

Book Review

Isaac Chavel

Moshe Koppel, *Meta-Halakhah: Logic, Intuition and the Unfolding of Jewish Law* (Jason Aronson Inc.; Northvale and London, 1997)

Dr. Moshe Koppel's *Meta-Halakhah* gives a fresh view of Jewish law, the Halakhah, as it has developed through the generations. This work is not a history of the Halakhah, but rather an extended essay on its nature and the process by which it is explicated and/or created. The fundamental question the book seeks to address is: How is it possible to view the complete Halakhah as given at Sinai, and at the same time to recognize the phenomenon of genuine *hiddush*, novelty, in the Halakhah itself.

Dr. Koppel uses some elementary notions from mathematical logic to create a framework in which this fundamental contradiction finds its resolution. His central thesis is that "the fundamental ideas of Judaism can be understood in light of the assumption that the process by which Halakhah is generated is autonomous, that the Halakhah is not modelable" (p. 34). This requires some explanatory comments .

Three relevant positions can be taken with regard to the Halakhah. It can be modelable and computable, or modelable but not computable, or nonmodelable. The notions of modelability, nonmodelability, computability, and the related concept of autonomy, are discussed in the book in some detail. Here, I only explain these terms in relation to the nature or structure of the Halakhah. So phrases such as "modelable and computable", "modelable but not computable", "nonmodelable" should be treated for the moment as no more than labels for the descriptions that follow. There are corresponding discussions for the autonomy, modelability, etc., of human behavior, but I leave that completely for the book. The descriptions given here will hopefully suffice for this review. Also, when I use the phrase "fundamental law(s)" given at Sinai I am referring to the laws given to Moses, be they general definitions and particular details of the commandments, or the particular cases from which we are to extrapolate the general definitions.

If we say that the Halakhah is modelable and computable then we are saying that a finite number of fundamental laws given to Moses at Sinai--written and oral--suffice to uniquely determine the full Halakhah for all time.

One might say, therefore, that there exists a finite computer program from which we can generate the complete Halakhah. Thus, any statement of the Law, and, particularly, any valid halakhic decision, is directly deduced, or: computed, from those Sinaitic laws. In particular, in any difference of opinion on a particular issue to be decided, only one of the opinions can be considered legitimate and the others must be rejected as incorrect.

If we say that the Halakhah is modelable but not computable then we are acknowledging that there is a part of the Halakhah in which none of its statements can be deduced from previous fundamental laws, and none of the statements in this part of the Halakhah can serve as a basis for new decisions (they are not in the computer program that generates subsequent Halakhah). The only way to describe this part of the Halakhah is to enumerate each statement in it. To say it more colorfully, each statement in this part is a "stand-alone". But we still insist that there are only a finite number of fundamental laws that serve as the basis of the computable Halakhah. Since there are a finite number of fundamental laws serving, for all time, as the basis of that part of the computable Law, a new phenomenon not previously considered by the Halakhah and not directly deducible from its fundamental laws would have to be consigned to and remain in the "stand-alone" Halakhah; any decision concerning its various aspects would have no contribution to make in the future to the computable part of the Law, since the basis of the computable part of Law is restricted to the original fundamental laws.

To say that the Halakhah is nonmodelable is to say (at least) that there are always problems in the Halakhah which cannot be solved using the currently known corpus of the Halakhah; and that, when a decision on a new problem is concretized, it might be incorporated into the computable part of the Halakhah to serve as a basis for solving future questions, for future computations, to expand henceforth the computable Halakhah. Furthermore, the pool of new questions which can be incorporated into the computable Halakhah is inexhaustible, so that the process never stops. Thus the complexity of the explicitly computable Halakhah is always increasing (the size of the computer program that renders decisions in the Halakhah is always growing), and always requires new additional fundamental laws, beyond those given at Sinai, to serve as a basis for all subsequent computations.

It is to this last statement that Dr. Koppel refers when he says that the Halakhah is not modelable. One must note that at any given moment the sum corpus of the Halakhah is finite, and therefore modelable. That is, we may divide the Halakhah into its computable part and its "stand-alone" part. At any given moment, the computable part of the Halakhah only requires a finite computer

program to generate it. Thus, we can only consider the nonmodelability of the Halakhah if we consider the totality of the Halakhah over all time.

In an attending footnote (p. 34) Dr. Koppel increases the stakes. He states "that a proper understanding of Judaism requires [it. mine] the assumption that Halakhah is autonomous." (Autonomy is defined by nonmodelability [p. 25]). He reiterates this more assertive claim, albeit in different language, later in the body of the book (p. 118), where he states that "I call this claim that the Torah and the people who live by it form a single autonomous system the fundamental proposition of meta-Halakhah [it. author's]. We will see that this fundamental proposition is the cornerstone of the Jewish faith." This stronger claim poses a serious challenge. If his claim that a proper understanding of Judaism requires autonomy of the Halakhah is correct but the assumption that the Halakhah is autonomous is incorrect, then there will be no possibility for a proper understanding of Judaism. Actually, the most one can claim is that if the halakhic process is to remain as we currently know it, then we require autonomy, that is, nonmodelability. I am not convinced that this latter claim has been proven; nonetheless, the original weaker statement that nonmodelability offers a possibility of understanding the halakhic process has more than enough to offer us so as to warrant our serious consideration .

The treatment of these matters is found in Part I of the book. The exposition is clear, with attention given to careful definition, and illustration in other contexts, of these notions. The treatment is not overburdened with technical details, nor is it so superficial as to give no genuine entree to the argument. Those untrained in the sciences and/or mathematics might have to work a bit (not too much—just a bit), but it is well worth the effort. We have here a new very broad view of the Halakhah, and one must consider the potential insights that it might contain. (Dr. Koppel forgot to remind the reader that a prime number is a number that cannot be factored into the product of two numbers. Thus $6=3*2$ is not a prime, and 13 is a prime.)

Towards the end of Part I, Dr. Koppel introduces the added element—intuition--which is required to move, from questions not subject to computation within the existing Halakhah, to consensus and decisions to be subsequently incorporated into the computable part of the Halakhah. The community which follows the Halakhah, the Jewish people, interprets the Halakhah intuitively by living it. This presupposes a rich cultural communal life of the Halakhah, in which a fluency in its ways is part of one's inheritance, so much so that responses to new situations seem spontaneous. Different approaches to new problems become resolved either the long way, by emerging communal consensus, or the short way, by crystallization of the problem so that it receives a formal resolution by the decisors, the poskim. (One might even argue that

given equal knowledge of and rational abilities in the Law, then two poskim differ only in their intuition.) When the problem is genuinely new, that is, it cannot be explicitly derived from the known Law, then one's only recourse is to intuition--without the usual benefit of an existing structure of the Law pertaining to the issue at hand. The new decisions, whether arrived at by consensus or explicit decision, are then incorporated into and formalized as part of the new structure, and produce "new" Halakhah. The result is a constantly developing Halakhah that is neither arbitrary nor stultified. The role of intuition cannot be understated; without it there would be no hope of passing from the genuinely new questions in the Law to decisions which influence the later course of the Law. Of course, as Dr. Koppel notes, the existence of intuition requires the possibility that "*some phenomena are not modelable but are [rev: nonetheless] comprehensible in an immediate nonreducible way*" [it. author's] (p. 32). In particular, there is knowledge of Torah beyond the computational argumentation of the Halakhah (the knowledge of Moses, our teacher, encompassed the total Halakhah intuitively); and this intuitive knowledge is expressed by both common practice-and explicit decisions----concerning noncomputable problems.

The rest of the book, Parts II and III, discusses the history of the Halakhah (its structure described above) and its relation to human autonomy. Part II presents an "idealized history" of the early development of the Halakhah, which considers most, if not all, talmudic statements about the Halakhah from the period of Moses, our teacher, through the "vineyard in Yavneh." These statements are interpreted in light of Dr. Koppel's conceptualizations, the framework sufficiently broad to encompass a large amount of the material.

Part III discusses the autonomy of the human being, the potential for nonmodelable human behavior. Thus, the phrase "human autonomy" is now interpreted within the mathematics of autonomous systems. The crux of the presentation is that "human beings are finite, and hence modelable; their potential for nonmodelability [rev: that is, their autonomy] can continue to be realized in this world only in the context of an autonomous community or culture that persists after they die" (p. 111). Therefore, it is necessary to consider the life of the Halakhah in a communal context, in a single autonomous system consisting of the Torah and the community of people who live by it (p. 118). The notions of nonmodelability--autonomy, therefore, tie the logical structure of the Halakhah to the community which lives by it. The discussion of the autonomy of human behavior is preceded by introductory remarks on existential psychology; later the discussion returns to the roles of unself-conscious fluency in the ways of the Halakhah by the masses and the intuitive decision making of the learned. It also contains perspectives in ta'amei

ha-mizvot ("reasons" for the commandments) and "principles" of the faith, and consideration of some current issues. The ideas presented are very interesting and, when the exposition is more midrashic than scientific/philosophic, the quality of midrash is quite high.

The most problematic aspect of the book is Dr. Koppel's treatment of talmudic statements. He is aware that one cannot interpret the talmudic statements on the nature of the Halakhah assuming that the Rabbis were conversant with modelability theory, yet he tries to show that his constructs are implicit in their statements. One might raise a number of objections to this approach:

(i) Is there any guarantee that expert practitioners of the Halakhah are the experts on the nature of Halakhah, on meta-Halakhah? Everyone would answer "yes" to this question-rishonim ke-mal'akhim. But, even if the Rabbis are also expert on the nature of the Halakhah, how can we establish that, in spite of all the differences of opinion expressed in the full talmudic corpus of the broad contours and the details of the Law, there was universal agreement on characterizing the very nature of the Halakhah? Dr. Koppel states that "although I cite relevant meta-Halakhic statements in support of my theory, I do not subject these statements to philological or historical scrutiny: . . . Whether the historical content of these statements is meant to be, or can be, taken seriously as history, concerns me less than how the Rabbis understood the development of Halakhah" (p. xiv). But even if one is not so interested in the historicity of talmudic statements, one does require philological analysis and contextual historical studies to establish the precise content and meaning of those talmudic statements, all the more so if the statements are to be interpreted in categories of twentieth century mathematical logic. The Mishnah and Talmud, after all, range over a period of 400-800 years (depending on one's scholarly approach; my thanks to Y. Elman for an update), and includes 2000-3400 participants in its discussions (see L.I. Levine, *The Rabbinic Class of Roman Palestine in Late Antiquity* (Jerusalem, 1989), 66-69; again, my thanks to Y. Elman), and it is quite unrealistic to postulate such total uniformity on the nature of the Halakhah.

(ii) Similarly, in Part II, where Dr. Koppel constructs an idealized history of the early Halakhah, his main tools are the talmudic statements on the development of the Halakhah. He states that he writes in the tradition started by R. Sherira Gaon, wherein "an ostensible concern with the *history* of the Halakhah serves as scaffolding for the attempt to understand the *nature* of Halakhah" [it. author's] (p. xv). This is a strange statement, for one is not sure whether Dr. Koppel is discussing his own view or that of R. Sherira Gaon. One can doubt whether R. Sherira Gaon was aware that he was not interested in the history of the Halakhah as much as in its nature. It is not certain that R. Sherira

was even aware, albeit intuitively, that there is such a thing as "meta-Halakhah." In fact, one could just as easily argue that the reverse is true, that R. Sherira's real interest was the history of the Halakhah, as he understood it, and any conceptualizations on its nature were the scaffolding. Then one has to say that Dr. Koppel is referring to his view of R. Sherira. Now one might argue that in literature and law the author has lost ownership of his/her text as soon as the ink is dry, that its meaning is henceforth in the hands of the reader/interpreter; but here Dr. Koppel is close to saying that the study of historical materials (R. Sherira's epistle) is no more than the meta-historian's (Dr. Koppel's) determination of the ideas he sees (modern deconstructionists would say "wishes to see") in the material. That would be implying more than, I think, Dr. Koppel wishes to admit.

Dr. Koppel's approach is valuable in that it stands on its own. One spends one's life studying and living by the Halakhah, the study of which includes its various states in different eras and includes the story of the people who lived by the Halakhah. Dr. Koppel has argued effectively that modern modelability theory is an excellent tool to articulate a broad sweeping macroscopic view which incorporates many of the salient features which have been part of the Halakhic process. He need not have claimed to provide a total view which includes all microscopic developments (which are usually studied by philological, critical methods) along the way, nor need he pretend to incorporate all previous talmudic comments on the nature and history of the Halakhah.

Nevertheless, Dr. Koppel's "idealized history" is valuable as a mythology of the Halakhah that may be created from his conceptualizations. By "mythology of the Halakhah" I mean an interpretation of the Halakhah which, more than an explanation of the structure of the Halakhah as an objective datum, is an expression of the communal experience and consciousness of those who live by it. Normally, one thinks of a mythology of the Halakhah as emerging from--and not prior to--the community's experience of the Halakhah and the sense of direction it provides to its individual and communal lives, in short, its tradition. Indeed, where different communities persist for hundreds of years, one would not expect identical mythologies----one expects different traditions to correspond to the different cultures and histories experienced within the halakhic framework. Modern life is inhospitable to myths emerging from a traditional communal reality; rather it has reversed the order. Contemporary myths purposefully direct communal consciousness to the program the ideology wishes to promote--be it economic, social, political, or religious, or any combination thereof. This programmatic purpose is that which

distinguishes contemporary ideology from tradition. To be sure, effective rhetoric can present ideologies as tradition. See, volume for example, L. Kaplan's article on dates Torah in the 1989 Orthodox Forum volume for a description, history, and analysis of the currently regnant Orthodox ideology, and the claim that it is a long-standing integral part of the tradition. Dr. Koppel's mythology of the Halakhah has the advantage that it lacks any such program. In fact, its emphasis on fluency and intuition in the life of the Halakhah directs one towards allowing communal spontaneity to re-emerge in the process, to experience the richness of the halakhic process and its community as its own reward--in sharp contrast to contemporary trends. In this light, Dr. Koppel's treatment of the talmudic material has much to offer to us. In some ways, he provides a mythology of the Halakhah which emerges from the mimetic religious life (see H. Soloveitchik's 1994 article in Tradition) which no longer exists. But Dr. Koppel's book is not an elegy for a lost golden age; it is a recognition of the authenticity of that life, and a call to reclaim that authenticity insofar as is possible.

In sum, this is an engaging book. The current public debates in Jewish life over the Halakhah and its implementation seem centered on ownership of the Halakhah, on which institutional organizations are uniquely authorized to set the programs which the Halakhah will serve, with all that goes with this ownership--authority. Moreover, the current creativity in the mythology of the Halakhah is exclusively dedicated to this institutional battle. Dr. Koppel's book returns us to the original yir'at shamayim, the fear of Heaven, embodied in the Halakhah, the living process which has sustained us to this point and which can continue to, if only we let it.

Some interest has been expressed as to whether the mathematics in Dr. Koppel's Meta-Halakhah is substantive or heuristic, namely, does one require the mathematics or is it just a convenient helpful mode of expression. Dr. Koppel himself expressed two attitudes on this matter. In his preface, he states (p. xiv), "nor do I suggest that the concepts borrowed from mathematical logic are *necessary* [it. author's] to understand the meta-Halakhic issues I try to explain." He continues to say that, as a mathematician, these concepts serve as useful analogies and metaphors. In fact, "others may have a sufficiently developed intuition for Halakhah itself that the analogy with mathematical logic does more harm than good." However, once the author warms to the subject in the body of the book, these hesitations are long forgotten. (See the statements from pp. 34, 118, quoted earlier in this review.) As to the reader's view of the matter, a first step was given at the outset of this review in describing, without any mathematical formalism, the consequences of

nonmodelability of the Halakhah. The reader would then decide if this in fact is a satisfactory sufficient description of the Halakhah as he/she knows it. The next step is to then attempt to carry out the corresponding discussion of human autonomy, and to express the interplay of the two discussions--the structure of the Law and personal autonomy--without the mathematical conceptualizations. If this can be done, then the mathematics is indeed heuristic.

In truth, the question of the mathematical character of the book might be more complex than asking if one has to run out and take a course in mathematical logic in order to understand the nature of Halakhah a la Koppel. One extreme is that the mathematics is inessential, and so is the mathematician. Anyone could have thought of this approach, and expressed it without any mathematics. It just so happens that a mathematician looked at the problem this way, and chose, what for him is, a natural language with which to express himself. The other extreme is that the very essence of the phenomenon is mathematical in character, and cannot be expressed without the formalisms. But there might be other possibilities. For example, the phenomenon is essentially mathematical in character, but lends itself (within the scope of Dr. Koppel's inquiry) to a nontechnical description, and therefore does not seem to require any mathematics. Or, for example, the phenomenon is not really mathematical at all, but has sufficiently rich structure that a mathematician might be the best or most likely one who, by natural talent and/or education, is equipped to perceive and then describe it. Thus, the proper version of the question on the mathematical character of Dr. Koppel's book might not emphasize the formal exposition of the structure of the Halakhah as much as it would focus on the mathematical modes of thought--the peculiar modes of analysis and intuition--that provide the fundamental insight.