvement, the rates of revaccination were relatively low in many

sections of the country. A new mandatory public health law was proposed to cover situations in areas where vaccination rates were low, but never enacted.<sup>36</sup> Little or no discussion of “informed consent” was reflected in these debates as in virtually every public health intervention concerning infectious diseases.<sup>37</sup>

Informed consent for medical experimentation, not in regard to the public’s health, had been a hot-button issue in Imperial Germany, specifically in 1898 concerning the research of Albert Neisser, who discovered the pathogen responsible for gonorrhea, into the transmission of sexually transmitted disease to his subjects during his experiments with a treatment for syphilis.<sup>38</sup> Globally it was the Nuremberg Doctors’ Trial of 1946–47 that set a universal standard for medical experimentation. The horrors of the Nazi concentration camps demanded a rethinking of human experimentation.<sup>39</sup> It was only the Jewish Chronic Disease Hospital Case of 1963 that fixed the idea of informed consent within American public awareness.<sup>40</sup> And that only because of the massive coverage in the media from *TIME* magazine to local newspapers of the maltreatment of Jewish Holocaust survivors and others used as guinea pigs for cancer research. The Jewish Chronic Disease Hospital Case, however, had virtually no impact on the careers of the researchers involved, even with the powerful evocation of Nazi medical experiments on Jews during this public discussion. If this were the case in a world where Nazi victims were still present in the health care system in overwhelming numbers, it is of little surprise that as the reality of the Holocaust fades but its power as metaphor expands, COVID-19 becomes the site of victimization “like Auschwitz.” The irony of this is that the first death from COVID-19 registered in Israel was Arie Even, like some of the patients in the Jewish Chronic Disease Hospital, a Holocaust survivor.<sup>41</sup>

The power of the instrumentalization of history is clearest during the reaction to the public health measures taken to ameliorate COVID-19. Given the projection of such images of the Holocaust and the “SS State” on to contemporary state public health actors, both in the United States and Israel, the appearance in Germany among the far-right followers of the *Alternative für Deutschland* of yellow mock “Jewish star” armbands with the word “Ungeimpft” (unvaccinated) seems apposite.<sup>42</sup> The linkage in Germany between the various anti-democratic forces and the anti-vaccine movement has an even more pernicious impact given the shifting function of the Holocaust in German public discourse.<sup>43</sup> In the United States this appropriation has yet other shades of meaning, yet the Holocaust remains a central reference. Washington state Representative Jim Walsh wore a yellow Star of David during his denunciation of mask mandates: “It’s an echo from history . . . In the current context, we’re

all Jews.” In the COVID-19 era the symbol was meant to convey how “denying people their rights . . . can lead to terrible outcomes.”<sup>44</sup> By June 2021 the evocation of the Holocaust became a set trope for the opponents of virtually every public health measure, from wearing masks to the closing of public spaces not only in Germany but across the western world. Can history, as the Israeli academic Elena Gomel queried, “. . . itself be imaged as contagion? And if yes, what does it say about the relationship between the historical imagination and the current socio-political moment?”<sup>45</sup>

Suddenly, every player, Ultra-Orthodox Jew in Israel or not, becomes the metaphoric victim of state power, of the Nazis. In Britain the anti-state actors, calling themselves “StandUp X” went even further. On line they state that “it does not consent to the ‘illegal and disproportionate measures’ and argues that Britain is ‘living in a state of authoritarian control.’ Social distancing measures, the wearing of masks, the enforcement of lockdowns and ‘Covid Ghettos’ are among the rules and regulations StandUp X opposes.” They make the argument that especially the use of vaccines turns them into medical experimental subjects that “violate the principles of the Nuremberg Code.”<sup>46</sup> Not merely victims, but victims of the Nazis, forced into ghettos and subject to horrific medical violations. And this was true on the Left as well as on the Right as one of the most outspoken anti-vaxxers in Great Britain was Piers Corbyn, the brother of the former leader of the Labour Party Jeremy Corbyn. He was arrested in February 2021 for distributing a leaflet with an image of the gates at Auschwitz with the motto “Arbeit Macht Frei” (“work sets you free”) replaced by the phrase “Vaccines are safe path to freedom.”<sup>47</sup>

The fear of vaccination is an articulation of the fear of a pernicious loss of control of one’s body. There is an analogy to the collective fearing of vaccination and being seen as a laboratory subject in the rhetoric within the African American (and the BAME community in Great Britain). There, however, one does not find the counter example: the notion of being a player in a “living laboratory” combatting disease. One of the rhetorical reactions to the COVID-19 vaccine (not just the mRNA vaccine BUT all vaccines, including more traditional ones, against COVID-19) has been that they were experimental, that testing was too superficial. That as such it was an attempt on the part of the “government” to violate our bodies against our will. Indeed, to poison us in order to control us.

The historical moment that is most often cited concerning Black communities in both the United States and Great Britain is that of the so-called Tuskegee Experiment. One journalist summarized this as “perhaps the most

egregious example, [when] U.S. public health officials in the 1930s began a study in which syphilis was left untreated in Black men. Known colloquially as the Tuskegee experiment, the study didn't end until 1972, and has become shorthand among African Americans for a legacy of racism and mistreatment in the medical industry."<sup>48</sup> The study had its roots in a generalized claim that minorities responded to various forms of infectious diseases radically differently (read: inferior) than the majority "Whites."<sup>49</sup> This led to the long-standing claims that "ritually observant" Jews had greater immunity from tuberculosis and the "promiscuous" Blacks suffered from syphilis to a much lesser degree than Whites. Neither, by the way, is true. The study was initially funded by the Rosenwald Fund, founded by Julius Rosenwald, the Jewish President of Sears, Roebuck and Co. in 1912. It was one of the major supporters of both African-American education and health. Its intent was to examine syphilis seroprevalence in the American South and was "characterized as a humanitarian effort to benefit the health of rural African Americans. The study reported extraordinarily high rates of positive Wassermann tests, even among children."<sup>50</sup> While the initial intent may have been to examine the "normal" course of the disease, it is clear that its impact was to stress that the poor health of Blacks in the South was a risk to this source of cheap labor. The "white man's burden" of colonialism, with the concomitant rise of tropical medicine, was clearly paralleled by such undertakings in the Jim Crow South. Yet such views on Black health disparities, no matter what their source, were also very much in line with those of Booker T. Washington, the founder of Tuskegee Institute, also underwritten by Rosenwald, who launched National Negro Health Week with a lecture in 1914. "Without health, and until we reduce the high death rate, it will be impossible for us to have permanent success in business, in property getting, in acquiring education, or to show other evidences of progress."<sup>51</sup> The following year, the year of his death, the US Public Health Service created an annual "Negro Health Week." Thus, Tuskegee Institute remained the natural home of such a study. Paul Goldberger's more or less contemporaneous studies of Pellagra were attempts to counter such racial specificity, looking at poor Whites and poor Blacks in the south and the impact of poverty, rather than supposed character, in the etiology of the disease. It is at this moment, the age of the Muckrakers, of reformers such as Ida B. Wells and Jacob Riis, that social medicine becomes fashionable, hence the emphasis on the link between poverty and poor health. These debates frame the experiment but its continuation well into the mid-twentieth century violated not only the Nuremberg Code but all public health guidelines of the time.

The public impact of the Tuskegee Experiment came in 1972, when Peter Buxton, a Czech-Jewish refugee whistle blower in the US Public Health Service, leaked the details of the study directly to the media after the Public Health Service refused to act for years on his complaints. Then in 1981 James H. Jones published his bestselling study of the experiments, which in turn led to David Feldshuh's Pulitzer Prize nominated play, *Miss Evers' Boys* in 1992 and then to a seven-issue Marvel comic book series in 2003, *Truth: Red, White, and Black*. (Think of this as analogous to the 1992 Pulitzer Prize winning graphic novel, Art Spiegelman's *Maus*.) It became a core element in the symbolic register of the Black community in regard to all forms of allopathic medicine. The experiment was read as a violation of patient's right to know, a violation of the Nuremberg Code.

On December 2, 2020 the former President Barack Obama gave a pre-taped interview with SiriusXM host Joe Madison to promote his new memoir, *A Promised Land*. When asked about African-Americans potentially being skeptical about taking a COVID-19 vaccine given past medical experiments on the community, President Obama said he would "absolutely" take the vaccine himself:

And I understand, historically, everything dating back all the way to the Tuskegee experiments and so forth, why the African-American community would have some skepticism. But the fact of the matter is, is that vaccines are why we don't have polio anymore. And they're the reason why we don't have a whole bunch of kids dying from measles, and smallpox, and diseases that used to decimate entire populations and communities. . . . And I promise you that when it's been made for people who are less at risk, I will be taking it. I may end up taking it on TV or having it filmed, just so that people know that I trust this science, and what I don't trust is getting COVID. I think at this point, particularly in the African-American community, we are—African Americans, Hispanics, Native Americans—we have the highest death rates from this thing, and are most exposed and most vulnerable, in part because we have a lot of preexisting conditions."<sup>52</sup>

The African-American community had been to this point in time extraordinarily impacted by COVID-19, but through the constant evocation of the Tuskegee experiment it was also the subject of the most direct campaign of focused historical information that has heightened anxieties by evoking the worst-case scenarios from the past. In 2020 and 2021, the reality is communities of color are disproportionately impacted by COVID-19, health disparities

between these communities and the White majority do exist, as do higher rates of preexisting conditions. Yet the evocation of these historical cases has the effect of marginalizing today's actual social cause and marginalizing the actual cause of such anxiety that is rooted in the ongoing, systematic racism of today's Western societies by stressing the historical victimization of these communities in the medical research and treatment. These too have a history, but the examples become untethered to any specific events and the historical specificity but rather exemplary of the systemic racism of which American medical practice, theory, and delivery is clearly intertwined. The difficulty is that in doing this one is exemplifying the wrong aspects to be feared, experiment or exploitation, rather than access and equal treatment. The analogy, as we have seen, is the use of the Holocaust as the model within which the Ultra-Orthodox Jewish community understands their treatment by state authorities during the COVID-19 pandemic in the USA, Britain, and Israel.

Anti-Semitism and racism are as real in the present as they were in the past, but faulty analogies to specific cases such as these are intended to generate fear. As the African-American physician David M. Pressel observed as early as 2003: "The analogy drawn between the past practices of racially motivated physicians—Nazi or otherwise—and contemporary physicians should not be misconstrued as suggesting that we are the ethical heirs to Mengele. Nor should invoking a Nazi analogy be perceived as equating the magnitude of Nazi doctors' crimes with some unethical American medical practices. The analogy is used to illustrate that underlying biased perceptions of people's relative worth may lead to deplorable consequences."<sup>53</sup> All historical analogies demand some sort of suspension of specificity; all reveal the need to lump such moments in the service of the present.

The rhetorical use of the Tuskegee experiment here in the USA as well as in the UK and the complexity of the idea of being a Jewish citizen of Israel as a laboratory reveal complex relationships to the instrumentalization of history during the pandemic. The real problem for all individual and communities has been accessing the means to ameliorate the intensity as well as the transmission of the disease but an underlying fear is that this will not work, that we are merely guinea pigs in some other narrative over which we have no control. This is a problem among the Ultra-Orthodox who had been primed because of communal response to earlier vaccines that (it was claimed) had swine products, as contaminated and contaminating, analogous to the reality of the untreated victims of the Tuskegee experiment. Thus, the tale of the ideal nation-state as the perfect site for a successful undertaking in the arena of COVID-19 turns

out to be as riddled with inconstancies as the notion that the nation-state conspires with opponents of individual liberty to infiltrate and control their citizens, even those whose politics are at one with the existing government.

We speak of the instrumentalization of history as if there is a static past that gets used and reused for a wide-range of purposes, some benign, some positive, and some simply evil. But history itself, like the science that haunts it, is a process, not a fixed point. Fritz Stern, certainly one of the best recorders of a German history so vital for his own biography as a German Jew and an American historian noted long ago that “history is the cognitive expression of the deep-rooted human desire to know the past. . . . A discipline so close to life cannot remain fixed; it changes with time, with the impact of new hopes, thoughts, and fears.”<sup>54</sup> But it also a means of escaping knowing what the actual moment demands. Hans Ulrich Gumbrecht noted that we in the age of social media are dealing not only with “post-memory” but rather a heightened and focused refunctioning of history: “Different from the ever shrinking and therefore ‘imperceptibly short’ present of the historicist chronotope, the new present (that continues to be our present in the early twenty-first century) is one in which all paradigms and phenomena from the past are juxtaposed as being available and ready-to-hand. For this present, instead of leaving the past behind, is inundated with pastness, and at the same time it is facing a future which, instead of being an open horizon of possibilities, seems occupied by threats that are inevitably moving towards us (think of ‘global warming’ as an example).” How much truer of COVID-19. The laboratory has become, at least in one moment, that space that Gumbrecht describes: “Between the past that engulfs us and the menacing future, the present has turned into a dimension of expanding simultaneities.”<sup>55</sup>

Is Israel then a living laboratory? Of course, but a living laboratory for the rethinking and refunctioning of history not only in an age of plague, but in a world where all are forced constantly and without relief to use those fragments of history that seem the most able to both articulate and encapsulate fear. Fear defined always clearly but the crisp lines of its focus hiding its inherent instability.<sup>56</sup> Albert Camus ends *The Plague* (1948) emphasizing contagion’s resistance to narrative because of its inherent instability:

And, indeed, as he listened to the cries of joy rising from the town, Rieux remembered that such joy is always imperiled. He knew what those jubilant crowds did not know but could have learned from books: that the plague bacillus never dies or disappears for good; that it can lie dormant for years and years in furniture and linen chests;

that it bides its time in bedrooms, cellars, trunks, and bookshelves; and that perhaps the day would come when, for the bane and the enlightening of men, it would rouse up its rats again and send them forth to die in a happy city.<sup>57</sup>

But are the rats merely the vector for disease or are they the embodiment of the fear of plague, a fear now articulated by an instrumentalization of the Holocaust, a Holocaust loosed from its historical moorings with the shift of generations and its implementation within the public sphere?



## Notes

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# Environmental History and Jewish Studies: Methodological Intersections and Opportunities

*by Dean Phillip Bell*

I

## INTRODUCTION

As an early modern social historian who has explored natural disasters in history, I have often investigated the impact that such occurrences have had on the people who experienced them and their connection with, or amplification of, other upheavals (natural, social, and otherwise) in the past. Increasingly as we experience natural disasters today, I have found myself asking how contemporary experiences inform the way that we examine and think about the past, present, and future and how our scholarly approaches are informed by our politics and experiences. In what follows I review the contemporary development and orientation of the academic fields of Environmental History and Jewish Studies, noting their parallels and differences, before turning to suggest how the work in each of these fields may inform the other, how they can provide valuable lenses for seeing the past with more nuance and depth, and how they reflect the ways that we see our own world today and into the future. I begin with the case of an early modern natural disaster that I explored previously, that surfaces the opportunities to see how these two fields might intersect or diverge and where they provide possibilities to deepen our understanding and analysis of past events, as well as of our own present sensibilities and perspectives and our future directions and learning.

The harsh winter of 1783–84 was followed by major volcanic eruptions in Iceland and Japan, intense heat, and seismic activity in Italy. The volcanic ash that was released helped to decrease sunshine and average temperatures

over the next five years. Extreme cold oppressed much of central Europe, with record-setting snowfalls, resulting in extensive and dangerous flooding with sudden warming at the end of February 1784 along the Rhine River.<sup>1</sup> The scenes depicted and narrated of huge ice floats on the river and many destroyed bridges and buildings were terrifying. The ensuing floods washed away people, animals, and property—from personal property to religious institutions (including many religious objects).

The flooding led to practical on-the-ground responses and mobilized strong civic sentiments and cooperation—including efforts to stem the tide of the waters and to rebuild. It also fostered complex theological and cultural responses—including reflections on the power of God and the flood as punishment for human sins to more personal reflections. The flooding impacted Jews and Christians along the river and we possess numerous accounts and a diverse range of sources about this environmental event and the impact it had on individuals and communities—from community ledgers, memory books, political decrees, sermons, religious writings, correspondence, news reports, visual images, to flood markers and information about architectural structures and damage, for example. Traditional sources, in this case written by both Jews and Christians, can be combined with the kinds of sources, including the quantitative data and material culture remains, that Environmental History regularly interrogates. Given that this was an event that had significant environmental and social historical components, it affords us a chance to explore the ways in which Environmental History and Jewish Studies can work together. Before returning to this case briefly, allow me to provide some context for these two fields, which will surface similarities and differences and expose opportunities for interdisciplinary cooperation.

## **ENVIRONMENTAL HISTORY**

The environment—including natural disasters and responses to them—has always been a critical concern of humans and human society. Yet until relatively recently historians have neglected the study of the environment, choosing instead, well into the twentieth century, to examine politics, often in the form of the history of wars and great leaders. Environmental History, at least in its contemporary vein, has developed primarily since the late 1960s. In the midst of the cultural revolution and the innovations in a number of academic

fields, Environmental History has almost by design been interdisciplinary, and, along with other work from that period and beyond, it has leveraged and fostered innovative historical methodologies and opened new sets of research questions.<sup>2</sup>

In response to concerns about environmental issues, along with the social sensibilities that spawned social historical growth, environmental historians have often been concerned with the impact of the environment on prior civilizations as well as contemporary society.<sup>3</sup> The work of Environmental History has, as a result, been characterized by one scholar as being carried out at four overlapping and interrelated levels: the development of Nature itself over time; interactions between Nature and socioeconomics; environmental policy and planning; and changing cultural beliefs and values related to Nature.<sup>4</sup> In his broad reading of recent work in Environmental History, J. R. McNeill has identified three central varieties of Environmental History: material (focused on “changes in biological and physical environments”), cultural/intellectual (focused on “representations and images of nature in arts and letters, how these have changed, and what they reveal about the people and societies that produced them”), and political (concerned with “law and state policy as it related to the natural world”).<sup>5</sup>

Like all history to some extent, but perhaps sharpened by its context, Environmental History, even in its earliest days, has had a significant political and, at times, polemical tone.<sup>6</sup> As William Cronon has noted, “Like the several other ‘new’ histories born or reenergized in the wake of the 1960s—women’s history, African-American history, Chicano history, gay and lesbian history, and the new social history generally—environmental history has always had an undeniable relation to the political movement that helped spawn it. The majority (but not quite all) of those who become environmental historians tend also to regard themselves as environmentalists.”<sup>7</sup> In its embryonic stages, Environmental History in Germany—as compared with the discipline in the United States—was much more concerned with connections to political agendas. Dorothee Brantz has noted that, “In many ways, German environmental history was much more problem-oriented and driven by the political agendas of the time, such as *Waldsterben*, atomic energy, smoke and river pollution.”<sup>8</sup> Although Brantz finds increasing disaffection for such “agenda-driven scholarship,” and notes the need to retain critical distance from the subjects of research, she also cautions that environmental historians do well to remember political and social responsibilities, “given current problems and future challenges.” Regardless of whether they fashion themselves as political activists of

a generation or two ago, almost by definition many environmental historians and a fair amount of Environmental History engage politics and the political.

Paul Warde, who has published widely on early modern German environmental history, concurs that environmental history should, at its core, address the political. He writes that “. . . if environmental history ceases to say anything to broader politics, it will have lost its wider resonance. . . .”<sup>9</sup> But Warde offers a very useful observation for this essay. In assessing the intersection of environmental politics and Environmental History in Germany, he asserts that:

I think environmental history may still offer much to environmental politics, in that it can help us understand how, historically, the “environment” and the “social” are delineations that are historical and contingent, but also mutually determining: not just in the sense of “influencing,” but in that our very idea of the social is predicated upon a sense of what the environment is. We may discover in the long-term that “environment” is thus not the best term for what we really want to study, that it’s already a secondary phenomenon—but so is the social.<sup>10</sup>

As Warde signals, both the environment and society are in some ways constructs and, as such, subject to changing meaning in history and they can influence each other in deep and important ways. Indeed, looking back at the early discussions of scholars who examined environmental issues allows us to see how some contemporary social and political issues contributed to the framing of research, the discourse of evaluation, and even the conclusions drawn. Carolyn Merchant, for example in *The Death of Nature: Women, Ecology, and the Scientific Revolution* and other publications, advanced an argument that linked feminism with environmental change. Drawing from the developing fields of two social movements in the 1960s and 70s, Merchant charted the “age-old” connections between women and Nature. The female “mother earth” was pivotal to an “organic cosmology that was undermined by the Scientific Revolution,” with its mechanistic orientations, and “the rise of market-oriented culture in early modern Europe.”<sup>11</sup> Merchant held a dramatically, and today largely untenable, idyllic view of pre-modern society:

In 1500, the daily interaction with nature was still structured for most Europeans, as it was for other peoples, by close-knit, cooperative, organic communities . . . Thus it is not surprising that for sixteenth-century Europeans the root metaphor binding together self, society,

and the cosmos was that of an organism. As a projection of the way people experienced daily life, organismic theory emphasized interdependence among the parts of the human body, subordination of individual to communal purposes in family, community, and state, and vital life permeating the cosmos to the lowliest state. . . . The organismic metaphor, however, was immensely flexible and adaptable to varying contexts, depending on which of its presuppositions was emphasized . . .<sup>12</sup>

Merchant argued that Nature was simultaneously identified as nurturing, providing for mankind, as well as wild and uncontrollable, causing storms and chaos. Both qualities were associated with the feminine. “The metaphor of the earth as a nurturing mother was gradually to vanish as a dominant image as the Scientific Revolution proceeded to mechanize and to rationalize the world view. The second image, nature as disorder, called forth an important modern idea, that of power over nature. Two new ideas, those of mechanism and that of the domination and mastery of nature, became core concepts of the modern world.”<sup>13</sup> As a result, throughout her work, Merchant unsurprisingly evinced strong social connections. She argued with particular vigor that changes in descriptions in Nature can tell us a great deal about social and cultural changes as well.<sup>14</sup>

More recently, Wolfgang Behringer, in a work first penned in German and then later translated into English—*A Cultural History of Climate*—has taken what some would consider a radical political stand, even as he has helped to further the discussion of climate as a social and historical phenomenon. An early modernist who has written important works on the history of witchcraft and witch persecutions in Germany, Behringer begins by providing a historical context for perceptions of Nature, and climate change in particular. He writes that,

Repentance preachers blamed the sins of humanity for the climate vagaries of the Little Ice Age: an immediate change in behavior would supposedly calm God’s wrath and bring about better times. But the weather did not improve, even after scapegoats were identified and hunted down. Environmental sins are today described as the transgressions that are bringing about manmade climate change. But will an immediate shift in behavior or a hunt for scapegoats halt the climate change? The answer is: no.<sup>15</sup>

According to Behringer, the changing climate revealed in history did not lead to social collapse; in fact, at times it led to significant cultural responses and more permanent improvements to living conditions.<sup>16</sup> Remarking on the

political and philanthropic impetus for and contexts of recent discussions about global warming, Behringer cautions that a long—very long—historical look at weather reveals much more dramatic changes and extremes in climate than today, most un-induced by humans. Behringer argues further that the trajectory of science in the generations leading up to the 1990s had in fact appeared to be one much more concerned with global cooling. For Behringer, the current increase in global temperatures is still of a short duration and far less than some of the dramatic changes in the past, including those of the medieval warm period, which allowed increased ranges of human settlement and increased crop production. Behringer, accordingly, asks: “Advocates of the ‘hockey stick’ (indicating recent and accelerated climate change) look askance on the theory of a medieval warm period, because it allegedly serves to downplay the anthropogenic warming of the late twentieth century. If, without any human influence, the climate in the twelfth century was even warmer than at the height of industrialization, why should not today’s warming also have ‘natural’ grounds? . . . A warm period in the high Middle Ages can scarcely be disputed, however, if we stick to the climate data and compare them with the turbulence of the early Middle Ages or the subsequent Little Ice Age.”<sup>17</sup> Behringer, like others, utilizes a range of sources in his scholarship. This includes results of various scientific surveys utilizing radioactivity, sediment analysis, and ice drilling. But noting the importance of social evidence and human observations, he equally draws from archival materials, written chronicles, and public memories.

The works of Merchant and Behringer—quite different to be sure—reveal that both Nature and society are changeable and that we bring our own contemporary issues and concerns into conversation with the environment and the past. They also highlight that all writing, including historical writing, is political (especially in a postmodern context), including writing about Nature and natural disasters. Given the important connection these and other authors posit between Nature, the perception of Nature, and human society, we may ask both how Nature and changes in Nature affected society and how changes in society have altered the way that humans perceive and understand Nature—and, by extension, natural disasters. Can responses to and descriptions of the environment help us to understand subtle changes in human society under different conditions? Can they help us peer into daily life as well as life as it was played out at times of dramatic change and crisis?

That we ask such questions today is somewhat unique in historical writing, but it is not accidental. The same social conditions in the 1960s and 70s that spawned discussions of ecology and environmentalism, also led to



important discussions of social and political questions as well—beyond the feminism noted above. Here I have literary criticism and postmodernism in mind in particular.<sup>18</sup> Indeed, the language of much of those disciplines is one closely related to broader changes and ruptures. Michel Foucault and others understand that language and knowledge are related to politics and power and they make knowledge an object that can be excavated through careful analysis and broad contextual reading.<sup>19</sup> Utilizing metaphors that echo contemporary understandings of Nature, history, as other disciplines, is seen to deal with texts that are alive and connected, not inert. Indeed, discussions of Nature, and especially natural resources, came together seamlessly in late seventeenth-century mineralogies and eighteenth-century natural histories that expounded upon and celebrated the natural riches within specific German territories and in the context of mercantilism.<sup>20</sup> In this case, the land was seen as a product that could be improved for greater productivity and power, reflecting powerful historical and societal concerns.

Narratives of natural disasters, in particular, surface a number of issues that have been addressed by recent scholarly methodologies, especially in the fields of literature and history, and discussions among postmodernists. Postmodernism has critiqued the meta-narratives of Modernity and it has been concerned with issues of crisis, rupture, and discontinuity, making the study of natural disasters potentially very useful in understanding historical caesura and cultural and mental shifts. Foucault noted that, “The problem is no longer one of tradition, of tracing a line, but one of division, of limits; it is no longer one of lasting foundations, but one of transformations that serve as new foundations, the rebuilding of foundations. . . .”<sup>21</sup> Or, again, he wrote that, “Discontinuity was the stigma of temporal dislocation that it was the historian’s task to remove from history. It has now become one of the basic elements of historical analysis.”<sup>22</sup> At times, Environmental History appears to be ahistorical or even anti-historical, seemingly asserting in a utopian vein that “ideal nature is essentially without history”<sup>23</sup> and pointing to an alleged chasm between past (at times idealized) and present (corrupted).

On the one hand, Environmental History has often been associated with modern problems—indeed, it has frequently been enmeshed with modernizing theories and tendencies. In this way it has been defined at times by certain political contexts and national boundaries. On the other hand, the environment is itself unfettered by borders and Environmental History has allowed the opportunity for broader regional study, with particular advances in global and comparative history. Environmental History has also been increasingly applied

to divergent historical themes and periods prior to Modernity. Of particular concern have been the common, inconspicuous aspects of daily life and the lives and experiences of the powerless.<sup>24</sup> The early modern period, in particular, though certainly not solely, has benefited from innovative discussions of many of these and related important developments.<sup>25</sup>

Environmental History is frequently seen as interdisciplinary, drawing from a range of methodologies, utilizing a diversity of sources,<sup>26</sup> and addressing myriad themes in many different locations. Indeed, environmental historians engage discussions of time and place—making them indebted simultaneously to fields such as history and geography—as well as the relationship of nature and society, and allowing them to draw from scientific advances as well as anthropological studies. And yet, as has been pointed out recently, environmental and social historians often miss the opportunity to engage in constructive discussions—in which the sources used by environmental historians can help us to understand the impact on people's behaviors and ideas and how more traditional historical sources can help us to understand environmental conditions and changes, as well as changing perceptions of and interactions with Nature. They utilize divergent sources, which may challenge extant notions of geographical and political borders, as well as periodizations and historical models; and although the languages they employ might profitably be applied across disciplines, they can also lead to miscommunication.<sup>27</sup>

Some scholars are concerned that a marriage of environmental and social history might privilege culture or nature or local and regional as opposed to national identities.<sup>28</sup> Nevertheless, recent historians have made a strong case for the possibility and usefulness of combining the two approaches, especially given interests in generalizing and comparing history and long term developments and processes, openness to trans-disciplinary methodologies, innovative uses of historical sources and data, and concern with everyday life, particularly prevalent given the social concerns that environmental history, like social history, grew out of and with which they have been heavily concerned.<sup>29</sup>

Stephen Mosley argues that the combination of environmental and social history also holds out significant prospects for deeper understandings of social identity at the local, regional, and national levels. The field of environmentalism more broadly reminds us about the interaction of various fields of knowledge and action. As Frank Uekoetter has written, we must be mindful of the environment as a field for civic activities, policy, and culture, which themselves interact in many different ways in different situations.<sup>30</sup> William Cronon has similarly pointed out that human activities have environmental

consequences just as changes in Nature affect people. What is more, he argues that neither Nature nor culture are static, even if the rates and scales of change can vary dramatically depending upon context.<sup>31</sup> To a certain extent, our very knowledge of Nature is conditioned by our own cultural values and lenses. That it is, our perceptions are culturally constructed. Cronon writes that we encounter Nature “. . . only through the many lenses of our own beliefs, cultural institutions, and structures of knowledge, all of which can only hope to approximate natural reality in a mimetic or metaphorical fashion, never actually replicate it.”<sup>32</sup>

### **JEWISH STUDIES**

Like social history, it is instructive to take Jewish Studies in conversation with Environmental History. Jewish Studies has had a long, and somewhat storied, development. Some might argue that it began already in the biblical period, with inner-biblical commentary, or perhaps with the rabbinic interpretation and discussion of biblical texts and the crafting of Judaism as a religion. Certainly in the Middle Ages and early modern period aspects of Jewish Studies emerged—from textual analysis of the Bible to the study of history and the transmission of texts, to ethnographic work about Jews and Judaism. The academic study of Judaism developed in the nineteenth century in Germany, as part of the *Wissenschaft des Judentums*, and elsewhere. *Wissenschaft* scholars sought to find the entirety of Judaism, as it unfolded in various ways and sources. Immanuel Wolf noted that it “. . . unfolds Judaism in accordance with its essence and describes it systematically, always relating individual features back to the fundamental principle of the whole.”<sup>33</sup> At the same time, *Wissenschaft* scholars opened the study of Judaism to critical interpretation of sources, ranging from historical to biblical. In the twentieth century, aspects of biblical studies, along with a healthy dose of political history, economics, and the social sciences (especially sociology) animated much of the approach to Jewish Studies before the middle of the century.

Emerging from the same political, cultural, and intellectual cauldron as Environmental History in the 1960s, modern Jewish Studies was also affected by and engaged in contemporary issues and discussions—responses to the Holocaust, the development and growth of the State of Israel, the civil rights movement, the emergence of ethnic and gender studies programs in America

and elsewhere, the growth of interfaith dialogue, especially in the wake of the Second Vatican Council, the US Supreme Court ruling to allow teaching about religion in public institutions (1963), and massive changes in Jewish communities and demographics. Postmodernism and postcolonialism likewise played an important role in the development of Jewish Studies, with new attention lavished on minority groups as reflected in colonial and subaltern studies. In this case, however, Jews might simultaneously be considered a paradigm of minority success in the wake of persecution, and yet be cast as oppressors particularly in anti-Zionist circles.

As has been true in other academic disciplines, especially but not only in the social sciences, Jewish Studies has been and increasingly become largely an interdisciplinary endeavor that has benefitted from this broader connectivity and recalibration, and challenging the very nature of what an academic discipline or field actually means or comprises. As Adam Zachary Newton writes in *Jewish Studies as Counterlife: A Report to the Academy*, “So, maybe the true pathos of this conflict of modern faculties is to be found not among neighboring disciplines or even between disciplines and interdisciplines, but *rather at the root of disciplinarity itself*. . . .”<sup>34</sup> As a result, Jewish Studies is often an important academic testing ground for new theories and methodologies that cut across different topics and traditions, and it boasts and engages a diverse and intriguing source base. Like other academic fields, Jewish Studies has become more microscopic and local in focus. And yet, by its nature, Jewish Studies can simultaneously be global, comparative, and macro-oriented as well. This provides intriguing opportunities to explore a number of complex and interrelated issues in novel and systemic ways.

While once closely associated with formal Jewish communal agendas, and often religious orientations (especially in the US and Israel and places where the purveyors and participants of Jewish Studies have largely been Jews of various stripes), Jewish Studies has expanded far beyond the confines of communal identity politics and denominational confines. The individual agendas of scholars and the foci of funders, especially foundations but also individual major donors, have been important, as have been the proclivities, perspectives, and interests of both the purveyors (faculty, researchers) and participants (students of varied backgrounds and levels).

The potential, and often inherent, tensions between communal and academic orientations and goals were noted early on. Robert Alter noted already in the early 1970s that, “I do not want to say that Jewish studies in the universities will have no effect at all, or a negative effect, on the issue of group survival

that so concerns the Jewish community, only that the effect will be much more oblique and complicated than many in the community imagine.”<sup>35</sup> He noted further that, “. . . any instruction in the humanities, though ideally critical and disinterested, is never value-free. Certain fundamental intellectual allegiances, aesthetic and perhaps moral preferences, surely come into play when a teacher decides on a curriculum, when he chooses emphases and approaches in the presentation of his materials, simply when he devotes himself to a particular field of study.”<sup>36</sup> In some places, such as Germany, but increasingly in the US as well, the market for Jewish Studies courses and research now extends far beyond the Jewish community or identifying Jews, providing opportunities for mainstreaming Jewish Studies, engaging with other sources, perspectives, and approaches, and challenging more traditional notions of Jews and Judaism.

Jewish Studies, especially over the past several decades, has been characterized by disparate and diverse research topics and global concerns. A once inward-looking and often lachrymose sensibility that emphasized Jewish learning and the persecution of Jews throughout history has changed into a scholarship that actively engages with Jewish interactions with the broader world, and changes as a result of those interactions, and that grapples with the impact of acculturation (seen more regularly as a positive and transformative force, as opposed to the much maligned and to-be-avoided assimilation). What is more, scholars have pivoted to explore many other aspects of Jewish life and experience, within local as well as more regional, national, global, and comparative ways, cutting across traditional disciplinary and at times chronological boundaries.

Recent work in Jewish Studies has explored many contemporary issues, including identity, agency, power relations, particularity and universalism, and acculturation. Studies of the Holocaust have informed some aspects of Jewish Studies—especially questions of rupture and crisis, trauma, victimization, memory, ethics, continuity, and power/powerlessness. Indeed, Modernity more generally has brought a sense of rupture for some. As the historian Yosef Hayim Yerushalmi noted in his popular work *Zakhor*, “The modern effort to reconstruct the Jewish past begins at a time that witnesses a sharp break in the continuity of Jewish living and hence also an ever-growing decay of Jewish group memory. In this sense, if for no other, history becomes what it had never been before—the faith of fallen Jews.”<sup>37</sup>

The recent emphasis on Israel and Israel Studies, almost as a subfield within Jewish Studies, has posed questions of politics and power (especially in the discourse of colonialism), hybrid identities, ideas of homeland, and

peoplehood and collective identity. Postmodernism has also impacted Jewish Studies, with its penchant to challenge objectivity, essentialism, and even truth; its attempts at radical contextualization and interpretation (and emphasis on the powerful role of language); its dismantling of holistic and coherent meta-narratives (instead focusing on the local and micro); and its examination of the experiences of victims and minorities. Jewish Studies, as a field, has experienced many of the same shifts and foci as other academic disciplines. It is, at the same time, traditional and innovative, often providing a rich ground for new and complex methodologies.

### **INTERSECTIONS AND OPPORTUNITIES**

Environmental History has opened important windows onto the range of human experiences in history, at times allowing for broad understandings of popular culture and cultural innovations, social and economic structures, and intellectual and religious transformations.<sup>38</sup>

Environmental History and Jewish Studies, as we have seen, share a number of characteristics and foci that draw from some similar contexts and that can enrich and deepen one another. They are both consciously, productively, and unapologetically interdisciplinary, which offers opportunities to expand the scope of topics and sources available for studying the past as well as the chance to develop, test, and apply a diverse range of academic disciplines and methodologies conditioned by traditional scholarship and responding to contemporary concerns. Both emphasize the importance of environmental (in many senses of the word) conditions and contexts as well as the diversity of experiences and developments. Both explore long-term and shorter durations and, as such in Jewish Studies, often examine tradition together with innovation and change.

Indebted to the postmodern turn, both Environmental History and Jewish Studies often explore and run up against politics and polemics. They challenge inherited notions of power, causality, and control, and instead emphasize the dynamics of power relations. Where Jewish Studies may sometimes lean towards the particular to understand the impact of various historical and contemporary forces on Jews and Jewish communities—even when Jewish Studies takes a broader, global, and more comparative perspective—Environmental History reminds us to pull back and see larger, and at

times longer-term, structures and processes as well as specific events. If Jewish Studies and Environmental History both balance the universal and particular, they do so often with different weighting and emphasis and so taken together give us the chance to deepen the discussion of both aspects of past experiences and present politics. Both have pointed to the importance of crises, ruptures, divides, and change. In this postmodern context, they have emphasized diversity and different explanatory models and they have blurred the distinctions between objective and subjective perceptions and representations.

In terms of both methodology and sources, Environmental History expands the range of sources that many Humanities and Social Science disciplines have engaged. This is true of various aspects of material culture, as well as living and natural archives. In plague history, for example, ancient DNA has been used along with excavations of burial sites; no less have climate and natural events and disasters been woven into historical accounts. Such events offer opportunities to see long-term changes as well as the experiences of daily life in many different settings. In this way, Environmental History also teaches us to look for changes in perspectives and behaviors at differing levels over periods of time and, since Nature does not always abide by political boundaries, it challenges us to compare developments and realities across religious and geographic divides. In the divide between Nature and Culture, Environmental History forces us to see how (and why) society and relationships are constructed and enacted in the ways that they are. Environmental History, as a result, tests the impact and limitations of technology and the constructed world and it provides models of systems thinking (through restoration, reconstruction, adaptation), which can offer valuable approaches to aspects of Jewish Studies—how we define culture, how we think about change, and how we evaluate influence, connections, and relationships. While Jewish Studies has often existed beyond the academy, Environmental History literally models taking down the walls and exploring the uncultivated—considering the impact of nature and other complex contextual conditions.

Returning to the case of the flooding of the Rhine, with which I began, the diversity of sources and methodologies presented by Environmental History and Jewish Studies allow us to peer into daily life and to see interactions between people of the same and different religious denominations and communal and familial networks within and beyond individual cities and towns in nuanced ways. While social standing often played a role in damage sustained (as wealthier folks typically lived further from known flood zones) and while many latent tensions continued on after the flood had wreaked its

havoc, we see both opportunities for engagement and some long-term shifts, especially regarding Jewish legal status in the broader society, but also changing perceptions of the environment, the role of science and religion, and the mutual impact of Nature and humanity on each other. The written texts belie Jewish integration and barriers to such integration on the Christian side and a complicated mix of Jewish particularism and universalism on the Jewish side. Nature's archives let us understand the broader context of the flooding, placing it into regional, national, and global settings (in addition to the local) and they allow us to assess with more precision the nature of changes and the impact of the flooding and the response, reconstruction, and reorientation after the disaster.

Emerging from similar political, intellectual, and cultural developments, Environmental History and Jewish Studies have much to offer and have been used to advance scholarship in many ways over the past several decades, enriching these and other fields. The overlapping approaches of these two fields can reinforce the methods and research trajectories that are possible. But their differences are also instructive and can serve to open new areas of study, expand source materials, and ask us to consider a range of questions and issues, which have contemporary resonance and that make historical events and developments richer in their own context and more relevant for today and tomorrow.



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*Notes*

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1. Dean Phillip Bell, "Navigating the Flood Waters: Perspectives on Jewish Life in Early Modern Germany," *Leo Baeck Institute Yearbook* 56 (2011): 29–52.
2. J. R. McNeill, "Drunks, Lampposts, and Environmental History," *Environmental History* 19 (January 2005): 64–66; William Cronon, "The Uses of Environmental History," *Environmental History Review* 17, no. 3 (Fall 1993): 4; Timo Myllyntaus, "Environment in Explaining History: Restoring Humans as Part of Nature," in *Encountering the Past in Nature: Essays in Environmental History*, ed. Timo Myllyntaus and Mikko Saikku (Athens, Ohio: Ohio University Press, 1999/2001), 141–60.
3. Alfred W. Crosby, "The Past and Present of Environmental History," *American Historical Review* 100, no. 4 (October 1995): 1182–83.
4. Stephen Mosley, "Common Ground: Integrating Social and Environmental History," *Journal of Social History* (Spring 2006): 916; Myllyntaus, "Environment in Explaining History"; Donald Worster, "Doing Environmental History," in *The Ends of the Earth: Perspectives on Modern Environmental History*, ed. Donald Worster (Cambridge: Cambridge University Press, 1988), 293.
5. J. R. McNeill, "The Nature of Environmental History," *History and Theory* 42 (December 2003): 6.
6. *Ibid.*, 34.
7. Cronon, "The Uses of Environmental History," 2; Joachim Radkau, *Nature and Power: A Global History of the Environment*, trans. Thomas Dunlap (Cambridge: Cambridge University Press, 2008).
8. "The Nature of German Environmental History," *German History* 27, no. 1 (2009): 127.
9. *Ibid.*, 128.
10. *Ibid.*
11. Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution* (San Francisco: Harper & Row, 1989), xvi.
12. *Ibid.*, 1–2; see also Radkau, *Nature and Power*, 221–22.
13. Merchant, *The Death of Nature*, 2.
14. *Ibid.*, 4–5.
15. Wolfgang Behringer, *A Cultural History of Climate*, trans. Patrick Camiller (Cambridge: Polity, 2009), vii.
16. *Ibid.*, viii.
17. *Ibid.*, 74–75.
18. Radkau, *Nature and Power*, 272–80.
19. Moshe Rosman, *How Jewish is Jewish History?* (Oxford: The Littman Library of Jewish Civilization, 2007), 2–3.

20. Alix Cooper, "‘The Possibilities of the Land’: The Inventory of ‘Natural Riches’ in Early Modern German Territories," in *Economies in the Age of Newton*, ed. Margaret Schabas and Neil De Marchi (Durham: Duke University Press, 2003), 130, 140ff.
21. Michel Foucault, *Archaeology of Knowledge* (London: Routledge, 2002), 5.
22. *Ibid.*, 8.
23. Cronon, "The Uses of Environmental History," 10–11.
24. Alan Taylor, "Unnatural Inequalities: Social and Environmental Histories," *Environmental History* 1, no. 4 (1996): 8; McNeill, "The Nature of Environmental History," 21–22.
25. Mosley, "Common Ground."
26. Taylor, "Unnatural Inequalities," 8.
27. Mosley, "Common Ground," 917.
28. *Ibid.*, 919.
29. *Ibid.*; Taylor, "Unnatural Inequalities," 8.
30. Frank Uekoetter, "Consigning Environmentalism to History? Remarks on the Place of the Environmental Movement in Modern History," *Rachel Carson Center Perspectives* 7 (2011): 12–13.
31. Cronon, "The Uses of Environmental History," 13–14.
32. *Ibid.*, 15.
33. Michael A. Meyer, *Ideas of Jewish History* (New York: Behrman House, 1974), 152.
34. Adam Zachary Newton, *Jewish Studies as Counterlife: A Report to the Academy* (New York: Fordham University Press, 2019), 13.
35. Robert Alter, "What Jewish Studies Can Do," *Commentary* 58, no. 4 (1974): 75.
36. *Ibid.*, 75; Martin Goodman, Jeremy Cohen, and David Sorkin, eds., *The Oxford Handbook of Jewish Studies* (Oxford: Oxford University Press, 2002), 3.
37. Yosef Hayim Yerushalmi, *Zakhor: Jewish History and Jewish Memory* (Seattle: University of Washington Press, 1996), 86.
38. Uwe Lübken and Christof Mauch, "Natural Disasters in Transatlantic Perspective: River Floods in German and U.S. History," *GHI Bulletin* 35 (Fall 2004): 99.

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# Changing Climates: Zionist Medical Climatology in Palestine, 1897–1948

*by Netta Cohen*

**T**his essay focuses on Zionist medical perceptions concerning the climate in Palestine from the establishment of the Zionist Organization in 1897 to the founding of the State of Israel in 1948. During this period Zionist medical approaches towards the climatic conditions in Palestine were not always consistent and they tended to reflect the general shift in Zionist perceptions towards both the Jewish body as well as the new Jewish homeland. More precisely, as we shall see, the aim of establishing a settler nation among European Jews was, at first, based on a romantic belief in an autochthonous belonging to the land. Thus, at the turn of the twentieth century many Zionist leaders and thinkers attempted to highlight what they perceived as an “organic” link between the Jewish people and the environmental conditions in Palestine. However, following the actual encounter of Jewish settlers with the natural realities of Palestine—especially after the establishment of the British Mandate in 1921, the increasing immigration of urban middle class European Jewish refugees during the interwar period, and the emergence of the Arab-Jewish conflict in this territory—discussions on climate gradually lost their romantic attributes and instead became associated with colonial scientific ideas on the perceived dangerous implications of non-temperate climates on Jewish European bodies and minds.

Yet, unlike some sections in colonial medicine that were meant to “protect” Western officials who were sojourning in warm regions from the so-called enervating influences of such climates, Jewish settlers in Palestine wished to take root in this country. Therefore, similarly to other contemporary

settler societies, Jewish medical doctors focused in their theory and practice on the ways in which settlers would best *acclimatize* in the local climate. The main medical branch that was occupied with these questions and which is the subject of investigation in this article is known in the historical literature as medical climatology.<sup>1</sup>

Colonial fears of warm climates are often also associated in the literature with tropical medicine. This medical branch was similarly linked with imperial expansions into tropical (and other non-western) regions, and it was supposed to “heal” them from their so-called diseased conditions. Indeed, tropical medicine was practiced in Palestine starting from the 1920s by the British authorities, by Zionist medical institutions, as well as by local Palestinian physicians who were all concerned about local diseases such as malaria, trachoma, and cholera which were understood to be, among other things, an outcome of the environment.<sup>2</sup> Nevertheless, as far as I am aware of, as natives to this geography, Palestinian physicians rarely discussed the local climate as a medical threat in itself or approached it via its racial (regenerative or degenerative) implications.

Alternatively, as I will demonstrate, Zionist medical concerns within the sub-field of medical climatology were directly linked to a contemporary colonial and metropolitan discourse about race. In this context, the liminal position of European Jews as a minority aspiring to liberate itself from a long history of persecution and oppression, on the one hand, and the tendency to embrace colonial ideas and practices as part of the Zionist attempt to obtain a non-European territory, on the other, were also reflected in contemporary medical approaches and specifically in those pertaining to climate.

In making this claim, I comply with the analysis of Dafna Hirsch, who in her influential work on hygiene in Mandate Palestine, stresses the ambivalent position that acculturated Central European Jews held between the Orient and the Occident. According to Hirsch, east and west have been used interchangeably by this group as dynamic categories that continuously constructed and reconstructed one another. Explicitly, she argues that during the Mandate period Jews who adhered to Western values and behaviours in Palestine, often constructed their own Occidentalism by Orientalizing other groups (such as Arabs, Mizrahi and East European Jews).<sup>3</sup> Nevertheless, while Hirsch discusses these categories in relation to general hygiene education in Palestine and analyses them as embedded in a “modernizing” discourse, in my work I wish to position these categories, specifically in relation climate in a colonial discourse.<sup>4</sup>

This distinction is significant not only because I believe that the definition of the Zionist project through its settlement ideologies, strategies and

practices is essential to its general understanding.<sup>5</sup> Nor is the use of the colonial framework of analysis important solely as a result of the long European history of notions about non-temperate regions which was known to and absorbed by Zionist physicians.<sup>6</sup> Colonialism should also be a central lens in the examination of the medical discourse about climate in Palestine because of the specific settler colonial attributes of the Zionist project which, as we shall see, added further nuances to its approaches to the local environment and its Arab inhabitants. Indeed, through the prism of climate Jewish physicians in Palestine aimed to distinguish the settler population from its surroundings while presenting this group as a European minority in the Middle East. However, at the same time, as settler colonials who wished to stay in their new territory (and “survive” and prosper in its climate), Jewish physicians understood that they must advance a discourse of integration and indeed acclimatization.

In addition, while Palestinian Arabs were usually not a target group for studies in medical climatology (as it was assumed that this population did not need to acclimatize in its homeland), they, nevertheless, played an important reference point according to which Jewish settlers tended to locate themselves. In other words, when wishing to transform the Jewish settler society into a native society in Palestine, Jewish physicians often pointed at Arab behaviours and lifestyle and argued that some of these behaviours should be adopted and copied. At other times, when settlers wished to highlight their separation from the local Arab community, they presented local Palestinian lifestyle as backward.

It should be recalled that unlike imperial officials who were primarily motivated by maximizing profit via extracting nature resources and exploiting indigenous labour, settlers usually placed great importance on the territory as a desired site of social transformation which they intended to make their own. As a result, settlers wished less to govern indigenous people or to recruit them in their economic undertakings than to seize their land, eliminate them or push them beyond an ever-expanding frontier.<sup>7</sup> However, the elimination of indigenous presence by settler societies was not always expressed in physical annihilation. Before 1948 there were two other prominent forms of elimination in Palestine. The first form of elimination was manifested in formal and informal political, cultural, economic, and physical segregation and separation between Jews and Palestinians. This approach was often linked with Jewish feelings of anxiety from and disgust of the natives and their lifestyle and it tended to also associate the local climate and environment with so-called Palestinian neglect. The second form of indigenous elimination, that might initially appear

as contradictory to the first form, was expressed in the active absorption of, fascination with, and even appropriation of local customs, knowledge, and culture. According to Rayna Green the cultural appropriation of indigeneity is based on a logic of genocide in which non-native peoples imagine themselves as the rightful inheritors of what previously belonged to the local population, thus entitling them to ownership of this land.<sup>8</sup> Professional discussions in the sub-field of medical climatology excel in reflecting this intricacy.

Since antiquity, climate has been routinely invoked in the explanation of human moral and physical variations. Following the encounter of Europeans with unfamiliar environments in the so-called New World, climate received renewed attention and gradually became a central explanation for the Otherness of non-European environments and people. The modern version of the conjecture between race theories and neo-Hippocratic theories during the nineteenth and twentieth centuries was known as medical climatology.<sup>9</sup> This medical branch concerned the various physical and psychological effects of general climatic and weather factors on human beings. Among the most important questions raised by medical experts in this context was whether European people could acclimatize to natural environments disparate from those to which they were used. Indeed, the notion of acclimatization had clear implications for colonial strategies, in particular determining whether Europeans could or should settle the distant geographies they controlled. Once settled, they began to ask themselves how foreign natural environments would physically and mentally affect colonizers in the short and long term.

According to historian Mark Harrison, before 1800 there was optimism regarding the prospects of such acclimatization. However, towards the beginning of the nineteenth century this optimism began to fade, a shift that Harrison links to changes in ideas about race as well as to the consolidation of colonial rule in many parts of the non-temperate world.<sup>10</sup> Nonetheless, during this time the concept of acclimatization did not disappear entirely, but rather transformed into what Harrison calls “weak transmutation.” This view accepted and acknowledged the effects of climate, but drew these effects out over many generations, thereby reconceptualizing climate as “a remote rather than an immediate influence on human development.”<sup>11</sup>

Generally, conceptions of race did not preclude the scientific education of emancipated Jews. On the one hand, Jewish interest in race sciences reflected their successful integration in Western scientific circles. On the other hand,



it pointed to the limitations of their integration, while serving as a response to the ongoing denigration of Jews as an inferior race. Race was also invoked to reinforce a conception of Jews as a *Volk* and nation instead of a religion. In fact, according to Mitchell Hart the notion of Jewish racial decay and the rise of Jewish nationalism were deeply intertwined. For Zionists, racial notions were not only a means of strengthening Jewish national identity, but also a tool for clarifying the urgency of the nationalist cause. According to them, Jews were a nation and race essentially different from other races and nations with whom they had integrated and assimilated over the past centuries. Thus, a Jewish homeland would contribute to their racial re-isolation, thereby preventing their perceived degeneration.<sup>12</sup>

However, Jewish scientists, including those who adopted the notion of “pure races,” preferred scholarly accounts that emphasized the influences of environmental, historical, and cultural elements in the development of races, while rejecting those that focused upon heredity alone. By locating Jewish degeneration in environmental conditions rather than in strictly hereditarian ones, Jewish doctors and social scientists presented the task of environmental transformation as equal to physical improvement. Jewish scientists such as Elias Auerbach, Arthur Ruppin, and Redcliffe Nathan Salaman explained that the Jewish *Urtypus* (primal type) was created in Palestine in ancient times and, thus, his “return” to the “biblical homeland” would correspond with its ancient nature.<sup>13</sup>

This rhetoric was also expressed in a text published in 1904 by Otto Warburg, a German-Jewish botanist and the president of the Zionist Organization between the years 1911 and 1921. Warburg wrote:

The fact that Jews are able to tolerate the Palestinian climate cannot be doubted; indeed, it is their original homeland [*Heimat*], and even if they have managed by now to also acclimatize in northern climates, the next generation of Jews living in Palestine will soon feel well in its climate just as the local Arabs do.<sup>14</sup>

On the contrary, Warburg wrote about Germans of the Templer community in Palestine that they only fitted Nordic climates. In the same text he commented that “All German attempts to move to the south have so far failed.”<sup>15</sup> By expressing these ideas Warburg mirrored the political and racial ambiguity that became part of the discussion on acclimatization in countries such as Germany and France. The renowned German scientist Rudolf Virchow, for example, who had the reputation of a progressive republican, manifested his

objection to German colonialism by opposing the possibility of German acclimatization in warm climates. In 1885 Virchow published an article entitled, “De l’acclimatement des Européens aux colonies.” In it he claimed that the nations of northern Europe consisted of a higher concentration of Aryan blood compared to southern Europe. This diagnosis enabled him to explain why, for example, the French have suffered greater loss in life in the Caribbean than the Spanish. About Jews, Virchow wrote that they were the “least Aryan” of all people and, hence, they were the best candidates for colonization.<sup>16</sup>

In their texts Warburg, Virchow and many others expressed a common national view of the late nineteenth century which, following neo-Lamarckian paradigms, bolstered the idea of an “organic” link between nations and their so-called primal environments. As we can see, as part of this paradigm, Palestinians at the beginning of the century, were, in fact, not portrayed as having better or worst racial characteristics in comparison to Jews. They were rather presented as people who were inhabiting their “natural” environment. This was the same environment in which Jews—considering their mythological history—were supposed to become native in as well.

Moreover, Palestine was sometimes also portrayed as a destination whose climate had the potential to heal ill patients (especially of Jewish background). Positive descriptions of the local climate frequently presented medical studies which showed the curative qualities of sun radiation on the development of children, the therapeutic virtues of the Tiberias Hot Springs as well as of several other healing resorts in high altitudes within the country.<sup>17</sup> Physician Aaron Sandler wrote about the potential “salubrious” resorts in Palestine while also alluding to their Central European counterparts:

The Palestinian climate offers splendid opportunities for the erection of Sanatoria and the establishment of spas [. . .]. Patients who require a rest-cure, who are convalescent, anaemic, neurotic, or tubercular, could be efficiently catered for, amid the beautiful scenery of Carmel and the Lebanon. [. . .] Tiberias, [. . .], with its mild winter climate, is of course famous for its springs [. . .]. They resemble some of the *Carlsbad wells*, and have the same effect when drunk [. . .]. Authorities are agreed that if these wells were in Europe, they would constitute one of the most popular spas.<sup>18</sup>

Indeed, in 1913, some Jewish physicians were already performing medical experiments in the Tiberias’ hot springs. However, it was only in 1932 after the refurbishment and the reopening of the springs with the help of British official institutions that they became a popular Jewish health resort. Sandra

Sufian points out that despite its mission to heal—or perhaps because of it—the doctors involved in the project advocated national separation within the hot springs. Following their reopening in the 1930s, a professional recommendation was made to set separate hours for Jewish and Arab patients.<sup>19</sup>

Zionist medical climatological publications often also alluded to Biblical and Talmudic texts. Physician Hillel Yaffe, for example, cited a famous Talmudic verse, writing that “the air of the Land of Israel creates enhanced wisdom” (אֲוִירַא דְאֶרֶץ יִשְׂרָאֵל מְחַכִּים)<sup>20</sup>—“but,” he added, “it also heals.”<sup>21</sup> The allusion of medical studies to ancient Jewish texts was meant to provide “historical” evidence for the “nativeness” of Jews in Palestine. In addition, it was supposed to convince a large number of European Jews to settle Palestine despite their doubts and fears of the difficulties that they might have to confront in this country.

Nevertheless, cheerful depictions of the climate in Palestine did not always match reality on the ground. Isaac Kummer, the protagonist of Shmuel Yosef Agnon’s classical novel *Only Yesterday*, said about the Zionists in his hometown, “they’ll give you prooftexts from the Talmud that the air of the land of Israel is healing, but when they travel for their health, they go to Carlsbad and other places outside the Land of Israel.”<sup>22</sup> Indeed one of the central medical traditions, utilized by Jewish physicians as a source of reference for their climatologically-related practices in Palestine, was the work conducted by physicians in natural healing resorts in Central Europe.

It should be stressed that natural healing resorts often retained strong colonial significance. According to historian Eric Jennings, already by the first half of the nineteenth century, hydrotherapy, for example, had positioned itself as one of the few countermeasures to the alleged degenerative and enervating effects of warm climates. Indeed, the connection was so unmistakable that according to Jennings, the town of Vichy and its natural spas owed much of its growing prosperity and development to colonial expansion. In their remarkable guide to spas for colonials from 1923, Serge Abbattucci and J. J. Matignon—practitioners of both tropical medicine and hydrotherapy—explained that the Frenchman in the tropics faced three central dangers: the ethnic threat, the pathological threat, and the climate threat. Hydrotherapy spas were supposed to answer all three according to the French doctors.<sup>23</sup>

In the Jewish-European context of the late nineteenth century medical spas initially reflected the Jewish desire to become part of a local professional and cultural elite while eventually demonstrating their failure to do so and their inferior social and professional position in the countries which they inhabited.

As historian Mirjam Zadoff demonstrates skilfully, healing resorts such as Carlsbad, Marienbad, and Franzensbad in central Europe were extremely popular among the European bourgeoisie. Moreover, Zadoff adds that spas in the second half of the nineteenth century grew into places that were identified with relaxation, leisure, and social encounters and as such they also became important sites of social and cultural mobilization for Central European Jews.<sup>24</sup>

Of particular significance in this context was the fact that seventy-five percent of the lecturers who were engaged with the theory and practice of natural healing resorts at the University of Vienna had a Jewish background. Zadoff explains this by pointing out that, although since 1867 discrimination of Jewish scientists was illegal in the Austrian-Hungarian Empire, Jewish medical experts boasted better chances of developing their careers in small medical specialties where competition was markedly lower. In addition, the fact that medical climatology was considered new and innovative, while at the same time promising a respectable income (largely at private spas), made it particularly attractive for Jewish physicians.<sup>25</sup> German-Jewish physician Theodor Zlocisti particularly praised the work of medical doctors of Jewish descent who contributed to this field of medicine. In his book *Palestine's Climatology and Pathology* (*Klimotologie und Pathologie Palästina's*) published in 1937 he wrote: "today we talk about the effects of climate on the body [. . .] thanks to the work of—especially—Jewish physicians such as Angelo Mosso, Nathan Zuntz, Adolf Loewy."<sup>26</sup>

As it is well known, during the 1920s and 1930s, a large group of educated middle classed Jews who largely obtained their education in German-speaking universities settled in Palestine. Many of them were physicians. Nissim Levi and Yael Levi, who collated statistical information on Jewish physicians in Palestine from the late eighteenth century until 1948, argue that during the first half of the twentieth century the most common medical schools among Jewish physicians in Palestine were those of the universities of Berlin, Vienna, Freiburg, Munich, and Heidelberg.<sup>27</sup>

Among the physicians whom I shall discuss in the following pages was Jacob Seide, who immigrated to Palestine in 1934 following the rise of National Socialism in Germany. Seide was born in 1900 in the Austro-Hungarian city of Lemberg (today the Ukrainian city, Leviv), and studied medicine in Prague, Vienna, Munich, and Würzburg.<sup>28</sup> Another noteworthy physician, whom I mentioned already, was Theodor Zlocisti. Born in 1874 near the city of Danzig, he studied in Berlin and during WWI served as a doctor for the German Red Cross in Constantinople. A zealous Zionist, he visited Palestine twice before finally immigrating there in 1921.<sup>29</sup>

Unlike the romantic views on climate which we have seen earlier, these physicians often presented a rather distorted view concerning the health implications of the warm climate on Jewish European bodies. I claim here that in Europe, Jewish physicians needed to fight scientific and popular racist views that led them to explain their so-called inferior characteristics by stressing the regenerating potential of the environment in Palestine. Yet, as European settlers in the Middle East, who, starting from 1917 (and even earlier) were receiving the official support of the British Empire for their settlement project, Zionist physicians and laypeople frequently demonstrated feelings of anxiety and disgust towards their new environment.

Complaints concerning the local climate and environment were mostly evident starting from the 1930s and they were, among other things, a result of the consolidation of Jewish medical institutions in the country during these years, which like in other settler colonial contexts boosted an ethnic-racial separatist approach towards the local populations by dividing between the Arabs and Jews and providing medical services almost exclusively to the latter. The enhanced negative discourse on climate during these years may have also been paradoxically derived from recent improvement in the sanitary conditions of the country which allowed the Jewish settler population to focus on “new” concerns. Finally, the escalating Arab-Jewish conflict was most likely a central element that influenced the Jewish sense of comfort in Palestine’s climate. In 1936 this conflict reached a boiling point that was expressed in six continuous months of violent actions from both sides and a general Arab strike in labour and transportation which shook the local Jewish economy.

One of the main issues of complaint and concern among Jewish physicians in Palestine was the *hamsin*. This climatic phenomenon meant dry, hot, and sandy desert winds which were believed to cause various physical and mental pathologies. Zlocisti, who dedicate more than twenty pages to describing this phenomenon and its implications in his book *Klimatologie und Pathologie*, wrote that “it would not be an exaggeration to say that no one feels physically or mentally comfortable in *hamsin* days.”<sup>30</sup> He described the mental effects of *hamsin* as including:

nervous and mental exhaustion, fatigue, irritation and nervousness. The multi-layered intermediate forms of this phenomenon show themselves in uncertainty, insecurity of memory, loss of eagerness, loss of energy, loss of the capability to concentrate, loss of courage, loss of enthusiasm for work and life.<sup>31</sup>

Based on information provided to him partly by his patients, Zlocisti added that this type of weather very often led to explosions of rage, senseless fits, followed by contrition, remorse, or alternatively by defiance and intolerance in reaction to the most trivial of stimuli. Influenced by contemporary bigot views he added that people with mentally unstable characters, and women in their forties, were especially prone to these reactions.<sup>32</sup>

Historian Warwick Anderson, whose scholarly work also focuses on settler colonial Australia, emphasises how medicine was used as a discourse of settlement as much as it was a means of knowing and understanding disease.<sup>33</sup> Thus, the body of medical knowledge, as it formed among Jewish physicians in Palestine during the first half of the twentieth century, also reflected geographical imaginations, and more specifically mirrored the discomfort of some of the population, in particular their alienation within—and even fear of—their new homeland. Such manifestations were frequent in newspaper articles, letters, memoirs, and fiction literature. For example, one columnist wrote in 1936:

It is extremely hot, gentlemen! I cannot remember such heat since I arrived in this country. I drink water from dusk to dawn and it is hot. I drink during the night as well and it is hot. I drink seas of water and juice, cold milk and soda. I eat ice cream and it is still hot!<sup>34</sup>

Statements reflecting the alienation of Jewish settlers from the local environment were especially vivid in the 1940s when Jewish refugees forcefully arrived in this country without being ideologically motivated to do so. Margaret Bergel, a German-Jewish refugee wrote in an application to the United Nations Relief and Rehabilitation Administration:

In 1933 I immigrated to Palestine from Germany; already in 1935, it appeared that my health suffered seriously from the local climate, and therefore I returned for a few years to Germany in 1936 where I felt perfectly healthy from the very first day. Of course, for the well-known political reasons, I could not stay there, and returned to Palestine having no other possibilities. Very soon, I fell sick again but never had the means of going abroad on a trip again. The war broke out, every summer here meant a crisis to my health, and all doctors whom I consulted agreed that I [. . .] cannot stand the climate of Palestine, and ought to go back to Europe as quickly as possible, “immediately after the war,” they said.<sup>35</sup>

Another refugee, Gershon Mankowitz, who wanted to leave Palestine for the United States wrote in 1949:

Does no one care about my fate? The climate in this country is not suitable for my health. My doctor advised that I must leave the country to be cured. I have a sister and many relatives in the United States. They can help me.<sup>36</sup>

However, such complaints were, if fact, not very efficient for the settler society who wished to stay and become rooted in Palestine. As mentioned earlier, one of the formal objectives for the utilization of medical climatology in Palestine was to determine whether and how Jewish colonization would be possible in this country. Zlocisti expressed his uncertainty concerning this issue when he asked in 1937:

Is the process of adjustment [to the local climate] different among Nordic people, local Semitic people and Semitic people from the diaspora? [. . .] For us the cool and rainy days hardly demand any adjustment. In the case of the hot, humid, and dry days we can speak about a proper biological process of acclimatization which manifests itself in different ways.<sup>37</sup>

Jewish physician R. Kazenelson wrote in 1939 that for the Jewish settler to become properly rooted in Palestine, he would need to adjust himself to the new climate, the new environment, and accordingly develop a new lifestyle. To clarify his point, Kazenelson added that “when referring to adjustment, we clearly mean [. . .] how to prevent diseases.”<sup>38</sup> Similarly physician and bacteriologist Israel Jacob Kligler wrote in 1937 that despite the fact that diseases pass from one person to another via bacteria, there are two elements that make the body most prone to catching them—climate and nutrition. According to Kligler, these elements were of particular importance in Palestine because Jewish settlers in this country were used to temperate climates and were therefore vulnerable to the local conditions.<sup>39</sup> Also Joseph Davidson, medical inspector of the immigration department of the Jewish Agency for Israel, explained that whereas most people are immune to diseases in their primal environments, this “natural immunity” is confounded when they move to new environments. In such cases, Davidson suggested, “one should try to maintain their health, be cautious of diseases and exhaustion, especially if [in the process of immigration] changing to a physical occupation.”<sup>40</sup>

Attempts to explain the possibility of acclimatization and its practical strategies were often expressed in medical books which were addressed at a popular audience and intended to educate the masses into maintaining a better state of health in their new physical conditions. The recommendations

contained in these books were all relatively similar, insofar as they focused on the principles of hygiene in warm climates. Seide explained in his guidebook, *Health of the Nation*, that he did not aim to provide general rules for hygiene but instead restricted his references to those concerning local environmental conditions.<sup>41</sup>

Sociologist of science, Bruno Latour, argues in this context that the boundaries of hygiene were usually quite vague, and it is precisely this quality that allowed its practitioners to express various underlying political, social and cultural ideas. This is partly also a result of the rhetoric of hygienists that had no central argument. Instead, it was an accumulation of “advice, precautions, receipt, opinion, statistics, remedies, regulations, anecdotes, case studies.”<sup>42</sup> In Palestine’s context, Hirsch and Sufain demonstrate how general ideas and measures that were meant to protect the health of the Jewish community in Palestine frequently contrasted its lifestyle with that of the local Palestinians. While Jewish physicians sometimes indeed contrasted the lifestyle of Jews with that of Arabs in this country, more often they completely ignored this population. This was perhaps because of the belief, expressed earlier by Warburg, that Arabs did not need to go through any kind of acclimatization processes in their “natural” environment. As we shall see in the following pages, besides contrasting and ignoring, at other times Jewish physicians actually aimed to study local Arab traditions and habits on how to manage with Palestine’s climate.

Although such shifting approaches towards the local population were obviously also embedded in the growing tension between Jews and Arabs during the Mandate period, they cannot be categorized neatly in accordance with the political chronology of the conflict. Arguments which used climate to discuss both positive and negative racial characteristics of Palestinian Arabs demonstrated how this natural element was used in a variety of ways, creating the possibility for different claims and perspectives to be highlighted within different political, cultural, and social contexts and depending upon the individual inclinations of different writers or speakers. In other words, the elasticity of climate inspired both feelings of attraction and alienation towards Palestinians and suited the inherent inconsistency of bigotry.

The analysis of texts concerning Jewish acclimatization in Palestine demonstrates that the penetration of hygiene to everyday life was usually discussed through two central spheres: the domestic sphere and the sphere of labour. Since Zionism tried to break away from conceptions of traditional Jewish life, which was construed as depending on charity for its survival, productive work in general became an extremely important value to this society. Seide



reported on foreign experiments, asserting that the most productive temperature for physical work was sixteen degrees Celsius, and for mental work, four degrees Celsius. Yet, accepting these conclusions would imply that the climate in Palestine was not suitable for physical work for more than six months of the year, and moreover deeming it categorically unsuitable for mental work. Seide thus had to settle on the results of another experiment, arguing that the best temperature for such activities was not above twenty-four degrees Celsius.<sup>43</sup> Similarly, Zlocisti argued that according to another research, July and August were the hardest months for labourers in the Jordan Valley. Typical to his dismissive approach to women, he added that this was three times truer for women, “even though,” he claimed, “their work is much less demanding.”<sup>44</sup>

The clothes of the Zionist labourer were also examined in relation to the climate in Palestine. In an article on the topic, Prof. W. Strauss, director of Hadassah Hospital in Jerusalem, complained that the human desire to look attractive has surpassed basic climatic needs. Therefore, he proposed a few basic principles to ensure that settlers’ outfits would also fulfil their climatic needs. Strauss argued especially for the wearing of light colours, capable of reflecting sunlight, although he ultimately claimed ventilation to be of utmost importance. He advised adopting some traditional Palestinian costumes, while in the same breath recommending a unique Russian shirt that he thought would complement the local conditions. This shirt was supposed to be worn on the outside of the trousers. Strauss stressed that it should also be worn without a belt to allow as much ventilation as possible. In addition to what he called “horizontal ventilation,” as enabled by the neck, armpit, and stomach area, there would also be “vertical ventilation,” since this shirt was designed to have small holes at the back (Pl. I).<sup>45</sup>

Similar concerns as those of Zionist labourers were addressed to Jewish housewives. For instance, a cookbook from 1937, entitled *How to Cook in Palestine*, published by the Women’s International Zionist Organization, advised the readers to abandon their traditional recipes in favour of culinary acclimatization.

What shall I cook? This problem, the concern of housewives the world over, is particularly acute in our country. The differences in the climate and necessary adjustments arising out of these differences compel the European housewife [in Palestine] to make many drastic changes in her cooking—a change not so easy to achieve as it would seem. [. . .] [In] most families the adjustment is slow, unwillingly and incomplete. [. . .] Some of these [old] habits are not only injurious to

the health of the family, but, in addition burden the housewife with unnecessary work.<sup>46</sup>

Among other advice, the author of this book, the German-Jewish economist Erna Meyer, suggested replacing “European fat-rich food” with local fruits and vegetables. As she explained: “Cooking, suitable to the climate must place vegetables, salads and fruits in the foreground.”<sup>47</sup> Seide similarly suggested substituting the nutritional value of fats with tropical vegetables and fruits, such as the avocado and guava, which he described as good sources of carbohydrate, vitamins, and minerals.<sup>48</sup>

As mentioned earlier, when having to decide on a new type of nutrition in the new homeland some experts also agreed to adopt local eating habits. An article of the daily *Davar* from 1925 entitled “The Science of Nutrition” explained:

Nutrition has been grounded in a scientific base only in recent years [. . .][F]or us this science is particularly important, since we are moving towards new living conditions and a new climate. We must look to the local inhabitants and their foods, which are the result of instinctive selection over generations. [. . .] [T]hey are completely different from our foods, which we have been accustomed to in Northern lands.<sup>49</sup>

Furthermore, the amount of water one needs to drink, and the amount of sweat and urine they produce in the warm weather, were also measured and discussed in hygiene guidebooks for the public. Seide wrote that there is no reason to limit the amount of water for a healthy child or adult during the summer days. This is because the body is able to dispose of extra water but cannot adjust to a lack of water for too long. However, to prevent any misunderstanding he specified the amount of water—exactly one and a half litres—as the minimum a person should drink during the summer days in Palestine. Meteorologist, Rudolf Feige, moreover, suggested the addition of cooking salt into the water on hot days, since excessive sweat could leach vital bodily minerals, such as sodium, calcium, and potassium.<sup>50</sup>

Similar guidelines as the ones mentioned above (on the “right way” to eat, drink, dress, work and rest in warm climates) were common in the British colonies and it is likely that this literature served as a role model for Jewish physicians’ medical guidebooks in Palestine. Books such as *Health in Africa: A Medical Handbook for European Travellers and Residents* (1897), *Health and Sickness in the Tropics: A Guide for Travellers and Residents in Remote Districts*

(1913), as well as many other publications discussed the effects of warm climates on the body temperature, respiration, urine, nervous system and menstruation of Anglo-Saxon bodies.

However, such publications were not only similar to those produced by Jewish physicians in Palestine. In some cases, Jewish physicians also alluded to contemporary medical climatological research conducted in former settler colonies such as the United States and Australia. These societies were presented as successful examples for the acclimatization of European people in warm climates. Moreover, in the bibliography of Zlocisti's book, he referred to scientific publications of his time such as, for example, *The Metabolism of White Races living in the Tropics* and "Tropical Australia and Its Settlements."<sup>51</sup> In a similar vein, Seide wrote in surprise and encouragement that despite the tropical conditions in Queensland, white settlers had not yet degenerated there.<sup>52</sup> Such statements mirrored the specific interest of Zionist physicians in the ways in which other settler societies dealt with comparable environmental challenges, thus, presenting themselves as sharing a common fate with them.

In this article I discussed a range of Zionist medical approaches relating to the climate in Palestine in the first half of the twentieth century. Indeed, expressing fear, disgust and complaint about the hazards of the local climate stressed the foreign and European origins of Jews in the Palestinian natural and cultural environment and moreover helped experts and laypeople in positioning themselves as inherently different and superior to the local Palestinian population. Nevertheless, as we have seen, this was not the only approach Zionist physicians held towards the local climate in Palestine. When aiming to respond to racial scientific theories on the so-called degenerative condition of Jews at the turn of the twentieth century, Zionist experts and ideologists took a positive approach towards the local Palestinian climate and described it as obtaining healing and curative qualities. In addition, when facing difficulties in adjusting to the local climate, Zionist physicians tended to emphasize the need of settlers to become rooted in the country and thus, in their studies, they focused on practical solutions which were supposed to help them achieve this goal. These solutions sometimes even included a romanticization of the local Palestinian lifestyle.

Zionist medical concerns within the sub-field of medical climatology were directly linked to a contemporary colonial and metropolitan discourse about race and more than they reflected an objective physical reality

in Palestine, they mirrored how physicians and laypeople perceived the Jewish European body in a changing physical as well as social, cultural, and political reality. Even Zlosicti who, as we know, dedicated an entire book to the climatological pathologies of Palestine, concluded eventually that the difficulties in acclimatization are, in fact, influenced to a much larger extent by elements that are beyond the work of physicians. He concluded that “for the healthy individual acclimatization is to a certain degree a mental process. [. . .] It is always advised to introspect the soul before blaming the weather.”<sup>53</sup>

## Notes

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1. In using this term, I refer to medical concerns about the effects of climatic and weather factors on human beings. It is important to note that these concerns were not exclusively termed as “medical climatology” by contemporaries. Common titles for this sub-field also included: medical geography, climate-physiology, colonial medicine and at times even tropical medicine.
2. Sandra M. Sufian, *Healing the Land and the Nation: Malaria and the Zionist Project in Palestine, 1920–1947* (Chicago: University of Chicago Press, 2007). Liat Kozma and Yoni Furas, “Palestinian Doctors under the British Mandate: The Formation of a Profession,” *International Journal for Middle East Studies* 52 (2000): 87–108.
3. Dafna Hirsch, *“We Are Here to Bring the West”: Hygiene Education and Culture Building in the Jewish Society of Palestine During the British Mandate Period* (Sde Boker: The Ben-Gurion Research Institute for the Study of Israel and Zionism, 2014) [Hebrew].
4. Hirsch applies the term colonialism when referring to the Zionist project. However, she does not use colonialism as an analytical category.
5. In recent decades there has been a growing literature on the colonial attributes of the Zionist project. For further reading see, for example: Areej Sabbagh-Khoury, “Tracing Settler Colonialism: A Genealogy of a Paradigm in the Sociology of Knowledge Production in Israel,” *Politics and Society* 50, no. 1 (2022): 44–83. Caroline Elkins and Susan Pedersen, *Settler Colonialism in the Twentieth Century: Projects, Practices, Legacies* (New York and London: Routledge, 2005). Derek Jonathan Penslar, “Is Zionism a Colonial Movement?” in *Colonialism and the Jews*, ed. Ethan Katz, Lisa Moses Leff, and Maud Mandel (Bloomington: Indiana University Press, 2017): 275–300. Gershon Shafir, “Theorizing Zionist Settler Colonialism in Palestine,” in *The Routledge Handbook of the History of Settler Colonialism*, ed. Edward Cavanagh and Lorenzo Veracini (London: Routledge, 2020): 339–52. Arnon Degani, “From Republic to Empire: Israel and the Palestinians after 1948,” in *The Routledge Handbook of the History of Settler Colonialism*, ed. Edward Cavanagh and Lorenzo Veracini (London: Routledge, 2016): 353–67.
6. A rich literature exists about the colonial history of European encounters with warm climates. For further reading see, for example: Richard Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens and the Origins of Environmentalism, 1600–1860* (Cambridge: Cambridge University Press, 1995). David Arnold, *Warm Climates and Western Medicine: The Emergence of Tropical Medicine, 1500–1900* (Amsterdam: Rodopi, 1996). Mark Harrison, *Climates and Constitutions: Health, Race, Environment and British Imperialism in India, 1600–1850* (Delhi and Oxford: Oxford University Press, 1999). Caroline Ford, *Natural Interests: The Contest over Environment in Modern France* (Cambridge, MA: Harvard University Press,

- 2016). Diana K. Davis, *The Arid Lands: History, Power, Knowledge* (Cambridge, Massachusetts: The MIT Press, 2016).
7. Elkins and Pedersen, *Settler Colonialism*, 2. Tracey Banivanua-Mar and Penelope Edmonds, *Making Settler Colonial Space: Perspectives on Race, Place and Identity* (Basingstoke: Palgrave Macmillan, 2010), 2. Patrick Wolfe, "Land, Labor, and Difference: Elementary Structures of Race," *The American Historical Review* 106, no.3 (2001): 866–905; Lorenzo Veracini, *Settler Colonialism: A Theoretical Overview* (New York: Palgrave Macmillan, 2010), 33–52.
  8. Rayna Green, "The Tribe Called Wannabee: Playing Indian in America and Europe," *Folklore* 99, no. 1 (1988): 30–55. Patrick Wolfe, "Settler Colonialism and the Elimination of the Native," *Journal of Genocide Research* 8, no. 4 (2006): 387–409. Elimination through assimilation in Palestine after 1948 is discussed by Arnon Degani in the following articles: Arnon Degani, "On the Frontier of Integration: The Histadrut and the Palestinian Arab Citizens of Israel," *Middle Eastern Studies* 56, no. 3 (2020): 412–16; Degani, "From Republic to Empire."
  9. Michael Osborne, "Resurrecting Hippocrates: Hygienic Sciences and the French Scientific Expeditions to Egypt, Morea and Algeria," in *Warm Climates and Western Medicine: The Emergence of Tropical Medicine, 1500–1900*, ed. David Arnold (Rodopi: Brill 1996), 80–82.
  10. Criticism on the possibility of Europeans to acclimatize in the so-called torrid zone began emerging also because of the high rates of European mortality in the colonies in previous decades which had weakened the colonizers' confidence. The fact that European death rate did not seem to wane over time, even among those who were born in the colonies or had lived there for longer periods, was presented by some at the mid-nineteenth century as evidence that acclimatization was, in fact, not possible. Arnold, *Warm Climates*, 9–11.
  11. Mark Harrison, "'The Tender Frame of Man': Disease, Climate, and Racial Difference in India and the West Indies, 1760–1860," *Bulletin of the History of Medicine* 70 (1996): 68–93; idem, *Climates & Constitutions*, 106.
  12. Mitchell Bryan Hart, *Social Science and the Politics of Modern Jewish Identity* (Stanford: Stanford University Press, 2000), 21. Other studies which focus on Jewish-Zionist racial thought during the twentieth century include: John M. Efron, *Defenders of the Race: Jewish Doctors and Race Science in Fin-de-Siècle Europe* (New Haven and London: Yale University Press, 1994). Raphael Falk, *Zionism and the Biology of the Jews* (New York: Springer, 2017). Dafna Hirsch, "Zionist Eugenics, Mixed Marriage, and the Creation of a 'New Jewish Type,'" *The Journal of the Royal Anthropological Institute* 15, no. 3 (2009): 592–609.
  13. Elias Auerbach, *Palästina Als Judenland* (Berlin, Leipzig: Aktionskomitee der Zionistischen Organisation, in Kommission Beim Juedischen Verlag, 1912). Arthur Ruppin, "The Selection of the Fittest," in *Three Decades of Palestine: Speeches and Papers on the Upbuilding of the Jewish National Home* (Jerusalem: Schocken, 1936):

- 66–80. Todd Endelman, “Anglo-Jewish Scientists and the Science of Race,” *Jewish Social Studies* 11, no. 1 (Autumn 2004): 72.
14. Otto Warburg, “Die Nichtjüdische Kolonisation Palästina,” *Altneuland* 1 (1904): 39–45. Quoted in: Dana von Suffrin, *Pflanzen für Palästina: Otto Warburg und die Naturwissenschaften im Jischuw* (Tübingen: Mohr Siebeck, 2019), 86.
  15. Warburg, “Die Nichtjüdische Kolonisation Palästina,” 43.
  16. This view was also accepted by other scientists, among them the British race scientist John Beddoe who asserted that Jews could thrive in different climates more than other Europeans (Efron, *Defenders of the Race*, 56). Virchow was a strong opponent of biological determinism, thus by making this statement he did not necessary mean to claim for Aryan superiority, though, he did contribute to the assumption according to which acclimatization was seen as a flaw. Eric T. Jennings, *Curing the Colonizers: Hydrotherapy, Climatology, and French Colonial Spas* (Durham, N.C. and London: Duke University Press, 2006), 21, 28–29.
  17. B. Beckman, “Ha-Rehitza Ba-Yam,” *Haaretz*, July 19, 1938. S. Sharonpolski, “Le-Yetzirat Hevrat Briut,” *Haaretz*, July 7, 1927. Unknown, “Ha-Mosad Ha-Pedology Le-Horim,” *Briut* 18, no. 2 (1934). Y. Meir, “Hava Ve-Na’ale Otam Le-Eretz Israel,” *Davar*, April 10, 1946. The sanitary condition of Hebron, 1921, Central Zionist Archive: L113.750. 2, 7–8. Aaron Sandler, “The Health Conditions of Palestine,” in *Zionist Work in Palestine*, ed. Israel Cohen (New York: Judaeon Publishing Company, 1912), 74. For further reading about the Tiberias hot springs see: Sufian, *Healing the Land and the Nation*.
  18. Sandler, “The Health Conditions of Palestine,” 83–84. Italics by Netta Cohen.
  19. Sufian, Sufian, *Healing the Land and the Nation*, 48–55. Other healing resorts advocated by both the Zionist and the British were located in Hebron, the Lebanon and the Carmel mountains and were promoted on behalf of their high altitude and relatively temperate climate. Sandler, “The Health Conditions of Palestine,” 74. File on the sanitary condition of Hebron, 1921, Central Zionist Archive: L113.750. 2, 7–8. Mountains in the tropics were generally seen as key sanatoria for some of the world’s most problematic diseases. Much has been written on the development of “hill stations” in India, the Caribbean and various parts of Africa. See: G. C. D. Adamson, “‘The Languor of the Hot Weather’: Everyday Perspectives on Weather and Climate in Colonial Bombay, 1819–1828,” *Journal of Historical Geography* 38, no. 2 (2012): 143–54. J. Kenny, “Climate, Race, and Imperial Authority: The Symbolic Landscape of the British Hill Station in India,” *Annals of the Association of American Geographers* 85, no. 4 (1995): 694–714.
  20. *M.B.Bat.* 158: 72.
  21. Hilel Yaffe, *Shmirat Ha’briut* (Jaffa: A. Atin Print, 1913), 2.
  22. Shmuel Yosef Agnon and Barbara Harshav, *Only Yesterday* (Princeton and [Great Britain]: Princeton University Press, 2000), 25.
  23. Jennings, *Curing the Colonizers*, 39, 49–50.

24. Mirjam Triendl-Zadoff, *Next Year in Marienbad : The Lost Worlds of Jewish Spa Culture*, 1st ed. (Philadelphia: University of Pennsylvania Press, 2012), 32–34.
25. *Ibid.*, 33–34, 37–38.
26. Theodor Zlocisti, *Klimatologie und Pathologie Palästinas* (Tel Aviv: Omanut Co., 1937), 18.
27. Yael Levy and Nissim Levy, *The Physicians of the Holy Land, 1788–1948 [Rofeiha Shel Eretz-Israel 1788–1948]* (Zikhron Ya'akov: Itay Bakhor, 2017), 62.
28. *Ibid.*, 236.
29. *Ibid.*, 241.
30. Zlocisti, *Klimatologie*, 45.
31. *Ibid.*, 44.
32. *Ibid.*
33. Warwick Anderson, *The Cultivation of Whiteness: Science, Health and Racial Destiny in Australia* (Carlton, Vic.: Melbourne University Press, 2005), 4.
34. Jacob Steinberg, *Kitvei Jacob Steinberg* (Tel Aviv: Vaad Ha-Yovel, 1936–37).
35. Quoted in: Ori Yehudai, “Displaced in the National Home: Jewish Repatriation from Palestine to Europe, 1945–48,” *Jewish Social Studies* 20, no. 2 (Winter 2014): 95.
36. Quoted in: Ori Yehudai, *Leaving Zion: Jewish Emigration from Palestine and Israel after World War II* (Cambridge: Cambridge University Press, 2020), 76.
37. Zlocisti, *Klimatologie*, 36–38.
38. R. Kazenelson, *Briut Ha-Ole: Madrich La-Ole Ha-Hadash Be-Inyanei Higyena Ve-Briut* (Jerusalem: Kupat ḥolim Amamit Ve Maḥleket Ha-aliya Shel Hasokhnut Ha-yahudit, 1939), 19.
39. Jacob Israel Kligler, “The Influence of the Climate on Infection,” *Ha-Refuah* 67, no. 1 (1937): 2.
40. Unknown, *Briut Ha'ole: Madrich La'ole Ha'khadash Be'inyanei Higyena Ve Briut* (Jerusalem: Kupat Kholim Amamit Ve Makhleket Ha'aliya Shel Hasochnut Ha'yahudit, 1939), 4.
41. Jacob Seide, *Briut Ha-Am: Ha-Teva, Ha-Aklim, Ve-Ha-Briut Be-Israel* (Jerusalem: Reuven Mas, 1954), 106–9.
42. Bruno Latour, *The Pasteurization of France* (Cambridge, MA and London: Harvard University Press, 1988), 20.
43. Seide, *Briut Ha-Am*, 28–29, 35.
44. Zlocisti, *Klimatologie*, 74.
45. Walter Strauss, “Ha-Aklim Ha-Ham Ve-Ha-Tilboshet,” in *Ha-Adam Ve-Ha-Aklim Be-Eretz-Israel*, ed. S. Rosenbaum (Tel Aviv: Olympia, Unknown), 57.
46. Erna Meyer, *How to Cook in Palestine?* (Tel Aviv: Palestine Federation of WIZO, 1937), 8.
47. *Ibid.*



48. Seide, *Briut Ha-Am*, 116–19. For further reading on climate and nutrition in Palestine see: Efrat Gilad, “Meat in the Heat: A History of Tel Aviv under the British Mandate for Palestine (1920s–1940s)” (University of Geneva, 2021).
49. Quoted in: Yael Raviv, *Falafel Nation: Cuisine and the Making of National Identity in Israel* (Lincoln, NE and London: University of Nebraska Press, 2015), 96.
50. Zlocisti, *Klimatologie*, 42. Rudolf Feige, “He’arot Al Ha-Klimatologia Ha-Shimushit Be-Eretz Israel,” in *Ha-Adam Veba-Aklim Be-Eretz Israel*, ed. S. Rosenbaum (Tel Aviv Olympia, Unkown), 37.
51. Zlocisti, *Klimatologie*, 166.
52. Seide, *Briut Ha-Am*, 21.
53. Zlocisti, *Klimatologie*, 45–47.

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# Jews and Science: A Note

by David A. Hollinger

**T**he topic of “Jews and Science” is productively approached through the fact of conspicuous Jewish achievement in science. The demographic over-representation of Jews among Nobel Prize winners and other lists of successful scientists is well known. What accounts for it?

The most discussed answer was provided by Thorstein Veblen in his legendary paper, “The Intellectual Preeminence of Jews in Modern Europe.”<sup>1</sup> Veblen’s basic idea was that the marginality of Jews to a Gentile-dominated society had generated a mentality of detachment and skepticism especially suited to the disinterested pursuit of learning. Veblen and most of his successors in this conversation have attended little to the comparable overrepresentation of Jews in high finance and on lists of the richest of the rich, perhaps because they do not want to retail stereotypes of Jewish bankers. Veblen, after all, was his generation’s greatest scourge of a parasitic leisure class, but the plutocrats and genteel bandits of his most enduring prose in *The Theory of the Leisure Class* are never implied to be Jewish.<sup>2</sup> As I have argued elsewhere,<sup>3</sup> Veblen’s anti-commercial bias was so ferocious and his apotheosis of alienation so extravagant that he failed to consider the class position and economic function of Jews in contexts where it might have turned his explanation in a different direction. Inquiries into Jewish scientific and scholarly achievement often run on an independent track, seeking explanations that may or may not apply to other arenas in which Jews have distinguished themselves. But once the demographically disproportionate attainments of Jews in science and scholarship are placed alongside the statistically similar overrepresentation of Jews in the leadership of the professions and in business and finance, intellectual

preeminence suddenly invites explanations that also account for these other instances of Jewish preeminence.

Here's the heart of the matter: the social conditions of many successive generations of Jewish diaspora experience in Europe endowed Jews with exactly the dispositions and skills that turned out to be the most conducive to leadership in a host of distinctly modern callings in the North Atlantic West of the nineteenth and twentieth centuries, including science and business. Among those conditions was the high rate of literacy sustained by rabbinic Judaism. But so, too, was the special economic position of Jews as an outsider group. They delivered a range of services about which the Christian and largely agricultural peoples dominant in Russia, the Hapsburg Monarchy, and many other states and empires were ambivalent. The practice of trades and the handling of money, especially with interest, were essential to development of a modern, capitalist society and sufficiently in tension with traditional Christian value systems to sharpen a division of labor. Jews often performed these vital services, while the non-Jewish majority could remain virtuous producers and honorable military men, and could hold themselves proudly aloof from moneylenders and middlemen. Boundary maintenance in this setting served the interests of both sides: if the outsider peoples mixed too much with the Poles or the Magyars or the Russians, the ability of the "outsiders" to do the "dirty work" diminished. Historians of European Jewry have explained all this to us many times. The best modern work in this tradition is Yuri Slezkine, *The Jewish Century*.<sup>4</sup>

In order best to survive and prosper, Jews developed to a higher degree than other European descent groups the distinctive set of skills on which the modernization process most depended: calculation, language fluency, record-keeping, close attention to detail, a facility for abstraction, and the mobility and flexibility required to move around and to deal with a variety of parties who often did not want much to do with each other. These are the very skills that form much of the basis for our modern notion of what it means to be "smart." The old wisecrack, usually offered affectionately, that Yiddish has at least nine words for "jerk" but only one for "tree" is emblematic of the people-centered as opposed to land-centered society and culture of the Central and Eastern European heartland of the Diaspora.

This historically sound explanation needs to be articulated clearly, and in relation to the record of other descent-defined groups. The failure to pursue this question openly, and on the basis of the best evidence we can find, implicitly fuels largely unexpressed speculations that Jews are, after all, genetically

superior—in the sense of being better equipped to cope with the challenges of a complex civilization—to African Americans, to Hispanics, and to indigenous Americans, the particular groups whose underrepresentation is constantly at issue, and superior genetically, also, to non-Jewish whites, including Irish and Polish Catholics and Anglo-Protestants. No sensitive person would say this, of course, for fear of giving offense. But the quiet suspicion that it may be true is an excellent reason to avoid the topic. I have encountered this sentiment many times since I began to write about American Jewish history nearly a half century ago. It is always privately expressed, but with deep sincerity. “I personally think it is genetic,” one distinguished historian said to me after reading my book, *Science, Jews, and Secular Culture*,<sup>5</sup> “but I would never say this in public.” This fellow assumed I was Jewish, like him. He was stunned when I told him I was *Deutsche Volk*, ethnically, and the direct descendant of two hundred years of Anabaptist preachers. “Well, you don’t have to be Jewish to be smart,” he thoughtfully assured me. I smiled.

Such presumptions feed the idea that too much talk about how quickly Jews rise to leadership positions in business, science, the arts, and in some political establishments might make other groups look bad. A sense of decency militates against this—why rub the collective noses of other groups in this reality?—and cast doubt on the wisdom and taste of colleagues who publish statistics on what percentage of billionaires, psychoanalysts, lawyers, left-leaning politicians, distinguished mathematicians, film directors, and chess champions are Jewish. *Yet the grounds for this reticence diminish, if not disappear, if these statistics can be explained by taking full account of the conditions under which the various descent communities have been shaped.*

Our scholars convincingly explain in terms of historical conditions the over-representation of black males in the American prison population. The same principles of inquiry and explanation should apply to Jewish Nobel Prize winners. Under-representation and over-representation constitute a syndrome, logically. As I have argued elsewhere,<sup>6</sup> avoiding the forthright historical and social-scientific study of the question perpetuates the mystification of Jewish history and subtly fuels the idea that the answer is really biological, and will serve to reinforce invidious distinctions between descent groups.

## Notes

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1. Thorstein Veblen, "The Intellectual Preeminence of Jews in Modern Europe," *Political Science Quarterly* 34 (1919): 33–42.
2. Thorstein Veblen, *The Theory of the Leisure Class* (New York: Macmillan, 1899).
3. David A. Hollinger, "Why Are Jews Prominent in Science and Scholarship? The Veblen Thesis Reconsidered," *Aleph* 2 (2002): 145–63.
4. Yuri Slezkine, *The Jewish Century* (Princeton: Princeton University Press, 2004).
5. David A. Hollinger, *Science, Jews, and Secular Culture* (Princeton: Princeton University Press, 1996).
6. David A. Hollinger, "Rich, Powerful and Smart: Jewish Overrepresentation Should be Explained Instead of Mystified or Avoided," *Jewish Quarterly Review* 94 (2004): 592–602.



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# Science and Judaism

*by Roald Hoffmann*

(The text that follows comes from a talk at a ceremonial function at the Technion in Haifa.)

**T**here are some things to get out of the way. One is the notion that Jews are smarter than other people, the other is that scientists are smarter than other people, two false arms of a bizarre syllogism forming, that all scientists are Jews, or the reverse. That scientists are smart is a construction of our education, perhaps the hammering into us by a teacher of an excessive valuation of mathematical thinking. The way scientists conduct their personal or financial lives should disabuse you of that notion. As for Jews being smart or smarter as a people—well you could imagine a non-Jew thinking that. But then just send him or her for a few years to Israel . . . and ask them again.

How then to account for the disproportionate number of Jews in science and medicine, and their success in these professions? Here are some personal thoughts, some not at all original, some idiosyncratic.

First: There is the background in the period of prevailing observance in the Jewish community (up to ~1900), of respect for learning. Not for nothing did the prophet Muhammad call the Jews the people of the Book. Jewish society valued not only the Book, but its scholars. Look at the heroic figures in exile, the role models—Rashi and Saadia Gaon, Nachmanides and Maimonides.

Second, the mode of religious study in the centuries of exile had (and continues to have today) a curious parallel with what came, later, to be the

method of European science. The Talmud and the fifteen hundred years of commentary and responsa since then are a discourse ingeniously suspended between the real and the hypothetical, with an emphasis on the real. There is little theology as such in the Talmud. Instead, the rabbis debate how one decides whether an edible side of beef found in the street is deemed *kosher* or not, and in the course of a discussion of the material science of *sukkah* construction examine a flight of fancy—can one use a living elephant for the side of a *sukkah*.

Science, a western European invention,<sup>1</sup> is the channeling of human curiosity into the observation of nature for the purpose of gaining reliable knowledge. In science, flights of inspired theoretical fancy are continually checked with the reality of our senses or instruments. Contact points with the real world and daily experience are what Talmud and science have in common.

Talmudic debate, as recorded 1500 years ago, or as it takes place in the study hall today, has a remarkable dialectical structure, of opposing views evoked and debated, and a logic of citation, of invoking what had been said before. To be sure, there is a vast difference between science and religion in the extent to which the Oedipal drive to—if not kill then at least deny our fathers—is privileged relative to respect for tradition. But in both Talmud and science, I see a parallel working out of a tense, creative balance between tradition and change.

But something more was needed, and here my observant colleagues may be angry with me. To have the potential for science to materialize in a people you need the creative flux of assimilation. If a person is *the other*, an immigrant to a country, a minority group within a country, if one is *out*, and *if* (oh such a big *if*) the society opens up, a little or a lot, then those segments of the population primed with a tradition of scholarship and a family support structure will flourish. Be they Jews, Chinese or Indians.

Let me explain, from my own experience, why being the other helps. When I came into the sixth grade at P.S. 93 Queens, a week after we arrived in America, I knew just a handful of English words. Of course, I learned quickly, as children do. But in the playground at recess, in class as well, I was outside the natural groupings of the kids. I listened, I watched—I observed. I formed hypotheses, often unspoken, about why kids ran or stood still on a base. Or what the teacher found to praise in a paper she read by one of the students. She told the student that he could find a biography of Simón Bolívar in the school library. The idea (where one might look for information) registered. Watching from outside engenders a mindset of reflection and care. Which is a pointer to science.

But there is something else that I see as singularly Jewish (which leads me to an eventual worry). Throughout history, until the mid-nineteenth century (the acceptance of the idea of a secular Jew of course varied from country to country), being Jewish meant only being observant, religious Jewish. This was insured by internal forces, among them the abiding belief in the compact between God and his People. And it was sealed by external forces, the relentless persecution and isolation (with some exceptions) by the nations.

Then things changed. There was an opening in Europe and in America, and here in Israel the people founded a state. Through the now porous walls of the ghetto the Jews flowed out. And assimilated. In the process, most lost their orthodoxy and had to find a new identity to replace their religious belief, for you don't lose millennia of tradition so easily.

I think many Jews found a new spiritual center in the ideal of justice and social service; I am certain that it is this side of socialism (now so sadly lost when we did away with Marxism for its other faults) which attracted Jews.

And the other replacement for the faith that Jews lost was an alternative way of making sense of this beautiful and terrible world. This was science. I think science for many Jews has been a substitute for religion.

I say this not meaning to offend my brothers and sisters who have chosen a still different way, that of Ramban and observant Jewish scientists, the way of *torah u madda*, of *Torah and secular knowledge*. I admire them. But I speak of the overwhelming majority of successful Jewish scientists who are not observant religious.

This brings me to a concern about engineers and scientists and their education, whether it is at the Technion or my Cornell. A meaningful life always has been a matter of matter and spirit, of *parnuse* and *torah* in its time. Where do your engineers and scientists, our engineers, get an exposure to the spiritual signposts of our world—to the poetry of Solomon ibn Gabirol and Sor Juana Inéz de la Cruz, to the Pillow Book of Sei Shōnagon, to Thucydides' account of the Peloponnesian War, Ibsen's "Wild Duck," to Caravaggio's paintings? If I look at the education of your scientists, the answer I get is, "Try the *gymnasia*, the *lycées* or the students' spare time." You know, I don't trust our high schools to provide the general education they once did. Moreover, I believe that it takes maturity, the maturity that comes with university age, for these cultural masterpieces to be understood. A precocious student may read Pushkin's *Yevgenyi Onegin* at age 16. But this novel in verse will have a very different impact on them at age twenty-one—the difference is that at twenty-one it is likely that she or he have fallen in love. And out of it.

The world of the transformers of matter of today and tomorrow—engineers and medical researchers and scientists—is hardly the nineteenth century, with its uncritical, almost evangelical valuation of technological progress into which I think Jews (you may disagree) have bought in with a vengeance. It is essential that the engineers and scientists of the future, the Jewish engineers and physicians of the future especially, be inspired by the cultural legacy and social concern of our past. That means actually our religious past, and the broader culture in which we live. It is important for all of us to create the educational structures that educate our technologists and scientists (and not just train them), to help them value the spiritual, literary, artistic sides of the only world we have.

*Notes*

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1. The origins of science are the subject of some debate. My personal view is that there are certainly reliable technological, medical, astronomical, and mathematical practices that originated elsewhere, in Arabic and Chinese cultures. We also admire the mastery of silver, gold, and copper metallurgy and textile dyes in Andean cultures. Non-European societies have also fostered at one time or another the institutionalized skepticism and open exchange of information that are part of the system of science. And simple curiosity underlies it all. But it did really come together in Europe.





## About the Contributors

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**ROALD HOFFMANN** was born in 1937 in Złoczów, then Poland. He came to the US in 1949, and has long been at Cornell, active as a theoretical chemist. In chemistry he has taught his colleagues how to think about electrons influencing structure and reactivity, and won most of the honors of his profession, including the 1981 Nobel Prize in Chemistry. Hoffmann is also a writer, carving out his own land between poetry, philosophy, and science. He has published six books of non-fiction, three plays, and six volumes of poetry, including two book length selections of his poems in Spanish and Russian translations.

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## The USC Casden Institute for the Study of the Jewish Role in American Life

The American Jewish community has played a vital role in shaping the politics, culture, commerce and multiethnic character of Southern California and the American West. Beginning in the mid-nineteenth century, when entrepreneurs like Isaias Hellman, Levi Strauss and Adolph Sutro first ventured out West, American Jews became a major force in the establishment and development of the budding Western territories. Since 1970, the number of Jews in the West has more than tripled. This dramatic demographic shift has made California—specifically, Los Angeles—home to the second largest Jewish population in the United States. Paralleling this shifting pattern of migration, Jewish voices in the West are today among the most prominent anywhere in the United States. Largely migrating from Eastern Europe, the Middle East and the East Coast of the United States, Jews have invigorated the West, where they exert a considerable presence in every sector of the economy—most notably in the media and the arts. With the emergence of Los Angeles as a world capital in entertainment and communications, the Jewish perspective and experience in the region are being amplified further. From artists and activists to scholars and professionals, Jews are significantly influencing the shape of things to come in the West and across the United States. In recognition of these important demographic and societal changes, in 1998 the University of Southern California established a scholarly institute dedicated to studying contemporary Jewish life in America with special emphasis on the western United States. The Casden Institute explores issues related to the interface between the Jewish community and the broader, multifaceted cultures that form the nation—issues of relationship as much as of Jewishness itself. It is also enhancing the educational experience for students at USC and elsewhere by exposing them to the problems—and promise—of life in Los Angeles' ethnically, socially, culturally and economically diverse community. Scholars, students and community leaders examine the ongoing contributions of American Jews in the arts, business, media, literature, education, politics, law and social relations, as well as the relationships between Jewish Americans and other groups, including African Americans,

Latinos, Asian Americans and Arab Americans. The Casden Institute's scholarly orientation and contemporary focus, combined with its location on the West Coast, set it apart from—and makes it an important complement to—the many excellent Jewish Studies programs across the nation that center on Judaism from an historical or religious perspective.

For more information about the USC Casden Institute, visit [www.usc.edu/casdeninstitute](http://www.usc.edu/casdeninstitute), e-mail [casden@usc.edu](mailto:casden@usc.edu), or call (213) 740-3405.