JUDAISM AS AN ECOLOGICAL STRATEGY: SELECTION FOR PHENOTYPIC TRAITS RELATED TO INTELLIGENCE, HIGH-INVESTMENT PARENTING, AND SOCIAL COHESION

[The law] commands us to bring . . . children up in learning and to exercise them in the laws. (Flavius Josephus, *Against Apion*, 2:204)

The evidence reviewed in the first several chapters indicates that Judaism may be viewed as an evolutionary strategy that has often involved intrasocietal resource competition with host gene pools. In particular, in Chapter 5 the extraordinarily rapid rise of Jews in Western societies after emancipation was noted, as was their success in competing with gentiles in a wide variety of areas ranging from business to the sciences and the arts. The purpose of the present chapter is to describe evidence related to the question of whether these high levels of achievement can in any sense be viewed as an aspect of Judaism as an evolutionary strategy.

As throughout this volume, in order for a particular practice to be considered an aspect of an evolutionary strategy, there must be evidence of a conscious purpose, rather than passive imposition. The proposal here is that Judaism represents an ecologically specialized group evolutionary strategy. The data presented in Chapter 5 indicate that Jews have competed with gentiles in a very wide range of economic activity and aspects of social status, ranging from artisan guilds to positions of influence with the government. These findings make generalization difficult. However, one very common feature of Jewish economic activity, noted, e.g., by Lindemann (1991, 146) is that Jews have often been overrepresented among middlemen as conduits for gentile primary production, as well as in relationships of manager over gentiles or employer to gentiles. We have also noted a strong tendency for Jews to compete successfully for positions that require education, literacy, and intelligence. In ecological terms, the generalization is that Jews tended to concentrate at the top of the human energy pyramid in prototypical societies throughout their history. ¹

In this regard, Jews are typical of several other "middleman minorities" that have occupied a similar ecological role in a variety of human societies (e.g., the Chinese in Southeast Asia; see Sowell 1993; Zenner 1991). The point here is that Jews, and undoubtedly other middleman minorities as well, tend to have a suite of traits that enable them to attain this ecological position above other groups in the society, the most important being intelligence and certain traits related to what personality psychologists refer to as "conscientiousness."

The purpose of this chapter is to show that Judaism as an evolutionary strategy has emphasized education and high-investment parenting, as well as eugenic practices and cultural supports related to intelligence and resource acquisition ability. In addition, however, there is evidence for the development of traits conducive to the group cohesion that is so essential to Judaism as a group evolutionary strategy.

EDUCATION AND INTELLECTUAL ABILITY AS ASPECTS OF JUDAISM AS AN EVOLUTIONARY STRATEGY

Take fast hold of instruction, let her not go; Keep her, for she is thy life. (Prov. 4:13)

Death and life are in the power of the tongue; and they that indulge it shall eat the fruit thereof. (Prov. 18:21)

If you discover a wise man, rise early to visit him; let your feet wear out his doorstep (Ecclus. 6:36)

A poor man with wisdom can hold his head high and take his seat among the great. (Ecclus. 11:1)

Schoolchildren may not be made to neglect their studies for the building of the Temple. (b. Shabbath 119b)

There is evidence in the ancient world for an intense interest in education among the Jews. The Jewish religious law was incredibly elaborated in the first centuries of the Christian era, culminating with the writing of the Mishnah and the Palestinian (Yerushalmi) and Babylonian (Bavli) Talmuds. These documents not only contain an extraordinary amount of sheer information, but also are presented in an extremely complex rhetorical style, so that thorough mastering of Jewish law requires an extremely high level of literacy, the retention of voluminous detail, and the ability to follow highly abstract arguments.

The proposal here is that Torah study as the *summum bonum* within the Jewish community had four important benefits relevant to the present perspective on Judaism as an evolutionary strategy: (1) Most obviously, scholarly study resulted in knowledge of an incredibly wide ranging set of laws and customs, which constituted an important source of the barriers between Jews and Gentiles and therefore was important for facilitating genetic and cultural segregation. There is also a long scholarly tradition that holds that the Pharisees and their successors utilized their knowledge and practice of the law to separate themselves from lower-class Jews--the 'am ha-ares (Sanders 1992, 428; see discussion below). (2) Training in the Jewish law would result in a relatively high level of education for the Jewish population as a whole compared to surrounding populations. This training would then be useful in resource competition with surrounding populations. (3) However, apart from the general level of Jewish education compared to surrounding populations, the educational system was geared to producing a highly educated elite. We have seen that the prosperity of the Jewish community in traditional societies often depended on the actions of a highly educated, wealthy elite of courtiers, capitalists, and lessees who in turn employed other Jews and thereby advanced the fortunes of the entire Jewish community. (4) Scholarly study became an important arena of natural selection for intelligence by serving as a vehicle of upward mobility within the Jewish community, as well as providing access to resources and reproductive success.

It should be noted that knowledge of barriers between Jews and gentiles could be obtained by means of oral communication of the law to the masses. As emphasized by Bickerman (1988, 170), if the only goal were to ensure that the people were aware of the large number of segregative rituals, there would be no need to develop a highly educated elite or to emphasize universal education for a high level of literacy within the Jewish community as a whole. Nor would it be necessary to develop a system that resulted in a large overlap among intelligence, education, resource control, and reproductive success. However, beginning around 200 B.C., perhaps with the writings of Ben Sira (Bickerman 1988, 170), there was an attempt to develop an intelligentsia separate from the priestly clans in which wisdom was identified with knowledge of the Torah and there was a concomitant effort to make some level of education available to the entire community of Jews

The Importance of Education

Moore (1927-30 I:281) notes that the attempt to educate all Jews in their religion was unique in the ancient world. Moreover, "[i]n its singular adaptation to the religious education of the whole people it seems rather to give evidence of intelligent purpose" (I:286). Religious study and teaching became "fundamental institutions of Judaism" (I:311), long preceding the Christian era, and organized schools date from shortly before this period.

Bickerman (1988) describes the development of the scribes as an educated, literate class beginning at least by the second century B.C. During this period, there was an idealization of "wisdom" defined as knowledge of the law of Moses, as represented by the writings of Ben Sira: "The Torah of the priest and the scribe was to be the foundation and the fulfillment of secular, liberal education" (p. 170), and this "Torah-centric" education (p. 172) was no longer restricted to the hereditary priestly class. This new scholarly elite, a sort of union between scribes and priests, would rise to their positions of social prominence on their own merits (Neusner 1987, 66). From this period on, the scholarly class became dominant in the Jewish community, and the entire community was expected to become "a nation of priests" and familiar with the law (Baron 1952a, 142; Baron 1952b, 276).

Bickerman (1988) stresses the idea that this concern with education was based on contemporary Greek interest in education: "The study of law was a Hellenistic innovation in Jerusalem" (p. 173). This suggests that the Jewish response was self-consciously motivated by a need to develop an educated intelligentsia able to compete in the Greek world. Indeed, Bickerman suggests that being a sage or a student of a sage was a necessary preparation for success in the Greek world, and by the end of the second century the author of pseudo-Aristeas could say that the ideal Jew not only was learned in the Torah, but also could impress Greek philosophers, with the result that "the myth of Jewish intellectual superiority began to take shape in Jewish thought" (p. 175). On the other hand, in Egypt and Babylon, native religious knowledge continued to be the province of a narrow class of priests and gradually disappeared.

As expected from this functionalist interpretation, the importance of education increased when it became increasingly clear that hopes for national independence were dashed. Baron (1952b, 120 notes that "[i]n the period following the failed rebellions in the second century [A.D.], the study of the Torah now became the very core of survival" (Baron 1952b, 120). The rabbis "declared the acquisition of a good education to be one of the primary duties of each individual, and provision for it a major responsibility of the community" (Baron 1952b, 274; see also Stern 1976, 946). "Torah study was not confined to the legal experts and the priests, but became a general community matter" (Stern 1976, 946). This requirement that all Jewish children be educated was quite unlike the practices in the surrounding Greco-Roman culture, where education was never intended to be available for everyone (Safrai 1968, 148).

Safrai (1968) finds the first reference to universal education for Jewish children in the beginning of the first century B.C., but proposes that the process began earlier and was completed only somewhat later. Stern (1976) cites a first century baraita that requires Jewish communities to have schools (b. *Sanhedrin* 17b), and the custom of measuring the greatness of a town by the number of schools. "A town which did not employ teachers of the written and oral Law had no right to exist" (p. 947). Reflecting this supreme importance, the Talmuds contain much discussion of methods of instruction and educational facilities.

"Judaism attached unique social recognition, in accord with its supreme evaluation of the all-human, indeed cosmic importance of Jewish education" (Baron 1952b, 276).

In keeping with the general segregationist thrust of Judaism, only Torah was taught in these schools: "The general Jewish school system dealt neither with Greek culture nor with their language" (Safrai 1968, 153). Nevertheless, as has probably been the case throughout subsequent Jewish history, the result even in the ancient world was that the average level of education among Jews was significantly higher than among the surrounding populations.

Apart from community-wide elementary education, there was an even stronger emphasis on education of an elite group of scholars. The emphasis on a scholarly elite can be seen in *Ecclesiasticus* 38:24--39:11, written in the second century B.C. This passage contrasts those who work with their hands with the scholar who preserves ancient knowledge, is of service to rulers, and is a source of sound advice for the community. Whereas the scholar has the most noble profession, those who work with their hands "are not in demand in public discussions or prominent in assembly. . . But they maintain the fabric of this world, and their prayers are about their daily work." The emphasis on elitism among the ancient Jews can also be seen in the exalted status Josephus attaches to wealthy, successful individuals (Sevenster 1975, 19-21). Individuals who remained without education and in ignorance of the law came to be regarded as of low status, and called by the pejorative term 'am ha-ares. As indicated below, there is excellent evidence for social, economic, and genetic discrimination against this group by the scholarly elite.

Corresponding to the very high social status attached to success as a scholar, there were economic as well as ultimately genetic benefits to being a successful scholar. From the origins of Judaism in the ancient world, rabbis were given special privileges, such as freedom from taxes, and there was a meritocracy such that family connections and money counted for little in attaining high status (Baron 1952b, 279). As early as the end of the second century and certainly by the third century, the practice developed that each community would provide economic support for a "resident spiritual leader-scholar-judge" (Alon [1980, 1984] 1989, 498). Moreover, as elaborated below, success as a scholar was valuable because it allowed the scholar to contract a desirable marriage, often to a woman from a wealthy family. At the very center of Judaism, therefore, was a set of institutions that would reliably result in eugenic processes related to intelligence and resource acquisition ability.

The Jewish Canon as an Arena and Product of High Level Intellectual Competition within the Jewish Community

Given the high social status accorded to scholars, as well as their ability to make good marriages, it is not surprising that the Jewish religious canon became

extremely elaborated and complex, with the result that aspiring to a position of scholarly prominence required a great deal of intelligence and prolonged study. Regarding the substance of higher education, "[e]ven a moderate proficiency in it was not to be attained without long and patient years of learning; mastery demanded unusual capacity. The method of the schools developed not only exact and retentive memory and great mental acuteness, but an exhaustive and ever-ready knowledge of every phrase and word of Scripture" (Moore 1927-30, I:319-320). In the language of modern research on intelligence, there is a strong emphasis in the traditional Jewish curriculum on verbal knowledge, rote memory, verbal concept formation, and comprehension of abstract ideas (Levinson 1958, 284).

It is important to note that the vast literature of the Mishnah, the Yerushalmi and Bavli, Midrashic collections, and subsequent commentary actually "contributed relatively little to the fundamentals of Judaism. All the essentials had been laid down by the Pharisaic scribes with an astounding finality, and Talmudic Jewry adhered to them with unswerving fidelity" (Baron 1952b, 310). Although there was a definite need for a body of civil and business law and other aspects of life as a self-governing community in the diaspora covered by the Mishnah and Talmuds, evidence provided here indicates that these documents contain a vast amount of material for which there are no practical functions at all. The incredible elaboration of Jewish religious law in these writings suggests that this mass of material is the result of intense intellectual competition within the Jewish community and that the resulting Torah then provided an arena for intellectual competition within the Jewish community.

To begin with, these writings are extremely difficult to understand without a great deal of study. There is no attempt to develop an easily comprehensible code of law or religious ideology that would be comprehensible to an individual who did not have an extraordinary degree of education and commitment to study.

What is said in the Mishnah is simple. How it is said is arcane. . . . Its deep structure of syntax and grammatical forms shapes what is said into an essentially secret and private language. It takes many years to master the difficult argot (Neusner 1988b, xxv; italics in text).

Neusner notes that although the Mishnah may be described as a law code, a schoolbook, and a corpus of tradition, it is best described as a work of philosophy in the Aristotelian tradition. The Aristotelian nature of much of this work is well illustrated by Neusner's (1988a, III:204-205) analysis of Tractate Terumot, a tractate concerned with designating a portion of agricultural crops for heave-offering for priests, which is an expansion of six verses from the Book of Numbers (18:8-13). The tractate contains extremely complex discussions of the classification of mixtures and things that fall into different classes. The differences between potential and actual and between intentional

and unintentional are important for classification, and the tractate discusses cases that involve several principles of classification. "I cannot imagine a more profoundly philosophical reading of a topic that, in itself, bears no philosophical interest whatever" (Neusner 1988a, III:205).

As in the case of Aristotelian philosophy, there is a great concern with classification and logical relationships among categories. Notice, however, the last sentence in this comment. The topic itself is without philosophical interest. Moreover, although the topic of heave-offering concerns a religious obligation with considerable practical concern to the authorities (see below), it becomes elaborated far beyond any practical usage here, and to characterize the tractate as religious is to strain the usual meaning of the term.

Indeed, many tractates have no foundation in Scripture at all and yet contain elaborate regulations. Thus, Tractate Tohorot concerns the cleanness or uncleanness of animals and raises a host of highly abstract issues involving classification. Neusner (1988a, 209) interprets one section to state that "if pieces of food are joined together and one of them is made unclean, all are affected and remain so. . . . But if we have an unclean piece of food and join others to it, while, when joined, all fall into the same remove of uncleanness as has affected the original, when separated, the pieces are unclean only by virtue of their former contact with that original piece and fall into a diminished remove of uncleanness."

Obviously, this is a very high level of casuistry indeed, and although these regulations may indeed alter the way in which an educated Jew would look at the world, there is a patent "made up," unnecessary quality about the entire tractate. Much of the material deals with issues that could not possibly have been of relevance to anyone at all apart from those who were discussing these issues. Moore (1928, II:74) says it well when he notes, regarding the elaborate regulations on which animals may be eaten, that "inasmuch as most of them were creatures that no civilized man would eat anyhow, these restrictions on diet belonged to learning rather than to life." Moreover, Neusner (1988b, xxvi), notes that, although there is a myriad of rules and regulations, it is difficult to see the Mishnah as a law book because no punishments are prescribed: "The Mishnah hardly even alludes to punishments or rewards consequent upon disobedience or obedience to its laws." Thus, hundreds of examples of how one can become unclean or clean are presented in an extremely difficult logic, but that is pretty much the end of the story.

Many of the problems appear to involve intellectual disputation for its own sake. The Mishnah is thus not constructed in order to produce a logically organized, easily grasped set of laws for purity and legal codes for self-government during the exile. Rather, "[t]he Mishnah begins nowhere. It ends abruptly. There is no predicting where it will commence or explaining why it is done. Where, when, why the document is laid out and set forth are questions not deemed urgent and not answered" (Neusner 1987, 87-88). Sanders

(1992, 471) says simply that the Mishnah "does not consist of set rules that governed society. It consists of debates."

Yet the Mishnah is "the initial and definitive statement of Judaism" (Neusner 1988a, I:5)--an integral part of Jewish canon. Moreover, and this is the point, the mastery of this canon was the *summun bonum* of a religion whose elite were not a group of celibate intellectuals, but rather a group of individuals with a great deal of social status and control of resources and whose first religious obligation was to "be fruitful and multiply."

This massive set of writings is therefore substantially *unnecessary* in terms of fulfilling any purely religious or practical legal need. Although, as indicated above, much of the Mishnah itself appears to exist only for the sake of intellectual disputation, this is even more true of the massive set of later writings. Neusner (1986a) shows that the majority of the material in the Yerushalmi and the Bavli is exegesis, including a great deal of expansion, of the Mishnah. Thus, it is common to generalize from the Mishnaic rules and to raise further questions, or establish entirely new lines of inquiry within the overall framework of the Mishnaic tractate. The consistency of rules from the Mishnah (and sometimes between the Mishnah and Tosefta) is explored.

Moreover, the Yerushalmi and the Bavli provide largely non-redundant commentaries on the Mishnah (Neusner 1986, 48ff), so that the sequence from the Mishnah--Yerushalmi--Bavli must be seen as one of ever greater elaboration of material that was already highly abstract and unnecessary to begin with. For example, the Mishnah Tractate Sukkah provides an elaboration on the rites performed in connection with the feast of Tabernacles based on three passages of the Pentateuch. While the scriptural passages only allude to a general obligation regarding the feast, the Mishnah provides prolonged discussions on the validity of particular structures, precisely who has the duty to perform the rite, and "a vast amount of [other] information in neat patterns" (Neusner 1988a, III:164). The Yerushalmi and the Bavli then expand on these issues and resolve disputes arising from positions arising in the Tosefta. For example, sukkahs are said to be valid only if exposed to the firmament, but this raises the issue of whether one sukkah can be on top of another one and of what happens when valid forms of roofing are intertwined with invalid forms. While the Mishnah never came up with a rule for this situation, it is now decreed that combinations of valid and invalid are valid and, moreover, that if no one is living in the upper one, the bottom one is valid. Many other questions are raised, but there is no indication that any of this discussion arose out of any practical need to resolve real disputes arising from the celebration of the feast.

Moreover, not only are the Yerushalmi and the Bavli non-redundant and essentially independent, but there is no suggestion that the latter has an identifiable interpretive ideology or message that might provide a credible rationale for such a massive undertaking. As Neusner (1986, 73) notes, "they wish to do much the same thing, which is to subject the Mishnah to a process of explanation and amplification." The differences are differences of detail and

taste: "The genus is the same, the species not" (p. 76). Some tractates, such as b. Qiddushin, add nothing to previous writings on the subject (Neusner 1992, 1).

These linkages between the Mishnah and Scripture provide a sort of intellectual justification of the Mishnah--considered as without autonomous authority--and the latter--viewed as authoritative--but the conclusion must be that the massive Talmudic commentaries on the Mishnah add little or nothing that is new, but serve the purely intellectual function of rationalizing and legitimating previous writings: "[T]heirs was a quest for a higher authority than the logic of their own minds" (1987; p. 105).

Now such a purely intellectual endeavor is certainly understandable without supposing any grand evolutionary function. Within the Western tradition, there have been many purely intellectual attempts to show that religious beliefs are justified on the basis of reason or science or, more recently, that scientific research is compatible with Scripture. For example, during the Middle Ages, the Scholastic philosophers such as Thomas Aquinas attempted to deduce the existence of God, the nature of the soul, and the nature of evil by the use of human reason in conjunction with Scriptural revelation. Their work is at a similar level of complexity, and mastering it would require a similar level of intellectual ability.

There are at least three major differences, however, between the purely intellectual endeavors of these medieval philosophers and the work that resulted in the massive set of writings produced by Judaism in later antiquity--and indeed beyond. In the case of Judaism, mastering these writings was a key to success in the community and ultimately was linked rather directly with control of economic resources and reproductive success. Success in mastering these purely intellectual pursuits was thus important not only as a means of satisfying intellectual curiosity, but also as a key to achieving evolutionary ends. In the case of the scholastic philosophers, there may indeed have been psychological and even some material rewards for their activities, but the activities of these monks were hardly the key to enhanced reproductive success.

Moreover, mastery of these works, or at least familiarity with them, was a major goal for the entire community--indeed, its *summum bonum*. The entire Jewish community--not simply an intellectual elite--was enjoined to become familiar with these works at some level. In a sense every Jew was being graded on the level of his intellectual ability and his knowledge of what had become an overwhelmingly vast and extremely complex scholarly tradition. This was certainly not the case with gentile communities, at least in traditional societies, and certainly never as a matter of religious practice.

Finally, the writings of the sages as a whole came to be viewed as part of the religious writings that, along with Scripture, constituted the Torah. While scriptural exegesis and philosophical and scientific approaches to religion were not uncommon in Christianity, they hardly became part of the sacred tradition itself. For Judaism, however, there was an enormous expansion of sacred

writings, so that being a full participant in the religious community required enormous intellectual effort and ability.

We have seen that the vast majority of these writings are without any function in terms of establishing religious and legal practice within the Jewish community; nor, for the most part, are they spiritual or religious in the usual sense of those terms. The present perspective hypothesizes that this mass of written material is, however, profoundly functional as an aspect of the establishment of Judaism as a eugenic/high-investment strategy for intrasocietal, intergroup resource competition. Mastering this immense mass of material is important because such mastery is an extraordinarily good indication of a high level of intellectual ability. The rabbis who contributed to this corpus had to be intimately acquainted with the massive Mishnah as well as the relevant opinions of the Tosefta. They also had to have an enormous knowledge of Scripture and be able to bring particular statements from Scripture to bear on particular problems. By any standard, this requires a high level of intellectual ability, and there is no question that modern psychological research supports the proposition that this high level of intellectual ability would generalize to competence in fields seemingly far removed from the scholarly study of ancient writings. Research on psychometric intelligence clearly shows that there is a strong general component to intelligence (Spearman's g factor). Being able to master this vast mass of writings is thus an excellent indication of a high level of general intelligence, and, as indicated below, especially verbal IQ.

One need not suppose that there was a conscious intent on the part of the rabbis to develop a Torah that could serve as a forum for high-stakes intellectual competition. Once scholarship was established as the *summum bonum* and the key to social status, resource control, and reproductive success within the Jewish community, there would be intense competition to develop an intellectual reputation. The writings produced as a result of this competition therefore become increasingly complex and inaccessible to those with less intellectual ability. Within a fairly short time, one could not hope to enter the arena without a very long period of preparation, a firm dedication, and persistence, as well as (I would suppose) native intellectual ability.

Similarly, in contemporary professional sports, the high salaries, social status, and fame of a successful athlete ensure that the competition to achieve success will be extremely intense. The level of play will be the highest available at the current time because the level of rewards ensures a very high level of participation in the competition and no defections from those who are successful. Viewed in this manner, the development of this massive corpus of material is more a consequence of the development of the strategy than a consciously intended aspect of the strategy. In either case, reaching a position of influence and respect in the Jewish community would now require a keen intellect and long, diligent preparation.

This proposal for the function of the massive Jewish canon is compatible with the canon fulfilling other purposes. As indicated above, at an obvious level, there was a need for developing a legal system for a self-governing group living in the diaspora. Also, given the extremely robust separatist thrust of Judaism, these elaborations served to isolate Jews from their surrounding environments and were thus functional not only in a self-consciously religious sense but also in a genetic sense. Moreover, Neusner (1987, 120) takes the view that the Yerushalmi attempted to confront the newly triumphant Christianity and re-interpreted recent history, and especially Roman power, from the standpoint of Judaism. There is also speculation on the possibility of a Messiah. These elaborations of the basic diaspora ideology may well have been functional in cementing the resolve of the community.

However, the point is that, even if there are other purposes for the incredible elaboration of the canon during this period, it is clear from the above that practical concerns are not the whole story. And there is no question that the canon was elaborated to the point that only long and patient study by a very intelligent person could possibly hope to master it. Indeed, the Jewish canon is an open canon, so that the task of mastering it continues to grow even now. Yet mastering this canon was for many centuries the *summum bonum* of the religion, and all Jews were expected to become at least somewhat knowledgeable regarding it. It is this latter unique phenomenon that must be explained by any competing theory.

Finally, it is worth commenting on the philosophical status of the basic Jewish canonical writings. Although, as emphasized by Neusner (1988a; I:passim), there are important commonalities between these canonical writings and the formal philosophical methodology deriving from Aristotle and Stoicism, it should be noted that the arbitrariness and unpredictability of many of the topics chosen by the Mishnah, as well as the arbitrariness of the distinctions made and the common appeals to authority of particular rabbis, differentiate this work from the Aristotelian tradition in Western philosophy. Regarding the importance of received authority, Neusner (1986a, 43) in discussing the Yerushalmi notes that "[f]ar more common are instances in which the deed of a rabbi is adduced as an authoritative precedent for the law under discussion. It was everywhere taken for granted that what a rabbi did he did because of his mastery of the law So on the basis of the action or practice of an authority, a law might be framed " Because of the essential arbitrariness of the rules, appeals to authority may have been necessary in order to provide an aura of legitimacy to the entire enterprise.

Thus, although I agree with Neusner that the Mishnah shares a concern with taxonomy and relationships among qualities with Aristotelian philosophy, in the case of this latter tradition there is the attempt to use this method to unravel the secrets of reality, including the physical and natural world and the nature of humans and their societies. The topics chosen are thus certainly far from arbitrary, and the authors are clearly attempting to understand a reality perceived by them to be not of their own making. The canonical writings of Judaism are, very self-consciously I believe, a man-made system of

categorization with a great deal of arbitrariness in the topics chosen and in the manner of their treatment.

In addition, although the Mishnah is extremely complex and thus demands a keen intellect to master, it is fundamentally irrational. Principles are often simply enunciated and expanded on or shown to require further principles or distinctions in order to apply to particular cases. The Mishnaic procedure resembles much more that of an abstract, *a priori* set of laws in which one attempts to develop principles that apply to every conceivable (not necessarily actual) possibility. Any legal system inevitably comes up against cases that are difficult to decide because more than one law may be applicable or because the law is not precise about what it applies to. However, the attempt to specify every possible eventuality in advance quickly becomes, as in the case of the Mishnah (as well as similar exercises in the Talmuds), an intellectual exercise whose purpose must be sought beyond the need to develop a practical legal system, much less an attempt to understand the world in rational terms.

Indeed, John Hartung (n.d.) describes the logic of the Talmudic references to Biblical passages as follows:

The criterion for using Biblical passages seems to have been that it should be possible to construe the words cited, when taken out of their original context, to be not obviously incompatible with the argument being made. Even then, in most cases, the Sages perceived themselves as having the authority to patch disparate phrases together and add or subtract text in order to make the meaning of works, as perceived by them, not a *non sequitur* to others. "Arguments" like this were deemed especially cogent if other Sages asserted their agreement and/or supplied additional totally irrelevant references. (p. 43)

Despite the logical veneer, the point was not to make a rational, scholarly argument. A great deal of intelligence was required, but ultimately there was no attempt to seek truth, religious or otherwise. These writings are thus ultimately irrational. And as is inevitable with irrational undertakings, acceptance of the Jewish canon was essentially an act of authoritarian submission.³

JEWISH EDUCATION AMONG THE SEPHARDIM AND ASHKENAZIM

Do not neglect the studies of the learned, but apply yourself to their maxims; from these you will learn discipline, and how to be the servant of princes. (Ecclus. 8:8)

The world endures only for the sake of the breath of schoolchildren. (b. Shabbath 119b)

It is better to give charity so that youngsters may study than to give charity to the synagogue. (Motto of German Jewry in the medieval period; quoted in Kanarfogel 1992, 17; italics in text)

Religious study was of central importance among the Sephardic Jews in Spain. Parents were expected to provide education for their children, although elementary and secondary education was often supplemented by communal assessments, and the *kehilla* typically provided for Talmudic study. "The motive was never lost sight of that the study of the Torah was a religious precept for which no sacrifice was too great" (Neuman 1969, II:69).

Study of the complexities of the Mishnah and the Talmud began as early as age seven or eight. Higher education in the Talmud and Jewish law was the province of the local rabbi, and there was great prestige attached to this role. The rector of the *yeshiva* "was the living embodiment of their highest ideal. . . . Outside the walls of the academy, in the community at large, he was the custodian of Judaism and a regenerating moral and spiritual force among his people . . . he was a dominating moral figure in the community and he wielded considerable legal powers" (Neuman 1969; II:81-82).

The scholar was free from communal taxes, and his government taxes were paid by the communal treasury. This special treatment was not because these scholars were impoverished, but occurred even if the scholar was wealthy, as a sign of reverence. The scholar was also protected from personal abuse by use of the *herem* (ban) and fines, and he was accorded a prominent place of burial.

These trends are also clear in work on traditional Ashkenazi societies. During the medieval period rabbinical rulings required fathers to hire a *melammed* (tutor) for their sons (Kanarfogel 1992, 19). Torah study was viewed as the noblest pursuit (Kanarfogel 1992, 30). During this period, scholars, while not supported by the community as in Spain, were revered, and efforts were made to ensure that they would be able to make a living effortlessly. Thus, for example, Kanarfogel (1992, 45) describes a ruling that scholars are allowed to retain monopolies in trade with gentiles, while such monopolies are not allowed for other Jews: "The community is mandated by Talmudic law to protect and aid this scholar, whose work is the work of heaven . . . and who teaches Torah without compensation, in order that he not be distracted from his studies." By the 14th and 15th centuries, as the Ashkenazi communities became larger, formalized community support for scholars became the rule.

Katz (1961a), writing of the 16th-18th centuries, notes that all Jewish children were expected to obtain schooling at a *heder* (elementary school, for children up to ages 12-13), even those in remote villages and poor children. Schooling occurred in public institutions under the supervision of the *kehilla*, and the *kehilla* also supported the education of poor children. The *kehillot* in turn were strongly pressured to maintain their educational institutions by super-*kehilla* organizations, and small villages who could not afford a *yeshiva* were obligated to contribute to the support of those in larger towns.

There was a keen interest in ensuring that the children actually made progress in school by having the rabbi make periodic examinations. There was also close supervision to ensure that there were not too many pupils per teacher or that the teacher did not lower the hours of instruction or engage the children in extraneous pursuits. Zborowski and Herzog (1952, 58) describe the custom of having the teacher visit on Sunday afternoon while the student was being quizzed by his father to determine his progress in school. For the teacher, it was an important moment because his livelihood depended on the performance of the child.

We have noted the historical importance of a highly educated, wealthy elite for the fortunes of the entire Jewish community. Corresponding to this circumstance, Jewish education among the Ashkenazim was highly elitist. The ultimate aim of education was to create scholars in Jewish law, and for this task *yeshivot* were created. Teachers at the *heder* level were poorly paid, and there was little prestige attached to this occupation, while the head of the *yeshiva* had immense prestige and was often wealthy and connected by marriage to other wealthy families (see below). Katz (1961a) makes the claim that education in the *heder* was intended not so much to provide a broad basic education for the masses as to provide the minority of children who were capable an opportunity to study the Talmud (Katz 1961a, 191). In this arena of extreme importance, the free market reigned supreme: The rabbi who ran the *yeshiva* obtained his position solely via the approbation of the students and the scholars.

Regarding the education received at the *yeshivot*, Katz (1961a) states that "[t]he scholarship of yeshiva students reached such a stage of complexity and acuteness that no one who had not devoted several years to intensive study could follow a lecture on their level or a learned discussion between them" (Katz 1961a, 194). Argumentation was highly abstract, "an exaggerated casuistry (*pilpul*)" that was "divorced from reality" (Katz 1961a, 195). A major activity consisted of attempting to logically resolve contradictions in the Talmud by engaging in dialectical Talmudic discourses termed *halukim*. Consistent with the present functionalist hypothesis, it was an activity that demanded "penetration, scholarship, imagination, memory, logic, wit, subtlety" (Zborowski & Herzog 1952, 98). Besides the abstract casuistry, part of the school year was devoted to developing a knowledge of the precise meaning and analysis of the Talmud. Katz (1961a) notes that "the method of precise analysis of the meaning of the early codifiers was also sufficiently complicated so that only several years' study would equip a person to follow such a course" (p. 195).

Students who completed their studies and received the titles of *haver* and *moreinu* obtained a variety of privileges within the community, and the rabbi of the *yeshiva* "could expect to gain prestige which would carry over to [his] other fields of [economic] activity. . . . The honor accorded the rabbi as head of the *yeshiva* and as disseminator of learning among the people, values that were universally esteemed, strengthened his hand as he carried out his function as arbiter of the values of the entire community" (Katz 1961a, 197-198). The

talmid hakam (scholar) was "the living embodiment of the law;" "the terrestrial realization of the divine image" (Sorkin 1987, 45-46).

"Study was identical with all of the religious virtues, then, including morality" (Sorkin 1987, 46), and being a scholar was a route to prestige and a good livelihood. Indeed, ranking within the traditional Eastern European shtetl community corresponded closely with scholarly ability (Zborowski & Herzog 1952, 80). Seating arrangements in the synagogue were in order of learning, with the rabbi and other mizrakh, as the most learned, nearest the eastern wall and next to the Ark where the Torah was housed, while those near the western wall were the most illiterate, ignorant members of the community (Zborowski & Herzog 1952, 73). Having illustrious scholars in one's pedigree was an important component of one's yikhus (family background; see Chapter 4), an essential aspect of social status in the community and known to all. While wealth could compensate for learning, a man with no money who was nevertheless learned, could achieve the highest status. However, it was unlikely that such a learned man would remain poor, since he would be sought by wealthy men as a son-in-law. Even very poor *yeshiva* students were accorded great respect because their prospects for wealth and high social status were good. Further, if a person with yikhus lost his money, he was the object of discreet charity, indicating that his pedigree continued to be a resource even during times of adversity.

On the other hand, an illiterate *amorets* (from 'am ha-ares, meaning "ignoramus"; see below) was at the absolute bottom of the hierarchy, despised as not really a complete Jew. Zborowski and Herzog (1952, 152) show that the dichotomy intellectual/non-intellectual was more or less coincident with Jew/non-Jew, and persons without intellectual ability were constantly confronted by the social superiority of those who had intellectual ability. Persons without intellectual ability were also morally suspect--suspected of being more likely to beat their wives and engaging in other horrible deeds (p. 82). Parents scolded their recalcitrant children with the prospect that if they continued to fail to excel at scholarship, they would descend to the depths of being an *amorets*.

Hundert (1992) shows that the income from rabbinic duties obtained by the rabbi of the small town of Opatow at the end of the 18th century placed him at the very top level of income for the entire community, below only the top estate managers. Goitein (1971, 95), writing of the medieval Islamic period, shows that scholars were often the recipients of gifts from other Jews in distant countries.

There is no question that Jews tended to be far more educated than the populations they lived among, and this was not only true in traditional societies. Even in the early stages of emancipation in Germany, Jewish families increasingly shifted to an emphasis on secular education as a means to ensure upward mobility and compete on equal terms with gentiles (Carlebach 1978, 28). By 1840 Jews had established their own school system through high school

and teacher training colleges, and an increasing number of Jewish students attended secular universities. The eventual result was that Jews were vastly overrepresented among university students between 1870 and 1933 (Gordon 1984, 13-14). Despite consisting of less than 1 percent of the population, Jews comprised 25 percent of students in law and medicine and 34 percent of graduate students in philosophy. Even in grammar schools, Jewish children were overrepresented by a factor of over 6 to 1 in Berlin in the early 20th century. Jewish overrepresentation was a prominent theme of anti-Semitic rhetoric in Germany during this period (see Chapter 5 and *SAID*, ch. 2).

EDUCATION AND EUGENICS AMONG JEWS

A man should sell all he possesses in order to marry the daughter of a scholar, or marry his daughter to a scholar or other man of character, because he may then rest assured that his children will be scholars; but marriage to an ignoramus will result in ignorant children. (b. Pesachim, 49a)

For a learned man to marry the daughter of an ignoramus ('am ha-ares') is like planting a vine tree among thorns. (b. Pesachim, 49a)

If one sees that scholarship is dying out in his children, one should marry his son to the daughter of a learned man. (b. Pesachim, 49a,b)

An unlettered Israelite should not marry a woman of priestly descent, since this constitutes in a way a profanation of the seed of Aaron. Should he marry her nevertheless, the Sages have said that the marriage will not prove successful, and he will die childless, or else he or she will come to an early death, or there will be strife between them. On the other hand, it is laudable and praiseworthy for a scholar to marry a woman of priestly descent, since in this instance learning and priesthood are united.

A man should not marry the daughter of an unlettered person, for if he should die or be sent into exile, his children would grow up in ignorance, since their mother knows not the crown of the Torah. Nor should a man marry his daughter to an unlettered person, for one who gives his daughter in marriage to such a husband is as though he had bound her and placed her in front of a lion, seeing that the beast's habit is to smite his mate and have intercourse with her, since he has no shame. A man should go so far as to sell all his possessions in order to marry a scholar's daughter, for should he die or go into exile, his children would grow up to be scholars. Similarly, he should marry his daughter to a scholar, since there is no reprehensible thing or strife in the house of a scholar. (*The Code of Maimonides, Book 5: The Book of Holiness*, ch. XXI: 31-32, 140)

Eugenicists such as Hughes (1928) and Weyl (1963, 1989) have long emphasized Jewish eugenic practices as resulting in high levels of intelligence

among Jews. Although there are major differences between an evolutionary perspective and a eugenics perspective on Judaism,⁴ the evolutionary perspective is highly compatible with the supposition that eugenic practices have been an important aspect of Judaism as an evolutionary strategy. From this perspective, not only did the Jewish canon perform an educational function, but also there is evidence that the Talmudic academy often functioned as an arena of natural selection for intelligence.

The first major eugenic effect occurred when the Babylonian exiles returned to Israel (now a part of the Persian Empire) in the fifth century B.C. The Babylonian exiles were disproportionately wealthy compared to the Israelites left behind, and in Chapter 3 data were presented indicating that these relatively wealthy and aristocratic exiles returning from Babylon refused to intermarry or associate with the "people of the land" ('am ha-ares)--both the Samaritan remnants of the northern kingdom and the former Israelites of the southern kingdom. The main reason given for this exclusion was that these groups had not preserved their ethnic purity, but Ezra's policy of removing all individuals of foreign taint from the Israelite community would also have had a eugenic effect.

Dating the origins of eugenics as a conscious policy among Jews is difficult. The evidence described in this chapter indicates that concern with education originated at least by the second century B.C., and there is evidence for social, economic, and genetic discrimination against the less educated classes at least from the period following the Second Commonwealth (70 A.D.). Moore (1927-30, II:157ff; see also Alon 1977; Safrai 1968) suggests that, following the destruction of the Temple in 70 A.D., the new class division was between an educated, religiously observant elite called "associates" (the haverim; sing. haber; i.e., members of the fellowship) and the 'am ha-ares, who were either characterized by a withdrawal from Torah education and knowledge or suspected of being careless in the performance of the religious law. The appellation 'am ha-ares itself is significant, since it is the term used for the racially mixed, religiously impure native population inveighed against by Ezra and Nehemiah during the Restoration in the fifth century B.C. It is thus a derogatory term, and the animosity between these groups was rather intense, especially during the second century A.D.⁵

Avi-Yonah (1984, 63f, 108f) notes that after the destruction of the Second Temple, the highly observant, exclusive *haberim* were the only group available to reconstitute a national authority, and they quickly assumed power as magistrates and used their authority to enforce rigorous observation of a very strict interpretation of the religious law, including the agricultural laws, which impacted so heavily on the 'am ha-ares. (For example, during the economically difficult times of the third century, the haberim strongly opposed the relaxation of the sabbatical year law, in which fields were to remain fallow in the seventh year despite the hardship this caused to the 'am ha-ares.) The rabbis had power in the towns, but they were freed from taxes while at the same time being dependent ultimately on the 'am ha-ares for support. The freedom from taxation

was especially resented during economic crises, as during the third century. The result was the development of an elite class of scholarly rabbis whose status was based on intellectual ability and who were supported by a relatively illiterate and poor peasantry.

There were a variety of methods of social discrimination against the 'am ha-ares. The 'am ha-ares were ritually unclean, so that any contact with them was fraught with difficulty. For example, Mishnah Tractate Tohorot (7:1-9--8:1-5) goes into great detail on how 'am ha-ares impart uncleanness to virtually everything they come in contact with, including the space surrounding them.⁶

Moore (1927-30 II:159) summarizes these prohibitions by noting that "the presumption of uncleanness was a serious bar to social intercourse, and indeed to friendly relations of any kind." Because of their ignorance of the law, the 'am ha-ares may not have paid the requisite tithes on agricultural produce to the authorities, with the result that business relationships were also highly problematic. Moreover, the 'am ha-ares were prevented from testifying in legal proceedings, could not be entrusted with a secret, and could not be appointed guardian of an orphan or be in charge of the poor rates. During the economic troubles of the third century, the Patriarch only reluctantly and belatedly opened his storehouses to the 'am ha-ares after originally opening them to "students of the Bible, of the Mishnah, of the Gemera, of the Halakah and the Haggadah" (quoted in Avi-Yonah 1984, 110).

These comments indicate that the policies of the *haverim* would have had negative economic effects on the 'am ha-ares, and the social discrimination might reasonably be supposed to result in defections of the 'am ha-ares from Judaism. Of particular interest here is that "marriage between the two classes was condemned in terms of abhorrence" (Moore 1927-30, II:159-160). Thus, the Talmud states that

A Jew must not marry a daughter of an 'am ha-ares, because they are unclean animals [sheqes] and their women forbidden reptiles [sheres] and with respect to their daughters the Scripture writes: "Cursed be he that lieth with any manner of beast [Deut. 27:21]! . . . Said R. Eleazar: one may butcher an 'am ha-ares on a Day of Atonement that happens to fall on a Sabbath [when any kind of work constitutes a violation of a double prohibition]. His disciples said to him: Master, say "slaughter" [instead of the vile word, butcher]. But he replied "slaughtering requires a benediction, butchering does not require a benediction." (b. Pesachim 49b)

In the words of Hillel, "No ignorant man ('am ha-ares) is religious" (cited in Moore 1927-30, II:160). Being religious meant having knowledge of an enormously complicated code of laws, many of which "from our point of view seem of the smallest religious significance" (Moore 1927 II:160). Thus, a great

deal is made of the regulations on agricultural tithing to priests (perhaps because many of the 'am ha-ares' were peasants), even though the priests no longer had any religious function. There is an extraordinary interest in the Mishnah in the regulation and taxation of agriculture, resulting in thousands of regulations (Avi-Yonah 1984, 20) elaborated to a truly amazing level of complexity.

Regarding the general system of agricultural taxation, Moore comments that

the system, with its numerous and various payments in kind, was complicated, while the method of collection, so far as there was such a thing, had the semblance--and doubtless the substance--of extortion by the beneficiary.

It is small wonder that the peasant earned the reputation of being very "untrustworthy" in acquitting himself of his religious obligations in this sphere. Even the most scrupulous of the class doubtless followed in this as in other matters the prescriptive usage of their fathers, heedless of the stricter interpretation of these laws in the schools and of the refinements of the oral law. (Moore 1927-30, II:72).

The clear animosity between these groups, the emphasis on elaborate regulation of the economic behavior of the 'am ha-ares by an intellectual, and non-agricultural elite, the elaborate set of rules regulating social contact between the groups based on the uncleanness of the 'am ha-ares, and the extreme importance of not marrying into the family of an 'am ha-ares are highly compatible with a eugenic interpretation in which community controls facilitating eugenic mating among the scholarly rabbinic class were highly salient to members of both groups. Moore indicates that the barriers between the 'am ha-ares and the haverim were not absolute, since an individual could be admitted to the educated class if he accepted instruction during a probationary period. However, the response of many of the 'am ha-ares was to flaunt their lack of knowledge and literacy and to thumb their noses at the haverim.

Nevertheless, Avi-Yonah (1984, 107, 110, 238) states that by the third century the rifts between these classes had receded and in the sixth century wealthy 'am ha-ares could achieve positions of power and influence in the community. There is the clear suggestion, however, that assortative mating based on intelligence and active avoidance of intermarriage with the unlettered was characteristic of the scholarly class beginning at least during the first century. Minimally, there is the suggestion that marriage would only be withingroup, and even after the disappearance of this class distinction, only wealthy, intelligent 'am ha-ares would be able to have influence in the towns and connubium with the rabbinic class.

Moreover, it is apparent from this material that the 'am ha-ares' would have had maximum motivation to leave the group. It has been mentioned that the poor and obscure have always been the most likely to leave Judaism, and this must have been particularly so during this period. From an evolutionary perspective, the exclusionary behavior and economic disabilities imposed on the

'am ha-ares by the haberim are absolutely incompatible with supposing that both of these groups were at that time members of the same evolutionary strategy. Quite clearly there is the indication of maximal divergence of interest here, rather than the impression of a unified, corporate type of Judaism in which there were high levels of within-group altruism and the consequent strong group cohesion. The image presented by this ancient conflict is highly discordant with the image of Judaism apparent from the material discussed in Chapter 6.

Theory and Practice of Eugenics Among the Jews

The Talmuds show a strong concern with eugenics. Marriage with a scholar or his children is highly recommended: "For marriage, a scholar was regarded... as more eligible than the wealthy descendent of a noble family." The Tannaim did not tire of reiterating the advice that "under all circumstances should a man sell everything he possesses in order to marry the daughter of a scholar, as well as to give his daughter to a scholar in marriage... Never should he marry the daughter of an illiterate man" (Baron 1952, II:235).

Feldman (1939) shows that the authors of the Talmud, like the other ancients, believed that heredity made an important contribution to individual differences in a wide variety of traits, including physical traits (e.g., height), personality (but not moral character), and, as indicated by the above quotations from the Talmud, scholarly ability. "Every care was taken to prevent the birth of undesirables by a process of selective mating" (p. 32). Individuals contemplating marriage are enjoined to attend to the family history of the future spouse: "A girl with a good pedigree, even if she be poor and an orphan, is worthy to become wife of a king" (Midrash Num. R.i, 5; quoted in Feldman 1939, 34). A prospective wife should be scrutinized for the presence in her family of diseases believed to be inherited (e.g., epilepsy), and also the character of her brothers should be examined, suggesting an awareness of the importance of sex-linked factors. Physical appearance was not to be a critical resource for a woman: "For 'false is grace and beauty is vain.' Pay regard to good breeding, for the object of marriage is to have children" (Taanith 26b and 31a; quoted in Feldman 1939, 35).

Feldman interprets the k'tsitsah (severance) ceremony, described in b. Kethuboth 28b, as intended to show the extreme care the rabbis took to ostracize anyone who had contracted a marriage not made according to eugenic principles. A barrel of fruit was broken in the market place in order to call attention to the event, and the following words spoken:

"Listen ye our brethren! A. B. married an unworthy wife, and we fear lest his offspring mingle with ours; take ye therefore an example for generations to come that his offspring may never mix with ours." In his authoritative 12th-century compilation of Jewish law, Maimonides states that "A man should not marry a woman belonging to a family of lepers or epileptics, provided that there is a presumption based on three cases that the disease is hereditary with them" (*The Code of Maimonides, Book 5: The Book of Holiness*, ch. XXI:30, p. 140). The advice, therefore, in the Sephardic community was to carefully scrutinize the family of a prospective mate for heritable diseases, and there is an implicit theory that the more commonly the disease is found among family members the more likely it is to be heritable--advice that makes excellent sense from the standpoint of modern genetics.

These writings were not without practical effect. There is evidence that the practice of intermarriage between daughters of wealthy men and males with high ability in scholarship dates from the very origins of Judaism as a diaspora religion. Baron (1952b, 221) notes that in Talmudic times wealthy men selected promising scholars as sons-in-law and supported them in their years of study.

Interestingly, Johnson (1987, 183) notes that most Jews during medieval times could list at least seven generations of ancestors. The main purpose of the genealogy was to show that one had illustrious scholars in one's lineage, and the list usually began with a famous scholar. Maimonides himself listed four important scholar/judges as ancestors (Johnson 1987, 184). The implication is that having illustrious scholars in one's pedigree was an important resource in social interactions (including marriage) within the Jewish community.

These practices also occurred among the Ashkenazim from an early period. Grossman (1989) notes that in medieval Germany it was the custom among *yeshiva* heads (themselves members of distinguished families) to choose their best pupils as sons-in-law. The son-in-law would then succeed him in his leadership within the community. In the shtetl societies of Eastern Europe, the Talmudic commandment to attempt to marry a scholar was taken very seriously to the point that there was a very direct correlation between the amount of the dowry and the number of scholars in the family tree (Zborowski & Herzog 1952, 82).

Parents dream of marrying their daughter to a learned youth or their son to the daughter of a learned father. The matchmaker, who is a very important institution in the shtetl, has in his notebook a list of all the eligible boys and girls within range. Under each name is a detailed account of his yikhus, in which the most important item is the number of learned men in the family, past and present. The greater the background of learning, the better the match. (Zborowski & Herzog 1952, 82)

There was also a concern with mental disorders in the genealogy of prospective mates in traditional shtetl society and at least until very recently, among Hasidic Jews in contemporary New York (Mintz 1992, 216ff; see also Chapter 4). A person with a psychiatric disorder was a blot on the marriage prospects of the entire family for generations, with the result that families made

every effort to prevent psychiatric disorders from being known to the wider community.⁸

There is also very clear evidence for eugenic practices among the 19th-century Ashkenazim. Etkes (1989) finds that, although a variety of traits were important in the choice of sons-in-law, including appearance, health, and temperament, particular value was placed on the perceived potential for Torah study. In other words, marriage with the daughter of a wealthy man and consequent support of study during the years of adolescence (the *kest* period) were conditioned primarily on scholarly ability, and, indeed, the prospective father-in-law would give the future son-in-law an examination prior to agreeing to the marriage. The father-in-law would then support the couple for a specified period of years and provide a large dowry, which would secure the financial future of the couple.

Katz (1961a) shows that scholarly ability was the *summum bonum* within the Jewish community--the ultimate resource when contemplating marriage. Wealthy individuals who were not themselves scholars could obtain scholarship indirectly by providing large dowries so that their daughters could marry scholars: "If an unlettered person married into a family of scholars, he would bask in the reflection of their glory" (p. 206). Moreover, in some cases, scholars could become wealthy simply as a result of their incomes and the many gifts they received. Individuals, such as the Court Jews of the 17th and 18th centuries, provided gifts and support for scholars. They thereby developed "the reputation of 'cherishing the Torah,' and the merit so acquired was equivalent to that achieved by study itself" (p. 206).

Beginning in the ancient world, wealthy men would marry their daughters to promising scholars and support the couple until adulthood (Baron 1952b, 221). This practice became a religiously sanctioned policy and persisted among both the Ashkenazim (Katz 1961a) and the Sephardim (Neuman 1969). Katz (1961a) notes that this pattern of early marriage, and the associated period of prolonged dependency on adults (the kest period referred to above), was assured only to the wealthy: "Only members of the upper class who were outstanding Jewish radical organizations such as the Russian Bund essentially replicated traditional Jewish separatism in a secular, socialist milieu. Issues related to Jewish identity and radical intellectual/political movements are discussed extensively in SAID (ch. 6). in both wealth and learning could afford the luxury of an early match without lessening their prospects. They were assured of a 'good match' by their very position" (p. 142). The poor, even when allowed to marry, would be forced to marry later, and there was a group of both sexes that was forced to remain unmarried--a clear marker of sexual competition within the Jewish community. On the other hand, upwardly mobile individuals would often defer marriage until they had obtained status, whether in the business world or by developing a reputation as a scholar.

As noted in Chapter 6, the officials of the Jewish community acted to regulate the marriages of the lower classes (Katz 1961a; Weinryb 1972), and the

marriages of poor and indigent Jews came under special scrutiny by these officials (Hundert, 1986b). These regulations included minimum dowry payments, foregoing Jewish charity for a certain period, and numerical limits on the marriages of poor Jews.

The result of these practices was a large overlap among scholarship, control of economic resources, social status, and, ultimately, fertility. Hundert (1992) notes that rabbis were often wealthy, socially prominent merchants, manufacturers, or traders. Throughout most of the 18th century, there was a Jewish aristocracy in Poland-Lithuania consisting of a small number of prominent families who "held an astonishing number of rabbinical and communal offices" (p. 117).

As in all traditional European societies (see, e.g., Herlihy & Klapische-Zuber 1985), Hundert (1992) finds that there was a positive association between wealth and numbers of children in Jewish households in the 18th century, and Weinryb (1972) notes that there were marked differences in fertility among Jews, with successful business leaders, prominent rabbis, and community leaders having a large number of children reaching adulthood, while families of the poor were small. Vogel and Motulsky (1986, 609) note that in mid-18th-century Poland prominent Jews had 4-9 surviving children, while poorer Jewish families had 1.2-2.4 surviving children. As is typical in preindustrial societies, wealthy families also benefited from having adequate food and were better able to avoid epidemics. Similarly, Goitein (1971, 140) notes that the families of wealthy Jews in the Medieval Islamic world were much larger than those of poor Jews.

Katz (1961a) notes that because the Ashkenazim were prevented from placing their resources in land and because their capital was always precarious, since it was liable to expropriation by the authorities, there was an unusual degree of fluidity in the society, in terms of both upward and downward mobility. In this type of society, scholarship was a better criterion of resource-obtaining potential even than present wealth, since it was independent of time and place, and obtaining a scholarly reputation was certainly not a matter of good fortune as wealth sometimes was. However, in some ways, scholarship and wealth were interchangeable, since property qualifications for voting were waived for scholars--another indication of the many benefits that scholarship conferred within the Jewish community.

As throughout Jewish history (Baron 1952b, 279), there was no hereditary elite of scholars. Scholars "were in a position to provide their sons with favorable facilities to continue their tradition by giving them an outstanding education and an atmosphere of learning. But they could not bequeath their learning nor block the rise of the sons of the uneducated" (Katz 1961a, 204). Nevertheless, there was a strong overlap among wealth, scholarship, family connections, and political power within the community to the point that at times scholarly position was virtually inherited. Kanarfogel (1992, 68) notes that virtually all of the prominent French Tosafists in the 12th and 13th centuries

were in a direct line from Rashi or were sons-in-law in this direct line. The presence of sons-in-law in this genealogy shows the possibility of upward mobility. It was a society with "tremendous distances between its peaks and valleys. . . . He who aimed to reach the peak had a long, steep road to climb, but if he had the strength, the ability, and the will, nothing would prevent him from achieving his desire" (Katz 1961a, 209).

Another aspect of some eugenic importance is that poor Jews were relatively likely to become apostates (see Chapter 2). Such defections would also contribute to the skewing of the Jewish gene pool toward high intelligence and resource acquisition ability. This phenomenon may quite possibly be related not only to the relatively degraded political and economic position of poor Jews in the Jewish community, but also to the extreme psychological emphasis on elitism within the Jewish community apparent in this material. One would expect that individuals who failed to live up to the cultural ideal of scholarly ability and wealth would develop a negative self-image and eventually be more prone to desert the group.

This elitism persists into contemporary times: Meyer (1988) notes that early in the 20th century many American Reform congregations still set minimum dues for members, which effectively excluded poor families, and the poor could not vote in synagogue elections. These practices continued for many years thereafter, and indeed, Meyer (1988, 289) notes that "to working people the established synagogue in the first decades of the century often looked more like a 'rich man's institution,' allied with oppressive capital, than one where they felt at home." Meyer, 306) describes membership in Reform congregations in the 1930s as a status symbol and as a marker of economic success.

Extreme concern with worldly success has also remained a characteristic of Judaism in the contemporary world. Herz and Rosen (1982, 368) note that "[s]uccess is so vitally important to the Jewish family ethos that we can hardly overemphasize it. . . . We cannot hope to understand the Jewish family without understanding the place that success for men (and recently women) plays in the system." Success is measured in terms of intellectual achievement, social status, and money, while failure, e.g., to graduate from college, is viewed as a problem requiring clinical counseling. Not surprisingly, a recent survey indicated that the group least likely to defect from Judaism was the highly educated (Ellman 1987).

DIFFERENCES BETWEEN JEWS AND GENTILES IN PSYCHOMETRIC INTELLIGENCE

Given these phenomena, it is expected that Jews will tend to exceed gentiles in intellectual ability, and particularly in what psychologists term verbal intelligence. As Levinson (1958, 284) notes, traditional Jewish education

emphasizes verbal knowledge, verbal concept formation, and ability to understand abstract ideas--exactly the abilities tapped by modern measures of verbal intelligence.

The belief in the superiority of Jewish intelligence has been common among Jews and gentiles alike. Patai and Patai (1989, 146ff) review data indicating that Jewish intellectual superiority was a common belief among many 19th-century and early 20th-century scholars, including some for whom the belief in Jewish intellectual superiority had anti-Semitic overtones: Galton and Pearson believed that Jews had developed into a parasitic race which used its superior intelligence to prey on gentiles. Castro (1954, 473) shows that both scholars and the populace agreed that the Jews of Spain had superior intelligence, and, indeed, Patai (1977) summarizes data suggesting that, during the medieval period in Spain, Jews were overrepresented among outstanding scientists by a factor of 18.

Data reviewed in Chapter 5 indicate a general Jewish overrepresentation in a wide range of fields in the modern world, including business, science, social science, literature, and the arts. At the pinnacle of achievement, Jewish overrepresentation is particularly striking. Patai and Patai (1989, 159) show that Jews received a highly disproportionate number of Nobel prizes in all categories from 1901 to 1985, including 11 percent for literature, 12.7 percent for chemistry, 20.2 percent for physics, 35.2 percent for physiology and medicine, and 26.1 percent for economics. Moreover, the extent of overrepresentation has increased since World War II, since Jews were awarded twice the number of prizes in the years 1943-1972 compared to 1901-1930. In Germany, Jews received 10 of 32 Nobel prizes awarded to German citizens between 1905 and 1931 despite constituting less than 1 percent of the population during this period (Gordon 1984, 14).

Studies of gifted children are of particular interest because IQs in the gifted range are unlikely to result from environmental influences acting on individuals whose genetic potential is near the population mean. Terman's (1926) classic study found twice as many Jewish gifted children as expected on the basis of their representation in the population, although the true representation of Jews in this group may have been higher because some may have concealed their Jewish identity. These subjects had IQs ranging from 135 to 200 with a mean of 151. One of Terman's Jewish subjects had an IQ of 184 when tested at age seven. His close relatives included a chief rabbi from Moscow, a prominent lawyer, a self-made millionaire, a concert pianist, a writer, and a prominent Polish scientist. His maternal great-grandfather was a rabbi famous for his compilation of a Jewish calendar spanning over 400 years, and the rabbi's descendants (the boy's cousins) had IQs of 156, 150, 130, and 122.

Research suggests an average IQ of Ashkenazi Jewish children in the range of 117. ¹⁰ In two studies of representative samples of Jewish children, Bachman (1970) and Vincent (1966) found an average IQ of 117 and 117.8, respectively, although Vincent's results are said to be an underestimate because they excluded

a large percentage of an elite group of Jewish children attending fee-paying schools. $^{\rm 11}$

There is good evidence that Jewish children's Verbal IQ is considerably higher than their Performance IQ. Brown (1944) found several sub-test differences compatible with the hypothesis that Jewish children are higher on verbal abilities, while Scandanavian children are higher on visuo-spatial abilities. Lesser, Fifer, and Clark (1965) found large differences favoring Jewish children over Chinese-American children on verbal ability, but insignificant differences in favor of Chinese-American children on visuo-spatial abilities. And Backman (1972) found that Jewish subjects were significantly higher than non-Jewish Caucasians on a measure of verbal knowledge but were significantly lower on visuo-spatial reasoning.

Large verbal/performance IQ differences have been found within Jewish populations. Levinson (1958) studied a representative sample of yeshiva students and found an average Verbal IQ of 125.6, an average Performance IQ of 105.3, and an average Full Scale IQ of 117.86, although he suggests that there may have been a ceiling effect for some students on the verbal portion. Whereas in the general population there was a correlation of 0.77 between Verbal and Performance IQs, among Jewish children it was only 0.31. Levinson (1960) found that a sample of Jewish boys (age 10-13) with an average Verbal IQ of 117 had a Performance IQ of 98, while Irish and Italian samples matched for Full Scale IQ had Verbal/Performance differences of only approximately 5 points (approximately 110-105). Levinson (1959) provides evidence that the Verbal/Performance difference for Jewish children increases from pre-school to young adulthood. When children were matched on the basis of full-scale Wechsler IQ, pre-school children showed a small (3-point) difference between Performance and Verbal IQ, while elementary school-age and college student subjects showed a difference of approximately 20 points.

Taken together, the data suggest a mean IQ in the 117 range for Ashkenazi Jewish children, with a Verbal IQ in the range of 125 and a Performance IQ in the average range. These results, if correct, would indicate a difference of almost two standard deviations from the Caucasian mean in Verbal IQ--exactly the type of intellectual ability that has been the focus of Jewish education and eugenic practices. While precise numerical estimates remain somewhat doubtful, there can be no doubt about the general superiority of the Ashkenazi Jewish children on measures of verbal intelligence (see also Patai & Patai 1989, 149)

There are important implications of the finding of higher verbal intelligence among Jews. Lynn (1992) notes that higher socio-economic status groups tend to have high verbal intelligence, but these groups are not particularly high on visuo-spatial abilities. This indicates that verbal intelligence is more important for upward mobility and success in contemporary societies, and this was undoubtedly the case in traditional stratified societies as well: Wilken (1983)

notes that education in rhetoric was the key to upward mobility in the Greco-Roman world of antiquity.

In this regard, it is worth mentioning that economic historians have noticed that Jewish economic activity has tended not to be characterized by technological innovation related to mechanical abilities tapped by tests of visuo-spatial abilities (i.e., Performance IQ). Thus, Mosse (1987, 166) suggests that the distinguishing features of Jewish economic activity in 19th-century Germany are to be found "less in outright innovation or invention than in a special aptitude for economic 'mediation' in the forms of the export of German goods, of 'secondary innovation', technology transfer through the introduction into Germany of processes and methods observed abroad, and new techniques for the stimulation of demand."

This is a difficult area because a theme of anti-Semitic writing in Germany was that Jews were not innovators, but only appropriated the inventions of others (Mosse 1987, 166, 404). Anti-Semites emphasized that inventors of new technology such as Rudolf Diesel and Werner von Siemons were predominantly gentile, while several Jewish fortunes in technical areas, such as those of Ludwig Loewe and Emil Rathenau, were made by importing technology that originated elsewhere and were dependent on capitalization provided by Jewish private banks. While among Jews ownership was divorced from technical competence, the prototypical gentile entrepreneur was the "inventor-artisan" whose technical competence was crucial to the success of the company. Whereas technical competence and inventiveness were crucial to the success of the prototypical gentile firms, among Jews success was related to having access to capital or to having "commercial flair and the ability to inspire confidence" (p. 312).

The origins of Jewish and gentile entrepreneurs were also different: Mosse (1987, 244) notes that gentile manufacturers tended to come from the families of artisans, whose work is also more likely to involve visuo-spatial abilities related to Performance IQ, whereas Jewish manufacturers tended to come from old trading or banking families.

These findings suggest the hypothesis that the Jewish/gentile difference in economic activity is mediated by differences in intellectual proclivities related to Verbal versus Performance IQ. Lynn (1987) notes that visuo-spatial abilities and verbal abilities are actually negatively correlated in populations that are homogeneous for Spearman's g, and he provides evidence that there are neurological trade-offs such that the more the cortex is devoted to one set of abilities, the less it can be devoted to the other. Lynn finds that Mongoloids and Caucasian males are relatively high on visuospatial abilities related to mechanical science and metal work. Lynn's findings build on much older work by Wechsler (1958, 160, 228-229) indicating that individuals with high Performance IQs are more likely to have mechanical and manipulative ability (e.g., carpenters, mechanics), but that individuals with higher-level occupations in these areas (e.g., engineers) also have high Verbal IQs. These tendencies

would make it more likely that gentile German males would be the type of "inventors-artisans" whose mechanical ability was a crucial ingredient in the success of their firms. And since Verbal IQ is generally related to upward social mobility in modern societies, the data are also consistent with the general finding that Jews were much better able to take advantage of the general opportunities opened up by the industrializing economy of Germany.

Non-eugenic Explanations for Jewish Intellectual and Achievement Differences in Western Societies

The attractiveness of the eugenic explanation derives from the following argument: (1) There is heritable genetic variation for intelligence (e.g., Lynn, 1992). Hundreds of behavioral genetic studies of intelligence confirm this finding, and it is only by rejecting an entire scientific discipline that one can maintain the contrary. Note that the exact level of heritability is not important for the eugenic argument. Responsible estimates of the heritability of intelligence range from approximately 0.4 to 0.8, but even if heritability is actually lower, the implication is that there is in fact some genetic variation for intelligence within human populations. (2) Given the virtual certainty that there is heritable variation for intelligence, then it is certain that the eugenic practices described above would result in natural selection within the Jewish population for the genes associated with intelligence.

Nevertheless, the eugenic argument need not deny that there have been other forces that would result in Jewish/gentile differences. Patai (1977; see also Motulsky 1977b) attributes some of the difference to natural selection imposed by gentiles--what I will term the *gentile selection hypothesis*. ¹⁵ This hypothesis states that because of the hostile gentile environment, there were strong pressures that favored the resourceful, intelligent, and wealthy members of the Jewish community.

One need not deny such a possibility in order to affirm the importance of eugenics. There is indeed evidence that at times anti-Semitic actions fell most heavily on the less wealthy individuals who were less able to flee or provide ransom for their families. For example, poor Jews who lacked the means to flee or could not be ransomed by relatives died disproportionately in the violence resulting from the Cossack uprising of 1648 (Weinryb 1972). It is difficult to determine how much weight to give to this hypothesis, however, because wars have affected all populations, and it is reasonable to suppose that intelligence may have been beneficial in escaping the ravages of war wherever it has occurred. For example, Jews have tended not to serve as combatants in military ventures, which undoubtedly resulted in high levels of mortality for common soldiers. Thus, war may well have acted as a similar eugenic selective force among gentiles.

We shall see below that Jewish intelligence appears to be lower in groups deriving from Muslim societies. The hypothesis elaborated below is that the extreme anti-Semitism of the Muslim societies actually prevented the flourishing of a highly literate Jewish culture in which intellectual ability was a key to social and reproductive success, with the result that the average IQ of Jews from these areas is lower than among the Ashkenazim. As a result, when the Ashkenazi Jews began to re-establish ties with their co-religionists in the Muslim world during the 19th century, the overwhelming picture was that Jews in these countries were much more likely to be uneducated and illiterate.

Thus, the proposal that anti-Semitism has been the most important cause of high Jewish intelligence must show that anti-Semitic actions resulting in natural selection for intelligence were stronger in Eastern Europe than in Yemen--a doubtful proposition at best (see below). Rather, high levels of Jewish intelligence and achievement have been associated with European societies where Jews have been given opportunities for developing a highly literate culture in which the educated elite were able to obtain high levels of resources and reproductive success.

Moreover, it would appear that some of the severe persecutions, such as the Spanish Inquisition, were directed much more at the successful members of the Jewish community than at the less able and therefore may not have had disproportionate effects on lower-status Jews. 16 After all, it was the wealthy Jews who were often the targets of popular hatred. Also, Jews who continued to practice Judaism in Spain during the 15th century and were subsequently expelled in 1492 were less educated and less economically successful than their Converso brethren who remained to endure the wrath of the Inquisition. In this case, the less wealthy Jews certainly suffered fewer casualties and eventually were able to emigrate to North Africa or the Levant. Eventually, the Levantine Sephardim underwent a distinct atrophy of their culture (see below), while the descendants of the Conversos continued their highly elite and exclusivist profile on the international economic scene. When these Levantine Sephardim immigrated to the United States in the 20th century, they exhibited much higher rates of illiteracy, alcoholism, prostitution, and wife abandonment than did the Ashkenazim (Sachar 1992, 338). While the Ashkenazim were quickly upwardly mobile in American society, the Sephardim achieved only "a modest economic foothold" and were more likely to engage in lower-status occupations (Sachar 1992, 340).

Finally, the gentile selection hypothesis does not provide a satisfactory explanation of the Jewish/gentile differences in the patterning of the Verbal and Performance subscales. These differences are very robust, and the gentile selection hypothesis must propose that individuals with high Verbal rather than Performance IQ were better able to escape the effects of persecutions. Now it might be the case that high verbal intelligence would be more adaptive in escaping persecutions, but it is not obvious why this would be the case. One possibility is that verbal intelligence was associated with wealth and success

among Jews, and it was these attributes that were favored during persecutions. However, given the evidence that wealth and verbal intelligence were strongly associated because of Jewish religious practices within the Jewish community, the gentile selection hypothesis really comes down to a slightly altered version of the eugenic hypothesis.

There have also been environmental hypotheses for the Jewish/gentile difference in intellectual ability. As Levinson (1958, 284) notes, the *yeshiva* curriculum may well be an environmental influence on verbal intelligence. Very strong environmental pressures for academic success in Ashkenazi Jewish families may also contribute. Although they state that there are no scientific studies measuring the phenomenon, Patai and Patai (1989, 153-154) sum up a situation that is virtually common knowledge by noting the strong emotional commitment of Jewish parents to stimulating the intellectual development of their children, sending them to the best schools, reinforcing self-perceptions of children as brilliant, and so on.

Zborowski and Herzog (1952) show that this extreme emphasis on encouraging children's academic pursuits and closely monitoring children's academic performance was characteristic of traditional Eastern European shtetl communities as well. The following quotation from a medieval Ashkenazic source shows the expectation that parents will be highly involved with their children's intellectual and moral socialization:

They will teach him Torah and guide him in the ways of Heaven and the precepts and good deeds. They strive and work for his benefit, in order that he be able to study Torah in purity and with ease. They are partners with God, and He gave the child the intellect to grasp the teachings. (Quoted in Kanarfogel 1992, 39)

Herz and Rosen (1982) also note that Jewish families highly value the ability to articulate one's thoughts and feelings verbally. Children are encouraged to express opinions and contribute to solving family problems, and they comment on "[t]he Jewish mother's role to devote her entire emotional energy to nurturing the intelligence and achievement of her children" (p. 378).

The environment in traditional Jewish families in the Eastern European shtetl communities was intensely verbal. Zborowski and Herzog (1952, 413)) describe a preoccupation with elaborate verbalization, much of it directed at children. Communication is described as "incessant." People were even conceptualized as having a total lifetime quota of words, with women having more than men. Silence and lack of verbal expressiveness were regarded with suspicion.

From a modern behavioral genetic perspective, these pressures need not be seen as pure environmental influences. Plomin and Bergeman (1991) have shown genetic influence on commonly used instruments measuring home environment. In other words, the number of books in one's home, the amount of verbal interaction between mother and child, social class status, ¹⁷ and the

commitment of parents to monitoring children's academic progress are not simply aspects of environmental influence on intelligence or other functioning, but also reflect genetic variation among the parents: Intelligent parents have large numbers of books around, talk to their children a great deal, and tend to be in the middle or upper-middle class. But their intelligence is influenced by their genetic makeup, and their genetic makeup predisposes them to enjoy reading books and entering occupations calling for high intelligence. Nevertheless, the extreme emphasis on academic accomplishment among Jews may be reasonably viewed as an important environmental pressure for high intelligence.

An evolutionary perspective is highly compatible with supposing that manipulating environments may be an important component of an evolutionary strategy (MacDonald 1988a, 1991; see Chapter 1). Given the fact that humans retain a high level of plasticity, it is quite reasonable to suppose that cultures would develop the intensive methods of socialization necessary to attain evolutionary goals within the particular context in which the group finds itself. In the case of Jews, we have seen that the cultural commitment to education and literacy, as well as the attempt to develop a highly competent elite, can be dated to very early in the diaspora. From the present perspective, the development of Jewish education and fostering of parenting practices that result in a high level of intellectual achievement are an important aspect of Judaism as an evolutionary strategy.

These environmental pushes toward intelligence can even be seen as complementing a eugenic strategy. From a genetic point of view, these environmental practices would tend to maximize the actually achieved intelligence among Jews by creating a uniform highly favorable environment. Within this high pressure, relatively homogeneous Jewish environment, individual differences are most likely due to genetic variation. (This is a general principle of behavioral genetics: As one diminishes the environmental variation, the only remaining source of variation must be genetic.) As a result, eugenic marriage practices are assured of being based overwhelmingly on genetic variation, rather than environmental variation. As a result, one can be assured that by marrying a relatively intelligent Jew, one is marrying someone with a relatively high genetic potential for intelligence, rather than simply one who came from a relatively favorable environment.

Between-group Variation for Intelligence among Jews: Comparisons between Ashkenazi and Oriental Jews

In addition to studies on Jews in Western societies, several studies are now available that compare Jewish groups within Israel. These studies are important because they call into question the idea that eugenic practices related to intelligence have everywhere been a component of Judaism as an evolutionary

strategy. The data will be reviewed, followed by an attempt to place the data within the framework of the present theoretical approach.

Israelis originating from Middle Eastern countries where Muslim was the dominant religion are overrepresented among the lower classes in Israel, with high rates of illiteracy among the parents, low levels of formal education, little verbal interaction with their children, fewer toys and other objects that facilitate play, and authoritarian patterns of child rearing (Patai 1977, 309ff). Oriental Jews have also been found to have poorer performance on measures of intelligence and academic achievement (e.g., Burg & Belmont 1990; Preale, Amir, & Sharan [Singer]; Sharan [Singer] & Weller 1971). They also differ on personality traits related to academic success, such as being lower on attention span and delay of gratification, but higher on impulsivity. The data on fertility reviewed below indicate that Oriental Jews have higher levels of fertility than do Ashkenazi Jews, although there has been a gradual tendency for convergence within Israel (Goldscheider 1986; Skokeid 1986). ¹⁸

Although Patai (1977) attributes the differences between Oriental- and European-derived children to cultural differences based on the differences in socio-economic status between the groups, Burg and Belmont (1990) found differences in verbal, reasoning, and numerical abilities between these groups within social class. Taken together, the data indicate that in comparison to Western Jews or, indeed, Caucasians generally, the Oriental group can be viewed as exhibiting a relatively low-investment parenting style (i.e., high fertility combined with low parental involvement; see below). The personality traits of impulsivity, short attention span, and low ability to delay gratification are also compatible with this perspective, since these traits tend to be correlated and are associated with low academic achievement (e.g., Shaywitz & Shaywitz 1988; see below). At a theoretical level, such individuals can be viewed as biased toward systems underlying attraction to reward, rather than the ability to inhibit behavior and persevere in unpleasurable tasks (MacDonald 1988a; 1992b; see below).

These results indicate that Judaism has not everywhere been characterized by a similar level of eugenic practices, high-investment parenting, and the development of a highly educated, entrepreneurial elite. However, eugenic practices appear to have been very common in the areas where Judaism underwent its largest demographic expansions and are thus central to understanding mainstream Judaism. The data imply that Oriental Jews failed to continue a policy that was well articulated in the Greco-Roman world and that not only was practiced then, but which has continued among the Ashkenazim and in at least some Sephardic groups into contemporary times.

Patai (1977) attributes these results to acculturation within a Muslim milieu. Certainly, these patterns do reflect the Muslim surroundings, but it should be noted that Jews have often pursued their cultural practices quite independently from the surrounding environment, and, in fact, "being different" is in some sense what Judaism is all about (see Chapter 4). Thus, we have noted that the

Jewish emphasis on universal education was unique in the ancient world, so that these developments occurred despite the fact that all around them there was relative illiteracy. One also wonders why the fact that the great majority of peasants in pre-expulsion Spain or Eastern Europe were relatively unlettered and that education was fairly uncommon among all classes did not result in Jews rejecting their emphasis on universal education and the development of a scholarly elite. Moreover, we have seen that the emphases on education, lifelong learning, and the prerogatives of the scholarly elite can be seen quite clearly in the religious texts of Judaism, so that developing and maintaining these institutions was really something of a religious obligation. Their relative absence in the Muslim world is therefore of considerable theoretical interest.

There is in fact evidence that Jewish populations in Muslim lands responded rather quickly to opportunities for education and upward mobility. Stillman (1991) shows that the Oriental Jews at the turn of the 20th century benefited greatly from education provided by the Alliance Israélite Universelle funded by Ashkenazi Jews. This network of schools resulted in the Oriental Jews having "a distinct advantage of opportunity over the largely uneducated Muslim masses . . . they came to have a new and unparalleled mobility and achieved a place in the economic life of the Muslim world that was far out of proportion to their numbers or their social status in the general population" (p. 25). These data indicate that an emphasis on education was highly effective during this period, but they also suggest that there must have been external reasons why this emphasis on education died out in the Muslim world. A hint is provided when Stillman (p. 45) notes that this upward mobility made possible by educational opportunity and sympathetic colonial governments was intensely resisted by the native Muslims. The Jews' new status brought about by their European co-religionists often resulted in an exacerbation of anti-Semitism by the native Muslims (see also Lewis 1984, 184-185).

As described by Lewis (1984), there was a general decline in Jewish fortunes in Muslim lands from the late Middle Ages to the 20th century. While at the beginning of the 16th century there is evidence for a highly literate Jewish culture in the Ottoman Empire, this culture gradually disappeared after the 16th century, so that from the mid-18th century until the intervention of the European powers in the 20th century, there was "an unmistakable picture of grinding poverty, ignorance, and insecurity" (Lewis 1984, 164) among Jews in the Muslim world. In the earlier period, Jews were prominent as physicians and in trade, commerce, and manufacturing. As in Western Europe, Jews were also deeply involved in finance and tax farming. Interestingly, this flourishing Jewish culture came at a time when Jews formed the ideal intermediary between the alien Ottoman elite and the subject populations (a theme of Chapter 5): Jews were favored as intermediaries over Christians because there was no possibility of collusion with the Christian enemies of the Ottoman state (Lewis 1984, 139).

After this period, there was degeneration of Jewish culture, accompanied by early marriage and a high birth rate (Lewis 1984, 141)--clearly indicative of a

shift to a low-investment style of parenting. Jews became increasingly degraded in the Ottoman Empire, and their decline was far more extreme than can be explained solely by the economic fortunes of the Ottoman Empire, since it affected them far more than their Muslim and Christian co-residents.

There is some evidence that other minorities simply out-competed Jews in this area, but this was ultimately the result not of deficits in the capabilities of Jews, but of exclusionary practices analogous to Jewish kinship preferences in business ventures that effectively excluded other groups (see Chapter 6). Thus, the Ottoman Christians were able to take advantage of European education and the preference of European Christians for Ottoman Christian business contacts, thereby overturning the Jewish economic domination over Christians that had been imposed by the sultan (Shaw 1991, 77). The increased political influence of Christians resulted in a decline in Jewish influence in the government, and, indeed, discriminatory measures were enacted, and there was an increase in official and unofficial violence directed at Jews.

The decline of the Jews was also influenced by increasing Turkish anti-Semitism. As the Turkish regime became more integrated into the society, Jews were less able to play the role of intermediary between the alien rulers and the Muslim and Christian natives, and the result was an increasing strictness of the regulations enforcing degradation and humiliation of Jews. ¹⁹

As is generally the case in times of economic and political misfortune for Jews, mysticism and *Kabbala*, rather than the intricacies of the Talmud, came to dominate religious education:

The *Zohar* of the Kabbalists replaced the Talmud and dominated life automatically and autocratically, without discussion, commentary, or understanding. . . . Kabbalistic symbolism determined all acts of daily life, morality, sexual and hygienic behavior, housing, clothing, food, education, the shape and length of hair and beards, the furniture used in houses, all that had once been influenced by the Talmud. (Shaw 1991, 132)

In the long run, the community became too poor to provide for the education of most children, with the result that the great majority were illiterate, and they pursued occupations requiring only limited intelligence and training. However, with the resurgence of Ottoman Jews in the 19th century as a result of patronage and protection from European Jews, once again there was a flowering of a highly literate culture, including secular schools based on Western models (Shaw 1991, 143ff, 175-176).

In the case of Yemen, the degeneration of Jewish culture was more probably due to anti-Semitic actions by the host society combined with the fragility of the local economy, which did not allow for the flourishing of the typical Jewish economic specialization related to activities calling for verbal intelligence. Nini (1991) shows that in 18th- and 19th-century Yemen there was no large urban economy in which a highly educated elite could prosper. The population of

Yemen was predominantly rural, and Jews resided in small groups working as artisans forced to adopt "secondary or marginal occupations" (p. 94). Communities were so small that it was often impossible to obtain a quorum for prayer. The persecution of Jews was often intense, and, indeed, the persecution of Jews in Yemen is generally considered to have been the most extreme in the Muslim world.

Because the vast majority of Jews were artisans, there was no class of wealthy property owners or middle-class entrepreneurs or traders who could support a thriving scholarly community. There was also little need for rabbis because the communities were very small and because Jewish communities were often essentially extended families. The common pattern in other diaspora communities of a wealthy, entrepreneurial elite helping the rest of the community occurred only rarely in Yemenese Jewish history, but when it did, it had the familiar features noted in Chapter 5: Thus, 18th-century Rabbi Shalom ben Aharon ha-Kohen Iraqi helped the Jewish community and generally raised the prestige of the Jews. However, his influence was short-lived, and he fell due to the envy and hostility of the local Muslim officials (Ahroni 1986, 138).

Correspondingly, there were no *yeshivot* in Yemen of the type described above as typical of Eastern Europe where scholars competed by debating questions of the law. As is typical in areas with intense anti-Semitism, intellectual activity tended toward mysticism, and there were frequent outbreaks of messianism (see Chapter 3). Moreover, because of the subsistence level of the economy, the rabbis did not live off public funds and often performed manual labor, so that religious study did not really pay off in terms of being a route to economic and reproductive success.

I conclude that the pattern of lower verbal intelligence, relatively high fertility, and low-investment parenting among Jews living in the Muslim world is linked ultimately to anti-Semitism and, in the case of Yemen, to the lack of economic development. These findings are consistent with the ecological/evolutionary model of parental investment proposed by Belsky, Steinberg, and Draper (1991). Within this model, adverse, unstable economic situations trigger a low-investment reproductive strategy, while economic prosperity and stability trigger a high investment strategy. Although traits related to parental investment also appear to be heritable (see below), the model of Belsky and colleagues is highly compatible with the shifts in parental investment patterns seen among Jewish populations over historical time.

HIGH INVESTMENT PARENTING AS AN ASPECT OF JUDAISM AS AN EVOLUTIONARY STRATEGY

You will see but seldom among them [i.e., Jews] guilty husbands leaving their virtuous partners for abandoned prostitutes, or shameless wives abandoning the care of their families and the sacred duties of matrimony and maternity, to plunge heedlessly into debauchery

It is there that lovely chastity follows the graces and enhances their charms; there an amiable blush still overspreads the face of the modest virgin (Tama [1807] 1971, 73-75)

Evolutionary accounts of parenting emphasize investment in offspring as a critical variable (e.g., Trivers 1985; Wilson, 1975). Parental investment is the cost of reproduction in terms of time, food, defense of offspring, teaching of offspring, *et cetera*. In the natural world, there are a variety of conditions which pull for high- investment parenting, including stressful physical environments, high levels of predation, and (most important for our purposes) a highly competitive environment. Competition for resources tends to result in animals having fewer and more widely spaced offspring, prolonged parental care, longer life span, and lower mortality rates at all stages of the life span. In humans, the prototypical high-investment pattern is also associated with high intelligence, delay of sexual maturation, stable pair bonding, and high levels of parental involvement with children (Belsky, Steinberg, & Draper 1991; MacDonald 1988a; MacDonald 1992a; MacDonald 1992b; Rushton 1988).

The material summarized by Zborowski and Herzog (1952) clearly indicates a high-investment style of parenting in traditional Ashkenazi shtetl communities. Jewish mothers in these communities are said to have an "unremitting solicitude" (p. 193) regarding their children. They engage in "boundless suffering and sacrifice. Parents 'kill themselves' for the sake of their children" (p. 294).

The general pattern in traditional Poland was for early marriage (especially for the wealthy) and continued dependence on the wife's family while continuing the boy's education (Hundert 1989; see also Katz, 1961a). During this period, the son-in-law was expected to distinguish himself in study and attend to nothing else (Biale 1986; Etkes 1989). The practice of early marriage declined, but the importance of education during the adolescent years continued (Biale 1986). Kraemer (1989) emphasizes that even older teenagers were still dependent on their parents and not free from parental control and influence. He cites evidence that adulthood began only at age 20.

Hyman (1989) notes that arranged marriages were the rule among Jews until after World War I, since the economic basis of marriage was too important to

leave to the vagaries of romantic love. For example, Neuman (1969, II:22) notes that it was common to arrange marriages of daughters around the time of puberty or earlier among both Sephardic and Ashkenazi Jews in all European countries in the Middle Ages. Romantic attraction was "not countenanced in good Jewish society" (Neuman 1969, II:19). Despite the lack of romance as the basis of marriage, the high level of family life and commitment to children became a rallying point for those attempting to defend Judaism from the criticisms of Enlightenment intellectuals: "In an age that held up so many aspects of Jewish experience to criticism or ridicule, they could point to traditional Jewish family life as a model of noble domestic behavior and thereby rehabilitate both Judaism and the Jews. Often they trumpeted the superiority of the Jewish family to that of the surrounding population" (Hyman 1989, 186). ²⁰

Guttentag and Secord (1983) note the following points relevant to the hypothesis that Jews engage in high-investment parenting:

- 1. Mortality rate is a theoretically important marker for a high investment reproductive style (Wilson, 1975, 101). Peritz and Tamir (1977, 415) summarize data indicating that "almost everywhere and in all the periods for which statistical data are available, the mortality of the Jews was considerably lower than that of the surrounding populations." This is especially the case for infant mortality. In a survey of 21 countries, Schmelz (1971) found that the median infant mortality rate for Jews was a little over one-half the rate for the general population (see also Goldstein, 138). This general pattern even holds for Jewish/gentile comparisons within social class, and there is less of a social class difference in infant morality among Jews than among other groups.²¹
- 2. Guttentag and Secord (1983) show that Talmudic writings emphasize good child-care practices and personal hygiene, temperance, and sexual probity. Hundert (1992) suggests that lowered rates of infant mortality brought on by Jewish practices of hygiene, child rearing, and diet were responsible for the demographic explosion of Jews in pre-industrial Poland.
- 3. Illegitimacy, premarital conception, and divorce rates tend to be lower among Jews than the surrounding populations (Cohen 1986; Hyman 1986b; Goldstein 1981). Guttentag and Secord (1983) find that mortality rates for illegitimate children were actually higher for Jews than for non-Jews, an indication of the normative importance of male parental investment among Jews.

Guttentag and Secord (1983) also summarize several intriguing sources of data showing that Jewish populations have been characterized by high sex ratios (i.e., the number of males per 100 females). Evolutionary perspectives on

variation in sex ratios (Trivers & Willard 1973; Mealey & Mackey 1990) have emphasized the idea that individuals with high social status should prefer to raise males rather than females because high-status males are better able to mate than are low-status males. Individuals with low social status are more likely to invest in females, since mating is relatively easy for females. The general finding that sex ratio is associated with social class is consistent with this perspective: The sex ratio in higher socio-economic status families tends to be skewed toward males (Boone 1988; Dickemann 1981; Guttentag & Secord 1983; Voland 1988). The expectation, then, is that Jewish populations would be characterized by a high sex ratio.

The hypothesis that Judaism is a high-investment strategy implies that Jewish communities will have high sex ratios, and Guttentag and Secord summarize evidence that this is indeed the case. First, they summarize data indicating very high sex ratios among Orthodox Jews (who are presumably most likely to rigidly adhere to Talmudic injunctions regarding the timing of intercourse; see below). Although the data in many cases are admittedly less than ideal, a wide range of independent studies on Eastern European populations indicates high ratios, with the best data set, coming from six uncorrected Odessa censuses between 1892 and 1903, indicating sex ratios ranging from 109 to 118, although Guttentag and Secord (1983) themselves interpret the data as indicating ratios in the range of 135. Moreover, sex ratios ranging from 111 to 115 were found for three independent North American samples studied between 1950 and 1964, and Harlap (1979) reports an overall sex ratio of 112 for a large group of Orthodox Jewish women in Israel.²³

Guttentag and Secord (1983) note that the Talmud requires that couples refrain from intercourse while the woman is menstruating and for a seven-day period thereafter. Following this period, they are advised to engage in frequent intercourse, with the result that intercourse is maximized at approximately the time of ovulation. Although timing intercourse exactly at ovulation would tend to result in a low sex ratio (Harlap 1979; James 1987a; James, 1987b; Zarutskie, Muller, Magone, & Soules 1990), Harlap (1979) found that Orthodox Jews actually tended to resume intercourse one or two days prior to or after ovulation, resulting in an overall sex ratio of 112. The same pattern was found among wives of rabbis and students of the Talmud who are likely to be the most scrupulous followers of religious law.

It should be noted that high sex ratios would tend to result in increased sexual competition among males within the Jewish community, since some males would be unable to find a Jewish mate. These males would have to forego marriage or else marry non-Jews (the latter an unlikely prospect without defection from the Jewish community). This process would therefore have eugenic consequences, since males unable to mate would tend to be from the lower rungs of the Jewish community.

JEWISH/GENTILE DIFFERENCES IN FERTILITY PATTERNS IN RESPONSE TO THE INDUSTRIAL REVOLUTION

Evolutionary perspectives on the demographic transition have emphasized the importance of fertility control and high-investment parenting in achieving upward mobility in response to the altered conditions following industrialization (e. g., Borgerhoff Mulder 1991). There is wide agreement that the Jews entered into the demographic transition earlier than gentiles and that Jewish fertility changed from being higher than gentile fertility to being lower than gentile fertility in the aggregate (e.g., A. Goldstein 1981; Knodel 1974; Ritterband 1981).

In general, the sharp drop in Jewish fertility coincided with emancipation and a consequent awareness "of the opportunities becoming available to them for education, economic advancement, and generally better integration into the larger society" (A. Goldstein 1981, 141). For example, Hyman (1981, 1989) summarizes evidence that 19th-century Jews in France and Germany were practicing birth control and that American and European Jews had lower birthrates than the surrounding population even when controlling for education, urbanization, and social status. Alice Goldstein (1981, 124) attributes the later age of marriage and the lowered fertility of German and Hungarian Jews to the prolonged education required for the typical Jewish occupations of white-collar worker and skilled craftsman. Moreover, the Jewish/gentile difference was decreased, but not eliminated, when controlling for occupation. ²⁴

There is evidence that the low-fertility/high investment pattern of most Jews after the Industrial Revolution is more characteristic of Jews who are less traditionally religious. Hyman (1981) finds that a sample of French rabbis and cantors (who would tend to be the most observant Jews) had higher fertility than the mean for French Jews. Moreover, Goldscheider and Ritterband (1981, 252) make the generalization that the highly traditional Orthodox and Hasidic Jews have higher fertility than other Jewish sects and that, within Israel, fertility is higher among those who are religiously observant than among secular Jews. Similarly, Cohen and Ritterband (1981) find that religious service attendance was associated with fertility among American Jews in the 1960s. These data are compatible with the hypothesis that, by accepting secular education and maximizing investment in their children, non-traditional forms of Judaism functioned to enable Jews to compete economically in the wider society.

There is evidence that Jewish populations adjust rapidly to the family patterns of the surrounding populations. For example, North African Jews migrating to France developed a pattern of having fewer children, marrying later, having a higher percentage of university graduates, and more frequently entering white-collar, professional occupations than those immigrating to Israel (DellaPergola 1986). Moreover, while Ashkenazi groups within Israel have a higher fertility rate than those in European or American communities

(Goldscheider 1986), immigration to Israel by Asian and African Jews tends to result in lower fertility and relatively delayed marriage compared to the country of origin (Goldscheider 1986; Skokeid 1986). Within Israel, the result is a tendency toward convergence, creating a pattern intermediate between Jewish patterns in Europe and America versus the patterns in Africa and Asia and in which ethnic differences among Jews are lessening (DellaPergola 1986; Goldscheider 1986; Schmelz, DellaPergola, & Avner 1990).

The suggestion is that the general response of Jews to emancipation and the development of contexts in which upward mobility is possible has been to "keep one step ahead" of the populations they are living among by investing more in education, lowering fertility, and delaying marriage. Within Israel, Jews tend to marry later, have fewer children, and achieve higher levels of education than the co-resident Arab population (Goldscheider & Ritterband 1981, 238).

This suggests a pattern in which Jews are in direct competition with the host society and are able to manipulate their fertility in an adaptive manner relative to the social context by being able to track the investment patterns of the host society. This suggestion is an interesting parallel to the findings presented by Irons (1992), who found a general tendency for groups to adjust fertility to local (within-group) reference standards. Jews, however, appear to be tracking the investment patterns of an external group (the host society) and adjusting them accordingly in a manner that allows them to compete successfully with the host society. Such a finding is highly compatible with the present conceptualization of Judaism as an evolutionary strategy in competition with the host society: High-investment parenting is a critical aspect of this competitive strategy, but the amount of investment can be adjusted to local conditions.

Congruent with this general interpretation of Jewish/gentile competition, Patai (1971, 161ff) notes a pattern in which Jews tend to excel in just those fields that are were most highly regarded by the host country. For example, Jewish achievement in mathematics has been far more common in Continental countries, where mathematics is revered, than in England where Jews have excelled in the typically English pursuits of business. Similarly, Jewish excellence in music and art has not been characteristic of Britain, while it has been characteristic of Germany and Russia. Moreover, Jews tend to win Nobel prizes in precisely those areas where gentiles of their country excel. As Johnson (1987, 383) notes regarding the success of Jewish student prize-winning prodigies in the late 19th century and early 20th century in France, "They beat the French at their own academic-cultural game every time."

JUDAISM AND PERSONALITY PSYCHOLOGY

When we offer sacrifices to [God] we do it not in order to surfeit ourselves, or to be drunken...; for such excesses are against the will of God, and would be an occasion of injuries and of luxury; but by keeping ourselves sober,

orderly, and ready for our other occupations, and being more temperate than others. (Flavius Josephus, *Against Apion*, 2:195)

Judaism asks--this is the mistake of the clever people--not intelligence but, in the first instance, obedience. (Magnus 1907, 78)

Apart from providing strong environmental pressure and genetic selection for intelligence, there is some reason to suppose that Jewish eugenics and cultural practices would also influence several personality systems, although the data are far from ideal.

The personality system of conscientiousness is a biological system that underlies attention to detail, neatness, orderliness, striving for achievement, persistence toward goals in the face of difficulty, and the ability to focus attention and delay gratification (Digman 1990). At the extreme, such a person is obsessive/compulsive and guilt-ridden (e.g., Widiger & Trull 1992). There is a strong positive association between conscientiousness and academic success (r = 0.50) (Digman & Takemoto-Chock 1981). The scales of *neat*, *careful* (of own work), *persevering*, and *planful* load positively on this dimension, while *irresponsible* and *careless* (of property) load negatively (Digman & Takemoto-Chock 1981; Digman & Inouye 1986). Correlations between high school grades and assessments of this factor performed six years previously were in the 0.50 range. Similar correlations occurred for occupational status assessed when subjects were in their mid-20s. Eugenic practices related to ability in Jewish religious studies would clearly influence this trait.

Studies of conscientiousness also indicate that this dimension includes items such as "trustworthy," "reliable," "dependable," and "responsible" which comprise what one might call "social conscientiousness" (e. g., Costa & McCrae 1992). Social conscientiousness appears to be a sort of "don't let down the group" trait, originally proposed by Darwin (1871) as the basis of group allegiance. As Goldberg (1981, 161) states, "[m]y knowledge of the status of a person X on the trait of Conscientiousness answers the question 'Can I count on X?'" Because of the importance of a sense of obligation to the group for Judaism throughout its history, there is reason to suppose social conscientiousness may be of particular importance to Judaism as a group evolutionary strategy.

Individuals high on this trait would be expected to feel intense guilt for having failed to fulfill their obligations to the group. Moreover, given the importance of conformity to group norms for Judaism, it would be expected that individuals who were low on this trait would be disproportionately inclined to abandon Judaism, while successful Jews who were the pillars of the community and thus epitomized the group ethic of Judaism would be disproportionately likely to be high on group conformity and also likely to be reproductively successful. The result is that there would be strong selection pressures toward high levels of social conscientiousness within the Jewish community. And since social conscientiousness is psychometrically (and presumably biologically) linked to the other aspects of conscientiousness, these

pressures would also result in a general trend toward higher levels of all aspects of conscientiousness within the Jewish community.²⁷

For example, Jordan (1989, 138) notes that Jews who defected during the Middle Ages (and sometimes persecuted their former co-religionists) tended to be people who were "unable to sustain the demands of [the] elders for conformity." This trend may well have accelerated since the Enlightenment because the costs of defection became lower. Israel (1985, 254) notes that after the Enlightenment defections from Judaism due ultimately to negative attitudes regarding the restrictive Jewish community life were common enough to have a negative demographic effect on the Jewish community. Moreover, in Chapter 4, it was noted that there was discrimination within the Jewish community such that the families of individuals who had apostatized or engaged in other major breaches of approved behavior had lessened prospects for marriage. To the extent that there is heritable variation for such non-conformity (and all personality traits are heritable [e.g., Rowe 1993]), such practices imply that there will be strong selection pressures concentrating genes for group loyalty and social conformity within the Jewish gene pool.

There has probably always been cultural selection such that people who have difficulty submerging their interests to those of the group have been disproportionately likely to defect from Judaism. Such individuals would have chaffed at the myriad regulations that governed every aspect of life in traditional Jewish society. In Triandis' (1990, 55; see Chapter 8) terms, these individuals are "idiocentric" people living in a collectivist culture; i.e., they are people who are less group oriented and less willing to put group interests above their own.

As in the case of intelligence, it is also highly likely that there were powerful environmental influences that facilitated the conscientiousness system. I propose that traditional Judaism, with its 613 commandments, positively facilitated the conscientiousness system. Baron (1952b, 216), writing of Jews in the ancient world, states that "[f]rom the moment he awakened in the morning until he came to rest at night his behavior was . . . governed by the multiplicity of ritualistic requirements concerning ablutions, prayers, the type of food he was allowed to eat and the time he should set aside for study. . . . It was in this vast interlocking system of observances and institutions, more and more fully elaborated by his rabbinic teachers, that he found his most integrated way of living as an individual and as a member of society."

Thus, a child reared in a traditional Jewish home would have been strongly socialized to continually monitor his/her behavior to ensure compliance with a vast number of restrictions--exactly the sorts of influences expected to strengthen the conscientiousness system. Indeed, the popular conception of the *talmid khokhem* (scholar) among the wider community of Eastern European shtetl Jews and especially among the Hasidim was that he was pre-occupied with endless rituals and consumed with anxiety that he had neglected some regulation (Zborowski & Herzog 1952, 140). Zborowski and Herzog (1952, 202) also describe individuals who are consumed with anxiety lest they omit

opportunities to help others, since failure to take advantage of such an opportunity was a violation of a commandment. One function of the Hasidic rabbi was to reassure people who were anxiety-ridden because of fear that they had violated one of the myriad regulations of rabbinical Judaism (p. 179).

Among modern Hasidim too, anxiety disorders ("superego problems") are a common source of complaint (Mintz 1992, 225). ²⁹ And one type of recognized deviance within the Orthodox community involves obsessive religious overconformity (Mayer 1979, 140-141). Such individuals become completely preoccupied with religious rituals.

Anxiety, the emotion of the conscientiousness system, is therefore a very salient psychological trait among those who represent ideal Jewish behavior in traditional societies, and thus among those who can be expected to have high social status and high reproductive success. Individuals, such as impulsive, disinhibited people, who find such requirements unduly burdensome would be prone to defect or to be excluded by the group, thereby concentrating genetic tendencies toward conscientiousness and social conformity among those who continued as Jews.

Moreover, the nature of Jewish religious writings and their role in the Jewish community would constitute effective cultural selection for individuals with high levels of conscientiousness. We have seen that these writings are extremely difficult to comprehend, so that learning them undoubtedly involves a great deal of persistence, frustration, and delay of gratification.

Also, there was little effort to make learning fun by having attractive subject matter. In the traditional Eastern European shtetl societies, studies began at age five or six with the Book of Leviticus and its very dull concern with laws and rituals, rather than with the colorful stories of other parts of the Tanakh (Zborowski & Herzog 1952, 96). Boys of all ages were expected to put in long hours of study, and even children of age three had a nine hour study routine (Zborowski & Herzog 1952, 163). In the *yeshiva*, it was customary to sleep only four or five hours a night and devote the rest of one's time to study.³⁰

There were powerful social pressures encouraging children to adopt this regimen of study and thus facilitating the conscientiousness system. Zborowski and Herzog (1952) show that in traditional Eastern European shtetl societies children were exposed at an early age to the cultural ideal of scholarship. The child's introduction to study was accompanied by an elaborate ceremony, which indicated to the child the importance of this area of his life--a custom also noted by Rabinowitz (1938, 214) among the Jews of northern France during the medieval period. Books were revered, and the father's period of study was not to be interrupted with any noise. Children were shown the extreme respect accorded scholars when they came to the house. They themselves were usually named after an ancestor who was an illustrious scholar, and they were constantly encouraged to emulate the achievements of their illustrious relative. Family and community-wide ceremonies marked each advancement along the road of scholarship.

The relevance of conscientiousness as a system underlying delay of gratification and perseverance in the face of hardship and difficulty is obvious. Conscientiousness is the system that impels people to continue their efforts in pursuit of a goal even when the activity is not intrinsically rewarding and is filled with frustration and difficulty (MacDonald n.d.). High frustration tolerance would appear to be a virtual necessity for coming to grips with these works, and we have seen that individuals who were relatively successful in mastering these works were also relatively likely to be reproductively successful.

There is also considerable evidence that traditional Jewish writing strongly advocated a generally responsible, sober, hard-working attitude toward life. Boys, and especially the children of the elite, were expected to refrain from rowdy and undisciplined activities. They were expected to never get their hands dirty or soil their clothes. Fighting was labeled as extremely "un-Jewish," and even outdoor games were discouraged. Descriptions of children tended to note that their "eyes were solemn and that they 'grin but do not smile'" (Zborowski & Herzog 1952, 163). The physical ideal for an older child and an adult was to be thin and pale, what Zborowski and Herzog (1952, 358) describe as "a progressive etherealization, until he becomes the 'beautiful old man'--pale, emaciated, aflame with inner light, the epitome of the complete and 'real' Jew." Children were even scolded if they developed a physically strong, ruddy appearance. There was a very strong emphasis on the ability to delay sensual gratification.

The Books of Proverbs and Ecclesiasticus not only advocate education, but also praise psychological traits such as self-discipline and opposition to sensual gratification. There is a complete lack of any glorification of military virtues, such as physical strength, courage, and aggression, which would be necessary virtues in independently existing societies. Indeed, traditional Jewish religious rituals included practices that symbolized a rejection of military weapons. For example, during the Sabbath service, the pointer that was used by the reader of the Torah could not be made of metal because metal is used in making weapons (Zborowski & Herzog 1952, 55).

This contrasts sharply with the Biblical accounts in which the military exploits of men such as Samson, Jephthah, and King David were glorified. Swift (1919) notes that during the First Commonwealth there were two ideals of manhood, represented by craft and shrewdness ("the thrifty herdsman and farmer, the shrewd merchant, the discerning and just judge, the crafty warrior" [p. 20]) on the one hand and by strength and courage ("the stalwart and daring hunter and soldier" [p. 20]) on the other. However, in the wisdom literature, physical aggression is abjured, and Jews are advised to be obsequious to kings. Self-control is valued more than military might: "He that is slow to anger is better than the mighty, and he who ruleth his spirit than he that taketh a city" (Prov. 16:32). Business, not military skill, is the route to influence: "Seest thou a man diligent in his business? he shall stand before kings; He shall not

stand before mean men" (Prov. 22:29). Neusner (1987, 162-163) finds that the affective program of the rabbis during the classical period of Judaism (640-1789) was to encourage humility, patience, and self-abnegation.

Some of these virtues are presumably influenced by the conscientiousness system described above. For example, there is a clear concern with being able to delay gratification in these writings, and this trait is considered by Patai (1977) to be a central Jewish value. Patai (1977) cites data indicating that contemporary Jews are in fact higher on this dimension. Since all personality systems show significant heritability (see Rowe 1993), the eugenic practices emphasized here would also tend to pull the Jewish community toward a higher level in these systems. As in the case of intelligence, traditional Jewish family influences would be expected to pull in this direction.

Interestingly, the Zionist movement emphasized a return to military virtues. "Instead of rabbis and sages, Zionism chose figures such as David or Judah Maccabee or Samson" (Neusner 1987, 204; see also Ragins 1980, 154). This development strongly suggests that the omission of these virtues from the wisdom literature was intentional and filled a need to emphasize scholarship, diligence in the pursuit of tasks, a de-emphasis on sensory pleasure, and self-control as aspects of an instrumental strategy in the diaspora. However, when confronted with the desire to establish a Jewish political entity, there was a renewed emphasis on the military virtues.

There is evidence for extremely intense relationships within the Jewish family. Alter (1989) notes the image of the overpowering father in Kafka and the "possessive, overbearing, guilt-inducing mother" (p. 227) as a fictional type, as illustrated, for example, by Philip Roth. Herz and Rosen (1982) describe emotionally intense relationships within the extended family, with frequent "cut-offs" of relatives who fail to conform to very high standards for participation in family events. The mother-child relationship is particularly intense and characterized by an extreme sense of self-sacrifice and the inculcation of guilt in the child. The child can never do enough to repay the mother's sacrifice. Parental love is intimately intertwined with parental sacrifice, rather than with physical or verbal expressions of affection.

The result is an intense motivation to please parents. Jewish children are expected to provide their parents with *naches* (i.e., desired rewards) in the form of achievement, financial success, and grandchildren, and the failure to provide them causes guilt. "Of course, there can never be enough *naches*, and their failure to provide 'enough' inevitably results in guilt" (Herz & Rosen 1982, 380).

This style of parenting is also apparent in the traditional Ashkenazi shtetl communities of Eastern Europe. We have already noted that the parents were extremely solicitous and self-sacrificing for their children, but Zborowski and Herzog (1952, 294) also note that, while direct expressions of affection were never made after infancy, the children were "reminded constantly of all their parents have done and suffered in their behalf." "All the sacrifice, all the

suffering, all the solicitude pile up into a monument to parental love, the dimensions of which define the vastness of filial indebtedness" (p. 297).

Besides the inculcation of guilt, there is also some indication that Jewish family life is characterized by high levels of affection and solicitude combined with hostility. Zborowski and Herzog (1952, 332) show that infants are showered with physical affection, including a great deal of kissing and caressing and that afterwards, although physical expressions of affection are rare, parents continue to be extremely solicitous about the intellectual accomplishments and physical well-being of their children.

However, there is also the suggestion that this self-sacrificing solicitude and affection are combined with high levels of anger and hostility directed toward the child. Alter (1989) notes the image of the mother as characterized by overpowering affection (and even seduction) combined with domination and hostility in Jewish fiction. And Zborowski and Herzog (1952, 301, 334-337), in their description of family life in traditional Eastern European shtetl societies, note that, in addition to extremely high levels of solicitude toward children, Jewish shtetl families typically engaged in heated arguments, a sort of "domestic pilpul" in which issues were intensely discussed and there were high levels of disagreement and anger. Mothers are likely to lash out in anger and impatience toward the child and oscillate quickly between intensely positive and intensely negative emotions directed at their children. Physical punishment performed in anger was not uncommon, and fathers appear to have been rather distant figures of respect, but not affection.

Modern psychological research is highly compatible with the idea that parent-child relationships may indeed be characterized by intense affection combined with hostility (i.e., ambivalence, as in ambivalent attachment), since these emotions are associated with two independent biological systems (MacDonald 1992a). The ability to form close family relationships and engage in high-investment parenting is clearly an extremely important aspect of Judaism as an evolutionary strategy, but it is reasonable to suppose that being able to compartmentalize one's relationships is also a highly important skill (MacDonald 1992a). Being able to engage in close family relationships would thus be highly compatible with engaging in purely instrumental behavior toward other individuals outside one's group, including behavior of a hostile, exploitative nature.³³ This type of flexibility would appear to be a general feature of human evolved psychology and thus common among all human groups (MacDonald 1992a), but the literary and ethnographic evidence suggests that Jewish family relationships very strongly facilitate both the affectional system and the ability to engage in aggressive and hostile interactions with others.34

These data on intense, compartmentalized family relationships are also compatible with facilitating high levels of guilt. As indicated above, the emotion of guilt is associated with the conscientiousness system, but there is excellent reason to suppose that this emotion could be exacerbated by combining intense

affection with hostility within the family. The affectional system is fundamentally a motivational system, and intense affection and solicitude would motivate the individual to please the other person and would induce guilt feelings upon lack of compliance (MacDonald 1992a). The combination of intense affection and unreasonable, unfulfillable demands would be expected to produce intense guilt. Indeed, these unreasonable, unfulfillable demands may be seen as an aspect of hostility. The result would be a highly conflicted child, strongly motivated to comply with parental demands and also highly motivated to reject these demands.

These findings are corroborated by Schiffrin's (1984) study of group conversational style among American Jews derived from Eastern Europe. She describes very high levels of disagreement and verbal challenging among the speakers. Speakers continually competed to be heard and used exaggerated intonation and a very rapid tempo of speech. Unlike the case with non-Jewish groups, arguments developed even when the questions asked were non-controversial. Arguments did not ended with consensus, but often simply shifted to a context of sociability and intimacy--just as Zborowski and Herzog portray the rapidly oscillating emotions of traditional Jewish shtetl mothers. Although these findings are restricted to Jews derived from Eastern Europe, Schiffrin (1984) also notes the parallelism of this type of verbal argumentation to the style of the Talmuds--continual disagreement within an overall context of solidarity. This suggests a wider applicability of these findings to other Jewish groups.³⁵

These findings also suggest that Jews tend to be high on the personality trait of affect intensity; i.e., they are prone to intense emotional experience of both positive and negative emotions (see Larsen & Diener 1987). Individuals high on affect intensity have more complex social networks and more complex lives, including multiple and even conflicting goals. They are prone to fast and frequent mood changes and lead varied and variable emotional lives. Clinically, affect intensity is related to cyclothymia (i. e., alternate periods of elation and depression), bipolar affective disorder (i.e., manic-depressive psychosis), neurotic symptoms, and somatic complaints (nervousness, feeling uneasy, shortness of breath). Affect intensity is also linked to creativity and the manic phase of bipolar affective disorder (see Tucker, Vannatta, & Rothlind 1990).

Consistent with the hypothesis that Jews are high on affect intensity, Zborowski and Herzog (1952, 414ff) show that emotional extremes were typical of the inhabitants of traditional Eastern European shtetl communities. The Jewish holidays were intensely emotional affairs, and the emotions that were expressed were quite opposite ones, a sort of rhythmic alternation of extremes. Rapid emotional oscillation was also characteristic of Yiddish drama. However, there is also a strong emphasis on control-being able to exhibit intense, contradictory emotions at the appropriate time.

The common perception of Jewish and gentile psychiatric workers from the late 19th century until at least the end of the 1920s was that compared to

gentiles, Jews (and especially male Jews), had relatively sensitive, highly reactive nervous systems, thus making them more prone to the diagnoses of hysteria, manic-depression, and neurasthenia (Gershon & Liebowitz 1977; Gilman 1993 92ff). Consistent with these early findings, Gershon and Liebowitz (1977) find that Jews had a higher rate of hospitalization for affective disorder than did non-Jews in New York. Strongly suggestive of a genetic basis for the greater prevalence of affective disorder among Jews is their finding that among Jews bipolar affective disorder constituted a higher percentage of all affective disorder than was the case in gentile populations in the United States or Sweden. Individuals with bipolar affective disorder have periods of intense euphoria or paranoid-anger as well as periods of despondency, worry, and hopelessness--exactly the traits expected to characterize individuals who are extreme on affect intensity.

There is some indication that Jews tend to be extreme on all personality systems. Patai (1977, 391) provides a long list of personality traits which appear to be more pronounced among American Jews. Although this type of data must be evaluated with caution, the traits involved appear to include items from all of the Five-Factor Personality Dimensions (see Digman 1990), including items suggesting a strong tendency toward neuroticism (e.g., "is more neurotic"; "anxious") and extraversion (e.g., "greater extraversion"). ³⁹ Indeed, this pattern would be expected given the supposition that Jews are higher on affect intensity. Affect intensity is related to all personality systems with a strong emotional component (Larsen & Diener 1987) and may be viewed as a behavioral energizing system that can be directed toward behavioral approach (related to extraversion) as well as behavioral avoidance and attention to danger (related to neuroticism and conscientiousness) (MacDonald n.d.). Individuals high on affect intensity are thus highly motivated to intensive interaction with the environment and often have conflicting goals because both behavioral approach and behavioral avoidance systems are prone to activation. Thus, the proposal is that a critical component in Jewish adaptation has been the elaboration of affect intensity as a personality system.

The suggestion is that via processes of cultural and natural selection Jews have developed an extremely powerful set of psychological systems that are intensely reactive to environmental contingencies. Personality systems underlie a set of adaptive interactions with the environment (see MacDonald 1991, 1992a, 1992b, n.d.). Behavioral approach systems direct us toward active, highly motivated involvement in the world, risk-taking, and the acquisition of resources and stimulation. On the other hand, behavioral avoidance, including the conscientiousness system, underlies the ability to react intensely to anticipated danger, defer gratification, persevere in unpleasant tasks, and be dependable and orderly.

Another personality system influenced by affect intensity is the affectional system (often termed agreeableness, warmth, or love in personality research). This system underlies the ability not only to form close, intimate relationships

related to high investment-parenting (MacDonald 1992a; see above), but also other types of long-term relationships of reciprocity, trust, and sympathy (Buss 1991; Wiggins & Broughton 1985). Such a trait would appear to be critical to membership in a cohesive, cooperative group such as Judaism. In this regard, it is of interest that Jews exhibit low levels of anti-social personality disorder (Levav et al. 1993), a disorder linked to being low on the agreeableness system (MacDonald 1992a; Widiger & Trull 1992).

Evolution, like a good engineer designed people with a good engine (the behavioral approach systems) and a good set of brakes (behavioral avoidance and conscientiousness). Individuals who are very high in all of these systems are likely to have a great deal of inner conflict (also noted by Patai [1977, 391] as a trait of American Jews), since they are pulled in different directions by these biologically and psychometrically independent systems (MacDonald n.d.). Exemplars would be the sort of fictional characters who populate Woody Allen movies: individuals who have very powerful drives toward resource acquisition, social dominance, and sensual gratification, but who also have a high level of anxiety, guilt, and inhibitory tendencies.

All personality systems are adaptively important, and being high on all of them provides the ability to be flexibly (and, indeed, intensely) responsive to environmental contingencies. An individual who was high on both the behavioral approach systems and the conscientiousness systems would be strongly motivated to engage in highly rewarding approach behaviors, including extraverted behavior related to resource acquisition, social dominance, and sensual gratification (aspects of behavioral approach), but would also show an ability to react intensely to threatened danger, delay gratification, persevere in the face of difficulty, and be dependable and orderly (aspects of behavioral avoidance and conscientiousness).

This perspective is compatible with the findings of Watson and Clark (1992) indicating that high scores on the Achievement facet of the NEO Personality Inventory (Costa & McCrae 1985) are associated not only with Extraversion, but also with the Conscientiousness facets of Orderliness and Dependability. Since Jews have generally been very high achievers, it would be expected that they would be high on both of these traits. Moreover, the data cited above indicating that Jewish families have intense family relationships characterized by contradictory emotions are quite compatible with this perspective, since the suggestion is that there are intense socialization processes within the Jewish family directed at different biological systems underlying qualitatively different interpersonal relationships.

Although the hypothesis that Jews are high in all personality systems requires further study, Patai's suggestion is compatible with the general point of this section: There have been powerful eugenic and cultural selective forces that have acted on personality systems within the Jewish community over historical time.

SOCIALIZATION FOR GROUP IDENTIFICATION

As with all collectivist cultures (Triandis 1990, 1991; see Chapter 8), Judaism depends on inculcating a very powerful sense of group identification. Socialization in collectivist cultures stresses group harmony, obedient submission to hierarchical authority, the honoring of parents and elders, ingroup loyalty, and trust and cooperation within the ingroup. Triandis (1990, 96) proposes that identification with an ingroup is increased under the following circumstances: Membership is rewarding to the individual; ingroups are separated by signs of distinctiveness; there is a sense of common fate; socialization emphasizes ingroup membership; ingroup membership is small; the ingroup has distinctive norms and values.

In addition, evolutionists such as Johnson (1986) have emphasized that socialization for group membership often includes an emphasis on the triggering of kin recognition mechanisms (such as references to the kinship nature of the group; e. g., "fatherland," "the Jewish people") and phenotypic similarity (such as similar dress and mannerisms). Operant and classical conditioning are often used, as when individuals are publicly rewarded for group allegiance and altruism.

All of these mechanisms are undoubtedly present within the Jewish community. Phenotypic similarity has been important throughout Jewish history (as indicated by community dress codes). Among contemporary Haredim, one ingredient affecting one's resource value on the marriage market is physical appearance that does not depart from the group norm on color of skin or hair. Thus, Heilman (1992, 280) reports that a haredi with red hair had great difficulty finding a wife. "They thought I looked too much like a goy." Moreover, the adulation of those who best exemplify the group ethic of Judaism is reflected in the contemporary world when major contributors to Jewish charity are honored within the Jewish community.

In the following, the emphasis will be on the reward value of group membership, as well as on ingroup membership and group distinctiveness as aspects of socialization.

There has been a very conscious attempt on the part of the Jewish community to inculcate a sense of group belongingness among all Jews. One aspect of these socialization influences is to continually place group members in situations where group activities involve very positive experiences, but there is also socialization for developing feelings of separateness from gentile culture.

In the traditional shtetl communities of Eastern Europe, beginning at birth children were socialized not simply as individuals or as family members, but also as a member of the entire community. A child's birth was celebrated by the entire community, and there were special roles for children in a variety of religious events. Thus, at the Passover celebration, the youngest child asks the Passover questions, "quivering with excitement" (Zborowski & Herzog 1952, 387). The very elaborate ceremony functions to make the child very aware of

the intimate connection of the child to the family and the family to the wider group of Jews extending backward in historical time. Another holiday, *Lag ba Omer*, is given over entirely to the pleasures of children, and a very prominent part of *Hanukkah* is when children go around to relatives to receive money. The boy's *Bar Mitzvah* is fundamentally a ceremony marking his new relationship to the group (Zborowski and Herzog 1952, 351).

Positive group experiences continue into adulthood. Mayer (1979, 62; see also Heilman 1992; Kamen 1985), writing on Orthodox Jews in 20th-century America notes the "atmosphere of festivity and the sense of at-oneness that recurs so frequently in the community." The result is "a sort of collective identification. The individual is merged but never submerged; rather, he is so strongly identified with the group that it partakes of his own individuality--he *is* the group and the group is he (Zborowski & Herzog 1952, 422; italics in text).

Besides these very positive group experiences, the goal of education was to promote the consciousness of separateness: Writing of traditional Ashkenazi society, Katz (1961a, 190) notes that "[t]he peculiar position of the Jews as a chosen people, the inherently mythic distinction between them and the nations, an understanding of the fate of the Jewish people in the Diaspora and their faith in the coming redemption--all of these penetrated the child's consciousness."

Kamen (1985) notes that the Hasidim are very concerned about contamination from the secular culture and work very hard to minimize the child's contact with or even awareness of the wider culture. Similar to all Jewish societies prior to the Enlightenment, central to this very self-conscious separatism is the use of a Jewish language (in this case, Yiddish), distinctive modes of dress, 40 and distinctive Jewish names (Kamen 1985, 43). Yiddish is the only language spoken in the home in the presence of children, and children are scolded for conversing in English outside of their English classes in school.

As throughout Jewish history, dietary practices are a potent mechanism for psychological separation. A writer on the psychology of the kosher dietary laws in a contemporary Orthodox community observes that permissible food becomes "identified as Jewish food and their consumption becomes an event through which one reaffirms to himself and to others that he is, indeed, a Jew . . (quoted in Mayer 1979, 65).

Education is of course extremely important, but a major goal in the Hasidic community is ensuring group enculturation, rather than imparting subject matter (Mayer 1979). Television and other means of integrating with the wider culture are forbidden so that the child is simply not exposed to these influences. In addition, there are numerous holidays that are utilized in the school curriculum as a means of discussing particular events important in Jewish history or religious practice.

In the synagogue, there is an emphasis on communal chanting, a communal experience "whereby the participants relive the inner time of their ancestors" (Mayer 1979, 108). There is a tendency for compartmentalization such that individual synagogues consist of endogamous subunits of relative ethnic

homogeneity. The main purpose of these smaller synagogues seems to be to satisfy the need for very close feelings of group identification--what Mayer (1979, 110) refers to as a "we-feeling" of shared intimacy in a group. Mayer describes a trend in which those trained in Orthodox *yeshivas* seek out Hasidic synagogues as adults because of their greater feelings of group intimacy.

After *Bar Mitzvah* and for approximately seven years until marriage, the boys spend 16 hours per day with their peer group, including communal breakfast, communal ritual baths, communal studying, and communal prayer. At this age, studying itself is done with a great deal of emotion. The boys/men of this age are expected to relate primarily to the peer group, and if a child spends too much time at home, his behavior reflects poorly on himself and his family.

Conformity to group attitudes and behavior is an extremely important aspect of social control in traditional Jewish communities. "A sense of correct behavior, Hasidishe behavior, takes precedence over individual deviations. Indulgence in contrary behavior is not tolerated by the group; the majority acts quickly to reprimand any member whose demeanor reflects negatively on his comrades" (Kamen 1985, 82-83). It is only with marriage that they have any independence from the peer group at all.

Mayer (1979, 136ff, 141-142) also describes elaborate mechanisms of social control within the Orthodox community, which spring into action to oppose any sign of non-conformity, such as a yarmulke that is too small or too brightly colored or a hem line that is too high. It zborowski and Herzog (1952, 226-227), writing of traditional European shtetl societies, also document elaborate mechanisms that ensure conformity within the community. People are extremely concerned about the good opinions of others. Everyone knows everything there is to know about everyone else, and withdrawal and secrecy are seen as intolerable. Strangers are helped because they are fellow Jews, but their foreign ways inspire mistrust. As the Talmud states, "a man should never depart from established practice" (quoted in Zborowski & Herzog 1952, 221).

Among the Hasidim studied by Kamen (1985), group meetings and social events are common. There are weekly meetings of the males (the *tish*) at which the children participate in group singing. After the singing, there is a discourse on the Torah, followed by singing and dancing. Group dancing by males is particularly striking and also occurs at weddings and other social events. The men join arms and dance together in an atmosphere of great joy and excitement—a clear indication of the powerful positive affective forces joining together members of the group. At the social events, children are introduced in a very positive manner to group membership.

Prayer is also done in groups. Beginning in the second grade, children have group prayers in school three times a day, and the same group continues to pray together daily throughout their school years. Kamen (1985, 64) quotes a rabbi who said that the practice "makes the boys feel like comrades, more than just students together . . . if they *davn* [pray] together they get closer to God and closer to each other." Because of the importance of this social function, prayers

are held an hour after the beginning of classes to make sure that all boys are present. The congregation also prays together three times daily. The prayers are performed with great emotional intensity, with "men swaying and rocking in every conceivable direction, hands motioning expressively" (p. 63; see also Mayer 1979, 111).

Another practice with affective overtones is *chazer* (cooperative learning in which a stronger student helps a weaker student). Kamen observed one boy with his arm around another during *chazer*, and a rabbi commented, "[i]n this Yeshiva there's real friendships built up, not competitions. The Rov's teachings stress good feelings and love between people. In hard times it holds people together and in good times it's that much nicer" (quoted in Kamen 1985, 74).

These trends are also apparent in the social world of the shtetl of traditional Eastern European society. Zborowski and Herzog (1952, 54) note the swaying and communal chanting as a prominent aspect of synagogue services in the traditional European shtetl communities:

The whole room is a swaying mass of black and white, filled with a tangle of murmur and low chantings, above which the vibrant voice of the cantor rises and falls, implores and exults, elaborating the traditional melodies with repetitions and modulations that are his own. The congregation prays as one, while within that unity each man as an individual speaks directly to God.

Zborowski and Herzog (1952, 177) note that there is even more swaying and general intensity of prayer among the Hasidim. They also note (p. 86) that children are expected to go to synagogue because the group atmosphere is viewed as essential to one's education. Group chanting is also an important aspect of education (p. 93). Schoolrooms are not places of silence punctuated by individual student recitations, but very noisy places of group activities like chanting and humming.

These findings indicate major attempts within traditional Jewish communities as well as contemporary Orthodox and Hasidic communities to socialize children to the group. However, these efforts are also apparent in much less traditional Jewish groups. In Chapter 4, it was noted that Judaism in contemporary American society may be viewed as a civil religion. Perhaps because of the lessening prevalence of many of the traditional segregating mechanisms that have facilitated group cohesion over the centuries, the civil religion goes to great lengths to prevent group defection, especially by attempts to strengthen Jewish education. Those who do defect are simply written off, and group continuity and integrity are maintained by a central core of highly committed individuals. Because of the assimilatory pressures from the surrounding society, great importance is placed on "the recognition of Jewish education as the most vital element in the preservation of the Jewish people" (Woocher 1986, 34). Similarly, Elazar (1980) notes that the drive for more intensive Jewish education, including an increasing emphasis on Jewish day

schools, was motivated by "the clearly pressing problems of assimilation" (p. 211).

Jewish identification is also actively facilitated by encouraging trips to Israel by high school and college students, and, indeed, Elazar refers to Israel as "the central focus of American Jewish educational effort" (p. 291). Woocher (1986, 150) notes that the trips to Israel are often overlaid with "mythic" overtones from Jewish history (p. 150) (e.g., visits to holocaust memorials) and have as their goal increased commitment to a Jewish identification on the part of the visitors. The retreats function as a sort of religious experience, which attempts to effect attitude change by removing participants from their normal lives; by emphasizing group-oriented activities and a sense of community, nostalgia, and "specialness"; and by renewing commitment to group identification and group goals (pp. 151-52). Woocher (1986) also stresses the importance of the General Assembly of the Council of Jewish Federations as a major civil religious event that functions to foster Jewish identification and a strong sense of community.

Finally, mention should be made of the role of external threat in facilitating group identification among Jews. As emphasized by evolutionists such as Alexander (1979), external threat tends to reduce internal divisions and maximize perceptions of common interest among group members. The awareness of anti-Semitism may thus be expected to foster a sense of group identity and social cohesion in the face of threat--the "common fate" or "shared enemy" syndrome studied by psychologists (Berkowitz 1982; Hogg & Abrams 1987).

Wilson and Sober (1994) have proposed the existence of group-selected psychological mechanisms that facilitate group goals on a facultative basis, that is, in response to specific contingencies. Here it is proposed that external threat is a situation that elicits an evolved facultative tendency to more strongly identify with the group. Thus, Woocher (1986, 46) notes that the European crisis of the 1930s, "as had happened so often in the past, called forth a deep sense of universal Jewish solidarity." Ragins (1980, 85-86), relying on personal testimonies, shows that anti-Semitism in Germany during the early 20th century had a strong tendency to provoke greater identification with Judaism among Jewish activists. As Freud noted in 1926, "My language . . . is German, my culture, my attainments are German. I considered myself German intellectually, until I noticed the growth of anti-Semitic prejudices in Germany and German Austria. Since that time, I prefer to call myself a Jew" (quoted in Gilman 1993, 16). 42 Feldman (1993, 43) finds very robust tendencies toward heightened Jewish identification and rejection of gentile culture consequent to anti-Semitism at the very beginnings of Judaism in the ancient world and throughout Jewish history.

A permanent sense of imminent threat appears to be common among Jews. Writing on the clinical profile of Jewish families, Herz and Rosen (1982) note that for Jewish families a "sense of persecution (or its imminence) is part of a cultural heritage and is usually assumed with pride. Suffering is even a form of

sharing with one's fellow-Jews. It binds Jews with their heritage--with the suffering of Jews throughout history." Zborowski and Herzog (1952, 153) note that the homes of wealthy Jews in traditional Eastern European shtetl communities sometimes had secret passages for use in times of anti-Semitic pogroms, and that their existence was "part of the imagery of the children who played around them, just as the half-effaced memory was part of every Jew's mental equipment."

This evolved response to external threat is often manipulated by Jewish authorities attempting to inculcate a stronger sense of group identification. Hartung (1992) provides anecdotal data on the emphasis on Jewish suffering and its exaggeration as aspects of modern synagogue service. Such practices have a long history. Roth (1978, 62) notes that Jewish "martyrologists" maintained lists of Jewish martyrs for commemoration during synagogue services during the Middle Ages, and Jordan (1989, 20) refers to the "forbidding martyrocentric self-image" during this period.

Woocher (1986) shows that Jewish survival in a threatening world is a fundamental theme of Judaism as a civil religion in contemporary America. Within this world view, the gentile world is conceptualized as fundamentally hostile, with Jewish life always on the verge of ceasing to exist entirely. "Like many other generations of Jews who have felt similarly, the leaders of the polity who fear that the end may be near have transformed this concern into a survivalist weapon" (Woocher 1986, 73). Thus, for example, Woocher (1986) notes that there has been a major effort since the 1960s to have American Jews visit Israel in an effort to strengthen Jewish identification, with a prominent aspect of the visit being a trip to a border outpost "where the ongoing threat to Israel's security is palpable" (p. 150).

In addition, there is evidence that the collectivist tendencies of Jewish communities became even more pronounced during periods of group conflict (Triandis 1990, 96). In Chapter 8, the extreme level of conformity and thought control that occurred among Jews in the Ottoman Empire is mentioned, based on Shaw (1991, 137ff). Although these practices occurred during a period of economic prosperity, these hyper-conformist tendencies became even more extreme during a subsequent period of persecution and economic decline. Again, there is the suggestion that increased group competition resulted in a facultative enhancement of mechanisms related to group cohesion. 43

To conclude: Judaism as a group strategy has developed a wide range of practices that serve to cement allegiance to the group and the submergence of individual goals to the overall aims of the group. Eugenic practices and the development of intensive cultural supports for group identification have resulted in a very powerful group orientation among Jews. Some of these cultural practices appear to trigger evolved psychological mechanisms related to group identification. As indicated above, this appears to be the case with the emphasis on external threat and its exaggeration. However, a similar situation may also occur with regard to socialization mechanisms in which the cultural

distinctiveness of the ingroup is stressed: Social identity processes underlying group identification appear to be a biological adaptation in which a powerful sense of group identification is triggered by emphasizing the distinctive features of the ingroup (viewed as positive) and the contrary characteristics of the outgroup (viewed as negative) (see *SAID*, ch. 1). The suggestion is that mechanisms of socialization for group identification rely ultimately on a very rich set of evolved psychological systems.

NOTES

1. It is interesting to note that the Jewish rejection of agricultural labor (i.e., primary production) is extremely deep-rooted. Nini (1991) notes that, in Yemen, Jews did not engage in agriculture, and he makes the interesting suggestion that this custom may have derived from the negative attitudes toward the 'am ha-ares beginning in ancient times (see below) or it may be the result of continued messianic attitudes which viewed the land of Israel as the only place where one should have close links to the soil. The result, as typical throughout Jewish history, was that Jews were not engaged in primary economic production, but lived at a higher level of the human energy pyramid. The interesting thing here is that Yemenite Jews typically performed very difficult manual labor and were extremely impoverished and uneducated. As a result, it was not an abhorrence of hard, manual labor that was involved. There is the suggestion that the avoidance of engaging in primary production has very deep cultural roots among Jews living in the diaspora.

- 2. These issues include the following: whether the inedible parts are to be included in the bulk necessary for imparting uncleanness; how the intention of the person eating the animal is to be considered in relation to the uncleanness of the animal; how contact between food of different degrees of uncleanness affects the cleanness of the animal; the levels of sanctification of food as related to their susceptibility to uncleanness as affected by how far they are removed from the original source of uncleanness (i.e., from the first remove, the "Father of uncleanness" (Neusner (1988a, 212), to the fourth remove); how the state of the food (i.e., whether solid, congealed, or liquid) affects all of this, especially in relation to the size of the food (e.g., if a congealed piece of the minimum size for uncleanness were to liquefy and lose one drop of liquid, it would no longer be unclean, nor would the drop of liquid exuded); how the status of the person (i. e., whether an observant Jew (haber) or an uneducated/non-observant Jew ('am ha-ares) affects the cleanness or uncleanness of the objects he/she comes in contact with; how the specific qualities of the food (e.g., the stage of ripeness for olives) affect its cleanness; the cleanness of doubts about whether an object is clean; how connections between clean and unclean things affect the whole during and after contact. Principles are enunciated, such as "All unclean things [are adjudged] in accord with [their condition] at the moment that they are found" (M. Toh. 3.5A), and then a long list of examples, which stretch the limits of the principle, is provided.
- 3. As discussed in *SAID* (chs. 6-8), certain predominantly Jewish intellectual movements of the 20th century, particularly psychoanalysis, the Frankfurt School, and radical political movements, have also been highly authoritarian and irrational.

- 4. An evolutionary perspective differs from a eugenic perspective because there is no emphasis in the eugenic perspective on resource competition between segregated gene pools or on the importance of within-group altruism. Weyl (1969, 1989) notes correctly that eugenic practices also occurred in China, but in this case there was no large, unbridgeable genetic gulf between an ethnically separate scholarly class and the rest of the population, and, indeed, successful scholars undoubtedly had large numbers of concubines from the lower levels of Chinese society. As a result, while anti-Semitism has been an extremely robust tendency, scholars were revered throughout Chinese society. (However, as indicated in Chapter 5, anti-Chinese activity has been directed against overseas Chinese when they lived as a segregated ethnic group viewed as being in competition with indigenous peoples.) In China, competition was not between a genetically isolated group of scholars and the rest of the population, but rather there was individual/family competition within the entire population, the basis of which was scholarly ability. Mainstream Judaism must be seen primarily not as an example of successful eugenic practices, but rather as a national/ethnic strategy that has a eugenic component: All the genes and gene frequencies typical of the Jewish ethnic group are involved (e.g., genes for fingerprint patterns), not simply genes for intelligence.
- 5. The question of whether the Pharisees (in addition to the haberim) discriminated against the 'am ha-ares' is controversial. (Schürer [1885] 1979, 399) states that the haberim are to be identified with the Pharisees.) Many scholars, including Betz (1968), Black (1962), Jeremias (1969, 246ff), Neusner (1971 III:286ff) and Schürer ([1885] 1979, 394ff), take the view that the Pharisees participated in closed communities separated from other Jews and from the 'am ha-ares in particular. Sanders (1992, 442) describes this tradition as one in which the Pharisees are "the only true Israel, communal meals, meals eaten in purity, sacred food, closed societies, unwillingness to mingle with others because of fear of impurity, exclusion of everyone else from the realm of the sacred, hatred of other Jews, expulsion of people who transgress food and purity laws from the commonwealth of Israel." Even though Sanders disagrees with this view, he suggests that the Pharisees only viewed the other Jews as lower on a scale of purity than themselves, but did not view the common people as entirely removed from the sacred (Sanders 1992, 434). Such a designation of relative impurity is of course compatible with considerable social and genetic discrimination against such people. The point here is that there is indeed a mainstream scholarly tradition that holds that there was a conscious attempt by organized sections of the Jewish community to exclude the 'am ha-ares from the community of Judaism.

Because of the many negative statements about the Pharisees in the New Testament, this issue has become an issue in Christian-Jewish scholarly polemics. (Jeremias [1969, 267] states that Jesus "openly and fearlessly called these men to repentance, and this act brought him to the cross.") However, the only important issue here is whether it is reasonable to suppose that the well-documented negative attitudes toward the relatively poor and illiterate 'am ha-ares on the part of the Jewish political and intellectual leadership had a negative effect on their genetic representation in the Jewish gene pool.

6. In the following passage, the house where the wife of an 'am ha-ares is grinding grain for a wife of a haber becomes especially unclean when the wife of the 'am ha-ares stops working, and if there are two such women there, one must always assume the worst:

- A. The wife of a *haber* who left the wife of an 'am ha-ares grinding [grain] in her house--
- B. [if the sound of] the millstones ceased
- C. the house is unclean.
- D. The millstones did not cease--
- E. unclean is only [the space] up to the place to which she can reach out her hand and touch.
- F. [If] they were two, one way or the other [whether or not the grinding ceased],
- G. "the house is unclean,"
- H. "for one grinds, and one snoops about," the words of R. Meir.
- I. And sages say, "Unclean is only [the space] up to the place to which they can reach out their hands and touch." (M. Toh. 7:4)
- 7. Epstein (1942, 311) emphasizes that this ceremony was intended to sever ties with anyone who had contracted a marriage of a woman of foreign blood. Clearly, both foreign blood and a marriage not made according to eugenic principles may well have both been viewed as unworthy marriages for the purposes of this ceremony.
- 8. Mintz (1992, 219) finds greater acceptance of professional treatment of mental disorder among the Hasidim dating from 1982, although great pains are still taken to prevent public knowledge of psychiatric disorder in the family.
- 9. Since marriage occurred long before the possibility of having children in many cases, it is reasonable to suppose that the practice had some other function than simply high fertility. Since the boy would be under the scrutiny of another family, marrying in early adolescence and living with in-laws would presumably result in a great deal of pressure to succeed at scholarship and to avoid the impulsivity and immediate gratification typical of adolescents (see MacDonald 1988a). There also is some indication that Jews believed that such a practice would make adolescent sexual desire less of a disruptive force. However, there is also evidence that in some cases the children became permanently repelled by sexual relationships as a result of the practice.
- 10. In reviews of the early literature, Brill (1936) and Nardi (1948) found that, despite severe methodological difficulties, Jewish children were superior or at least equal to non-Jewish children in Britain and the United States, and a similar conclusion is reached by Maller (1948). Among the best of the early studies was that of Davies and Hughes (1927), which found that Jewish children aged 8-14 were superior to British children in three schools situated in a good district, a moderately poor district, and a very poor district, respectively. Lynn (1992) interprets these data to indicate a mean IQ of Jewish children of 110.5, 110.6 for arithmetic, and 113.0 for English. Although this was not a representative Jewish sample, the differences were present in all three schools and thus within the three socio-economic categories.
- 11. In addition, Levinson (1957) found that applicants to Jewish day schools had an average IQ of 118, and Nardi (1948) found that children in Jewish day schools had an average IQ of 115.2. Although Nardi cautions that his sample may not be entirely representative of the Jewish population, data are provided indicating that Jewish children in a public school actually had higher average IQs than Jewish children enrolled in religious schools in the same neighborhood.
- 12. One can detect a sensitivity to issues of anti-Semitism in Lenz's (1931, 647ff) account of "Nordic" and Jewish abilities (See especially p. 674n). His data, apart from IQ differences, are impressionistic, but I believe that he was attempting to give an unbiased account based on his experience, and his conclusions are broadly consistent with the

verbal/performance distinction emphasized here. As do several modern theorists (Lynn 1992; Rushton 1988; see also my comments in Chapter 8), Lenz gives major weight to the selective pressures of the Ice Age on northern peoples. The intellectual abilities of these peoples are proposed to be due to a great need to master the natural environment, resulting in selection for traits related to mechanical ability, structural design, and inventiveness. Lenz's description of Jewish intellectual abilities conforms essentially to what is termed here *verbal intelligence*, and he notes that such abilities are important for social influence and would be expected in a people who evolved in large groups. See also Chapter 8, note 16.

- 13. Even more commonly, Jews tended to enter businesses that required only a simple technology, again depending on capital provided by the Jewish community (Mosse 1987, 169).
- 14. This does not imply that Jews were not innovators or did not contribute greatly to the development of the German economy. Quite the contrary. Mosse (1987, 404) persuasively argues that Jews were pioneers in a wide range of economic activity; they were "innovators without for that being inventors." The suggestion here is that differences in intellectual proclivities (verbal versus performance IQs) contributed to the observed patterns.
- 15. Although Patai (1977) accepts the idea that eugenic processes may have had some effect, he emphasizes other causes. His work is a good example of a strong apologetic tendency in social science research by Jews and is considered in detail in *SAID* (ch. 5).
- 16. See, e.g., Beinart's (1981) discussion of the Inquisition in Cuidad Real. Jordan (1989, 64) notes that poorer Jews were able to escape persecution from King John of England in the early 13th century.
- 17. Several studies have found Jewish/gentile differences in intelligence at all socio-economic levels (e.g., Davies & Hughes 1927). Socio-economic status is thus not likely to be an independent contributor to the high level of Jewish intelligence.
- 18. Recently, Kaniel and Fisherman (1991) found that children in a "non-culturally deprived" sample of Israelis taking the Progressive Matrices Test were either exactly at the 50th percentile (ages 9-10, 10-11, 13-14, 14-15) or somewhat below (ages 11-12 at the 45th percentile; ages 12-13 at the 40th percentile). Thus unlike Jewish children in the United States, there is no overall tendency for the Israeli population to be superior to American norms for intelligence tests--presumably reflecting the influence of the large Oriental group in Israel.
- 19. Similarly, in Morocco, Lewis attributes the decline of Jews to Muslim repression, which left Jews "in a state of material degradation and intellectual impoverishment" (1984, 148). Stillman (1979) attributes the economic and demographic decline of Jews in Arab lands to the development of an Islamic state bureaucracy and bourgeoisie, which gradually resulted in the economic marginalization and social isolation of Jews and other minorities. This type of exclusion by native Muslim populations also occurred much earlier in other areas: For example, Stillman (1979) notes the exclusion of Jews from a wide range of economic activities by Muslim guilds in medieval Morocco and from government service in 14th-century Egypt (p. 273).
- 20. This emphasis on the moral worth of Judaism as deriving from its exemplary family life occurred also in the Jewish apologetic literature in the ancient world (e.g., Philo and Josephus) during the period when Judaism first encountered Western (Greek) culture (J. J. Collins 1985, 167; see Chapter 4).

- 21. While all studies find lower Jewish mortality up to age 55, there are conflicting data regarding the adult mortality rate after this age (see Peritz & Tamir 1977).
- 22. A remarkable corroboration of this general finding comes from a recent study by Bereczkei (1993), who found a very low sex ratio among Hungarian gypsies associated with a variety of other traits characteristic of a low-investment style of reproduction compared to Hungarians: higher fertility, longer reproductive period, earlier onset of sexual behavior and reproduction, more unstable pair bonds, higher rate of single parenting, shorter interval of birth spacing, higher infant mortality rate, and higher rate of survival of low-birth-weight infants. The gypsies would appear to be a low-investment group evolutionary strategy.
- 23. Kaplan (1983, 275) reported findings that there was a surplus of Jewish women in Germany in the late 19th and early 20th centuries may be explainable in these terms. Another intriguing set of data is presented by Mosse (1987, 216) who finds an extremely *low* sex ratio of 15/33 (0.45) among the children of a group of elite German Jews (i.e., individuals with a fortune of greater than 15 million marks) in the early 20th century. However, in a larger "sub-elite" group (individuals with a fortune of 5-15 million marks), the sex ratio of children was a very *high* 51/28 (1.8). Mosse comments that self-made men tended not to have male offspring, whereas the dynastic banking families whose wealth dated from the 18th century tended to regularly produce male heirs. These patterns were quite different for gentiles with similar incomes, the latter having both a higher fertility rate and an approximately equal sex ratio for both income categories.
- 24. For similar data on the Soviet Union, see Gitelman (1981) and S. Goldstein (1981). For data on the United States, see S. Goldstein (1981) and Bachman 1970, 35).
- 25. An early follower of Freud described a Jewish predisposition to obsessive neurosis; Freud agreed with this association and proposed that obsessive neurosis was more common among "highly developed people" (see Gay 1987, 135-136). Freud viewed Jews as genetically superior to gentiles. See *SAID* (chs. 3 and 7).
- 26. Factor analytic studies (Lusk, MacDonald & Newman 1993; Watson & Clark 1992) have found conscientiousness items yield separate factors for social conscientiousness and several types of asocial conscientiousness. Thus, Costa and McCrae (1992) describe a "Dutifulness" facet of Conscientiousness, consisting of items related to performing assigned tasks conscientiously, fulfilling commitments, fulfilling social obligations, and being dependable and reliable. At least some facets of Costa and McCrae's Conscientiousness appear to be asocial, including orderliness and lack of impulsivity.
- 27. Johnson (1987, 138), discussing individuals such as Heinrich Heine, notes "[a] Jewish phenomenon which became very common over the centuries: a clever young man who, in his youth, accepted the modernity and sophistication of the day and then, late in middle age, returned to his Jewish roots." This suggests age changes in the tendency for group identification among Jews. Triandis (1991, 82) finds that a common phenomenon in collectivist cultures such as Judaism (see Chapter 8) is for commitment to the group (collectivism) to increase as the individual ages. Triandis speculates that older people have been socialized in the collectivist environment for a longer period of time, but the effect pointed to by Johnson suggests in addition that individuals who have fled these socializing influences tend to return to a stronger sense of group identity as they get older. I speculate that there are developmental genetic differences in attachment to group interests, perhaps resulting from the relative decline of the individualistic drives

associated with the extraversion system (see MacDonald 1988a, MacDonald 1992a, MacDonald 1992b; Zuckerman 1979).

- 28. The Sephardic philosopher Baruch Spinoza is a famous example of a non-conformist who was expelled from the Jewish community.
- 29. One source of psychological stress among the Hasidim is that individuals must develop a community-oriented facade, which hides the private self. Such findings are expected in collectivist, authoritarian cultures (Triandis 1990, 77ff). Other sources of family stress are the intrusive nature of family interaction and the authoritarian style of child rearing (Mintz 1992, 176ff).
- 30. These tendencies are also apparent in contemporary Hasidism. The school day is very long, and after *Bar Mitzvah*, it becomes even longer. Students are strictly supervised. and it is expected that they will adopt very strict study habits. "Many nights they will fall asleep over their books . . . , awake abruptly and begin reading again with enforced vigor and concentration" (Kamen 1985, 84). "The rabbis are aware of the weariness brought on by such vigorous mental activity, but feel it builds character and resolution in a child if he 'fights physical urges to learn Torah'" (Kamen 1985, 69). As was also the case in other traditional Jewish communities, scholarly ability resulted in increased social status within the Hasidic community (p. 87).
- 31. For example: "My son, if sinners entice thee, consent thou not. If they say, 'Come with us, let us lie in wait for blood, let us lurk for the innocent without cause; Let us swallow them up alive as the grave, and whole, as those that go down into the pit . . ." (Prov. 1:11-12); "The wrath of a king is as messengers of death; But a wise man will pacify it. In the light of the king's countenance is life; and his favour is as a cloud of the latter rain" (Prov. 16:14-15). The dependence of Jewish welfare on the favor of ruling elites was a major theme of Chapter 5.
- 32. The allusion is to the intense argumentation characteristic of *yeshiva* academic discussions; see above.
- 33. I speculate that one aspect of Judaism as a group evolutionary strategy is that Jews must be able to accept high levels of hostility as a normal aspect of interpersonal relationships, so that having intense hostility directed toward one does not result in self-condemnation and self-hatred. In SAID (ch. 2), I discuss data indicating that anti-Semitism has been virtually universal in human societies and that anti-Semitism is anticipated in canonical Jewish religious writings dating from the priestly redaction of the Pentateuch. Indeed, Peli (1991, 110), in discussing Midrashic perceptions of anti-Semitism throughout the ages, notes that "they treat Judeophobia as an inevitable reality that Jews have to learn to live with without giving up in despair on the one hand, or trying in vain to 'correct' its causes on the other." The proposal here is that Jewish socialization emphasizes being able to "learn to live with" hostility in a context of overall self-acceptance. Consistent with this proposal, Gilman (1986) suggests that Jewish self-hatred results from internalizing gentiles' negative images of Jews. To remain a non-self-hating Jew therefore, one cannot allow the desire for acceptance by gentiles to lead to a denial of difference. One must continue to accept oneself as a Jew in the context of being hated even by a large majority of the society one lives in. A direct corollary of this is that Jewish theories of anti-Semitism have typically stressed the irrationality and projective nature of gentile beliefs about Jews. See the discussion in SAID (especially ch. 8).

34. As a prominent example of compartmentalized emotions, Freud ([1931] 1985, 333) observed in *The Interpretation of Dreams*, "My emotional life has always insisted that I should have an intimate friend and a hated enemy. I have always been able to provide myself afresh with both, and it has not infrequently happened that the ideal situation of childhood has been so completely reproduced that friend and enemy have come together in a single individual--though not, of course, both at once or with constant oscillations, as may have been the case in my early childhood."

Regarding this statement, McGrath (1974, 38) states that "[t]he close professional relationships with men like Josef Breuer and Willhelm Fliess are but two of the subsequent examples in which Freud sought and found fellow rebels to share his defiance of authority in the exploration of sexuality, and in both cases the relationships eventually moved from the most intimate friendship to bitter antagonism." Gay (1988, 241) notes a similar pattern: "As in earlier friendships, Freud rapidly, almost rashly, invested his affections, moved toward almost unreserved cordiality, and ended in irreparable, furious estrangement."

- 35. Heilman (1976) shows that the role of argumentation in creating social cohesion is well established among Orthodox Jews not only in public debates over religious law, but at more informal levels as well, including, I would suggest, the family.
- 36. A remarkable recent example is a scene in Paul Mazursky's film, "The Pickle," which portrays a reminiscence of a Jewish childhood in which the parents are screaming insults at each other while seated on a Ferris wheel with their son between them. The son interjects a joke and the parents immediately dissolve into laughter and the entire family then proceeds to engage in a very convivial, intimate conversation.
- 37. Gilman's (1993, 92ff) account indicates that Jewish psychiatrists emphasized environmental causes of the phenomenon, while gentiles were more prone to suppose it was influenced by genetic selection in the diaspora. The general attraction of Jewish social scientists to environmentalism is discussed in SAID (ch. 5). It is interesting in this regard that the typical sex difference found in affective disorder does not occur in Jewish populations (Levav et al. 1993). This suggests selection away from a more sex differentiated pattern typical of gentile populations. These findings are compatible with the hypothesis that gentile males have been under greater selection pressure for physical risk taking and sensation seeking in which intense emotional reactivity (which tends to trigger behavioral avoidance mechanisms energized by fear and anxiety) would be a liability (MacDonald 1988a; n.d.). Zuckerman (1984) notes that sensation seekers, a group that includes individuals who engage in physically dangerous activities, tend to be stimulus augmenters; i.e., they have strong nervous systems and do not inhibit responding even at very high levels of stimulus intensity. In other words, they tend to have low emotional reactivity. Because of the ecological position of the Jews, however, physical risk taking and sensation seeking are expected to be of relatively little importance, while intense emotional reactivity would be an asset in motivating conscientiousness and other systems driven by negative emotions important for group living (especially anxiety) as well as positive emotions important for some aspects of behavioral approach, self-confidence, and creativity (see MacDonald n.d.).
- 38. In an epidemiological study based on interviews of a stratified sample of the 1949-1958 birth cohort in Israel, Levav and his colleagues (1993) found that bipolar affective disorder I (a form of manic-depression) was more common among those deriving from Europe. The most common diagnosis was generalized anxiety disorder and

labile personality disorder, the latter characterized by periods of depression and hypomania. Again, the suggestion is that Ashkenazi Jews have highly reactive nervous systems and are prone to alternating between intensely positive and intensely negative emotions. Anxiety disorder was found less frequently in Israel than in several other areas, but the authors caution that the studies estimating prevalences used different diagnostic criteria, different interview schedules, *et cetera*.

- 39. One of the correlates of extraversion is risk-taking behavior. A proneness to risk-taking is a common observation of Jewish economic behavior throughout the ages (Johnson 1987; Mosse 1987, 314ff).
- 40. A young Hasidic man commented, "I call my clothing a personal weapon because if I am tempted to do something which by law is not right, one look at myself, my hat, my coat, my tstitsis reminds me who I am. Nobody is there to see except me, and believe me that's enough" (quoted in Kamen 1985, 88-89). In the wider Orthodox community men must wear skullcaps or hats, and women must be modestly dressed (Mayer 1979, 73).
 - 41. See also the discussion of Turkish Jews (Shaw 1991, 65) in Chapter 8.
- 42. Freud's comment is probably disingenuous. As indicated in *SAID* (ch. 7), Freud had an intense Jewish identification dating from his childhood.
- 43. In addition, there was a shift toward mysticism (often seen in times of persecution; see Chapter 3) and asceticism and an increase in what can only be termed hypervigilance of female behavior related to sexuality. This last is particularly interesting because it suggests a concern that females might defect from the group strategy in times of crisis. Females were not allowed out of the house unless they were too poor to have servants do the shopping. Women out of the house were to remain visible from the street at all times.

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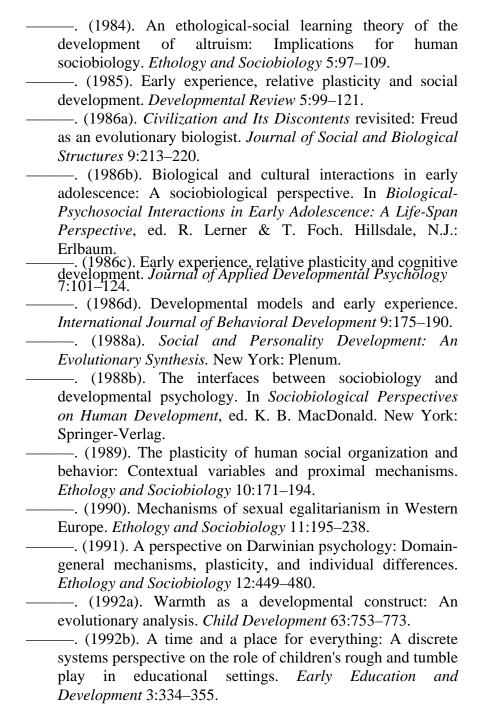
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