BETWEEN MOTHERS, FETUSES AND SOCIETY: REPRODUCTIVE GENETICS IN THE ISRAELI-JEWHISH CONTEXT

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Studies have shown that Israeli women and the Israeli legal, religious and medical establishments are exceptionally supportive of reproductive genetics and its outcomes, in the form either of selective abortions based on the unborn child’s prospective health, or of prevention of carriers of the same recessive genetic anomaly from marrying each other.

While reproductive genetics has been intensely criticized throughout the western world, criticism has been more or less absent from Israeli-Jewish society. Indeed, Israeli women are heavily pressured to engage in the selection of their embryos, or, in the ultra-Orthodox community, to marry according to “genetic compatibility.” Where other theories understand this as deriving from collective ideals of bodily perfection that push for the selection of future generations, I ask why inhibitions concerning Prenatal Diagnosis (PND) and its more immediate meanings are lacking. In order to answer this question, I draw on culturally specific Israeli-Jewish understandings of such issues as the biocultural concept of “life” and that of a “life worthy of living” versus “wrongful life”; the moral standing of the fetus and its mother; and Jewish-Zionist attitudes towards science, medicine and eugenics.

Reflections offered in this essay draw upon my recently completed doctoral research comparing the fields of reproductive genetics in Israel and Germany.
Introduction

The practice of reproductive genetics in Israel is a part of a national culture of fertility, and more specifically of a culture of new reproductive technologies. Various writers have shown Israeli society to be very family-oriented, with high marriage rates, relatively low divorce rates and high birth rates. A complex combination of factors, including identification with the collective goal of fighting the “demographic threat” (that the country’s Arab population might eventually outnumber the Jews); the need to “make Jewish babies,” particularly in the wake of the Holocaust; and the threat of losing a child in war or in a terrorist attack are all said to have influenced Israel’s pro-natalist culture. A further factor is Jewish tradition, which sees parenthood as a moral and religious commandment and treats infertility as a severe disability. Moreover, women’s infertility is an archetype of suffering in the Israeli/Jewish imagination. The duty to reproduce falls upon all members of society, including its highest religious authorities; the ideal of celibacy is absent from Judaism.

While it has repeatedly been argued that the Israeli medical practice of new reproductive technologies (NRTs) and its accompanying legislation reflect this positive evaluation of parenthood, less attention has been paid to the other, complementary side of the warm adoption of NRTs in Israel. NRTs are also used to prevent the birth of children with genetic “defects,” either by performing selective abortions based on the unborn child’s prospective health, or by preventing two carriers of the same recessive genetic anomaly from marrying, as is common in the ultra-Orthodox community. Compared to most other medically advanced nations, Israel seems to have embraced the practice of prenatal diagnosis (PND) and premarital genetic testing to a far greater extent.

Opposition to PND, which is prevalent in the western world, is commonly grounded in arguments to do with the protection of embryos and a general opposition to abortion; fears of interference with God’s creation; of the slippery slope leading to “designer babies;” or of devaluing the life of the disabled; or a wish to hold eugenics and its moral connotations at arm’s length. Such opposition is by and large lacking from Israeli public discourse. Rather, studies have shown that both Israeli-Jewish (non-Orthodox) women and Israeli genetic counselors opt for elective prenatal diagnosis, seeking to strike a balance between the quality and the sanctity of life in a manner that may be interpreted by some as flexible and progressive, and by others as
selective and discriminative. Larissa Remennick has found that since the 1990s, the Israeli medical scene has experienced a surge in elective prenatal genetic diagnosis, which has spread beyond risk groups to the general population of women, especially those of Ashkenazi (i.e., central and eastern European) extraction.

This trend is especially notable in relation to heterozygote population screening tests, which have become very common in Israel, on a scale not known to exist elsewhere. They are offered by all genetic institutes, receive wide publicity and are partly covered by supplementary health insurance. Recently, the Israel Association of Medical Geneticists advised the public to check for the following conditions: Tay-Sachs, β-Thalassemia, Cystic Fibrosis, Fragile X, Familial Dysautonomia, Canavan Disease, Costeff syndrome among Iraqi Jews, and Metachromatic Leukodystrophy among Yemenites. The Association less strongly recommended testing for Fanconi Anemia (type C), Bloom Syndrome, Niemann-Pick Type A, Mucolipidosis IV, and Ataxia-Telangiectasia. Other tests are offered in hospitals and labs across the country even though they have been declared controversial by the Association of Medical Geneticists, such as tests for Gaucher’s Disease, Familial Mediterranean Fever, Albinism, Non-Syndromic Deafness, Usher syndrome 1 F, Alpha 1-Antitripsin Deficiency, Phenylketonuria and Maple Syrup Urine disease.

Data from the Israeli Ministry of Health (www.health.gov.il: statistics: pregnancy) suggest that selective abortions are common in Israel. In 2003, 3,476 pregnancies were terminated because of embryopathic indications—17% of all abortions. Meira Weiss has claimed that Israeli parents and physicians tend to select abortion in relatively mild cases of fetal disability. Similarly, late abortions (after viability), which are performed mostly for embryopathic reasons, are far more common in Israel than in countries such as Germany, the US, the UK, Denmark and Canada.

Thus, not only are PND and its selective outcomes barely criticized in Israel; to a great extent they are warmly endorsed. How is this to be explained? Remennick, who studied the reasons why Israeli women seek prenatal genetic testing, has argued that it is mostly due to strong institutional and health provider support of such tests, as well as to depictions of the Ashkenazi gene pool as especially problematic, geneticization of kinship, emerging social norms that equate “good mothering” with taking “genetic responsibility” for future offspring and the entire family, deep intolerance towards disability, and fear of the burden of care for a disabled child in a time when the welfare
system is shrinking. Stressing Israeli culture’s non-tolerance of the disabled as a reason behind both selective abortions and the abandonment of disabled children, Weiss has coined the term “chosen body,” a code for the monitoring, screening, molding and selection of concrete Israeli bodies from womb to tomb. According to Weiss, the Israeli “chosen body” ideal emanates both from the Zionist movement, which strove for the rehabilitation of the Jewish body, and from Jewish religious tradition, which is unreceptive of severe physical and mental disability. Thus, contemporary Israeli society values healthy, fit, competent and whole bodies. By regulating the bodies of mothers and fetuses, according to Weiss, the Israeli quest for a “perfect child” also constructs Israeli collective identity.

The thesis I shall offer to explain the biological selectivity characteristic of Israeli society is meant to complement those of Weiss and Remennick. Where their explanations examine the factors pushing for selectivity, I ask instead what it is that enables Israeli-Jewish culture to be so uninhibited in comparison with other western countries. Thus, while Weiss’s thesis centers on collective body ideals, and Remennick’s on professional culture and anti-disability sentiments, I offer a middle-range theory that centers on the more immediate meanings in Israeli-Jewish society of pregnancy, pre- and postnatal life, and the legitimate uses of technologies that manipulate life itself. I argue, in general, that the internal logic of the discourse of reproductive genetics in Israel should be understood primarily through what I term the Israeli biopolitics of the beginning of life itself: the Israeli-Jewish bio-cultural concept of “life,” and the response to basic questions such as: When does life begin? How thick is the border between pre- and postnatal life? When is life “worthy of living,” and when is it “wrongful”? And how legitimate is the technological manipulation of life itself? I have no quarrel with the view that both professionals’ and pregnant women’s practices are indeed formed by cultural collective understandings. However, it is my assertion that these understandings emanate more immediately from the bio-cultural concept of “life,” and concrete understandings of pregnancy and the legitimate use of technology, than from collective ideals regarding the perfection of the body politic.

By adopting a cultural perspective, I am not implying that other factors—such as economic considerations, institutional factors, scientific discoveries and legal pressure—have not had their share in shaping reproductive genetics in Israel. However, for the purposes of this paper, and in the tradition of cultural studies, I will focus on cultural meaning systems as the driving
force behind the exceptionally warm and uncritical adoption of reproductive genetics in Israeli-Jewish society.

PND and Women’s Bodies

While men (especially prospective fathers) often take part in reproductive decision-making, PND and its consequences are always mediated by the woman’s body, be it through blood testing, ultrasounds, CVS amniocentesis or selective abortions. Germinal studies into the practice of PND, such as those of Rayna Rapp and Barbara Katz-Rothman, focused on women’s experiences of embryonic genetic testing. In Rapp’s words, the women become “moral pioneers”: Situated on the research frontier of the expanding capacity for prenatal genetic diagnosis, they are forced to judge the quality of their own future children and to make concrete, embodied decisions about the standards for entry into the human community. Moreover, they learn to view their physical and emotional experience of pregnancy as tentative, at least until they get the results of their tests.

This paper does not study Israeli women’s own accounts of how they manage their pregnancies, but aims rather at understanding the cultural forces behind their practices and decisions during pregnancy. According to Rapp, any woman choosing to test for the health of her fetus necessarily confronts the limits of altruism, life, fate and nature, within which she pictures parenthood and her own values concerning the “quality control” of children. This moral pioneering is obviously framed by the individual’s familial and economic circumstances, personality, and specific history regarding disability. However, patterns of justification regarding these matters are also communal. Hence, in this paper I trace the cultural premises which shape women’s experiences, most of the time unconsciously, and endeavor to undermine what I consider to be a false claim about their supposed autonomy—false, because women’s options are always constrained both by value-laden technology itself and by the prevalent ways of using that technology in their society.

Following Hadley, who argues that contemporary reproductive genetics has both blessings and burdens, in that it is simultaneously liberating, discriminating and constraining, I believe that studying the cultural premises behind pregnancy management is vital for any critical discussion of women’s losses and gains as a result of undergoing PND. Furthermore, it may enhance
women’s freedom of choice either to refuse what has become medical routine without being labeled backward or irresponsible, or to abort without feelings of guilt and shame. Hence, in what follows I postpone moral judgment and try to understand, on the basis of diverse studies from different fields, what it is in Jewish-Zionist culture that makes Israeli attitudes exceptional in the western world.

This paper focuses on the Israeli Jewish population alone (about 80% of the national population), as Arab women’s responses to contemporary reproductive genetics merit a separate analysis. Clearly, the documented boom in reproductive genetics is not similarly experienced by all Israeli women. Social inequality and cultural differences are apparent in the frequency of testing and selective abortion among diverse population groups (for instance, Arabs and Jews, religious and non-religious). Being Jewish, secular, educated, having a higher income and private health insurance, as well as having fewer children and being of Ashkenazi origin, were all found to be significant factors in predicting the performance of genetic tests. Nevertheless, this paper’s claim concerning Israel’s Jewish population is that despite major differences between religious and non-religious women in the ways they use these new medical techniques, Jewish religious doctrine is one of the major factors behind the enthusiastic endorsement of PND in Israel. Furthermore, differences between ultra-Orthodox and secular attitudes towards reproductive genetics are smaller than they may seem, as the ultra-Orthodox utilize contemporary knowledge and technology to check for genetic compatibility before finalizing arranged marriages. In addition, Michael Barilan claims that the reluctance of Orthodox Jewish women to perform selective abortions is not indicative of Jewish law, but rather of the tensions between the law and the ethos of the law, as such abortions are not strongly condemned by the law itself.

The Problem of Abortion

Since genetic treatment and cure lag behind the possibility of discovering abnormal conditions, reproductive genetics currently goes hand in hand with selective abortions. However, in sharp contrast to the American or German political history of abortions, the legal interruption of pregnancy has remained largely tangential to Israeli public debate. Abortion has most often entered
Israeli politics in the context of coalition demands made by Orthodox Jewish parties, which have made their support for different governments conditional upon restrictions on abortion. What they oppose, however, is the legalization of abortion “on demand” or due to financial distress, and not that of abortion performed for medical reasons (to do with the mother, the fetus or both) or in cases of underage or unwed mothers, or of adultery, rape or incest. In general, the issue of abortion in Israel seems to elicit more apathy than ambivalence. Moreover, abortion is usually justified or opposed in Israeli culture in terms of arguments about demographic or social distress, and not in terms of feminist or right-to-life discourse.

In 1977, Israel’s Knesset enacted a law allowing for legal abortion on the basis of approval by hospital committees. The array of permitted grounds for abortion included social circumstances, such as poverty, but two years later the so-called “social clause” was repealed due to pressure from the Orthodox parties. According to Yael Yishai, these policy changes reflect two contradictory aspects of Israel’s perceived population problem: on the one hand, the link between family size and social distress, and on the other, the fertility imbalance between the Jewish and non-Jewish communities. Yishai maintains that the liberalization of abortion policy was triggered by a growing awareness in the early 1970s that large families constitute a social risk group. Later on, the repeal of the social clause was presented as a possible solution to the so-called “demographic time bomb” of the fertility differentials between Jews and Arabs, seen as large enough to jeopardize the country’s Jewish majority. Jews were therefore encouraged to “be fruitful and multiply.” However, the restriction of the law had no effect on the number of abortions performed, as women, assisted by liberal committees, framed their abortion requests to fit the enabling clauses of the law. The Orthodox parties have not been fighting against the actual practice of abortion policy, which clearly allows abortions for reasons not indicated in the law.

If it ostensibly prohibits abortion on demand, Israeli law explicitly permits abortions performed on embryopathic grounds. Additionally, it sets no time limit for abortions that meet its criteria, thus overlooking the whole issue of viability, which is central to much of the bio-ethical and legal discussion of abortion in the west. In line with this attitude, Israeli abortion policy, past and present, does not touch on the possible conflict between the interests of mothers and those of fetuses, as protection of the fetus is virtually a non-issue.
Indeed, Israeli law offers no rationale for its regulation of abortion, referring neither to the status and rights of the fetus nor to those of the pregnant woman. Thus, the Israeli fetus has no legal standing whatsoever and is not recognized as an autonomous being.

This understanding of the (non-)status of the fetus, as reflected in Israel’s abortion law and public debate, very much echoes Jewish doctrine. In the eyes of ancient Jewish law, the fetus is deemed an organic part of its mother rather than an independent entity, and hence it has no legal status. Abortion is not regarded as murder, although it may amount to killing. The difference between the two lies in the circumstances: killing of an “aggressor”—even an “innocent” one—is allowed in self-defense, and a fetus may be so regarded when the mother’s health is at risk. The woman’s own health thus overrides the theoretical interests of the fetus. So, although Judaism sees life as a supreme value, there are nonetheless circumstances in which abortion is permitted. While some rabbis would only justify abortion when the mother’s life is in clear danger, others are willing to extend religious exemptions to situations whereby continuing the pregnancy would threaten the woman’s physical or psychological wellbeing, or the prospective wellbeing of the unborn child. Rabbis have issued contradictory rulings regarding abortion in a host of medical conditions, such as Tay Sachs, Down Syndrome, anencephaly, X-ray exposure during pregnancy, rubella in pregnancy, and so on.

Moreover, halakhah (Jewish law) teaches that in order to claim its full protection, one must have established the capacity to maintain an independent and lasting life. Thus, according to Barilan, Jewish doctrine does not stress biological viability alone, but also viability in the sense of acquiring the attributes of one made in the imago dei. Barilan explains that Jewish law sets the threshold of viability at the thirtieth day after birth, and so the value of protecting premature neonates from future suffering and misery may, in the first thirty days, prevail over the value of life. Thus, Jewish doctrine, though it opposes abortion in principle, is far more flexible than, for instance, Catholic doctrine, which views ensoulment as taking place at the moment of conception; the fetus is therefore a “life,” and the taking of that life impinges upon the salvation of its soul after death. These differences help to explain why the Catholic Church has made abortion such an important issue on its political agenda, shaping much of the social controversy surround abortion in the west, while Jewish rabbis do not see it as such.
I have argued elsewhere\textsuperscript{59} that it is not only fetuses that are seen first and foremost as a part of their mothers, and thus as subordinate to them; similarly, children in Israeli-Jewish society are not perceived as autonomous human beings bearing individual rights, or as gifts that should be accepted “as is,” but rather as parts of their families. It follows that the selection of future children in keeping with their family’s interests (especially the wish not to be burdened with extra care), as well as the “right” to have a healthy child, are not morally condemned, but are even positively counseled and seen as fully congruent with responsible parenthood. This stands in sharp contrast to a Habermasian understanding,\textsuperscript{60} which forbids parents to become the designers of their children; to do so, in this view, would be to transgress the legitimate borders between children and their parents and to deprive children of the potential for the fully ethical existence of their (autonomous) self.

\textit{The Problem of “Wrongful Life,” and Its Supposed Devaluing of the Life of the Disabled}

As mentioned above, Israeli law\textsuperscript{61} acknowledges an embryopathic indication as a just cause for selective abortion throughout pregnancy, explaining that termination is permitted if “the newborn is likely to have a mental or physical defect.” Shapira has analyzed the precise terminology of this clause:

The phraseology adopted by the Israeli legislature appears to reveal an unmistakably lenient policy on abortion for eugenic reasons. The physical or mental defect justifying interruption of pregnancy need not necessarily be extensive or grievous. An ordinary, perhaps even a relatively minor, defect may suffice. Furthermore, the defect need only be “likely” as distinct from certain or probable. The term “likely” seems to denote a more reasonable possibility which may fall short of a near certainty or a high probability.\textsuperscript{62}

The abortion law in Israel is not supplemented by other laws dealing with fetal rights, as the Israeli fetus simply has none. Nevertheless, we may infer something about the legal status of the fetus from an important legal verdict handed down by Israel’s Supreme Court, concerning the issue of “wrongful
Strangely, and in contradiction to the general Israeli understanding of the relationship between a pregnant woman and her child, in wrongful life suits the rights of the fetus, now a child, are recognized post factum. Put bluntly, it seems that the only right the Israeli fetus holds is the right not to be born handicapped.

Wrongful life suits permit an infant to sue medical agents (mainly genetic counselors and gynecologists) for negligently failing to detect a fetal anomaly or inform the parents of its potentiality. As a consequence, the child (as well as the parents) can demand compensation on the grounds of his/her life being “wrongful.” The right of the fetus not to be born was acknowledged by the Israeli Supreme Court in the Zaitsov case, in which the court stated that in certain cases, non-existence is preferable to living with a disability. Two of the justices, Miriam Ben-Porat and Dov Levin, did not shy away from comparing non-existence to life with a disability. They accepted that in certain rare and extreme situations, a “reasonable person” could conclude that one would be better off not being born than being brought into this world impaired. This extreme position opens up the difficulty of deciding what kind of problem is severe enough to allow a wrongful life cause of action. Two other justices, Aharon Barak and Shlomo Lewin, preferred an alternative approach that seeks to avoid this dilemma. In their view, the defendant’s professional negligence generated at once two results, which, though intertwined, can be separated conceptually: the child’s birth and her handicapped existence. Thus, the genetic counselor’s negligence is responsible not for the granting of life or the prevention of non-life, but for causing impaired life. Consequently, the plaintiff’s life should be compared to hypothetical life without harm.

Similar wrongful life suits have been rejected by the majority of courts around the world, as they are understood to pose a symbolic danger to the sanctity of human life and to devalue the lives of the disabled. Israel is thus exceptional in its acceptance of this controversial claim. This does not mean that only Israeli professionals are subject to legal threats: “wrongful birth” suits, in which parents claim compensation for the burden of raising a disabled child whose disability was not diagnosed due to professional negligence, have been accepted elsewhere in the world. However, such suits (which have also been brought in Israel) do not pose the same legal, philosophical and moral dilemmas as wrongful life suits; they are old-fashioned tort claims involving plaintiffs (the parents) who had the status of legally entitled persons when the
“wrong” was done. Additionally, they do not declare any life to be wrongful or favor non-existence over existence with disabilities.

While they do not use the terminology of “wrongful life,” disability organizations in Israel, like the judges in the Zaitsov decision, do not perceive prenatal diagnosis and selective abortions as posing any danger to the sanctity of life, or as threatening human dignity. Aviad Raz, who explored the views of leaders of disability rights organizations and support groups for people with genetic conditions in Israel, found that unlike many of their North American counterparts, they are generally in favor of prenatal diagnosis and selective abortions. Raz explains this as a two-fold view of disability, in which the view that disability should be prevented by prenatal testing is separated from postnatal support of disabled persons.

This dual perspective resembles the Orthodox Jewish community’s attitude towards the disabled. In his book about disability in Jewish law, Zvi Marx remarks that attitudes toward disability evinced in rabbinic and halakhic literature are often disturbing to contemporary sensibilities. He explains that halakhic culture is to a large extent a competence-oriented culture that excludes the disabled, who are devalued and stigmatized because of their exemption from many precepts. Nonetheless, in Israeli society, religious communities and organizations are renowned for their social support of the disabled. In sum, it seems that in Israel, the border between pre- and postnatal life, as represented in the discussion of “wrongful life,” is perceived to be “thick.” Attitudes towards supposedly defective fetuses are not understood to project onto the treatment of postnatal life.

Zionism, Judaism, and the Problem of Interference with God’s Creation

It is impossible to understand the cultural logic behind the uses made of medical genetics in Israel without taking into consideration the society’s scientific mentality. Whereas other post-industrial societies are characterized by a pervasive discourse of risk, this is almost completely absent in Israel, and the public is generally trustful of science and “progress.” Barbara Prainsack and Ofer Firestine, writing about the regulation of biotechnology in Israel and its non-controversial status as compared with other parts of the western world, argue that most Israelis take a positive attitude toward scientific practices.
and technologies that are controversial elsewhere, such as stem cell research, genetic diagnosis and cloning. This attitude is explained in terms of cultural, political and religious narratives that construct biotechnology as crucial for the continuity of Jewish existence in the Middle East; indeed, the very survival of Israel in such a hostile environment is seen to be dependent on its modernity—that is, on its scientific and technological superiority.72

Furthermore, according to Barilan,73 no a priori rabbinic bans have been issued on stem cell research, cloning or genetic experiments on humans. Rather, in their capacity as guardians of the law, rabbinic decisors tend by and large to regard such practices as morally valuable and to seek legal solutions that enable people to exploit their benefits.74 While many Christian teachings emphasize the subordination of humans to God in the process of creation, in Judaism the accusation of “playing God” is misplaced. Human beings are encouraged to take an active part in God’s creation by constantly striving to improve it, among other things by the alleviation of suffering.75

Indeed, Jews traditionally evince respect for medical science and doctoring, and pregnancy in Israel has been highly medicalized.76 Similarly, Rapp77 has found that non-Orthodox American Jewish women have a relatively more “user-friendly” attitude toward medical interventions than other women, and they generally see modern medicine as a blessing, especially in relation to PND. As we shall now see, this strong trust in science is also reflected in historical and contemporary attitudes towards eugenics.

The Problem of Eugenics, Jewish Tradition and Zionism

According to Immanuel Jakobovits,78 Jewish law has always been supportive of eugenic ideas, even in pre-modern times, in keeping with its encouragement of individuals to take responsibility for society and for unborn generations in a manner foreign to any preceding system of religious thought or social medicine. For instance, various provisions in Jewish law from medieval times were clearly motivated by eugenic considerations for the moral excellence of the progeny, such as the prohibition of marriage into families with hereditary disorders. On the other hand, in his essay about Jewish eugenics, Noam Zohar79 contends that conventional views perceiving Jewish tradition as favoring eugenics, or even racist (with its idea of the “chosen people”), rest on a one-sided reading of Jewish tradition, overlooking traditional critiques
of pedigree and of the notion of a “Jewish race” in Jewish writings. Barilan also disagrees with Jakobovits on this point.

Without delving too far into this theological argument, Jewish attitudes towards the health of the community’s offspring can be linked with contemporary practices among ultra-Orthodox Jews. Nowadays, the ultra-Orthodox community is deploying contemporary genetic knowledge in a unique fashion through a program known as “Dor Yeshorim” (An Upright Generation), which conducts carrier screening tests prior to prearranged marriages, the prevalent mode of marriage in that community. The purpose of the program is to prevent two heterozygotes from mating, thus averting the birth of a disabled baby prior to conception. Screening is strictly anonymous, and results are provided to the match-making organization. If both potential partners are found to be carriers of the same abnormal allele, any steps towards an engagement are halted. “Dor Yeshorim” gives no information on individual disease carrier status, but only on the “genetic compatibility” of prospective partners. According to Barbara Prainsack and Gil Siegal, this allows it to avoid certain pressing issues that “secular” genetic screening programs struggle with, such as the passing on of too much “useless” information to the tested individual. Also avoided, obviously, are abortions, which Orthodox Jews would very much like to prevent. Nevertheless, the program demonstrates the favorable attitude of Jewish culture toward prevention of life with disability, and the lack of any attitude on the part of modern-day rabbis toward genetic testing as “heretical” interference with God’s creation. This moral reasoning would seem to resonate with the collective body ideals described by Weiss, but it cannot be reduced to them. Rather, moral thinking concerning eugenics should also be understood in relation to general Jewish attitudes toward the manipulation of life itself by modern science and technology, as well as to ideas concerning the prevention of suffering.

Shifting the lens from Jewish tradition to Zionism, we may note that a variety of human genetic studies took place in the modern state of Israel immediately upon its establishment. The main impetus for this initial flourish of activity came from the massive number of Jewish immigrants arriving in Israel from all parts of the world, leading to the perception of Israel as an ideal setting for studying genetic similarities and differences among Jews. Most of those early Israeli studies in population genetics tried to answer such questions as: How heterogeneous are the different Jewish communities? How much do they differ from one another and from their former host populations?
And, to what extent do the genetic data correlate with the known histories of the separate groups? These lines of research went hand in hand with efforts to apply the knowledge they produced, and so, according to Tirza Cohen, doctors and scientists in Israel began providing genetic counseling as well as treating and investigating hereditary diseases long before medical genetics was recognized as a medical field. Furthermore, research into population genetics in Israel during the 1950s and 1960s was considerably touched by historical processes, ideology and socially determined perceptions. As Nurit Kirsh claims, many scientists were motivated by an effort to shape and ratify the emergent Jewish national identity by genetically proving a shared biological origin to all Jewish Israelis, sometimes at the cost of somewhat biased research conclusions. Seeking a common genetic origin for the different Jewish ethnic groups in a context outside the Jewish state might have been perceived as using medical genetics to ask racist questions. However, that is not how it was seen in Israel, and even today studies are being carried out on the “Jewish Genome.”

Indeed, Rafael Falk, a prominent Israeli genetics professor, reads the entire history of Zionism as a eugenicist project. He states that the understanding of Judaism as a biological essence became an integral part of Zionist thought towards the end of the nineteenth century. While many European Jews struggled against the idea that Judaism is a race, prominent Zionists such as Hess, Herzl, Bialik, Nordau and even Buber argued that the biological dimension of the Jewish Volk should not be overlooked. Sachlav Stoler-Liss, writing about Zionist motherhood, claims that in the 1920s, 1930s and even beyond, eugenic thought was prevalent among Zionist pediatricians, gynecologists, general practitioners and other types of experts and “advisers” in the yishuv (the pre-state Jewish community of Palestine), who were trying both quantitatively and qualitatively to improve future generations of tzabarim (Israeli-born Jews).

These attitudes seem to have survived in Israeli society, almost as though the problematic history of medical genetics, with its fatal consequences for the European Jews, had gone entirely unnoticed in Israel. A study of Israeli human geneticists has shown that they perceive themselves to be the victims of racism and hence do not pause for moral contemplation of their professional activities and any possible relationship between them and the past wrongdoings of others. In fact, for most of the Israeli public and the vast majority of Israeli professionals (with the exception of a few critical thinkers), the type of
eugenics that has been condemned is seen as bearing no relation whatsoever to contemporary practices.\textsuperscript{90}

This non-critical thinking about medical genetics has also been found to characterize Israeli disability activists. In interviews with chairpersons of Israeli disability organizations, Raz\textsuperscript{91} discovered that they perceive prenatal genetic testing to be eugenic. However, they supported it for precisely that reason, as eugenics has no negative connotations for them, implying only an improvement of the health of the progeny. Thus, while in the west “eugenics” has become a word with “nasty connotations,”\textsuperscript{92} this is not the case in Israel.

\textit{Conclusion}

In seeking to understand what mutes moral criticism of prenatal diagnosis in Israeli society, I have tried to sketch the unique characteristics lying behind the Israeli biopolitics of the beginning of life itself, the origins of which, I believe, lie in Jewish tradition and Zionism. It has been my claim that the generally accepting and uncritical attitude towards reproductive genetics among Israeli women (as well as among Israeli professionals, in the legal system and in public opinion) results from a number of factors. First, reproductive medicine is very popular, and pregnancy intensely medicalized. Second, both the Israeli legal system and Jewish doctrine understand culturally acceptable life to begin after birth, and fetuses are perceived as parts of their mothers, with no autonomous rights. Abortions, therefore, are not automatically condemned. Third, according to the Israeli legal system, some kinds of life may well be “wrongful,” and even disability activists support the prevention of life with disability. Because they strongly differentiate between pre- and postnatal life, they do not fear that this may threaten care for the living disabled.\textsuperscript{93} Fourth, in a somewhat eugenic fashion, Jewish tradition supports the prevention of life with disability, especially prior to conception, and contemporary Israeli medical genetics is not haunted by the negative history of eugenics. Rather, it is supported by the relatively “soft” Jewish-Zionist eugenic history, and by general attitudes towards science and medicine. Finally, Israeli-Jewish culture does not perceive the technological manipulation of life either as “playing God” or as threatening to human dignity or rights, since the prevention of life with disability is not seen as endangering human dignity, but rather as preventing suffering and
improving on God’s creation. In general, advanced medical technologies are understood to serve the common good and not to pose risks.

To return to women’s “moral pioneering” in relation to PND, it should by now be clear why Israeli women are especially exposed to strong pressures to engage with reproductive genetics, with all its burdens and blessings. However, Israeli women’s reproductive decisions following a positive diagnosis have not yet been studied in depth, and further research is needed to learn about the justifications Israeli women use when deciding to abort or keep an affected pregnancy. It would be interesting to learn whether they lean on private motivations, such as the specific situations of their families, on professional advice, or on general understandings of the concept of life and the rights of fetuses, notions of the collective good, or other justifications. While it is clear that all these different factors influence reproductive decision-making, the balance between the different levels of justification remains unknown.

Notes:

1. This paper is based on a large, comparative study of reproductive genetics in Israel and Germany, which looked through the prism of the beginning of life into the question of which lives these two societies consider (un)worthy of living. My book, What is a Life (un)Worthy of Living? Reproductive Genetics in Germany and Israel is forthcoming (Dordrecht: Springer/Kluwer).
10. Barbara Prainsack and Gil Siegal, “The Rise of Genetic Couplehood: A Comparative View of Pre-Marital Genetic Screening,” *Biosocieties*, 1 (2006), pp. 17–36. The research of Prainsack and Siegal concerns Israel’s ultra-Orthodox community (about 5% of Israeli Jews), a highly traditional community that practices arranged marriages and now uses the services of Dor Yeshorim very widely. I know of no studies on genetic screening practices among Israel’s “national” or “modern Orthodox” Jews (about 12% of Israeli Jews), who, while adhering strictly to Jewish law, seek to combine modernity and tradition and eschew arranged marriages.


16. Remennick, “Quest after the Perfect Baby” (above, note 9); Weiss, *Chosen Body* (above, note 4).


18. Remennick, “Quest after the Perfect Baby” (above, note 9).

19. Heterozygotes have two different alleles (any one of a series of two or more different genes that occupy the same locus on a chromosome) at one (or more) loci on homologous chromosomes. In the case of recessive disorders, having only one abnormal allele means that the person does not have the disorder and may thus be unaware of his/her carrier status. However, if this person mates with another heterozygote carrying the same anomalous allele, their chances of having a sick child are one in four. Thus, these tests check whether the members of a couple are carriers of the same genetic anomaly. If so, and the woman is or becomes pregnant, the fetus may be tested.

20. Interview with Prof. J. Zlotogora, Head of the Department of Community Genetics in the Israel Ministry of Health.


23. In Germany, the estimated rate of post-diagnostic abortions is 2–4% of all recorded terminations. (German National Ethics Council, 2003). However, it could be that the Israeli statistic is skewed, for example, by women reporting to hospital abortion committees that (say) they took a prohibited medication during pregnancy, so as to be permitted an abortion on demand.


26. Remennick, “Quest after the Perfect Baby?” (above, note 9).


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30. For the Foucauldian model of biopower/biopolitics, which asserts that modernity is situated at the point where the simple living body becomes what is at stake in society’s political strategies, see Michel Foucault, *History of Sexuality, I: An Introduction* (Harmondsworth: Penguin, 1981). This now-classic model has been extended, updated and critiqued by different writers. See, for example, Rose, “The Politics of Life Itself” (above note, 30), pp. 1–30; and Giorgio Agamben, *Homo Sacer: Sovereign Power and Bare Life* (Stanford, CA: Stanford University Press, 1998).


38. Remennick, “Quest after the Perfect Baby” (above, note 9).


51. Amir, Abortions, a Silenced Issue (above, note 45).
54. Jakobovits, Jewish Medical Ethics (above, note 7), loc. cit.
57. Michael Y. Barilan, Know from Whence You Came, and Where You Are Going: An Ethical, Historical and Social Exploration of Jewish Bioethics (forthcoming), Chap. 3. The traditional halakhic approach concerning infants reflects the high infant mortality rates of former centuries.
58. Jakobovits, Jewish Medical Ethics (above, note 7), loc. cit.
59. Hashiloni-Dolev, Life (un)Worthy of Livingy (above, note 1).
63. Zaitsov v. Katz, C.A 540/82, 40 P.D. (2) 85. In this case, a woman had turned to genetic counseling to check whether Hunter’s Disease, which was present in her family, might harm her future children. If so, she wanted to avoid having a boy, as males are the risk group for this disease. The counselor mistakenly told her that her children could not inherit the condition, and when a child with Hunter’s Disease
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was later born, the mother sued the counselor. Her claim was rejected in the district court but accepted on appeal by the Supreme Court, with only one of the five justices dissenting.

67. Heyd, “Right to be Born Free of Birth Defects” (above, note 65).
70. Marx, *Disability in Jewish Law* (above, note 5), foreword.
73. Barilan, “Biomedical Ethics and Halakha” and “Abortion” (above, note 42)
78. Jakobovits, *Jewish Medical Ethics* (above, note 7), *loc. cit.*
80. Barilan, “Biomedical Ethics and Halakha” and “Abortion” (above, note 42).
84. See Nurit Kirsh, “Genetic Research on Israel’s Populations: Two Opposite
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86. Kirsh, “Genetic Research” (above, note 84).


89. Hashiloni-Dolev, Life (un)Worthy of Living (above, note 1), Chapter 3.

90. Ibid.

91. Raz, “Important to Test” (above, note 68).


93. Raz, “Important to Test” (above, note 68).