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Zionism and Evolutionary Theory: Seals, Social Darwinism, Science Education, and Eugenics

Daniel R. Langton, Paper given to Katz Centre for Advanced Judaic Studies, Philadelphia, 27 Sept 2017

1. Introduction

For the last four years, on and off, I've been working on a book for entitled *Darwin's Jews*. The book covers a wide variety of Jewish interests in biological evolutionary theory, including, among other things, the influence of Darwinism in shaping Reform Judaism in the US, its appeal for mystics as different as Elijah Benamozegh and Abraham Isaac Kook, the fascinating ways in which the theory was used to reframe the problem of evil after the Shoah for thinkers such as Mordecai Kaplan and Hans Jonas, and Jewish race theory and eugenics. It's this last topic which I'm here at the Katz Center to work on, and today I'd like to set out some very early ideas about whom I'm thinking of including among those Zionists who found evolutionary theory useful in conceptualizing or articulating the Zionist project. There are two parts to the presentation, the first being a hastily drawn up survey of some of the names one might expect to see, while the second half outlines the views of a couple of lesser-known Zionist eugenicists that I've had a chance to look at so far. Two words of warning: At this early stage I have nothing of much consequence to say about evolution and Zionism as a political movement; I am simply trying to identify a variety of Zionists who drew upon the theory in one way or another; it may well be that by the time I'm finished it will be clear that I'm only talking about a tiny minority of unrepresentative thinkers, that Zionism per se is not a useful organising category, and that I will have to find a different way to incorporate the more interesting examples into the book. The other word of warning is that, while I hope the connection between evolution and this year's Katz annual theme is clear ('Nature Between Science and Religion: Jewish Culture and the Natural World'), my inclusion of eugenics does need to be justified, but I'll leave this for a little later on in the

presentation.

As often noted, political Zionist ideology has embraced and identified closely with science and technology in a wide variety of ways. Zionist science enabled Jewish Palestine to be presented to the non-Jewish world as an oasis of progressive principles and western values in the Middle East, and promised to bridge the backwards desert societies and the advanced West. Furthermore, the association with a modern, scientifically-driven society reinforced the idea of Jewish genius, archaeological science helped demonstrate the Jewish claim to the land, and modern agricultural techniques showed it to be capable of absorbing the Jewish masses. Within the Jewish world itself, the embrace of science and technology was integral to the reinvention of the Jew, and secular Zionists were often scornful about what they regarded as the superstitious Jewish religion they had left behind and were keen to distance themselves from it. The secular Zionist aspiration for normalcy and its embrace of humanistic values and scientific universalism was the flip side of the coin of the rejection of Jewish particularism.

2. Zionists who did not relate evolutionary theory to Zionism

Of course, for many there was no direct connection. The cultural critic and co-founder of the World Zionist Congress, Max Nordau is a good example of a prominent Zionist who wrote about evolution but did not explicitly relate it to his nationalist ideology. As a youth, he was a keen naturalist and evolutionist, and his early literary writings reflected strong evolutionary assumptions,² as did some of his works written after he had committed himself to the Zionist cause in 1895, such as his study on the biological

¹ The classic study is that of Derek Penslar, *Zionism and Technocracy* (Bloomington: Indiana University Press, 1991). For a religion-and-science perspective, see Noah Efron, *Judaism and Science: A Historical Introduction* (Westport and London: Greenwood Press, 2007), 230-34.

² For example, *Paradox* (1885) was a collection of essays that made frequent reference to Darwin and treated topics such as 'The Natural History of Love' and 'Evolution in Aesthetics.' Most famously, in *Degeneration* (1892), Nordau discussed the weakening or retrogression of western civilization and in particular its literature and art, questioning the widespread presumptions about racial evolution and societal progress. Max Nordau, *Paradoxe* (Leipzig: Elischer, 1885); *Entartung* (Berlin: Carl Duncker, 1892).

foundations of ethics *Morals of Man* (1916).³ Generally speaking, however, and despite the application of race science to account for Jewish degeneration, Nordau made no attempt to apply the science to the movement, even as he called for a rejuvenation of Jewish life and the need for physically robust 'muscle Jews' to people a Jewish Palestine.⁴

Likewise, early on in his career the religious Zionist and philosopher Martin Buber had lauded gradual evolution as the model for Jewish rebirth⁵ and, in his memoir, had highlighted Darwin's writings as among those works read in his childhood home.⁶ In time, however, he came to view the topic more negatively. By 1910 he was attacking the ubiquitous presence of evolution in modern thought. For him, progress in Jewish religion was not enough: a radical renewal was required. And yet the paradigm of evolution stymied such efforts, when the natural scientist's sense of gradualist, incremental change was applied inappropriately to human life and society. For Buber, the most tragic example of this tendency was to be found in Nietzsche, who failed to provoke a genuine social reform because he had failed to 'free himself from the dogma of evolution'.⁷ And

³ Die Biologie Der Ethik (Leipzig: Elischer, 1916).

⁴ One might argue that evolutionary theory was an implicit, even if not explicit, foundation to his thought. Falk suggests that 'Nordau, more than anyone else, personified the close relationship between Zionism and the so-called social Darwinism of *fin de siècle Europe*' as an ardent promoter of the decline of Western culture and its biological correlates. But Nordau's study *Degeneration*, on which Falk bases his view, was a pre-Zionist work and, as Falk himself notes, the views expressed therein were 'a kind of social Spencerism rather than Darwinism.' Furthermore, while it is true that Nordau wrote later, as a Zionist, calling for Jews to return to the agriculture, for Jewish education to inculcate self-respect by making the name 'Jew' an honorable title, and for internal Jewish solidarity, it is hard to agree with Falk's estimation of these as 'Lamarckian eugenic edicts.' Raphael Falk, "Zionism and the Biology of the Jews," *Science in Context* 11, no. 3-4 (1998): 594.

⁵ Martin Buber, "On the Jewish Renaissance (1903)," in *The Martin Buber Reader: Essential Writings*, ed. Asher D. Biemann (New York: Palgrave, 2002), 141.

⁶ In discussing familial influences, Buber recalled that his father 'had occupied himself seriously with the questions that had been raised in such books as Darwin's *Origin of the Species* and Renan's *Life of Jesus*.' *Meetings: Autobiographical Fragments*, ed. Maurice Friedman (London and New York: Routledge, 2002), 26. Originally published as part of *The Philosophy of Martin Buber* in 1967.

⁷ Buber wrote: 'When I speak of renewal I am well aware that this is a bold, indeed almost daring, term, which, being at variance with the current outlook upon life and the world, is unacceptable to it. All activities of the typical man of today are governed by the concept of evolution, that is, the concept of gradual change – or, as it is also called, progress – emerging from the collective effort many small causes. This concept, which, as one begins to realise, can claim only a relative validity even in the realm of natural processes, as, to be sure, greatly stimulated and advanced natural sciences, but its effect upon the realm of the mind and will has been highly deleterious. Man's spirit has been as greatly depressed by a sense of inescapable evolution as it had once been depressed by the sense of inescapable predestination, induced by Calvinism. The extinction of heroic, unconditional living in our time must to a great extent be ascribed to

while he admired the work of Henri Bergson, who espoused a non-Darwinian conception of evolution and whose writings affirmed life through 'participation in creation', more generally he felt that evolutionary science and philosophy had undermined biblical faith, that is, it had undermined the existential meaning one might derive from a proper appreciation of the great work of creation. For the modern man, he wrote in 1948, the 'strangeness of biblical concepts' was a 'stumbling block' and detrimental to faith, and he asked rhetorically, 'Has he not lost the reality of creation in his concept of "evolution"? But if evolution was an impediment for radical social change and a threat to the faith of the modern man, Buber made no reference to it in relation to Zionism.

Another example of a religious Zionist interested in evolution but who apparently saw no direct implications or relevance for the movement, except perhaps insofar as it threatened the particular religious worldview that he hoped would characterize the growing Jewish population of the Land, was Isaac Halevi Herzog (1888-1959), ¹⁰ Chief Rabbi of British Mandate Palestine and Israel over the period 1936-1959. He became concerned as to whether the Torah's chronology of six thousand years could be defended in light of scientific claims regarding the age of the universe and of human development. In private correspondence with the controversial writer of cosmogony and history, Immanuel Velikovsky, ¹¹ he discussed, among other things, the possibility that 'a special providence'

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the sense. Once the great doer expected to alter the face of the world with his deed, and to inform all becoming with his own will. He did not feel that he was subject to the conditions of the world... Man's consciousness of God and deed had already been stifled in his cradle; all one could hope for was to become the exponent of some small "progress." And whoever can no longer desire the impossible will be able to achieve nothing more than the all-too-possible... The most tragic example of this corruption is probably the man who, though he longed for such a life more intensely than any other man, could not free himself from the dogma of evolution: Friederich Nietzsche.' "Renewal of Judaism (1910)," in *On Judaism*, ed. Nahum N. Glatzer (New York: Schoken, 1973), 34-35.

⁸ "The Silent Question: On Henri Bergson and Simone Weil (1952)," in *On Judaism*, ed. Will Herberg (Cleveland and New York: World Publishing Company, 1973), 308. Henri Bergson (1859-1941) was a French Jewish philosopher whose *Creative Evolution*, which had sought to challenge materialistic conceptions of evolution and had popularized the idea of the *élan vital* or vital force, was published in French in 1907 and English in 1911.

⁹ "The Man of Today and the Jewish Bible (1948)," 245.

¹⁰ Herzog himself was scientifically trained, holding a PhD in marine biology from London University. For an overview of his views in relation to evolution, including a biography sketch, see Raphael Shuchat, "R. Isaac Halevi Herzog's Attitude to Evolution and His Correspondence with Immanuel Velikovsky," *The Torah u-Madda Journal* 15 (2008-09).

¹¹ Immanuel Velikovsky (1895-1979) was a Russian-Jewish sometime psychiatrist and independent scholar who played a role in founding Hebrew University and who is perhaps best known for his revisionist

had guided human evolution and thus 'accelerated what otherwise would have taken hundreds of thousands of years'. At times he appeared deeply concerned about the implications of evolutionary theory for Jewish tradition, while at other times he appeared more sanguine, commenting 'belief in the Divine inspiration of the Torah will be made more difficult, but will not be necessarily destroyed, if the chronology for man even of the present earth is untenable. In any case, it is clear that his interest was strictly theological and not concerned with Zionist matters as such.

3. Zionists who applied evolutionary theory to Zionism

So, let's start with a broad overview of the ways in which various representatives of different species of Zionism drew upon evolutionary theory in their writings, including Political Zionism [Herzl, Klausner and Ruppin], cultural Zionism [Ahad Ha-Am], and religious Zionism [Kook].

3.1 How does Evolution figure in Zionist thought?

I have to begin, of course, with Theodor Herzl (1860-1904), although his interest in evolutionary biology and the issue of Jewish survival is probably the most superficial of those considered here today. In a diary entry in 1895, Herzl, the future father of Political Zionism and co-founder with Nordau of the World Zionist Congress, outlined a theory of

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scholarship of ancient history, exemplified in the best-selling *Worlds in Collision* (1950), which drew heavily upon comparative mythology and espoused a catastrophist perspective on evolutionary and geological science. Schuchat argues that their correspondence reveals Herzog to be undecided as to whether evolution should be regarded as an exact science or an unproven theory. Ibid., 146.

¹² Herzog to Velikovsky correspondence, 31 August 1953, reproduced in ibid., 158. 'A man-fossil declared to be several hundred thousand years old, even if the age be correct, maybe a fossilised relic of the former Adam belong to a previously settled earth.' Herzog to Velikovsky correspondence, 31 August 1953, reproduced in ibid., 159.

¹³ Herzog wrote '[M]ust it be accepted that the human race had been here as a continuous chain already hundreds of thousands of years? If so, we would have to reinterpret the Book of Genesis! Please remember that were it not for our Pentateuchal extremely short chronology which issues from the Biblical data directly, science would hardly be a disturbing fact.' Herzog to Velikovsky correspondence, 25 October 1953, reproduced in ibid., 161.

¹⁴ Herzog to Velikovsky correspondence, 31 August 1953, reproduced in ibid., 159.

anti-Semitism in which the deprivation of the ghettos was responsible for the widespread perception of Jews as anti-social and usurious; as a result, he was convinced that, with social emancipation, Jewry would shift under the pressure of harsh social criticism towards more honourable professions previously barred to them and bring them to social acceptance. On this particular occasion, Herzl presented anti-Semitism as a kind of evolutionary force for change. He likened the Jewish historical tendency to adapt to different environments to the natural adaptations of animals such as seals, which had originally been land-based, to the ocean environment so that their biology converged with that of the fish to create analogous features such as flippers. And he noted that, if an act of nature forced them to return them to the land, then flippers would revert to feet. For Herzl, a similar kind of (what he called) 'Darwinian mimicry' would make possible the adaptations necessary for future Jewish assimilation. 15 It's worth noting that although evolution functions here simply as an analogy for anti-Semitism, it is pleasing to see that he does not make the mistake that so many others at that time made in conceiving of evolution exclusively in terms of progress, but that he understood the biological plasticity that was implied by the Darwinian focus on fitness for a changing environment. Of course, he would soon come to believe that assimilation was an entirely unrealistic hope, regardless of the Jewish capacity for change. Evolution, it seemed, could not be expected to ensure survival of the Jewish species if the environment was too hostile.

Some Political Zionists wrote with an interesting social science or anthropological bent, such as Joseph Klausner and Arthur Ruppin, which gave their interest in evolutionary theory a quite distinctive flavour. The Lithuanian-born historian and specialist of Hebrew literature Joseph Klausner (1874-1958), who would compete with Chaim Weizmann to be the first president of the State of Israel, was much preoccupied with building up the

¹⁵ Herzl wrote: '[A]nti-Semitism, which is a strong and unconscious force among the masses, will not harm the Jews. I consider it to be a movement useful to the Jewish character. It represents the education of the group by the masses, and will perhaps lead to its being absorbed. Education is accomplished only through hard knocks. A Darwinian mimicry will set in. The Jews will adapt themselves. They are like the seals, which an act of nature cast into the water. These animals assume the appearance and habits of fish, which they certainly are not. Once they return to dry land again and are allowed to remain there for a few generations, they will turn their fins into feet again. The traces of one kind of pressure can be effaced only by another kind.' Diary entry, Paris, 1895 reproduced in Theodor Herzl, *The Diaries of Theodor Herzl Translated and Edited by Marvin Lowenthal* (New York: Grosset and Dunlap, 1958), 9-10.

national Jewish consciousness through the promotion of studies about modern thought and science. For example, before moving to Palestine, while living in Odessa, he published Ha-Adam Ha-Kadmon or The Original Man (1899), which set out the scientific evidence for the development of prehistoric humankind by reference to the relevant literature. The work was premised on evolutionary theory in its treatment of the fossil evidence (he wrote about 'the law of slow and gradual evolution is here seen in full'), ¹⁶ and in his comments on embryology and comparative anatomy (where he said that 'this proved with certainty the closeness of humans to other animals'), ¹⁷ and geology (he accepted the extreme antiquity of the earth and reported its estimated age as between 100m and 25m years ago). 18 He reviewed Lamarck and other pre-darwinians before setting out Darwin's theory of adaptation and the process of natural selection in relation to the environment and, in this context, he deliberately portrayed humankind as 'the latest link in this process... [so that] man is not a new creation, but a new formation from the creatures that preceded him'. 19 He drew heavily from Darwin and Huxley and others to argue that humankind shared a common ancestor with the ape. 20 Most of the rest of the book was spent considering the anthropological, paleontological and zoological evidence for 'primitive man' and 'missing links'.

As a Zionist it was vitally important to Klausner, who regarded evolutionary theory as 'the solid foundation of all the new historical sciences', that Jews should 'write in Hebrew about [scientific] matters having no direct connection whatsoever to the Jewish People' precisely because of the perceived clash between the universalist, humanist worldview and the religious Jewish worldview which were in competition for the cultural soul and ethos of Jewish Palestine;²¹ Darwin's 'Book of Creation', or historical anthropology, dealt with questions of creation and formation, just as did Judaism, even if

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¹⁶ Joseph Klausner, *Ha-Adam Ha-Kadmon: Yesodot Ha-Antropologyah. Three Parts in One Volume* (Warsaw: Tushiyah, 1900), 15.

¹⁷ Ibid., 15-16.

¹⁸ Ibid., 15.

¹⁹ Ibid., 17. It was a strictly hierarchical conception of evolution, such that Klausner could write: 'All living creatures came to be upon the earth, as it is known, one after another in a fixed in gradual order, with each of their higher forms being a development over time of a lower form.' ibid., 44.

²⁰ Ibid., 18.

²¹ Ibid., 24.

it arrived at very different answers.²² Deliberately contrasting himself against the *maskilim*, the adherents of the Jewish Enlightenment, who had sought to show that science and faith were sisters, Klausner argued that science, when properly evidenced, had to take priority over traditions or received teachings.²³ After all, religion, too, had evolved, along with its ethical teachings.²⁴ But, he went on, religious Jews need not fear evolution, since faith addressed *creation* while science spoke of *formation/becoming*: the two could be aligned if one set aside the traditional teaching of creation as something from nothing, and reconceptualised it in terms of scientific monism, which saw all as part of an evolutionary process, that is, the creation of something from something else.²⁵ He argued that it was indeed possible to transform the traditional reading of the biblical texts so as to find solutions in accordance with the times, as the scholarship of Naftali Levy (1874) and Isaac Castiglioni (1894) had shown.²⁶ Klausner regarded this kind of compromise as illustrative of 'Judaism's gift for transforming itself in accordance with the spirit of the time, to take off one form and put on another, like any other thing containing a true breath of life.'²⁷ While it was not always the case,²⁸ here he sought to

²² Ibid., 172-73. He did not shy away from claiming that modern science 'offered a complete worldview... which encompasses nearly all important human questions.'

²³ Klausner maintained that 'any compromise between faith and science might be valuable in a practical and provisional sense, but it would be neither true nor valid.' ibid., 173.

²⁴ For example, altruism could, in Klausner's view, be explained ibid. 'according to Darwin's laws of adaptation and natural selection' because 'only those people have survived who possessed those social virtues and who bequeathed them to their children', while individuals without such traits would not have flourished or passed on their characteristics since society could not have survived without them. Ibid., 26-29.

²⁵ Ibid., 174-75. Monism in this context is the denial of the existence of a distinction or duality in the universe, such as between the Creation and the Creator; it is a mechanistic view of organic life and physical nature as a unified whole.

²⁶ Ibid., 176. Klausner was referring to Naftali Levy, *Toldot Adam [the Book of the Origins of Man]* (Vienna: Spitzer & Holzwarth, 1874). and Vittorio Hayim Castiglioni, *Pe'er Ha'adam [the Generations of Man]* (Trieste and Cracow: Joseph Fisher, 1892).

²⁷ Klausner, *Ha-Adam Ha-Kadmon: Yesodot Ha-Antropologyah. Three Parts in One Volume*, 176. As he put it, '[G]iven the results of the sciences that are founded upon theory of unity of the entire was, we are not posing any danger to Judaism, rather strengthening in deepening its roots in people's hearts.' ibid., 175.
²⁸ For example, Klausner read and commented on Ahad Ha-Am's views on evolution in a series of review articles in the Russian-Jewish literary journal *Knizhki Vokhoda* in 1900. There Klausner took issue with Ahad Ha-Am as too soft on religion, suggesting that a rejection of traditional religious authority was inadequate and was nothing more than an 'artificial transformation of the species [of religion]'. In these articles, Klausner spoke of a 'struggle for existence' and compared the Jewish people with the developing 'organism', although he noted that whereas organisms naturally decayed, a people or nation could always rejuvenate. Cited in J. Philipson, "Darwinism and Zionism: Ahad Ha-Am and Joseph Klausner," in *Charles Darwin and Modern Biology: Proceedings* (St Petersburg: Nestor-Historia, 2010), 619. In one review Klausner compared Zionism and Darwinism directly, suggesting that in that both represented complete

avoid alienating religious sensitivities even as he tried to establish a strong secular knowledge base of the proto-Jewish nation state.

Arthur Ruppin (1876-1943) was a Polish-German demographer and sociologist who played a leading role in the land development of the Zionist settlement of Palestine and as an academic at Hebrew University.²⁹ As a student of law and economics before moving to Palestine, and profoundly influenced by the Social Darwinian theory of the German biologist Ernst Haeckel and others, he wrote a treatise on Darwin and the Social Sciences in 1903 that attempted an analysis of the applicability of Darwin's theory to organizing society and the state.³⁰ In this work he compared species survival with race survival, stressing the role played by altruism and collective aid rather than the prevailing model of progress as the result of violent struggle. In his view, the human race was a product of evolution but its biologically-determined drives could be readily overridden and its capacities for morality and freedom could be improved upon through a creative programme of social engineering. For Ruppin, writing within a modern European culture in which religious adherence could no longer be assumed, this social engineering was envisaged as a shift in investment of the future hopes of the individual from the religious to the national dimension (with the nation state conceived of as a mixture of race and historical culture) and thus a shift from religious devotion to national feeling.³¹ Later, in The Jew of Today (1904), he argued for the necessity of Jewish survival in terms of diversity within the human eco-system, and expressed his rationale for Zionism as one means by which to avoid the loss of a unique national culture, which was the evolutionary expression of its particular racial characteristics. As he saw it, 'the right to national existence can only be based on the fact that so long as they survive as a nation,

worldviews that 'give a direction to all thoughts and views of the modern, intellectual man.' Cited in ibid., 618.

²⁹ For an excellent overview of Ruppin's views on race, see Amos Morris-Reich, "Arthur Ruppin's Concept of Race," *Israel Studies* 11, no. 3 (2006). See also Penslar, *Zionism and Technocracy*, 85,86.

³⁰ Arthur Ruppin, "Darwinismus Und Sozialwissenschaft," (Jena1903).

³¹ Penslar cites Ruppin's diary 2 April 1903 to suggest that, for Ruppin, it was of little or no matter whether one committed to German nationalism or Zionism: '[T]he individual human being is as such worthless; he is valuable only as a member of the nation. And nations are the means for the elevation of mankind.... Jewry has a justification for its existence only if it can exist as a nation and has in itself the power to obtain the basis for the survival of the nation, a territory. Otherwise it deserves to die out. Zionism or complete assimilation – *tertium non datur*... It does not matter which nation one belongs to; rather, the one belonging to a nation altogether.' Penslar, *Zionism and Technocracy*, 87,88.

they can do more for the development of human culture and if they are absorbed by other nations.' Ruppin resigned his position as head of the Bureau of Jewish Statistics and emigrated in 1908 to become head of the World Zionist Organization's Palestine Office; he became increasingly convinced that assimilation was responsible for the abnormal, pathological state of modern Jews. In the 1930s, he came to accept that the race of Israelites was a mixture of the bloodlines of various ancient tribes and that the modern Jew reflected genetic influences of the surrounding nations and so was not a pure race as such; Jewish distinctiveness, then, was the result of social and cultural ties rather than genetics. Nevertheless, like so many others of his generation after the Second World War, he remained convinced that race, along with the national culture it shaped, were the key categories for understanding human society and he continued to espouse a strongly evolutionist belief in the environment as an elemental force in shaping those various races or species that comprised humankind. This was even true of his final book on Jewish survival, written in 1940, to address the twin threats of anti-Semitism and assimilation:

[T]he environment can create, by natural social selection, species of man which are different in their qualities from those of the original group, insofar as the difference between the external conditions is greater and longer. By weeding out the less fit, the environment influences the development of the important qualities for existence in the given conditions for one group in this direction and for

³² Arthur Ruppin, *The Jew Today* (New York: Henry Holt, 1913), 400. The 1904 German original is slightly different: 'The basis for any rational justification for the continued existence of the Jews as a separate people is their superior racial attributes.' *Die Juden Der Gegenwart* (Berlin: Juedischer Verlag, 1904), 271. In the conclusion Ruppin went on: 'Zionism is not a mere national or chauvinistic caprice, but the last desperate stand of the Jews against annihilation. Should the denationalizing process, which, in Western Europe, has already crushed all independent Jewish culture, spread to Eastern Europe – and there are signs that it is beginning to do so – all is over with the Jews and with Jewish culture. Once lost, a national culture can never be re-created, and without a culture of its own the total absorption of the Jews by the other nations is only a question of time. If the Jews wish to continue to exist, no pains should be spared, no sacrifice considered too great. The will of the nation cannot be resisted, it must conquer in the end.' *The Jew Today*, 300-01.

³³ For example, Ruppin suggested that '[t]heir purity, must be settled as follows: From the moment they left Palestine the Jews absorbed blood of many different non-Jewish peoples. However, racially these people were primarily of the same three racial components from which the Jews of Palestine were earlier established.' *Soziologie Der Juden* (Berlin: Juedischer Verlag, 1931), 30.

another group in the opposite way. What we call today the human race is actually [made up of] species which were created through crossing and selection.³⁴

Practically speaking all this had concrete implications for the Zionist project for Ruppin. He probably made this point most clearly in an article of 1919 entitled 'Selection of the Fittest', he had used eugenic and evolutionary language to argue that Palestinian immigration policy needed to be focused on selecting out the diseased, the mentally deranged and the anti-social, and encouraging the entry of 'race Jews' to keep pure the racial stock, so far as it was possible.³⁵

For the pioneer of Cultural Zionism, Ahad Ha-Am (1856-1927), who wrote about the subject in a series of essays in the 1890s, the study of evolution in nature offered an excellent conceptual tool for understanding the natural development of Judaism and its place within Zionism. In Religion was to be regarded as a functional product of the host culture at a particular point in that culture's development; as such, it answered existential questions and served the will-to-live of individuals and nations. This view was shaped in large part by his early fascination with the natural sciences and his conviction that the supreme law of nature, which he credited to Darwin, was 'the will to exist'.³⁶ [As such, he identified Darwin as an influence upon Nietzsche in approaching the question of how new moralities emerged.³⁷] He criticized those who portrayed their ancestors in the Jewish tradition as giants whose words and actions were eternally right. For Ahad Ha-Am, it was extraordinary that despite their awareness that 'the world is accepting

³⁴ The War of the Jews for Their Existence (Tel Aviv1940), 16.

³⁵ "The Selection of the Fittest (1919)," in *Three Decades of Palestine: Speeches and Papers on the Upbuilding of the Jewish National Home*, ed. Arthur Ruppin (Jerusalem: Shocken, 1936).

³⁶ Ahad Ha-Am wrote: 'This all-powerful force disguises itself in the innumerable changes of shape and form; the penetrating I will recognise it, beneath them all, as *the desire for life and well-being*. This desire, which is implanted in us by nature, forces every living thing to pursue at all times that which brings life and pleasure, and to shun that which leads to destruction or page. For every living thing this desire is the motive and the goal of every single action... For man's struggle for life and well-being has a distinct quality of its own. In the case of all other living things, the struggle is purely external: it is a struggle against hostile natural forces, against an environment in a call to life and well-being.' Ahad Ha-Am, "Many Inventions (1890)," in *Selected Essays by Ahad Ha-Am, Translated from the Hebrew by Leon Simon* (Philadelphia: The Jewish Publication Society of America, 1912), 160.

³⁷ Ahad Ha-Am wrote: 'It is true that Nietzsche himself hated historians, and stigmatised Darwin and Spencer, the authors of the evolutionary theory, as mediocrities. But this did not prevent even him from inventing historical hypotheses in order to explain the progress of morality, or from taking the cornerstone of his new system from Darwin.' "The Transvaluation of Values (1898)," 237.

gradually a scientific theory [i.e. Darwinism] which does not admit the existence of purpose or end, even where it seems most obvious' yet they continued to act 'as though these fifty years had brought no change of idea and outlook into the world!' He went on,

But since the conceptions associated with the term 'evolution' arose in the domain of natural science, and made their way subsequently into philosophy and history, the situation has changed completely... In place of [the tradition's] invective and moral condemnation, tirade and sarcasm, we now have analysis.³⁹

The implications for modern ethical teaching and for the study of the natural history of religion were profound, leading to a suspension of judgement about the Jewish religious tradition's own estimation of itself and the moral authority of its teachings.

[J]ust as the natural scientist... knows no distinction between the most exquisite bird and the most repulsive insect, but examines all alike with the minutest attention, doing his best to penetrate into the mystery of their lives and the process of their evolution: so, too, the student of the spiritual life of mankind has no concern with good and evil, wisdom or folly.⁴⁰

Neither his acceptance of the findings of modern science, nor the historicist understanding of Judaism that he derived from it, shook Ahad Ha-Am's sense of his bond with the Jewish people. As a cultural Zionist, he valued the land as a 'spiritual centre' that could facilitate the social and moral improvement of a Hebrew culture that had freed itself of both religious authority and negative diaspora influences, more than he valued it as a solution for the poverty and insecurity of individual Jews at that time. Evolutionary theory was an integral part of the scientifically-informed culture that he hoped would characterise the developing movement. He was clearly aware of the controversy and hostility provoked by interpretations of Darwinism that suggested that life had no *telos* or

³⁸ "Slavery in Freedom (1891)," 183,90,91.

³⁹ "Ancestor Worship (1897)," 207.

⁴⁰ Ibid., 208.

goal, *contra* to religious teaching. He knew how antagonistic it would be to sets its analytical power for making sense of the natural world against the poverty of misunderstanding of much religious tradition. And he knew what he was doing when he dared to offer evolution as a model for a natural history of religion itself. But in promoting this secular worldview, which he called his Judaism, he wrote 'I at least can speak my mind concerning the beliefs and the opinions which I have inherited from my ancestors, without fearing to snap the bond that unites me to my people. I can even adopt that "scientific heresy which bears the name of Darwin," without any danger to my Judaism.'41

In this context Abraham Isaac Kook (1865-1935), Chief Rabbi of British Mandate Palestine 1921-1935, is interesting. His position on evolution was, at least in part, a response to the significance attached to evolutionary theory by secular Zionists. A passionate religious Zionist, Kook believed that secular Zionists were acting religiously and in accordance with God's will, whether they recognized it or not. He was concerned to understand the causes of their rejection of Judaism and became convinced that evolutionary theory played a significant role. ⁴² In his early writings Kook claimed that, for enlightened Jews, evolution represented no threat to Judaism [or to a correct reading of Genesis]. He wrote,

Evolution that comes with great gradualness, millions of years, is what agitates the hearts of the small-minded. They think that evolution is a reason to deny the existence of the living God, but they are greatly mistaken... And if the ways of wisdom compel [us to acknowledge] that this came to pass through evolution over myriads of myriad of years, we feel the utmost wonder at how great and exalted is

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⁴¹ Ha-Am, "Slavery in Freedom (1891)," 194.

⁴² In *Orot Ha-Kodesh* [Lights of Holiness], a three-volume collection of essays published posthumously in 1963-64, he would later explain that the crisis in 'man's outlook' that had brought about 'confusion and disorder' to wider society, had been caused by several factors. Of these, the theory of evolution was highlighted for having 'wrought a major revolution'. Abraham Isaac Kook, *Orot Ha-Kodesh* [*Lights of Holiness*] (Jerusalem: Mossad Ha-Rav Kook, 1938, 1985), II:556-60. English translation in Abraham Isaac Kook and Ben Zion Bokser, *The Essential Writings of Abraham Isaac Kook* (New York: Amity House, 1988), 170, 71-72. The two other 'basic changes' in wider society were the change in social outlook and the change in the cosmological outlook.

God the Eternal, that myriads of years working constantly to produce a desired end, are reckoned as naught or a instant.⁴³

For Kook, there was no reason for Jews to fear scientists' conceptions of deep time or evolutionary theory; indeed, he suggested, the faithful should familiarize themselves with the work of geologists and biologists, writing,

[It is] only through lack of understanding that the perplexed of our generation think that the theory of evolution according to [Kant and Laplace and] Darwin, and other scholars of this time, will bring with it the destruction of the Torah.⁴⁴

It was, he went on, only a theory, after all. But since, as he well understood, it was a theory of great importance to secular Jews as a foundational truth of the Western culture they espoused, and since he preferred not to adopt a hostile, confrontational stance but rather a conciliatory, accomodationist one, he urged his co-religionists to act as if the theory was true, to accept it as true for the sake of argument. In this, he said, they would be following the example of engagement with unfamiliar philosophies first established by Maimonides. This was all around the turn of the century. Later, from around 1925 onwards, Kook went further to reconcile what he regarded as the partial truths of evolution with the eternal truths of Judaism. For this he focused on the mystical parallels with the scientific conception of evolution, and sought to present the science as a partial understanding of a fuller kabbalistic knowledge of cosmic evolution to his religious readership. Like many before and since, Kook understood evolutionary theory in narrowly progressive terms, and saw life developing with a pronounced upwards trajectory, ever improving. He saw parallels to the old Lurianic conception of a broken cosmos in which the divine fragments are strewn across the world and are seeking to find

⁴³ Abraham Isaac Kook, "Li-Nevuchei Ha-Dor [for the Perplexed of This Generation]," (http://kavvanah.files.wordpress.com/2010/05/kook-nevuchai.pdf, c.1900, 2010), 11.

⁴⁴ Ibid., 19. Kant appeared to assume the biological science of evolutionists such as Buffon and others, and in *Universal Natural History and Theory of the Heavens* (1755) he himself published a nebular theory for the origin of stars and planets that antedated the famous nebular hypothesis for the solar system found in Laplace's *Exposition du systeme du monde* (1796). In this context, Kook's interest in Darwin is in relation to the idea of transmutation in general, rather than any particular interest in natural selection as a mechanism.

their way back to perfect union in the godhead. And he expressed evolution, whether cosmic or biological, as a mending of the world (*tikkun ha-olam*) and a return to God (*teshuvah*). As such, he claimed that 'The doctrine of evolution that is presently gaining acceptance in the world has a greater affinity with the secret teachings of the *Cabbalah* than all other philosophies.'⁴⁵ He even went so far as to accept the bestial, animal origins of humankind, which, historically speaking, is the red line that many theistic evolutionists have not been prepared to cross. While his scheme, which he called 'creative evolution', was not developed in great depth or detail, it was sufficient for his purposes, namely, to persuade his co-religionists to avoid unnecessary conflict with the secular Zionists whom he regarded as partners in advancing God's work in their building up of the Land. It seems reasonable to suggest, then, that Kook's interest in evolutionary theory was as much a strategic attempt to reconcile warring religious and secular Zionists, as it was an apologetic endeavor to reconcile science and religion.

So, to summarize our findings so far, it was by no means unusual for Zionists of very different stripes to allude to evolutionary science in relation the movement. Along with the vast majority of the European *intelligentsia* of the late nineteenth century, they were unable to resist the attraction to, and authority of, the Darwinian paradigm. So it was that, in a period of intense rumination just prior to his transformation into the leader of political Zionism, Herzl referred to evolution metaphorically in attempting to account for Jewish survival in a hostile world. As a cultural Zionist, Ahad Ha-Am presented it as an integral aspect of the modern worldview required to build the Jewish nation and one that necessarily undermined the authority of religious superstition and out-dated tradition. Among religious Zionists, one can point to Chief Rabbi Kook, who, while certainly not countenancing scientific hypotheses over Torah, was nevertheless inclined for the sake of building bridges with secularist Zionists to minimise religious condemnation of the theory. Of those mentioned so far, it was perhaps in the anthropological and sociological writings of Klausner and Ruppin that the most sustained utilizations of evolutionary

⁴⁵ Abraham Isaac Kook, *Orot Ha-Teshuvah [Lights of Penitence]* (Jerusalem: Mossad Ha-Rav Kook, 1925, 1985), II:555. English translation in Abraham Isaac Kook and Ben Zion Bokser, *Abraham Isaac Kook: The Lights of Penitence, Lights of Holiness, the Moral Principles, Essays, Letters and Poems* (London: SPCK, 1979), 220-21.

theory for the Zionist enterprise were to be found: Klausner attempted to weave Darwinian theory into the fabric of national intellectual life and education, while Ruppin used it, among other things, as the primary justification for the Zionist enterprise itself and even deriving from it some practical race-related policies, which sound ominously eugenic in tone. And this brings us now to the second part of the presentation: [that comprises the main focus of this chapter, namely,]Zionist eugenics.

3.2 Why were some Zionists interested in eugenics?

One area to which *some* Zionists were drawn to evolutionary science was eugenics, which was often also closely associated with race theory. I have three case studies of Zionist eugenicists that I'm writing up at the moment, only two of which I'll talk about today. But before I launch into this, I need to offer a few words of justification for considering eugenics and race theory alongside evolutionary theory. This is necessary because historians of science have tended to treat these biological sciences in very different ways and for very good reasons. They distinguish sharply between the histories of evolutionary theory, of race theory, and of eugenic theory partly because of the real theoretical differences between these scientific orpseudo-scientific disciplines, and partly because of the differing political contexts for each. 46 For example, logically, one does not need to ascribe to any kind of evolutionary theory or any kind of race theory in order to teach eugenics, which is essentially concerned with inter-breeding practices that will improve the quality of a particular human population. And while evolutionary theory has appealed to political groups of all kinds, race theory tends to be associated with conservative, right-wing politics, while eugenic theory was, on the whole, a liberal, middle-class movement. I discussed the issue last year with the race-theory specialist

⁴⁶ There are, of course, many ways to conceive of the relations between the biological sciences, heredity and society. For a useful comparative study of race science in a variety of national contexts, including Palestine, see Amos Morris-Reich, *Race and Photography: Racial Photography as Scientific Evidence*, 1876-1980 (Chicago: University of Chicago Press, 2016). For the liberal political context of the eugenics movement in general, see Marius Turda, *Modernism and Eugenics* (New York: Palgrave Macmillan, 2010). For the genetic and race science and its relevance for Jews specifically, see Veronika Lipphardt, *Biologie Der Juden: Jüdische Wissenschaftler Über "Rasse" Und Vererbung 1900-1935* (Göttingen: Vandenhoeck & Ruprecht, 2008). For a wide-ranging discussion of Darwinism in social thought, at least in the US context, see Carl N. Degler, *In Search of Human Nature: The Decline and Revival of Darwinism in American Social Thought* (New York: Oxford University Press, 1991). *Got through these texts and draw out what is useful.

Amos Morris-Reich, and he placed great importance on avoiding the sin of conflating these categories. And yet here I am, including eugenicists alongside evolutionists in a survey of Zionist thought. My defence is very simple, and it's that that my primary sources made me do it. This is true of my three Zionist case studies and, for what it's worth, evolution, race and eugenics are also woven together in the writings of two non-Zionist eugenicists I've worked on, namely, Joseph Jacobs, editor of the Jewish Encyclopedia, and the Anglo-Jewish journalist and communal authority Lucien Wolf, although in those cases the focus is on understanding the past evolutionary and eugenic forces acting upon the Jewish people. One might also point to the New York based Reform rabbi Max Reichler, who justified eugenics in relation to the Talmudic teachings and race theory. ⁴⁷ So while it is correct that one need not necessarily justify one's eugenicist tendencies in terms of race science or evolutionary theory, and while it might well make sense in other contexts for historians to treat these categories as distinct subjects, for the Jewish eugenicists that I've looked at, at least, it's usually the case that Darwinism, race science and eugenics were closely associated and related in their minds.48

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⁴⁷ A particularly striking example was the US Reform Max Reichler who attempted to harmonize biblical and rabbinic teachings with modern eugenic policy. He claimed that 'The Rabbis, like the eugenicists of today, measured the success of a marriage by the number and quality of the off-spring. In their judgments the main objects of marriage were the reproduction of the human race (*leshem piryah veribyah*), and the augmentation of the favored stock (*lethikun havlad*).' Among other things he considered the legal categories of prohibitions of marriage of defectives by reason of heredity, of personal defectives, and consanguineous marriages. After setting out the extensive sources, Reichler concluded that 'the Rabbis recognized the fact that both physical and psychical qualities were inherited, and endeavored by direct precept and law, as well as by indirect advice and admonition, to preserve and improve the inborn, wholesome qualities of the Jewish race... Their ideal was a race healthy in body and spirit, pure and undefiled, devoid of any admixture of inferior human protoplasm. Such an ideal, though apparently narrow and chauvinistic, has its eugenic value.' Rabbi Max Reichler, "Jewish Eugenics," in *Jewish Eugenics and Other Essays: Three Papers Read before the New York Board of Jewish Ministers 1915*, ed. Max Reichler, Joel Blau, and D. de Sola Pool (New York: Bloch Publishing Company, 1916).

⁴⁸ It is possible to overplay the differences. Darwin himself appeared to agree with his cousin Francis Galton's eugenicist theory, and his sons George and Leonard also supported the theory, Leonard becoming a president of the eugenics Education Society. In *The Descent of Man* (1871), Darwin discussed classic eugenic issues, including the tendency of 'savages' to eliminate the weak in body and mind in contrast to the practice of 'civilized societies' which build asylums for the imbecile, the maimed and the sick so that 'the weak members... propagate their kind'. It is unsurprising that many eugenicists were inspired by Darwinism, not least because of the enormous authority and sway that evolutionary science had in the nineteenth and early twentieth centuries. Between 1920 and 1939, high-school biology textbooks consistently justified eugenics in relation to Darwinian theory, including G.W. Hunter's *Civil Biology* (1914), which was the book associated with John Scopes during the Monkey Trial of 1925. It was by no means only the Nazis who conflated and related evolutionary theory, race science, and eugenics. [*Check

Some of this is unsurprising, I'd suggest. Since even before Darwin, progressive evolutionary thought was probably the single most important conceptual framework characterising Victorian thought and culture. And from the last third of the nineteenth century until the mid twentieth, 'race' was arguably the single most important category for European and North American social and biological sciences. There were of course many different and conflicting definitions, with some organising humanity according to an inherent and fixed hierarchy of races and sub-races while others acknowledged the distinctions without giving them social significance. Some espoused 'racial determinism', that is, the idea that one's racial category determines one's potential and thus one's social value; others emphasised what was shared in common between the different human types which could, after all, readily interbreed. 'Racial purity' was regarded by some as vital for the health of the race, with racial mixing being equated to degeneration, while others argued that racial mixing would regenerate and benefit the population. From the 1920s, ideas of racial hierarchies that were deterministic in nature and required programmes for the protection of race purity were increasingly linked to certain political ideologies, and lost academic credibility. And yet while Nazi racism was denounced from the early 1930s and one might have assumed that the elimination of irrational race theory from culture and science was inevitable after the War, in fact only a small proportion of the educated public reformulated their attitudes on the question of race in response to the rise of the Nazis. The nineteenth-century categorization of race as a scientific concept continued well into the twentieth century, despite the fact that questions about its unscientific nature were posed by some anthropologists and biologists long before the Nazis. Some European Jewish pioneers of the social sciences, including Durkheim, who were concerned to encourage integration and assimilation, argued that Jewish similarities stemmed from their common humanity and that any differences were socially mediated or constructed, rather than intrinsic or racial; as a result, racial theories about Jewish

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all these claims and quotes, taken from a review of West's *Darwin Day in America* by Anne Gardiner – dodgy sources*].

differences were to be regarded as inconsequential for the purposes of assimilation into European or American society.⁴⁹

How did Zionists relate to such views? Obviously, a good proportion shared the assumption of many Europeans and North Americans in the 1930s of race as a scientific category, and looked at government-supported eugenic programmes with interest and favour, even if they sought to distance themselves from Hitler, as some did. At the same time, in contrast to the pioneering social scientists, there was a tendency among some Zionists to focus on Jewish racial difference, and even the idea of a superior Hebrew type, and to regard it either as intrinsic or as the potential eugenic result of the mass immigration and the assimilation (and therefore interbreeding) of numerous Jewish groups.⁵⁰

3.2.1 Abraham Matmon

Abraham Matmon is the first my two examples. He was a sexologist closely associated with the Institute for Hygiene and the Sexual Sciences in Tel Aviv who was highly active as an author and editor in the 1930s. He published, among other things, a Hebrew language journal on public health and sexual hygiene called *Briut* (Health) and examples of his own works include *The Sex Life of Man* (1939),⁵¹ an article entitled 'Racial Improvement and Control of Marriage' (1933),⁵² and a pamphlet on 'The Racial Improvement of the Human Species and Its Value for Our Nation' (1933),⁵³ the last of which is the focus here. The early twentieth century was a time of nation building

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⁴⁹ For a useful discussion of this and, more generally, for an excellent treatment of the wider topic of scientific racist theory as approached by both Jews and non-Jews, see Elazar Barkan, *The Retreat of Scientific Racism* (Cambridge: Cambridge University Press, 1992). For an application of the complex intellectual terrain in relation to one of our examples, Arthur Ruppin, see Morris-Reich, "Arthur Ruppin's Concept of Race."

⁵⁰ Morris-Reich argues that 'The rhetoric of race – sometimes an explicit view of race – was of importance primarily in the German branch of Zionism' but it is not difficult to find examples from British or Palestinian-based Zionists, too, as we shall see. "Arthur Ruppin's Concept of Race," 4.

⁵¹ Abraham Matmon, "Hayai Ha-Min Shel Ha-Adam [the Sex Life of Man]," (Jerusalem: Institute for Hygiene and the Sexual Sciences, 1939).

⁵² "Hashbachat Ha-Gez'a Ve-Piku'ach A'l Nisu'im [Racial Improvement and Control of Marriage]," *Briut* 1 (1933).

⁵³ "Hashbachat Ha-Gez'a Shel Ha-Min Ha-Enoshi Ve-A'rachav Le-Ma'an A'menu [the Racial Improvement of the Human Species and Its Value for Our Nation]," (Tel Aviv: Institute for Hygiene and the Sexual Sciences, 1933).

following the Balfour Declaration of 1917 and during the period of the British Mandate from 1920-1948. Zionists in Palestine were as interested as any other group in race science and eugenics, and Matmon, in Tel Aviv, was a significant figure in that context.

Matmon understood the Zionist movement mainly in terms of the revitalization of Jewish civilization in its broadest sense. It was obvious to him that in order to develop a healthy nation among the other nations, and to avoid further degeneration of the Jewish people (symptoms of which included poor eyesight and a variety of mental frailties),⁵⁴ one needed to focus on inculcating that part of society that was responsible for social and cultural advancement. He explained,

There is a great deal of talk among us concerning our nation's aspiration for mental and physical renewal, a renewal which will enable it to carry forward the tradition of past generations, to increase the spiritual wealth bequeathed to it by its forefathers, to spread their wisdom throughout the world, and to acquire an honourable place in human society. Yet we must always remember at the same time the assumption that for the nation to avoid degeneration, we must concern ourselves not only with its quantitative value, but also with its quality. The best element in the nation is that which always goes forwards, pushing the nation, or, more accurately, pulling the backward, along with it.⁵⁵

As a secular Zionist, Matmon was suspicious of religious worldviews that interfered with the secular nation-building project; in contrast to those who emphasized the need to increase Jewish numbers in the Land, he was more concerned with quality than with quantity. He suggested that

Many thinking people, especially men of religion – who, as a rule, do not base their views on modern science – believe that the nation's fate, its future and its strength depend upon the greatest possible number of marital ties accomplished

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⁵⁴ The list Matmon gives includes deficient vision, feebleness of nerves, tendency to suicide, old-age melancholy, deep depression, personalities with an unstable mental equilibrium, and idiotic blindness. Ibid. ⁵⁵ Ibid., 3, 10.

within the nation and the resulting births. They ascribe no great value to the nature of the infant, whether he is weak or strong, intelligent or simpleminded; a person destined to be a deep thinker and a source of benefit to others, or one who end will be to be a criminal and harm society. This is not the case with those who base their views upon the foundation of science, and in particular upon theory of heredity; they know and understand very well that that is not the right way.⁵⁶

As a mechanism for developing a healthy nation, the obvious tool was the science of heredity, and yet Matmon recognized that the practical policy implications could be highly problematic, especially for a liberal state concerned with how to cope with a dysgenic element within society that multiplied at a disproportionate rate.

We are therefore facing the question of how to solve this problem. Shall we content ourselves with providing asylums and shelters for these wretched people, or shall we let them wander about without any supervision until they disappear from the face of the earth? The latter counsel is inhuman and will not achieve the aim because, as we have already mentioned, that part of society is the most fertile, and we have no permission to allow the matter to be resolved by blind chance and human nature. On the contrary, we must take these people's fate in our own hands, to provide them with the necessary help and protection, while exerting an influence on the course taken by their procreation, and guide that procreation in a way congenial with society. This is the new role of modern hygiene: to protect humanity from the deluge of the inferior and to block any penetration of humanity by them, by depriving them of the ability to pass their infertility on to future generations. With this, we come into contact with a new branch of hygiene, the hygiene of procreation, eugenics, or "improving the human race". 57

For Matmon, the Zionist state equated to the Jewish collective. It was essentially a nation like other nations, and one which could and should learn from other nation's experiences

⁵⁶ Ibid., 3.

⁵⁷ Ibid.

with eugenics, whether European or north American; as such, his article was peppered by references to various eugenic policies and related scientific writings from various Western nations. At the same time, Matmon felt that he could offer an original approach to the problem, a programme which he called 'passive eugenics'.

The eugenic ideas that Matmon propounded were, he explained, based on the foundational works of Francis Galton (whose photos were included in the article), which were themselves derived from the evolutionary science of Charles Darwin and supported by the principles of heredity described by Gregor Mendel.⁵⁸ He reasoned that, on the basis of such a powerful scientific ability to make definitive statements about human heredity that encompassed multiple generations, state intervention was now demanded at some level. He insisted that

[W]e now *know* with scientific *precision* that both physical and mental characteristics can be passed on from parents to children. There are also heritable diseases with prominent and latent symptoms that we discover in the children, either immediately or later on. This phenomenon gives rise to a great deal of thought on our part about this question, because a child may suddenly be born who exhibits the symptoms of conditions which were present in neither of his parents, but which were passed on to him from a grandparent, or from more distant ancestors, or from sources that remain unknown to us.⁵⁹

Among the societal phenomena implicated by the new knowledge was that of 'the dangers inherent in blood relatives marrying each other'. Matmon spent some time

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⁵⁸ Strictly speaking, Galton worked out his theory before Mendel's work on plant hybridization (1866) was republished in 1900 and became widely known, but Matmon viewed Darwin and Mendel as both contributing significantly to Galton's development of eugenics: 'This theory [of eugenics] is based upon ideas that are taken from Darwin's theory. But the man who established a system of racial improvement, and gave it the [name of] eugenics is Darwin's cousin Francis Galton. He was the first to stress with full force the significance of heredity in [understanding] human achievement... The phenomena of heredity in the realm of plants has already been investigated years before... by the Austrian, Johann Gregor Mendel... According to Galton, the parents pass their traits and capacities to the children in the following way [according to the ratios of heritability found in Mendel's research]: the child inherits from each parent a quarter of his characteristics, from each of the four grandparents one-sixteenth, from each great-grandparent, one-sixty-fourth.' ibid., 6.

⁵⁹ Ibid., 5-6.

setting out the international evidence for degeneration as a result of interbreeding or intermarriage, concluding:

What need has humanity of such people? Of course, if they are present, we cannot do anything to them. On the contrary, our human conscience tells us and forces us to support them, to ease their war of survival, which for them is ten times more difficult than for a healthy person. But we can and should want that type will not continue to multiply by procreation...⁶⁰

Matmon reminded his readers of the negative consequences on any society of the resultant dysgenic progeny of 'vagrants, thieves, criminals, whores, etc' who 'create a great deal of work for the police, the courts and the legislators, and put a heavy burden on medical aid, support and care services'. 61 The direct relevance and significance for the builders of a new State was obvious at a time when resources were so sparse, as was the inevitable solution: 'We must do everything to ensure that these types cease to be, and disappear from the world.'62

But how to achieve this end? Matmon did not go so far as to promote positive eugenics, that is, the state-sponsored policy of actively promoting higher rates of reproduction for people with desirable traits. And he absolutely rejected The first option, which Matmon (mis)labelled 'positive eugenics', was to attempt to educate the 'children produced by such [dysgenic] parents' to become upstanding citizens. 63 The French experience of New Caledonia in the Pacific Islands, however, whereby the end result was sodomy among school children, the ascendancy of professional criminals throughout the region, and prostitution and venereal disease among the women, convinced Matmon of the error of this approach. A second option was negative eugenics, such as practiced by the ancient Spartans who exposed their weak and sick children to prevent a public burden, or by the contemporary American. As a sexologist, Matmon insisted that 'We have neither the

⁶⁰ Ibid., 8.

⁶¹ Ibid., 11,12.

⁶² Ibid., 12.

⁶³ Mislabeled in the sense that positive eugenics is usually understood to refer to the active promotion of higher rates of reproduction for people with desirable traits.

authority nor the right to demand that anyone to give up his natural (sexual) gratification the sake of our peace of mind and well-being. '64 practice of sterilization. Neither of these did Matmon hesitate to describe as 'barbaric means... neither good nor fair' 55 since it was neither politically nor morally expedient in his view to prohibit dysgenic individuals from marrying or procreating. His own solution for practical racial improvement, based on the practice of (pre-)marital examination, he called 'passive eugenics'. It was of utility both in relation to regular sexual hygiene but, crucially, also for hereditary issues. Practically, oOnce the doctor had conducted his examination and was in possession of the necessary information, he could advise the individual, or his or her prospective partner, of the eugenic information that would allow them to make an informed choice and directing their precautionary actions. 66 In a classic case of the triumph of optimism over experience, Matmon maintained that concerned citizens of the Jewish State, being rational in the main, would likely postpone or abandon altogether their personal breeding programmes for the greater good of the health of the nation. The greater good, of course, was ambitiously ideological. Ultimately, Matmon explained, passive eugenics could

the purpose of the marital examination is to raise the quality of the nation and to give rise to a generation of people who will be, if not superior human beings, physically and mentally healthy and wholly free of all defects.⁶⁷

In offering such a passive intervention, the Jewish state would address the hereditary issues for the nation, alongside the sexual health of individuals, without imposing unreasonable and unrealistic prohibitions on any individual's sexual freedom.

Sadly, I have no information as to whether or not his It is worth noting that nowhere in the study was there any reference to different races, so that Matmon's concern was very much for the Jewish nation to aspire to be exemplary within the modern western world in its racial hygiene from a medical point of view (supported by discussion of sexual health

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⁶⁴ Matmon, "Hashbachat Ha-Gez'a Shel Ha-Min Ha-Enoshi Ve-A'rachav Le-Ma'an A'menu [the Racial Improvement of the Human Species and Its Value for Our Nation]," 14.

⁶⁵ Ibid., 13.

⁶⁶ Ibid., 14.

⁶⁷ Ibid., 15.

more generally), rather than to be concerned with a programme to improve its race over other distinct races. plan plan to test the rationality of the Palestine Jew was ever put into effect or even trialed.

In his article, Matmon suggested that there was an unavoidable tension between the need to ensure the welfare of the individual degenerate and the equally legitimate need to ensure the welfare of the nation and species; although he did not attempt to explain this in terms of evolutionary theory, he appeared to view it very much as a serious challenge for any civilization, including the Jewish civilization as manifested in the nascent Zionist state. From this perspective the traditional religious encouragement of large families appeared detrimental, especially if the progeny were of poor quality. While he was concerned that degenerate individuals propagated better than the healthy, he nevertheless rejected educational programmes as ineffective and legal sanctions against reproduction among dysgenic people as morally reprehensible. Instead, his 'passive eugenics' programme, which in practical terms meant the introduction of a State-funded medical examination that would inform an individual about their potential partner's inheritable defects and venereal diseases with a view to the postponement or prevention of a dysgenic marriage.

For Matmon, Zionism represented the locus of the future life of the Jewish people and its civilization. As such, the Jewish state was significant as a national space, as a nation among the nations, for those people who happened to be Jewish. As a medical practitioner and eugenicist, he focused more negatively on the prevention of degeneration, disease and other dysgenic threats. He viewed the Zionist project in universalist or humanist terms, that is, in terms of interventionist social policies concerned with the hygiene of the Jewish national body, rather than with the protection of the racial stock of world Jewry, and with no sense of a positive function for religion. The second of our studies, Yisrael Rubin, was less concerned with societal degeneration than he was excited by the glorious eugenic possibilities that awaited Palestinian Jewry.

3.2.2 Yisrael Rubin

Dr Y. Rubin (b.1890), the penname of Yisrael Rivka'i, was a medical psychologist, educator and literary scholar who led the Paedological Institute for Parents in Tel Aviv from its establishment in 1930, which sought to teach parenting skills through courses and exhibitions. He wrote books and articles and gave radio broadcasts in the 1930s and 1940s on children's education both in general and as practiced in Palestine. He co-edited a series entitled *Mother and Child Yearbook* (1934-36), which was innovative in offering health advice that drew upon the literary and visual arts, and a textbook entitled *Mother and Child: Medical and Pedagogic Handbook* (1945). After the establishment of the State of Israel, he was appointed to the ministry of education. Rubin's article on 'The Ingathering of the Exiles from a Eugenic Point of View' was published in *Mozna'im* or *Weighing Scales*, a periodical of the Hebrew Authors' Association, in 1934.

Rubin's key concern in this essay was to convince his readers that the Zionist project represented enormous possibilities both for the study of eugenics and for the regeneration of the Jewish people. Specifically, he envisioned a new model Jew:

[O]ur *life in this land*, this life which is, in its very essence, first and foremost a great and audacious national endeavor in the *eugenic* sense. Any person who does not see the return of the sons to the land of the Fathers as a great *eugenic* revolution in the life of the nation, fails to see the wood for the trees; he is confused by the details so that he cannot see the whole, which is the end and aim of those same details... [namely] the creation of the new Hebrew type, improved and perfected.⁶⁹

In making his argument, Rubin's literary flair was especially apparent in the poetic, religious language he used on occasion to allude to a national spirit or destiny. In effect he argued that the eugenic creation of a new Hebrew type was a religious calling, even a commandment of sorts:

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⁶⁸ Ibid

⁶⁹ Dafna Hirsch, "Zionist Eugenics, Mixed Marriage, and the Creation of a 'New Jewish Type'," *Journal of the Royal Anthropological Institute* 15 (2009).

The Lord of the Nation has commanded us in every place: Go forth and improve yourselves, go and make every effort to create a new Jewish type, perfected and reformed. The sounds of the Lord of the Nation's command are heard, and strike roots, in the settlement of Palestine [the *Yishuv*] *more* than anywhere else.In other places, the 'we will hear' triumphs over the 'we will do' in the nation's response to that commandment [*mitzvah*]. I.e., rather than fulfilling eugenic aspirations by changing their ways of life, the Jews in those places can but feel the need for such changes. By contrast, in the settlement of Palestine, the 'we will do' is put before the 'we will hear', and the former subjugates the latter.⁷⁰

What made the Palestine situation different from other Jewish migrations, observed Rubin, was its voluntary character. The suggestion was that, from among the various Jewish communities converging from across the globe, it was the highest quality and most proactive element of the Jewish people that was being funneled into the Land and which was being mixed and cultivated through marriage. The ingathering of the exiles

He observed,

There is indeed an ingathering of the exiles wherever Jews immigrate, but nowhere is it as multifaceted and rich in composition as in Palestine... It is different in Palestine: from the point of view of both this land's small and limited area, and the sentiment for the fusing and unification of all parts of the nation – a sentiment that is in the hearts of all those who come to Palestine, to a greater or lesser extent – the ingathering of the exiles is here not only an objective and static fact, but also a subjective and dynamic one, a voluntary intention. The ingathering of the exiles here is unique in its variety and many-sidedness, as I have remarked above... And this kind of ingathering of the exiles can and does represent an invaluable eugenic factor... The high eugenic value of *mixed marriages* between

⁷⁰ Y Rubin, "The Ingathering of the Exiles from a Eugenic Point of View," *Moznayim* 1, no. 4 (1934): 89.

different peoples and races, for instance, is an elementary eugenic truth. The pouring of new blood has only a strengthening and invigorating effect.⁷¹

Rubin went on to ask rhetorically of the future of the Jewish people, 'Does not this [infusion of new blood] alone already carry within itself a high degree of eugenic salvation?'⁷² As a consequence, there were clear implications for social policy so that, for example, he called for educational reform to ensure that different Jewish ethnic groups were not prevented from meeting and mixing freely together.⁷³ At the same time, there were profound lessons for the science of heredity more generally.

Two sets of questions raised themselves immediately in Rubin's mind, relating respectively to the physical and psychological changes that inter-breeding between different Jewish groups might have already caused by 1934. Regarding physical characteristics, he was able to point to the observations that 'our children in Palestine are surprisingly superior in height to Jewish children abroad' and that changes in hair colour had been recorded. Hubin was the issue of psychology that most excited Rubin since this brave new world, Rubin was concerned that too little research had been conducted. This was mortifying since it was clear to him that Palestine promised radical development in this area. Was was in effect a unique environment that should be studied so as to throw light on the was to be found in, which demanded urgent work to shed light upon 'psychobiological specificity [of the new] which must form Jewish man in Palestine by virtue of the unique conditions here.'

He went on to identify some of these special conditions.

⁷¹ Ibid.

⁷² Ibid., 90-91.

⁷³ Rubin opined: 'What should be a cause for the greatest anguish, and be denounced with the most unambiguous language of opposition, is every trace of separatism in the field of our education; and likewise any attempt to organize pupils by their communities of origin.' ibid., 91.

⁷⁴ Ibid.

⁷⁵ Rubin complained: 'As for an original [national] Hebrew psychology in Palestine, there is nothing to be said, since it barely exists at all.' ibid., 91-92.

For we have so many phenomena and factors in our life in this land that are unique and without parallel in any other land, and for that reason, the experience of others [i.e. European psychologists] must not be used [in conducting psychological work]. I shall mention some such phenomena and factors, without wasting time with explanations and causes for them: Mass proletarianization, originating partly not through economic necessity, but through an ideological act of will. A transition to a new spoken language, which even here, at the final destination of immigrant, has not been striking roots for very long – and the very transition to this language means the revival and birth of a language. The first birth pangs of feeling for one's homeland by a nation with a past of constant wandering – what influence does a territorial identity exert on a nation whose historical experience been characterized by the most widespread geographical presence across the world? What is the influence of the transition in Palestine itself, from urban life abroad to rural life in Palestine?

This new environment brought about by would generate Thus, without attempting to conceal his frustration and impatience, Rubin argued that the unprecedented eugenic and ideological nature of the Zionist project demanded a new psychology, a *Zionist* psychology, to comprehend the new Hebrew type.

Even as Rubin cited his new commandment to 'Go forth and improve yourselves', he felt the need to distance his views from those of Hitler, which were to be regarded as inauthentic race science.⁷⁷ He was convinced that the unique conditions of Palestine, including the economic implications of the new socialist Zionist ideology, the transition of so many to a recently revived language, the new sense of rootedness following centuries of wandering, and the shift from an urban to a rural lifestyle, demanded a unique approach to the understand of the changes to the collective Jewish psyche brought

⁷⁶ Ibid., 92-93.

⁷⁷ As Rubin exclaimed at one point: '[T]he "racial theory" from the school of Hitler's scientists (which fights vehemently, although for the benefit of the German nation, against mixed marriage with a non-German, with non-Aryans) that theory has nothing whatsoever in common with the true science of eugenics. On the contrary: "the racial theory" of Hitler is in total opposition to the "science of eugenics".' ibid., 93.

about by this grand eugenic experiment. The incoming Jews were adapting to the new environment, and Rubin claimed that the formation of a new Hebrew type had no parallels elsewhere in the world. When one considered from how many different geographical locations Jews had gathered, one could imagine the potential eugenic benefits for the Jewish people that might result from the mixed marriages of so many different ethnic groups. As such, Palestine promised to be the 'eugenic salvation' of world Jewry.

4. Conclusion

Jewish proponents of eugenics of various sorts, including religious eugenicists,⁷⁸ were by no means rare,⁷⁹ and Zionist examples even less so.⁸⁰ Raphael Falk of Hebrew University has observed that 'in the first half of the [twentieth] century Zionist ideology was very much grounded in anthropological notions of Darwinism that became increasingly

⁷⁸ A particularly striking example was the US Reform Max Reichler who attempted to harmonize biblical and rabbinic teachings with modern eugenic policy. He claimed that 'The Rabbis, like the eugenicists of today, measured the success of a marriage by the number and quality of the off-spring. In their judgments the main objects of marriage were the reproduction of the human race (*leshem piryah veribyah*), and the augmentation of the favored stock (*lethikun havlad*).' Among other things he considered the legal categories of prohibitions of marriage of defectives by reason of heredity, of personal defectives, and consanguineous marriages. After setting out the extensive sources, Reichler concluded that 'the Rabbis recognized the fact that both physical and psychical qualities were inherited, and endeavored by direct precept and law, as well as by indirect advice and admonition, to preserve and improve the inborn, wholesome qualities of the Jewish race... Their ideal was a race healthy in body and spirit, pure and undefiled, devoid of any admixture of inferior human protoplasm. Such an ideal, though apparently narrow and chauvinistic, has its eugenic value.' Rabbi Reichler, "Jewish Eugenics."

⁷⁹ A good history of the topic of Jewish eugenics remains to be written, but Glad's patchwork survey *Jewish Eugenics*, while often unreliable and badly written, and despite its polemical concern to present Jewish culture in eugenic terms and to justify a revival of eugenic public policy, does provide basic source listings and useful chronologies. John Glad, *Jewish Eugenics* (Washington, DC: Wooden Shore Publishers, 2011).

⁸⁰ For a sense of the range of interest among Zionists, see the studies by Efron, Falk and Hart. In a chapter on 'Zionism and Racial Anthropology' Efron surveys the German Zionist views of Elias Auerbach, Felix Theilhaber, Ignaz Zollschan, and also the Bureau for Jewish Statistics, with whom Arthur Ruppin would be closely associated. John M. Efron, *Defenders of the Race: Jewish Doctors and Race Science in Fin-De-Siècle Europe* (New Haven, London: Yale University Press, 1994). Falk's somewhat idiosyncratic and eclectic survey presents Redcliffe Salaman as a non-Zionist and uses him as a benchmark for considering the Palestine-based eugenicists such as Ruppin, Abraham Matmon, Yisrael Rubin, Fritz Bodenheimer, and a number of post-Second World War geneticists. Falk, "Zionism and the Biology of the Jews." In a section on 'Zionism and the Dangers of Assimilation', Hart concerns himself primarily with European-based Jewish racial scientific work, including, among others, that of the Russian Max Mandelstamm and the Austrian Ignaz Zollschan, as well as Ruppin, once again. Mitchell B. Hart, "Racial Science, Social Science and the Politics of Jewish Assimilation," *Isis* 90, no. 2 (1999).

eugenically orientated.'⁸¹ And Mitchell Hart of the University of Florida, has argued that Zionist social scientists, in particular, tended to view Jews as a nation with characteristic racial traits and to believe that acculturation and assimilation in modern times had had a disastrous effect on the Jewish body, which the Zionist homeland could cure.⁸²

My initial findings, which go beyond the narrow group of Zionist social scientists, are broadly in line with these comments. Set alongside each other, the individuals considered today illustrate a general more general trend that sees a shift in the application of evolutionary science by Jews in relation to Jews. There was a movement away from the late nineteenth-century's concern with largely theoretical treatments of the Jewish past, such as the historical studies offered by Lucien Wolf and Joseph Jacobs, 83 to more practical considerations of the Jewish future in the twentieth century and the age of Zionism. Even if not as overtly eugenicist as Abraham Matmon's policy recommendations and Yisrael Rubin's hopes for the eugenic salvation of the Jews, or as social Darwinian as Arthur Ruppin's analysis, there was a tendency to regard evolutionary science as significant for the future of Palestine, and in particular, the future of its education system. Here, it appears that the religious-secular divide would be a significant factor, as one might have predicted. Ahad Ha-Am expressed a belief that evolutionary theory was intrinsically secular in nature and would undermine unwanted religious influences in the Land. And this assumption and danger was acknowledged by Joseph Klausner, although he felt that theistic forms of evolution were possible. Likewise, at least one religious Zionist, Abraham Isaac Kook, spent time and energy crafting a kabbalistic conception of evolution that could counter this threat to the unity of the Zionist enterprise. But beyond these few tenuous generalisations, I have nothing else to add at this time.

⁸¹ Falk adds that 'these sentiments [of the first half of the century] were formally replaced by withdrawal from any eugenic or biological racist thought after the experiences of the Nazi era.' Falk, "Zionism and the Biology of the Jews," 590.

⁸² Hart, "Racial Science, Social Science and the Politics of Jewish Assimilation," 275,77.

⁸³ See Daniel R. Langton, "Jewish Evolutionary Perspectives on Judaism, Anti-Semitism, and Race Science in Late Nineteenth Century England: A Comparative Study of Lucien Wolf and Joseph Jacobs," *Jewish Historical Studies* 46 (2014).

BIBLIOGRAPHY

- Barkan, Elazar. *The Retreat of Scientific Racism*. Cambridge: Cambridge University Press, 1992.
- Buber, Martin. "The Man of Today and the Jewish Bible (1948)." In *On Judaism*, edited by Will Herberg. Cleveland and New York: World Publishing Company, 1973.
- ——. *Meetings: Autobiographical Fragments*. Edited by Maurice Friedman. London and New York: Routledge, 2002.
- ——. "On the Jewish Renaissance (1903)." In *The Martin Buber Reader: Essential Writings*, edited by Asher D. Biemann. New York: Palgrave, 2002.
- ——. "Renewal of Judaism (1910)." In *On Judaism*, edited by Nahum N. Glatzer. New York: Schoken, 1973.
- ——. "The Silent Question: On Henri Bergson and Simone Weil (1952)." In *On Judaism*, edited by Will Herberg. Cleveland and New York: World Publishing Company, 1973.
- Castiglioni, Vittorio Hayim. *Pe'er Ha'adam [the Generations of Man]*. [in Hebrew] Trieste and Cracow: Joseph Fisher, 1892.
- Degler, Carl N. In Search of Human Nature: The Decline and Revival of Darwinism in American Social Thought. New York: Oxford University Press, 1991.
- Efron, John M. Defenders of the Race: Jewish Doctors and Race Science in Fin-De-Siècle Europe. [in English] New Haven, London: Yale University Press, 1994.
- Efron, Noah. *Judaism and Science: A Historical Introduction* Westport and London: Greenwood Press, 2007.
- Falk, Raphael. "Zionism and the Biology of the Jews." *Science in Context* 11, no. 3-4 (1998): 587-607.
- Glad, John. Jewish Eugenics. Washington, DC: Wooden Shore Publishers, 2011.
- Ha-Am, Ahad. "Ancestor Worship (1897)." In *Selected Essays by Ahad Ha-Am, Translated from the Hebrew by Leon Simon*. Philadelphia: The Jewish Publication Society of America, 1912.
- ——. "Many Inventions (1890)." In *Selected Essays by Ahad Ha-Am, Translated from the Hebrew by Leon Simon*. Philadelphia: The Jewish Publication Society of America, 1912.
- ——. "Slavery in Freedom (1891)." In *Selected Essays by Ahad Ha-Am, Translated from the Hebrew by Leon Simon*. Philadelphia: The Jewish Publication Society of America, 1912.
- ——. "The Transvaluation of Values (1898)." In *Selected Essays by Ahad Ha-Am, Translated from the Hebrew by Leon Simon*. Philadelphia: The Jewish Publication Society of America, 1912.
- Hart, Mitchell B. "Racial Science, Social Science and the Politics of Jewish Assimilation." *Isis* 90, no. 2 (1999): 268-97.
- Herzl, Theodor. *The Diaries of Theodor Herzl Translated and Edited by Marvin Lowenthal*. New York: Grosset and Dunlap, 1958.
- Hirsch, Dafna. "Zionist Eugenics, Mixed Marriage, and the Creation of a 'New Jewish Type'." *Journal of the Royal Anthropological Institute* 15 (2009): 592-609.

- Klausner, Joseph. *Ha-Adam Ha-Kadmon: Yesodot Ha-Antropologyah. Three Parts in One Volume.* Warsaw: Tushiyah, 1900.
- Kook, Abraham Isaac. "Li-Nevuchei Ha-Dor [for the Perplexed of This Generation]." http://kavvanah.files.wordpress.com/2010/05/kook-nevuchai.pdf, c.1900, 2010.
- ——. Orot Ha-Kodesh [Lights of Holiness]. Jerusalem: Mossad Ha-Rav Kook, 1938, 1985.
- ——. *Orot Ha-Teshuvah [Lights of Penitence]*. Jerusalem: Mossad Ha-Rav Kook, 1925, 1985.
- Kook, Abraham Isaac, and Ben Zion Bokser. *Abraham Isaac Kook: The Lights of Penitence, Lights of Holiness, the Moral Principles, Essays, Letters and Poems.* London: SPCK, 1979.
- ——. *The Essential Writings of Abraham Isaac Kook.* [in English] New York: Amity House, 1988.
- Langton, Daniel R. "Jewish Evolutionary Perspectives on Judaism, Anti-Semitism, and Race Science in Late Nineteenth Century England: A Comparative Study of Lucien Wolf and Joseph Jacobs." *Jewish Historical Studies* 46 (2014): 37-73.
- Levy, Naftali. *Toldot Adam [the Book of the Origins of Man]*. [in Hebrew] Vienna: Spitzer & Holzwarth, 1874.
- Lipphardt, Veronika. *Biologie Der Juden: Jüdische Wissenschaftler Über "Rasse" Und Vererbung 1900-1935.* Göttingen: Vandenhoeck & Ruprecht, 2008.
- Matmon, Abraham. "Hashbachat Ha-Gez'a Shel Ha-Min Ha-Enoshi Ve-A'rachav Le-Ma'an A'menu [the Racial Improvement of the Human Species and Its Value for Our Nation]." Tel Aviv: Institute for Hygiene and the Sexual Sciences, 1933.
- ———. "Hashbachat Ha-Gez'a Ve-Piku'ach A'l Nisu'im [Racial Improvement and Control of Marriage]." *Briut* 1 (1933).
- ——. "Hayai Ha-Min Shel Ha-Adam [the Sex Life of Man]." Jerusalem: Institute for Hygiene and the Sexual Sciences, 1939.
- Morris-Reich, Amos. "Arthur Ruppin's Concept of Race." *Israel Studies* 11, no. 3 (2006): 1-30.
- ———. Race and Photography: Racial Photography as Scientific Evidence, 1876-1980. Chicago: University of Chicago Press, 2016.
- Nordau, Max. Die Biologie Der Ethik. Leipzig: Elischer, 1916.
- ——. *Entartung*. Berlin: Carl Duncker, 1892.
- ——. *Paradoxe*. Leipzig: Elischer, 1885.
- Penslar, Derek. Zionism and Technocracy. Bloomington: Indiana University Press, 1991.
- Philipson, J. "Darwinism and Zionism: Ahad Ha-Am and Joseph Klausner." In *Charles Darwin and Modern Biology: Proceedings* 616-22. St Petersburg: Nestor-Historia, 2010.
- Reichler, Max. "Jewish Eugenics." In *Jewish Eugenics and Other Essays: Three Papers Read before the New York Board of Jewish Ministers 1915*, edited by Max Reichler, Joel Blau and D. de Sola Pool. New York: Bloch Publishing Company, 1916.
- Rubin, Y. "The Ingathering of the Exiles from a Eugenic Point of View." [In Hebrew]. *Moznayim* 1, no. 4 (1934): 89-93.
- Ruppin, Arthur. "Darwinismus Und Sozialwissenschaft." Jena, 1903.
- ——. Die Juden Der Gegenwart. [in Hebrew] Berlin: Juedischer Verlag, 1904.

