## **PURITY AND KASHRUT**

## Deborah Williger

he dialectic of impurity is expressed by the old German proverb Dreck macht Speck, meaning "filth makes bacon." This sounds like a nonkosher introduction to the topic at hand, but the proverb articulates that children, like piglets, will put on weight once they ingest a certain amount of filth from their environment. This absorption increases the variety of intestinal germ population, which has been demonstrated to promote robust growth. On the other hand, there is the saying Vor dem Essen, Händewaschen nicht vergessen, warning "don't forget to wash your hands before you eat." This claims the opposite: Certain impurities cause dangerous illnesses. Therefore, it is necessary to cleanse dirt that could be harmful and pose a risk to health and life. Infiltration by impurities must be prevented before they do damage. Both physical and psychological contaminations can affect individuals or groups. Spiritual contaminations that dominate one's entire existence fall, following traditional Jewish interpretations, into the category of idolatry. Worshiping foreign gods is a capital crime. The transgression of the commandment against making images, represented in the Hebrew Bible as the dance around the golden calf, is considered unthinkable.

Measuring degrees of spiritual pollution seems impossible. By contrast, the natural sciences have no problem quantifying the exact doses and potential costs and benefits of pollution in a variety of environments. Once a critical mass of impurity enters a living organism, it can do harm. If the infected organic mass cannot be healed, it dies. The creatures' organic mass disintegrates into its molecular units, and its bare skeletal remains emerge clean and purified. In the end, death makes a clean

no modifications or adaptations are made.

separation between organic and inorganic matter, while life presupposes the commingling of both unconditionally. Living organisms are characterized by diversity and movement. Organic and inorganic elements exchange, mix, mingle, and separate in rhythmic cycles. There is constant metabolic exchange between chemical elements, such as nitrogen, oxygen, and carbon; mineral building blocks, such as phosphorus, calcium, or iron; and various organic components, such as carbohydrates, enzymes, hormones, and amino acids in tissues, vessels, organs, and cellular nuclei. Living organisms, whether single or composite cell organisms, constantly establish a fluid equilibrium between internal and external elements. Life flourishes where separation and recombination, division, and fertilization occur. Once certain parts no longer come together in order to multiply, distances widen and borders emerge that eventually lead to permanent divisions, and life ends.

It seems high time to develop new methods for cleansing and healing. Despite considerable scientific progress in the development of tools and technologies, all the way to computers and artificial intelligence, humanity has not succeeded in creating a more just and happier world. We continue to inflict poisonous ideologies, such as antisemitism, racism, and exploitation on each other, despite our technological progress and intellectual prowess. Furthermore, the evolution of human civilization has created unintended side effects, including population growth and mass production and consumption, as well as increasing levels of pollution that threaten the planet. The greatest threats emanate from the smallest particles, especially the waste products of nuclear fission. Radioactive and other forms of environmental pollution are postmodern forms of original sin that implicates all descendants in the future who did not commit the original offense. As this enormous mass of guilt piles up, what are the possibilities for expiation and atonement? Will there even be a possibility for reconciliation so that life will continue on earth? We do know that neither systemic nor individual violence can be purified by tears. That requires action. There is no point in waiting passively for redemption, as if a redeemer (a man) could arrive to undo the consequences of environmental pollution. The Jewish tradition is focused on right action. According to the Torah, one should never expect metaphysical interventions or the entry of divine forces into earthly affairs.

Purification is a means of defense. For spiritual or physical hygiene, the following cleansing agents are available: reconciliation, teshuvah, time, water, sand, salt, and the medical arts. These different detergents have varying degrees of efficiency. In vain, Lady Macbeth tried to wash her hands to regain innocence. The success of purification depends on the manner and form of the pollution, as well as the adequacy of the detergent and its appropriate application. Whether we speak of the purification of objects or subjects, and irrespective of the choice of methods, purification is always a process of separation.

In fact, creation itself is the result of a process of separation. Out of one totality emerged many parts. Kabbalists call this origin of the world *zimzum*, and astrophysicists name it the Big Bang. From duality flowed immeasurable evolutionary diversity without ever-reaching perfection. According to the Kabbalists, the two primordial rivers that flow from the Garden of Eden (Gen 2:10-14) signify the fusion of wisdom and cognition. While logic separates, abstracts, and analyzes, wisdom connects and clarifies. In the first act of creation, God says "Let there be light" (Gen 1:3), which allowed perception of the created universe, heaven, and earth. Enlightenment makes the infinite potential and its interconnectedness, the dependence, and interflowing of all reality recognizable.

Following in the footsteps of ancient Greek philosophy, the notion that the physical body is of lesser worth than the rational mind (historically correlated with masculinity) became powerfully entrenched in the socio-history of the West. The source of impurity was identified as the material world, while the spiritual was seen as pure. This alienation between body and spirit paved the way for dualistic systems of domination, including social Darwinism, sexism, and the domination of animals, which I define as jugularism, from the Latin word *jugulare*, meaning to slaughter or murder.<sup>2</sup>

In Jewish thought, spirit and body are not antagonists. Instead, physical health and intellectual-spiritual health form a unity. Maimonides (1135–1204), a physician and rabbi, prescribed dietetic treatments, which required the maintenance of balance in all domains of life as the best prophylactic for general good health as well as righteous action following the commandments of God.<sup>3</sup> The capacity for good and evil is inherent in all people, who must decide every day to choose the right path. In the first book of Moses, there is a constant search for peace by way of

balance. The social dynamics between the first pair of brothers, Cain and Abel, all the way to Joseph and his brothers is the story of transformation of male violence into moral strength and balanced relationships. It is through just action that humanity becomes connected to fellow creatures, an ideal vision described in the Garden of Eden, which serves as blueprint for the Messianic world to come.

Jewish dietary laws, kashrut, orient the just preparation and presentation of food in the direction of the metaphysical. Jews are bound together by their trust in the truth of the Torah and its Talmudic interpretation. They observe these commandments voluntarily, out of insight, in humility and gratitude. Kashrut is one of the pillars of the Torah, Talmud, and Jewish teachings. It serves to maintain purity and balance of body and soul. Kashrut devotes itself in almost infinite detail to practical instructions for the proper preparation of food and defines prerequisites and modes of contamination. The rules of kashrut connect to various commandments and prohibitions that serve a range of different goals, from just food preparation to the proper celebration of the yearly cycle of religious holidays, from the sustainable use of natural resources to practices of hospitality and charity. Kashrut is embedded in the entire Jewish system of morality and law, Halakah. Halakah, "the way," consists of 613 commandments, of which 248 are positive commandments and 365 are negative prohibitions. Some of these commandments relate to the Temple service and have lost their relevance with the destruction of the Temple some 2,000 years ago. All others remain in effect without distinction. In general, Halakah orders conduct on the basis of two principles: to avoid suffering and to maintain proper balance.<sup>4</sup> Jews are instructed to behave justly, every day, for their entire lifetime. There is no need for rational justifications. Rational explanations are not considered necessary or theologically desirable, although they are sometimes requested and provided. But anyone who follows the revealed commandments unconditionally walks with God.

Transgressions of God's ordinances constitute a sin against God. But humans are imperfect and everyone makes mistakes. Accepting one own sinfulness is the beginning of purification, growth, and maturity. Everybody is summoned to insight, expiation, and atonement, and nobody should be abandoned in the process of purification of their guilt. On Yom Kippur, a fast day of atonement, the entire congregation confesses every conceivable sin and asks for mercy for all of them together. Anyone who

repents and commits to change may hope for reconciliation and longevity. The rabbis of the Talmud and Jews today are constantly debating the legal, practical, social, and moral issues in search of compromise and the right path. There is agreement that no position can ever claim to be the sole and unique truth.

The rules of kashrut guide proper behavior toward living animals in general, and the process of preparing food from animals in particular. The welfare of animals plays a central role and supersedes human use. The Talmud claims: "If animals suffer, it can never go well for humans" (jBaba Mezia 85a). Therefore, numerous Jewish directives and prohibitions demand considerate care for animals. Humans are explicitly prohibited to torture animals and charged with the ethical treatment of animals. Animals have a right to live in species diverse environments, based on Genesis: "Be fruitful and multiply in all kinds" (Gen 1:25). All species including humanity are part of divine creation. There is no living being that is intrinsically clean or unclean. There can be no hierarchy or value judgment among fellow creatures. The issue of clean and unclean arises exclusively in the context of suitability for temple sacrifices, and nowadays, with regard to status as a source of nourishment. Impureness counts as treyf, which is Yiddish and refers to foods deemed unfit for human consumption on the basis of kashrut. Eating treyf food pollutes body, mind, and soul. Hence, the rules of kashrut aim to prevent human pollution by controlling the process from selection to consumption. An animal must be chosen and declared pure for later consumption, it must be slaughtered, cut up, sliced, prepared, and brought to table as a meat dish, and at every point of this process, something could go wrong and render it treyf, in which case it must be passed up and sorted out of the process of further preparation. I divide this process into four stages: The first step is the choice of pure animal species from all animal species. The second step deals with the application of kashrut rules for the slaughter of the (sacrificial) victim chosen from a pure species. The third step involves the choice of body parts of the slain animal that qualify as pure for further preparation. The fourth step regulates the separation of meat and milk, which must be kept separate at all phases of preparation and consumption of the meal. At each of the four steps, there are feedback mechanisms that control the process and determine the next step until the final determination that a meal qualifies as kosher for consumption.

Different Jewish movements apply different *halakic* standards to kashrut practices in their communities. For communal meals in congregations, large kitchens, restaurants, or private homes, a rabbinically trained *mashgiach* or *mashgicha* (male or female kashrut supervisors) controls the observance of dietary laws. Congregational rabbis teach their congregants and give the seal of approval on packaged food to certify their kosher status, the *hecksher*, the guarantee that every step was correctly observed throughout the production process. This precedent is being adopted by modern secular practices that mark merchandise for quality (organic) and provenance (origin country), which becomes more popular.

There are numerous criteria for selection at each stage. I can only provide a quick overview here. First, the question of which animal is considered clean and from the right animal pool that is permitted for slaughter. Leviticus specifies all of the clean and unclean water, air, and land animals. Already in the book of Genesis, Noah distinguishes between pure and impure animals, which seems anachronistic since the flood occurs before Sinai. Of the pure animals, Noah takes seven pairs with him on the *teva*, the ark. Without this precaution, his thanksgiving sacrifice after the *mabbul*, the Great Flood, would have exterminated the pure species immediately.

The majority of kashrut rules concern land animals and poultry, and specifically herd animals that can be domesticated, bred, and kept in close proximity to human habitation. Their controlled reproduction in captivity under good conditions guarantees a sustainable herd size that provides a continuous supply of animals for transportation and fieldwork, as well as wool, milk, eggs, and meat as well as hides and horns to livestock owners.<sup>5</sup> But on meat consumption, the Torah places restraints protecting domestic animals from unrestrained use, mandating that they should be treated as if they were free and wild animals that could be caught only with difficulty (Dt 12:20-22). Kashrut aims to protect the life of animals by limiting the desires of humans and moderating the consumption of meat. Such boundaries serve as purifying discipline to generate moral maturity. There is no commandment in the Bible that demands any consumption of meat. On the contrary, the ideal form of nourishment is veganism, as laid out in the account of creation (Gen 1:29). Toward this ideal, Halakah helps imperfect humans to tread the path of moderation.

No predatory animal belongs among the clean species. Nachmanides (1194-1270) remarked that the prohibition to eat predators existed to prevent the transfer of the bloody manner with which predators feed themselves to humans. 6 His explanation provides a moral reason for the ban on eating predators. Spiritual health and purity, he seems to argue, is at risk of becoming bloodthirsty and must be protected by dietary laws. There is only a low threshold that prevents humans from turning violent and brutal, according to the Talmud, and it must be fortified by various measures. For instance, this subject comes up in the context of training ritual slaughterers and is cited as reason for the requirement to cover up the spilled blood of slaughtered animals immediately. One is allowed neither to collect nor to use blood. The possibility of psychological pollution from gazing on large pools of blood is taken very seriously. In the Book of Job, blood should even be covered with gold dust, should there be no other material available (Job 28:6). Meat should only be eaten by righteous people, who are morally mature to resist acts of violence: Without inner strength and purity, one risks losing gentleness by consuming meat.

Pigs are likewise spared. One explanation for this is that the Israelites wanted to separate politically and culturally from the Canaanites and Egyptians, who ate pork. In addition, pigs cannot graze on pastures and compete with humans for food. In barren steppe regions, pigs were kept at latrines, a circumstance that associated pigs with uncleanness. Agrarian science tells us that in hot climates, pork is prone to contamination by bladder worms and various germs that spoil their meat more quickly than the flesh of ruminants. That might have been recognized phenomenologically 3,000 years ago and provides a reason for abstinence from pork. Today, pigs are pumped full of soy meal and grain for mass consumption, which could calm fears of hygienic pollution. As to the moral and spiritual pollution possibly caused by the mass consumption of pork, that is a different matter. After all, behavioral science attributes high intelligence and sensitivity to pigs, which can reach the level of sixyear-old children. Pigs are physiologically closer to humans than primates; their skin, bones, organs, and muscles are similar to ours. I suspect there might be a sensibility against cannibalism at work here. On the other hand, all of the prohibitions are subordinated to the principle of saving a life (pikuach nefesh). For example, there is a Talmudic discussion about whether a pregnant woman could decide to eat pork on Yom Kippur.<sup>7</sup> Purity laws are strict but always directed toward enhancing life and greater abundance.

Why was the Jewish abstention from pork taken as a provocation throughout history, often leading to violence against Jews? In earlier centuries, Christians persecuted Jews with crude depictions of so-called *Judensäue*, meaning Jewish sows. In Spain, Jews who saved themselves from burning at the stake of the Inquisition by submitting to forced baptism were called *maranos*, meaning pigs. Jewish purity laws were turned against Jews by Christians who defamed Jews as spiritually inferior and dirty like animals.

Donkeys, as valuable beasts of burden, were not eaten. One possible explanation is that donkeys give birth to only a few young and they were very rare and needed to be conserved. Camel meat was likewise not consumed, probably because of the sheer impossibility of slaughtering large animals gently. And considerate slaughter is a necessary condition.

Ritual slaughter also specifies the qualities of the particular animal that is chosen for slaughter by a professionally competent examination of its fitness. Any externally visible or palpable physical defect or impairment, such as old or open injuries, would disqualify an animal from slaughter. An injured animal could not be slaughtered. That disqualifies hunting. The hunt does not allow for careful exclusion of animals with flaws or their suffering in the process of killing itself. The mandate for physical integrity of animals before slaughter and the commandment to respect the life and fertility of the animals also exclude castration. Eunuchs were excluded from serving as Temple priests. Temple priests were not allowed to come into contact with the dead, which renders them impure temporarily.

Purity laws, of course, extend beyond food and slaughter regulations. People can also become ritually impure but only for certain periods of time, and there are means of purification. Time is one factor in purification. A person who shows signs of leprosy remains impure until the wounds heal up. Time heals wounds. Healing is a form of purification, and purification promotes healing. The concept of quarantine reflects the French word for forty, *quarante*. Forty days of rain, the Great Flood, a quarantine against the violence of the epoch. Forty is the biblical time unit signifying completion, a generation (in the desert), that is needed for purification and maturation. In the barren wilderness of sand, the souls

of the Israelites could be purified without going astray. The regeneration of the soul and of nature requires periods of rest, *Shabbat*. Noah, whose name in Hebrew means "resting," spent 365 days on the ark surviving the purifying wrath of the flood. Water and sand are enough to cleanse dishes, materials, and bodies. But oceans and deserts are necessary to purify souls. The judge Deborah ruled for forty years of unity and peace in Israel. Forty years of wandering in the desert were needed in order to appreciate the freedom following the exodus. What can cleanse our world today, since water, soil, and time are in short supply?

Ritual purity and impurity fluctuate in and through time. For instance, menstrual ritual purity laws regulate sexual relations through the menstrual cycle and after childbirth. Women's menstrual blood and the bloody discharge of childbirth do not render women dirty but ritually impure. Impurity in this context carries no moral implications, since menstruation is a natural and ordinary part of the rhythms of life. A patriarchal gaze that objectifies women and reduces them into property of their husbands sees the monthly *mikveh* bath as a ritual preparation that readies women "for use." But there are other possible interpretations that appreciate menstrual purity laws as regular periodization of sexuality in order to recharge eroticism in the context of marriage. The period of purity and impurity mandates phases of rest, regeneration, and purification. Traditionally, women have been in charge of *Niddah* laws and they invested their performance with personal and spiritual meaning, including the pleasurable preparation for sexual encounter.

Shabbat, as well, establishes a living rhythm that structures holy and profane by introducing distinctions between feast day and workdays. As a day of rest, the Shabbat is sanctified by observance. The Shabbat is consecrated as a day of collection and peaceful assembly. In the creation narrative, the Shabbat is not closed off like the days before it with the formula, "and it was evening and it was morning." On the sixth day, all living creatures receive provisions, and there is a double portion of manna for the Israelites on their journey through the desert. Material well-being is secured before the Shabbat begins. Of all the days, God makes the seventh day of creation holy, dedicated to God self. The Shabbat points beyond itself and Jews receive an additional soul on that day. It is a day to regenerate so as to face the coming week until the next Shabbat.

Pure animals are not holy animals. Animals chosen as sacrifice in the Temple were dedicated to God. But if an animal, after consecration, injured itself on the way to the altar or proved inappropriate for any other reason, there was a firmly established withdrawal procedure. Kashrut does not sanctify the flesh. There is no Catholic mystery of transubstantiation taking place here. Holy animals never wandered through Jerusalem. While *kashrut* facilitates no esoteric metamorphosis, it serves to sacralize Jewish life.

The rules for ritual slaughter are found in the book Kodashim (sacred things) of the Talmud, in the tractate Hullin, which addresses ordinary or mundane matters. This section, in translation, comprises about 900 pages. These are the written records of the oral Torah that relate to the verse in Deuteronomy: "Thou shalt slaughter from your livestock as I have bidden you" (Dt 22:21). No question is left unanswered as the sages discuss who should do the slaughtering and when, where, and under which conditions an animal may be killed. Its level of detail can be compared to today's European Union slaughterhouse quality management manuals. According to the laws of kashrut, an animal has to be killed gently and its blood has to be drained completely. A well-trained Shochet slaughters an animal in one sharp deep cut, which slices through all of its neck parts toward specific chondral of the spine. Animals show no pain reaction to these cuts and are brain dead within seconds.8 A thorough inspection of the carcass, the bedika, follows. If everything has gone according to order, and the carcass shows no damages, body parts considered non-kosher, such as entrails, brain, and nerves, must be separated. There was never any risk of BSE (bovine spongiform encephalopathy), which causes mad cow disease and created a major food and veterinarian crisis in Europe between the 1980s through the early 2000s. The next step involves processing sections of meat in a kosher kitchen. Before cooking, meat must be further koshered with water and salt, that is, completely cleaned of blood. Most importantly, meat is kept strictly separate from dairy during storage, preparation, and serving. The separation of milk and meat goes back to the Torah verse: "Thou shalt not boil a young goat in its mother's milk" (Ex 23:19). Three more injunctions warn against taking a mother bird out of its nest with its chicks (Dt 22:6-7), specify that "a calf and its mother must not be slaughtered on the same day" (Lev 22:28), and warn against wanton destructiveness (Dt 20:19).

Maimonides drew from these verses that humans should practice compassion and moderation and avoid greed that harms creation. Hence, the separation of dairy and meat is endowed with moral meaning and spiritual lessons. My explanation points to the barren landscape of Israelite pastoral communities who for reasons of herd management had to adjust their consumption of meat and milk to herd size and grazing conditions. Resources (albumen) can be spared if the luxury of consuming meat and milk together is moderated. There is a wait time that must be observed between consuming dairy products and eating meat. Dairy and meat cooking utensils and dishes must be separated and, as practical aid, are often color-coded, so that blue hand towels are used for dairy and red for meat. Dishes have to be koshered, which today is entrusted to dishwashers that clean with hotter water than hand washing ever could. Although several assortments of dishes are no longer necessary, traditional households maintain separate sets of meat and dairy dishes.

Modern research has shown that storing fresh meat and milk products in separate freeze units decreases the likelihood of bacterial crosscontamination. Separate storage units for unprocessed foods and processed meat and milk products are mandated by European and national jurisdictions and strictly regulated by governmental nutrition, hygiene, and veterinary institutions. All (even non-kosher) supermarkets and butcher shops separate their food items. Other research tested the rise of carcinogenic nitrosamines when meat and dairy products are heated together. Thus, kashrut, with its ancient millennia-old traditions, displays features that turn out to be relevant for health and ecological reasons. In the 1970s, Rabbi Zalman Schachter Shalomi founded the Renewal movement and used kashrut for holistic and ecological purposes. Ecological crop and animal husbandry, which aim at sustainability, animal welfare, and fair-trade practices, make up today's image of eco-kashrut. Eco-kashrut is a growing ecological movement in the United States and Israel. It is even attracting followers in Europe, such as the Renewal community Ohel Hachidusch in Berlin.

But in Europe, there is very little knowledge about kosher food. Its infrastructure has been almost completely destroyed in the Shoah, and the Jewish remnant cannot sustain a robust demand for kosher products. There is nothing that comes close to what existed in Europe 90 or 100 years ago. Ironically, it was frenzied ideas of racial purity that

spawned this murder, a fatal utopia that contrasts with traditional Jewish notions of ancestry and elective affinity (2 Kings 2:12). German guilt contaminates and creates an obscure bond between Germans and the Jewish people. There is a peculiar attraction to Jewish cuisine and culture despite the alienation and estrangement from Jewish people. In absentia, Jewish food enjoys a good reputation and seems compatible with people's understanding of healthy nourishment. Maybe, food will succeed in creating rapprochement as the proverb says: "Love goes through the gut."

Even as opposition to global unification grows, there is a hunger for different, genuine, and original cuisines. Against the trend of national isolation, people engage in a vital blending when it comes to food. Getting to know foreign cuisines promotes mutual respect for what is different. There is a surge of interest in dishes and cuisine coming from the furthest ends of the earth. Ayurveda, eco-kashrut, and Japanese tea ceremonies fascinate for their holistic approaches to nutrition. It is not only empirical material qualities but their moral, spiritual, and sociopolitical aspects, including the protection of animals and the environment that make them attractive. This trend toward exotic, authentic regional dishes rules extends to kosher cuisine as well. 10 In the United States, kosher restaurants and food stores are gaining new customers. Consumers eat kosher pastrami one day and traditional Thai food the next. They trust the qualitative tests of a rabbinate whose authority they would not respect otherwise. Dairy kosher cuisine is vegetarian and must be prepared without any trace of animal meat products. Meat is supplemented by exclusively vegan food with vegetable albumin and fat. That makes certain lines of kosher products attractive as vegan and vegetarian alternatives.

On the side of the traditionalists, there is a tendency to circle the wagons. It never occurs to many traditional Jews, for example, that something essential is missing from their Jewish identity, when they turn their back on the needs of animals, nature, and the environment. They should face the world around them and include ecological themes in kosher rules. It would be much more productive if both traditional and critically minded types would realize that their basic goals are in agreement: to maintain species biodiversity, as well as cultural and religious variety, on the earth. Variety and mixture (impurity) strengthens and enriches life. That can already be seen in the microcosm of intestinal bacteria populations.

Purity and impurity are ambivalent constructs that can be harmful and beneficial. Total purity means death, while life requires exchange, variety, and mixture. All living organisms are characterized by impurity in their genetic makeup, bloodlines, families, cultures, and species. The purity rules of kashrut aim for connection with the divine, with nature, with others, humans, and with oneself. The *kosher* kitchen serves life, contributes to sustainable management of natural resources, and embraces the search for vegan and vegetarian alternatives.

## **Notes**

- 1. Green, Arthur, A Guide to the Zohar (Stanford: Stanford University Press, 2004), pp. 40-4.
- 2. Williger, Deborah, 2019, "Jenseits der Grenzen," Journal of the European Society of Women in Theological Research 27, pp. 109–32.
- 3. Rabinowitz, Louis I., and Philip Grossman, ed. and transl. *The Code of Maimonides: The Book of Holiness*, 5, (New Haven: Yale University Press, 1965).
- 4. Does a future of high-quality farmed meat on the basis of tissue culture lead to more or less meat consumption? While it makes animal farming obsolete, it does not change the dualistic and "jugularist" perspective on animals, which requires a more profound paradigm change.
- 5. Berkowitz, Beth, and Marion Katz, "The Cowering Calf and the Thirsty Dog," *Islamic and Jewish Reasoning*, Anver M. Emon ed., 69–112 (London: Oneworld, 2016).
- 6. Nachmanides, Commentary on the Torah: Deuteronomy, Chavel, Charles B. ed. (New York, Judaica Publisher, 2005), p. 271.
- 7. Mosche ben Maimon, *Von verbotenen Speisen*, Igor Itkin/Alexander Adler/Leon Mandelstamm (www.talmud.de/tlmd/rambam-von-den-verbotenen-speisen) chapter 10.
- 8. Ritual slaughter (kashrut and halal) aims to slaughter with care and compassion. In the United States, a mobile pen for ritual slaughter was invented by animal science professor Temple Grandin. The animal is led into the pen and secured in a fixed position by hydraulic lifts, which keep the dead animal from falling. The carcass is cut only after all of the blood has drained, according to rules of Halakha. This process has been tested on over 3,000 slaughtered cows and certified by the American Society for the Prevention of Cruelty to Animals. It is known as A.S.P.C.A.-PEN and used by small-scale organic farms in the United States. Grandin, Temple, Improving Religious Slaughter Practices in the US (Fort Collins, TX: Anthropology of Food, 2006).
- 9. Marder, Michael, *Maimonides' Palm Tree*, in The Philosophers Plant An Intellectual Herbarium (Columbia: Columbia University Press, 2014), pp. 97–110.
- 10. Schorsch, Jonathan, *The Food Movement, Culture, and Religion A Tale of Pigs, Christians, Jews, and Politics* (Palgrave Macmillan Cham, 2018), pp. 29–34.
- 11. Cardozo, David, "The Symbolism of the Korban Pesach," *Cardozian Newsletter* Nissan 5779, https://www.cardozoacademy.org/?s=Nissan.