

The Logical Structure of Talmudic Reasoning

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Orthodoxy, Theological Debate, and Contemporary Judaism :

A Critical Exploration of Questions Raised in the Thought of Louis Jacobs

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SUMMARY

Halakhic reasoning, in its mature Talmudic form, rests on a foundation of five presuppositions, or axioms, including the comprehensiveness and non-redundancy of scripture, and is guided by two formulas. The first formula is the **formula of bijection**, $A \sim B$, which establishes a one-to-one correspondence between A the textual elements of the Torah and B the propositions of law comprising the system of *halakha*; the second is the **formula of adequate justification**, $\exists f_x (f_x \supset L)$, which states that there is a feature f_x that serves as adequate justification for the application of a law L . The 'Thirteen Rules of Rabbi Ishmael' are analysed in terms of these formulas. An outline of stages in the evolution of rabbinic interpretation in the Talmudic period sets the Thirteen Rules in their historical context as a third-century attempt, subsequently refined, to systematize rabbinic scriptural exegesis and legal reasoning.

A more rigorous logical treatment will be found in my article, 'The Evolution of Talmudic Reasoning', in *History and Philosophy of Logic* 32/1 (February 2011), 9-28.

On the Nature of Talmudic Reasoning

Louis Jacobs devoted much of his scholarly output to what he called the Talmudic argument, and made significant contributions to our understanding of the literary construction of the Talmudic sugya. I should like to record my personal gratitude to him as one of the first to take an interest in my own work on the Analytic School associated with the name of Hayyim Soloveitchik and to offer some helpful suggestions and encouragement. I offer this piece in his memory.

The Rabbinic Project

Modern readers of the Talmud – even yeshiva students – are apt to lose patience with the arguments that fill so many of its pages about how this, that or the other rabbi read this, that or the other verse to support this, that or the other halakhic ruling. But obviously the rabbis themselves were greatly exercised about such matters, to the extent of erecting an elaborate edifice of rules to justify their readings, and engaging in a major project to demonstrate that the system of law they had articulated corresponded perfectly with the biblical texts of which they believed themselves the faithful guardians.

They formalized their inferential techniques, but did not create an abstract system of reasoning of general application as Aristotle had done, nor would they have wished to create one; such logic as they had was ancillary to the sacred activity of Torah study, not an end in itself.

One of my amusements when I was a philosophy undergraduate was to recast a newspaper article in the form of Aristotelian syllogisms. This never demonstrated that writer's thesis was correct, but it did show that if you choose your axioms or premises skilfully you can make anything appear rational. What I shall attempt in this exercise is to clarify the axioms and premises that lie behind the rabbinic system of relating *halakha* to scripture. My description in logical terms of what they were doing will illuminate the underlying logical structure of their reasoning processes, but it will not say anything about their conscious intentions, still less about the objective validity of their conclusions.

We should not assume that all rabbinic reasoning is of a consistent pattern, or that it conforms to the 'Thirteen Rules of Rabbi Ishmael' which I shall discuss later; nor should we assume that Rabbi Aqiva, in second-century Palestine, argued with the same methods or on the same set of assumptions as Abbaye and Rava in fourth-century Babylonia.

I shall restrict my remarks to *halakhic* argument. *Aggada* often enough utilizes the same forms, but also engages in free word associations, narrative exegesis and imaginative flights of fancy. Even with regard to *halakha* I will not offer any account of non-logical aspects of discourse, for instance of the sociological or the psychological assumptions made by the rabbis, interesting as these are.

The First Three Presuppositions (Axioms)

James Kugel [12] has listed four assumptions on which, he claims, ancient interpreters such as Ben Sira worked:

1. The Bible is cryptic - its real meaning is not apparent.
2. It is a single great Book of Instruction, fundamentally relevant.
3. It is perfect and harmonious, free from mistakes or inconsistencies, 'omnisignificant'.
4. It is divinely sanctioned and inspired.

The rabbis flatly contradict the first of these assumptions, at least in the context of *halakha* – the real meaning *is* apparent, provided you know how to read; Torah is not esoteric. They also narrow 'Bible' by privileging the Five Books of Torah (though the rest is consistent and divinely inspired), which they maintain were not merely 'inspired' by God but dictated verbally to Moses.

Their assumptions are:

1. The Torah is free from error.
2. There is nothing redundant in the Five Books of the Torah—every word, every nuance, tells us something, or is required by the structure of the Hebrew language.
3. The Five Books are comprehensive, containing all that humans need to know, or at least all they need to know to conduct their lives in accordance with God's will.

None of these assumptions is stated in scripture, nor are they anywhere listed as a group within the rabbinic corpus. The perfection of Torah is a constant rabbinic theme. That it is free from redundancy is an explicit and unchallenged teaching of the School of Rabbi Ishmael in the Bavli:

תנא דבי רבי ישמעאל: כל פרשה שנאמרה ונישנית, לא נישנית אלא בשביל דבר שנתחדש בה¹

¹ Sota 3a, BQ 64b, Shavu'ot 19a, Menahot 10a, Bekhorot 43b.

From a logical point of view, the sentences expressing the assumptions articulate three *axioms* of a rabbinic theory of interpretation. They are three sentences belonging to the set of sentences that comprise the theory and, as axioms, are included without proof.²

Let us set out the three axioms formally:

Axiom 1: Scripture is free of error.

That is:

For any statement S , if S is a statement in scripture, S is true.

Axiom 2: No scriptural expression is redundant.

Or:

For any expression E , if E is an expression in scripture, E conveys a unit of information, and there is no expression E_1 that conveys the same unit of information

The 'unit of information' should be understood as 'unit of the Torah's system of law', or 'member of the set of laws of the Torah'. It is immaterial for our purposes whether 'unit of law' is thought of in ontological terms (the reification of law) or as 'proposition of law'; either way, it is distinct from the sentences and expressions of the written Torah.

Axiom 3: Scripture is comprehensive.

That is:

For any unit of information i , if $i \in B$, there exists an expression E in scripture that points to it

Again, 'unit of information' is understood as 'unit of the Torah's system of law'

² That is, no proof within the system. The demonstration e.g. that the text is a perfect transcription of God's words is not relevant to argumentation within the system, but functions as a theological justification, external to the system itself, and is therefore not included among the axioms.

Basic Structures

The logical structure of the rabbis' hermeneutic of the Talmudic can be exhibited in terms of relationships within and between two sets ('classes', 'groups', or 'domains').

Set *A* is the set of sentences, terms, expressions in the written Hebrew text of the Torah, i.e. the Five Books from Genesis to Deuteronomy.

Set *B* is the full set of laws (i.e., propositions, or reified laws, but not the written texts) comprising the Torah.

These sets are collections of items (texts, laws). These items lack characteristics beloved of mathematicians, such as recursive enumerability, strict order or well-foundedness, though self-reference is certainly possible, as when the Torah says 'This is the Torah that Moses set before the Israelites'³. To put it another way, unlike e.g. the set of real numbers, where the whole set can be generated from one number by a simple algorithm, the items in these sets cannot be generated from one another; they are more like random collections.

Set *A* has the following characteristics:

1. It is finite and enumerable; the whole text is 'out there'
2. It is constrained by the rules and structures of natural language
3. It is hierarchical, ranging down through books, pericopes,⁴ sentences, phrases, words, individual letters and their shapes

Set *B* has these characteristics

1. It is finite and enumerable, consisting of the body of law revealed to Moses at Sinai
2. It is often possible for a specific law (for instance, 'do not steal') to take the form of a subset of laws comprising a small, definable group of members
3. Relations between laws can sometimes be established on the basis of 'second-order' principles that govern more than one law

³ Deuteronomy 4:44. In fact this is not a true self-reference, but a reference to the laws comprised in chapters 12-26 (see Rashi *ad loc.*), but the logical point remains.

⁴ The familiar chapter divisions postdate the era of the Rabbis.

4. Though the number of laws is finite, applications and refinements of the law are unlimited, allowing room for *hiddushim*, new insights or applications

In both cases, 'enumerable' is a statement of principle rather than fact, since there is no one on earth who could in fact list all the significant features of the text or the discrete items of law. Let us say that God could enumerate the sets, the rabbis attempted to, but the rest of us remain somewhat in the dark. In God's mind, at least, these sets are crisp.

Two categories of argument arise:

First, there is the justification from scripture; how do the members of Set *A* point to the members of Set *B*, or at least, which member of set *A* points to which member of Set *B*? Since both sets consist of enumerable members, and following Axioms 2 and 3 there ought to be the same number of each, it should be possible to establish a one-to-one relationship between the members of *A* and *B*, that is, between the written elements of Torah and the laws it contains. This is a much stronger relationship than that which a map has to the territory it represents. Every item on a map points to something in the territory, but not everything in the territory is represented on the map. Here though, the relationship works both ways. Everything in the text points to something in the law, and everything in the law is represented by something in the text.

This two-way relationship is known to logicians as a *bijective* function:

$$A \sim B$$

I shall refer to this as the **formula of bijection**. Much Talmudic argument flows from the assumption that such a relationship actually exists.⁵

In addition to this, there is what we may call the 'inner logic' of the system, arising only from internal relations within Set *B*. A typical instance would be the *qal va-homer* or *a fortiori* argument: If (such-and-such a law) applies in case *c*₁, which is a lenient case, how much more so will it apply in case *c*₂, which is stringent. This argument makes no reference to Set *A*, as it is concerned with laws, not texts.

Tradition as well as modern scholarship has asked to what extent to which the rabbis based their formulations of law on their understanding of scripture, and to what extent they first formulated law

⁵ However, B. *Sanh.* 34a-b raises the question of whether more than one verse may carry the same inference.

and only then looked for scriptural proof-texts to support their decisions. We will not enter into this discussion, as the forms of argumentation are independent of the processes that led people to use them and of the uses to which they were subsequently put.

The Thirteen Rules — and others

Clearly, the three axioms on their own are inadequate to generate laws from the text of scripture, since they offer no guidance on *how* to make inferences from what is or is not stated in the text, i.e., how to map any *a* on to the corresponding *b*, or on how to define values for each *b*. Rules are required to tell us, for instance, the *extension* of a scriptural expression — is it to be interpreted narrowly or broadly?

Texts listing such rules are attributed to Hillel⁶ (died c. 20 CE), to Rabbi Ishmael ben Elisha (early second century), and to Rabbi Eliezer the son of Rabbi José of Galilee (late second century).⁷

The best known list is the ‘Thirteen Rules of Rabbi Ishmael’. This figures as part of the ‘Baraita of Rabbi Ishmael’, an introduction to *Sifra*, the halakhic Midrash on Leviticus traditionally ascribed to Rabbi Ishmael, but not composed before the late third century. Both the attribution to Rabbi Ishmael and the conjunction of *baraita* and midrash may be artefacts of early copyists, though the earliest extant manuscripts⁸ have them. The *baraita*, however, does not merely list the rules, but adds examples for sixteen, rather than thirteen, rules, treating (a) and (b) in Rules 3, 7 and 12 as separate rules.⁹

Here are the Thirteen Rules as set out in the *baraita*. Several are formulated not as rules, but as names for forms of biblical phraseology that allow inferences to be made.

1. *Qal va’ḥomer* (‘light and heavy’ — *a fortiori* argument).

⁶ Tosefta *Sanhedrin* end of chapter 7; *Avot d’Rabbi Natan* 37:10; Introduction to *Sifra* (as below).

⁷ Enelow [7] edited mss. of the 32 rules of Rabbi Eliezer.

⁸ The Codex Assemani on which Finkelstein [8] based his edition is probably 10th century. The earliest dated manuscripts are *Sifra* of 1073 (Vatican Library, no. 31) and *Sifra* of 1291 (Oxford, no. 151), which also includes the Mekhilta. Several sections are found also among the Geniza fragments.

⁹ Louis Finkelstein, though on the whole a conservative commentator, regarded the examples as a later addition ([8] Vol. 1 p. 187). On the numbering, see [8] Vol. 1, 172-4.

2. *G'zera shava* (similar wording in different contexts).
3. *Binyan av* — A model or prototype set out (a) in one text or (b) in two texts.
4. A general term followed by a specific (particular) term.
5. A specific term followed by a general term.
6. If a general term is followed by a specific term and then by [another] general term, follow the specific term.
7. (a) A general term that needs a specific term [to clarify it], or (b) a specific term that needs a general term [to clarify it].
8. If something was included in a general term, and then specified separately to teach something, it teaches us something not just about itself but about the whole general term.
9. If something was included in a general term, and then specified separately to demonstrate something similar, it alleviates the law, and does not make it more stringent.
10. If something was included in a general term, and then specified separately to demonstrate something dissimilar, it both alleviates the law [in some respect] and makes it more stringent [in another respect].
11. If something was included in a general term, and then specified separately to provide an argument in a new matter, it cannot be reapplied to the general term unless scripture explicitly applies it.
12. Something learned from (a) its context, or (b) from its ending (i.e. what follows it).
13. Similarly, if two texts contradict each other, [the matter cannot be resolved until] until a third text comes to harmonise them.

The terminology is somewhat confusing, and has been variously translated, so an illustration may prove helpful:

Example 1

Rule 6 is applied in the Babylonian Talmud (*Eruvin* 27) to Deuteronomy 14:26, which sets out how you should spend tithe money in Jerusalem:

You shall spend the money on whatever your heart desires, on cattle, sheep, wine or strong drink, whatever you wish ...

‘Whatever your heart desires’ is a general term; ‘cattle, sheep, wine or strong drink’ is specific; ‘whatever you wish’ is general. Rule 6 says that we should ‘follow the specific term’. Hence, the law

is that the money may be spent on animal and plant foods but not, e.g., on water or salt. There is still room for ambiguity—e.g. is fish-brine food or water?—but the general principle is clear. The rule, like all in this class, tells us how broadly or narrowly we should understand a particular term.

Are these *logical* rules, as was argued by Adolf Schwarz [19] over a century ago? Apart from *qal va-homer* (*a fortiori* argument), they are certainly not deductive (though of course it may be possible by supplying suitable axioms to *construct* a system within which they operate deductively); induction offers better models, and Schwarz as well as subsequent commentators explored this possibility, if unconvincingly.

David Daube [4] [5] and Saul Lieberman [12] drew some plausible analogies with methods used by the Alexandrian rhetoricians to interpret Homer and other Greek classics. The analogies should not be pushed too far, as there is much that is not paralleled, but as both they and Schwarz agree, a Greek connection is undoubtedly present; for instance, the terminology of ‘general’ and ‘specific’ (*k’lal* and *p’rat*) reflects Aristotle’s terminology in Chapter 7 of *De Interpretatione*; the term *g’zera shava* (inference based on similar terminology in two different contexts), or the similar term *heqesh* (‘knocking together’, or comparing, in a single context), is etymologically similar to *sullogismos* (‘putting words together’), though the method of inference it denotes is certainly not syllogistic. Perhaps the Thirteen Rules should be compared with rules of rhetoric rather than logic, enthymeme rather than syllogism.

The difference between the logical status of Rule 1, *qal va’homer* and the prima facie non-deductive character of the other rules, especially Rule 2, *g’zera shava*, has long been recognized, and is reflected in the Talmudic debate (*Pesahim* 66a; *Nidda* 19b) as to whether a suitably qualified scholar may apply a *g’zera shava* on his own, i.e. without a received tradition, to interpret Torah. The mediaeval authorities followed the opinion that such an individual might use an *a fortiori* argument (*qal va’homer*) to interpret scripture even if he had not received a tradition to that effect, but that it was not acceptable to interpret on the basis of similarity of expression (*g’zera shava*) other than where there was an existing tradition to say that the similarity was significant; with regard to the other rules, Rashi held that they could not be applied without a received tradition, but Tosafot held that they could.¹⁰ In practice, all except *qal va’homer* very quickly fell into disuse, so that even in the later layers of the Talmud the use of such rules is invariably attributed to earlier Sages.

¹⁰ *Shabbat* 132a Rashi s.v. *ela atya*; *Sukka* 31a, Rashi s.v. *Lo maqshinan*; Tosafot s.v. *v’Ri*.

The rules may be divided for convenience into four categories:

1. Rules dependent on extensive and restrictive interpretation of terms: 4, 5, 6, 7, 8, 9, 10, 11
2. Rules dependent on legal logic: 1, 3
3. Contextual rules: 12, 13
4. Rules dependent on word association: 2

Presuppositions (Axioms) 4 and 5

Before we can appreciate the logical structure of the rules it will be necessary to supplement the three axioms set out above with two additional ones.

Axiom 4: Terms used in biblical statements of law stand for sets that comprise small, definable numbers of subsets.

For instance, 'whatever your heart desires' in Example 1 above covers the subsets 'animal foods' and 'plant foods'. The laws expressed by these subsets are the 'units of information' referred to in the clarification of Axioms 2 and 3 above.

Axiom 5: The Laws of Torah can be fully stated in terms of small, definable numbers of sets of cases.

In the same illustration, the law of second tithe is comprehensively stated by reference to 'animal foods', 'plant foods', and 'foods that are neither animal nor plant'.

Of course, no such axioms or hidden premises are actually stated, but as we shall see they are necessary if we wish to exhibit the logical structure of those rules that involve general (*k'lal*) and specific (*p'rat*) terms, that is, terms denoting broad or narrow classes or sets.

Group One — Specific and General v. Extensive and Restrictive

Rules in the first category fall within the realm of the **formula of bijection**, $A \sim B$, since they explore the one-to-one correspondence between set A the textual elements of the Torah and set B the elements of law.

All the rules in this category depend on the classification of terms as *k'lal* (general) and *p'rat* (specific); they are about the *extension* of terms, that is, how broadly or narrowly terms should be understood. However, an alternative vocabulary is also common in the rabbinic sources, in which the operative terms are *ribbui* (extension) and *mi 'ut* (restriction), often occurring in the form of

verbal cognates rather than substantives. Here I shall assess the relationship between the two vocabularies, and enquire whether they represent two distinct methods of interpretation.

Example 2

Leviticus 5:1-10 catalogues rituals of expiation for various offences, including (5:4) the inadvertent violation of various kinds of oath. This example concerns the definition of the kinds of oath to which the pericope applies. Verse 4 may be set out as follows:

4a. *Or if anyone swear clearly by his lips*

4b. *To do bad (להרע) or to do good (להיטיב)*

4c. *Whatever anyone may utter clearly by way of an oath*

Rabbi Ishmael maintains that the verse applies only to oaths made about the future, since 'to do bad or to do good' indicates a statement about what one will do, not about the past; Rabbi Aqiva maintains that oaths concerning the past are included, too. This is how the Mishna reports their debate:

Rabbi Ishmael says, He is only liable for [violation of an oath relating to] the future, for it says, *To do bad or to do good*. Rabbi Aqiva said to him, If [you take it so literally, it would apply only to oaths to do] bad or good. How would you know about those that do not [propose] bad nor good? [Ishmael] replied, From the inclusiveness (*ribbui*) of scripture. Aqiva responded, If scripture includes the one it includes the other¹¹. (Mishna *Shavu'ot* 3:5 (25a))

The Mishna does not attribute to either Ishmael or Aqiva the methodology of *k'lal uf'rat*.¹² The Bavli, however, introduces methodologies:

Surely what Rabbi Aqiva said to Rabbi Ishmael was correct?

¹¹ If it includes, beyond the strict sense, indifferent oaths (i.e. neither bad nor good) it also includes those about the past.

¹² At first glance it may appear that Ishmael is using the alternative terminology of *ribbui* and *mi'ut*, but this would be to read into the Mishna text rather more than is actually there; no abstract rule or principle is cited, merely the fact that the language of scripture, or perhaps language in general, may be inclusive.

Rabbi Yoḥanan said, Rabbi Ishmael, who studied under (lit. ‘served’) Rabbi Neḥuniah ben ha-Qaneh, who interpreted the whole Torah according to [the system of] *k’lal uf’rat*, likewise interpreted according to *k’lal uf’rat*; Rabbi Aqiva, who studied under Naḥum of Gimzo, who interpreted the whole Torah according to [the principle of] *ribbui* and *mi’ut*, likewise interpreted according to *ribbui* and *mi’ut*.

Where do we find that Rabbi Aqiva interpreted according to [the principle of] *ribbui* and *mi’ut*? [In the] baraita which taught: *Or if anyone swear clearly by his lips* — includes; *To bad [purpose] or to good* — excludes [whatever is neither to a good or a bad purpose]; *Whatever anyone may utter clearly by way of an oath* — includes again. Include, exclude, include includes everything. What does it include? Everything. What does it exclude? It excludes [only] a *d’var mitzva* (an obligatory act¹³).

But Rabbi Ishmael interpreted according to [the system of] general (*klal*) and specific (*p’rat*). [As the] baraita taught: *Or if anyone swear clearly by his lips* — general; *To bad [purpose] or to good* — specific [i.e. whatever is to a good or a bad purpose]; *Whatever anyone may utter clearly by way of an oath* — general again. General, specific, general, follow the specific term; as the specific term is explicit — it refers to the future — [the law applies] only to [oaths] referring to the future. [So] the general term includes [oaths] referring to the future even if they are [to a purpose that is] neither good nor bad, while the specific excludes [oaths] referring to the past even if they are [to a purpose that is] good nor bad. (Bavli *Shavu’ot* 26a)

Axiom 4 stated that terms used in biblical statements of law stand for sets comprising small, definable numbers of subsets. Axiom 5 tells us that the law on reparation for inadvertent violation of oaths consists of a small, definable number of subsets. These subsets are five kinds of oath:

- a. Oaths carrying a commitment to future action, where that action is good or bad
- b. Oaths carrying a commitment to future action, where that action is neither good nor bad
- c. Oaths carrying a commitment to future action, where that action is obligatory (*mitzva*)
- d. Oaths asserting something about past action, whether good or bad
- e. Oaths asserting something about past action, where that action was neither good nor bad

¹³ An oath to perform an obligatory act is ipso facto invalid.

Both Ishmael and Aqiva agree that the law cannot apply to all five subsets a, b, c, d, e; Ishmael excludes c, d, e and applies the law only to a and b, while Aqiva excludes only c, and applies the law to a, b, d, e.

The effect of the rules, then, is as follows:

- 1) *K'lal uf'rat* (Ishmael) limits application of the law to the specified subset(s), though it is prepared to interpret them liberally if a second *k'lal* follows.
- 2) *Ribbui umi'ut* (Aqiva) does not limit application of the law to the specified subset(s), but takes the specification as an indication that *some* limitation must be applied, even though a second *ribbui* follows.

Put another way, one could say that while both rules indicate a limited selection of subsets, *k'lal uf'rat ukh'lal* imposes a more extensive limitation than *ribbui umi'ut v'ribbui*.

Michael L. Chernick [1] has defended the conventional view:

‘In the tannaitic period KPK and RM midrashic methodologies were two clearly distinct hermeneutic approaches. In time they became more and more alike until they were viewed as parallel forms of interpretation.’¹⁴

In the light of our analysis above it seems clear that there is no radical difference of approach between the *k'lal uf'rat* rules and the *ribbui umi'ut* rules. On the contrary, the difference is one of degree rather than principle.¹⁵ This is further borne out in a responsum of Rabbi Abraham, the son of Maimonides (1186-1237), who compares *k'lal uf'rat ukhla'l* with *ribbui mi'ut v'ribbui*; Rabbi Abraham's understanding is that *k'lal uf'rat ukhla'l* limits to the *p'rat* then extends it, while *ribbui mi'ut v'ribbui* restores the *ribbui*, albeit incompletely.¹⁶

¹⁴ [1] English Abstract. KPK stands for *k'lal p'rat k'lal* and RMR for *ribbui mi'ut ribbui*.

¹⁵ I am not convinced by Andrew Schumann's ([18] p. 54) suggestion that *k'lal uf'rat* interpretation is analytic and *ribbui umi'ut* synthetic. Both, it seems to me, are synthetic; 'oath' is not *defined* as about future or past action etc., and one does not arrive at, e.g., 'Oath carrying a commitment to future action, where that action is obligatory' by an analysis of 'oath'. Nor can I agree that either mode of interpretation is *a priori*.

¹⁶ *Teshuvot rabenu Avraham ben ha-Rambam*, Hebrew tr. by S. D. Goitein, ed. A. H. Freimann; Jerusalem: Mekizei Nirdamim, 5698/1938, No. 95, pp 136-41.

In the final section I shall argue on historical grounds that there are not two methodologies but two descriptive languages; only in the third century, well after the time of Ishmael and Aqiva, was an attempt made to distinguish methodologies.

The basic analysis offered here can be applied to Rules 4-11 and to the analogous procedures that use the vocabulary of *ribbui umi'ut*. There are additional issues to be clarified, such as the meaning and logical implication of 'general term that needs a specific term' (Rule 7) **Error! Reference source not found.**, and the relationship between rules that depend on the extensionality of language (e.g. Rule 6) and those that depend more on context (e.g. Rules 8-11) [1] .

Group Two — *Qal va-ḥomer* and *Binyan Av*

Are there superfluous rules?

Joseph ben Meir Teomim (the *Pri Megadim*) (1727-93) raised the issue of why, if *binyan av* (Rule 3) is included, was it necessary to add *qal va-ḥomer* to the list of Rules?¹⁷ His point is that whether you use *qal va-ḥomer* or *binyan av* the inferential process is much the same; you discover some feature of the base case that appears to require application of the law, and then you show that the feature is present in the new case too.

Far from being peculiar to Jewish law, this inferential process is of the very essence of law. *All* systems of law work by applying statutes or precedents to the case in hand. If the judge is applying statutory law he will somehow have to move from the *general* statement articulating the statute to the *specific* case before him; if he is basing his decision on a precedent he will first need to clarify the rationale of the precedent (the *specific* case), then generalize from that, and from that *generalization* move to judgement of the *specific* case before him. The problems arising from these requirements are well known to jurists and can be studied in works such as [3] [14] and [15].

¹⁷ *Shoshanat ha-Amaqim* (Warsaw 5650/1889) *K'lal Aleph* pp. 10-17. He equates *binyan av* with the common Talmudic phrase *ma matsinu* 'just as we find ...' (cf Rashi *Men* 56a s.v. (ותיתי). He remarks that his question was anticipated by 'R. Eliyahu ibn Galipapa in *Y'dei Eliyahu* p. 123b s.v. *ut'muna* in the name of Maharik,' but I have not been able to trace the reference. I am informed by Jonathan Fishburn that *Y'dei Eliyahu* was published in Constantinople in 1728; Eliyahu ben Hayyim Mevorach Galipapa, probably born in Bulgaria, was Rabbi of Rhodes in the seventeenth and eighteenth centuries.

The argument from specific case to general law or vice versa *necessarily* involves consideration of *ratio decidendi*, that is, the legal principle upon which the decision in a specific case is founded.¹⁸

This is exemplified as early as the biblical Book of Numbers. Miriam has slandered her brother Moses, and is to be punished. The punishment is declared by God:

Example 3

And the Lord said to Moses: If her father had spat in her face, would she not bear her shame for seven days? Let her be secluded outside the camp for seven days, then let her come back in. (Numbers 12:14)

The Talmud (*Bava Qama* 25a) cites this as a paradigmatic *qal va-ḥomer*, noting that a *qal va-ḥomer* cannot result in a more stringent punishment than that of the precedent. But what we should notice is that the argument depends on identifying the *ratio decidendi* of the minor case, viz. that if you insult an authority figure you must be shamed, and noting that in the major case (insulting the prophet of God) the same *ratio decidendi* (insulting an authority figure) applies, leading to the same result.

What follows from this is that the *qal va-ḥomer* is only superficially an argument from minor to major. From a logical point of view it depends only on the demonstration that the 'major' and 'minor' cases share a common operative factor; the greater stringency of the 'major' case turns out to be no more than a rhetorical device to convince us that it shares the relevant *ratio decidendi* with the 'minor' case; it is irrelevant to the logic.

That this is so is confirmed by the principle known as *daygo*: דיו לבא מן הדין להיות כנדון '[The penalty for the inferred offence] does not exceed that from which it is derived' (Mishna *Bava Qama* 2:5). If the *qal va-ḥomer* depended on the degree of gravity of the inferred offence, we should expect the penalty for the graver offence to be higher than that for the lesser offence, but this is not so, it is equal. It seems, therefore, that the *qal va-ḥomer* depends only on a feature in common to the case inferred and the case on which the inference is based, and that the additional gravity of the case inferred merely emphasizes the common factor.

¹⁸ This should not be confused with the Talmudic question regarding רבי שמעון דדריש טעמא דקרא (B. Yev. 23a and parallels); the issue there is whether a biblical injunction may be set aside by an individual who thinks its underlying rationale does not apply to him.

If this is correct, *qal va-homer* reduces to a special case of Rule 3 of the Thirteen Rules, the *binyan av*, or prototype/model; the prototype functions as a model precisely in virtue of its *ratio decidendi*. Here is an example:

Example 4

According to biblical law, one who curses his father or mother is liable to the death penalty. Leviticus 20:9 merely states the penalty — it does not actually say ‘Do not curse your father or your mother’ — but the rabbis hold that wherever a penalty is laid down scripture issues a ‘warning’ too. Where is that ‘warning’ to be found? Since it is not explicit, it must be inferred from analogous cases where there is an explicit scriptural warning. There are two such cases, both in Exodus 22:27, one concerning a judge and the other concerning a prince, and these are cited as a *binyan av*, or prototype:

Where do we find a warning? If his father was a judge, he is included in ‘do not revile the gods’ (Exodus 20:27); if a prince, he is included in ‘nor curse a prince among your people’ (Exodus 20:27). So you must infer by *binyan av* from both of them [together]. Prince is not like judge, nor is judge like prince. Judge is not like prince, for you are commanded to obey the ruling of a judge, but you are not commanded to obey the ruling of a prince; nor is prince like judge, for you are commanded not to rebel against a prince, but you are not commanded to obey the ruling of a prince.¹⁹ The common factor is that they are ‘your people’ and you are warned not to curse them; I may therefore include your father, for he is ‘your people’ and [therefore] you are warned not to curse him.

But do they not also have in common that their exalted status renders [one who curses them liable to severe punishment]? That is why it states ‘Do not curse the deaf’ (Leviticus 19:14) — scripture speaks of the lowly ones among your people. Should you think that it is because of his deafness [that he must be given special consideration], ‘prince’ and ‘judge’ prove you wrong; should you think that it is because of their exalted status that [one who curses] prince and judge [is punished], ‘deaf’ proves you wrong. So the argument goes around, this is not like that and that is not like this; the common factor is that they are ‘your people’ and you are warned not to curse them; I may therefore

¹⁹ ‘Rebel’ refers to political disobedience, ‘ruling’ to law. The prince has political but not legal authority, the judge has legal but not political authority.

include your father; since he is 'your people' you are warned not to curse him. (*Sanhedrin* 66a, translated freely)

The logical structure of this argument is similar to that of the *qal va-homer* above.

This form of argument is extremely common in the Talmud Bavli, though it is rarely referred to as *binyan av*. Like *qal va-homer*, it is kind of *ratio decidendi* argument; we establish the reason for the decision in one law, and demonstrate that the same reason applies in the case under discussion, thereby justifying application of the law. The conclusion is always expressed by assigning a value to x in what we may call **the formula of adequate justification**:

$$\exists f_x (f_x \supset L)$$

That is, there is a feature x in the case under discussion that leads to ($\equiv$ justifies the application of) L , the law in question.

Group Three — 'If not relevant here ...'

Group 3 of the Thirteen Rules comprises Rules 12 and 13. These depend on relating a statement to its context, a task for literary semantics rather than logic. The aim of relating the statement to the context, however, is always to complete the task of establishing the one-to-one correspondence between set A , the textual elements of the Torah and set B , the elements of law, and so falls firmly within the realm of the **formula of bijection**, $A \sim B$.

Nowhere is this more obvious than with a procedure the rabbis occasionally adopt whereby a statement appears to be wrested from, rather than related to, its context, and applied to a different situation; it is almost as if scripture were being treated not as a text to be read but as a code to be precisely deciphered, making for an extremely tight one-to-one relationship between cipher and ciphered. This curious procedure is known as *im eino 'inyan* — 'if not relevant here ...'; if a word or expression is superfluous in its own context, it is transposed elsewhere.²⁰

²⁰ Even a single letter may be transposed from one word to another, e.g. *Yoma* 48a. The expression *im eino 'inyan* is not found in the Yerushalmi, but occurs occasionally in Midrash Halakha and more frequently in the Bavli. *Don minah uminah v'uqeih b'atra* (*Yev.* 78b, *Men.* 62a etc.) seems to work in the same code-like way.

Example 5

A worker's right to take refreshment from crops on which he is working is established by two biblical verses:

When you enter your neighbour's vineyard, you may eat grapes at your pleasure, but you must not put any in your basket (Deuteronomy 23:25)

When you enter your neighbour's standing corn you may pluck ears by hand, but you shall not move a sickle over your neighbour's standing corn (Deuteronomy 23:26)

These rights are summed up in the Mishna:

The Torah gives these a right to eat: One who is working on that which is joined [to the ground]²¹ as it is about to be harvested; on that which has been harvested, before work on it is finished; [only] on that which grows from the ground.²² These may not eat: One who is working on that which is joined to the ground before the time of harvesting; on that which has been harvested, after work on it is finished; on that which does not grow from the ground. (*Bava Metzia* 7:2 (87a-b))

An animal has a similar right:

Do not muzzle an ox when it is threshing (Deuteronomy 25:4)

Threshing, of course, takes place after the crop has been harvested, when it is no longer 'joined' to the ground; the ox, that is, has a right to browse what it is working on when it has been cropped. Workers, if we look only to scripture, have a right only to that which has *not* been cropped, viz. grapes on the vine or standing corn. How do we know, asks the *gemara*, that human workers may help themselves (in appropriate circumstances) to what has been cropped and that oxen may browse what is 'joined'? Note that the law is not in doubt, only its scriptural basis.

After rejecting other proposals, an anonymous suggestion is made that the right of workers to cropped produce may be derived from the repetition of the word *qama* ('standing corn') in Deuteronomy 23:26:

²¹ i.e. not yet harvested.

²² This excludes products such as milk.

Scripture says ‘standing corn’ twice. It [the repetition] is not relevant to [establish the right of workers] to that which is joined [since that has already been stated], apply it to [the right of workers] to that which has been harvested. (*Bava Metzia* 88b)

A similar argument establishes the right of oxen to unharvested crops:

Scripture says ‘your neighbour’ twice.²³ It [the repetition] is not relevant to [establish the right of workers] to that which is joined [since that has already been stated], apply it to [the right of oxen] to that which is joined. (*Bava Metzia* 88b)

The argument, though it appears arbitrary, flows quite smoothly from the Five Axioms we have set down. The Torah contains all the items of information that comprise the law; no expression is superfluous; therefore, there must be a one-to-one correspondence between the expressions used by the Torah and the items of information it contains. Interpretation is like a jigsaw puzzle in which you know all the pieces are present and you just have to place them correctly; alternatively, it is a set of ciphers in a code.

We have, however, moved far away from the interpretation of scripture as natural language.

Group Four — The *G’zera Shava*

Rule 2, the *g’zera shava*, is the only rule in this group. It covers inferences made on the basis of an identical, or closely similar, word or phrase that occurs in two contexts, and belongs under the **formula of bijection**, $A \sim B$, since it explores the one-to-one correspondence between set A , the textual elements of the Torah and set B , the elements of law.

For instance, Rabbi Yoḥanan wishes to prove, from scripture, that there is an obligation to sit in the Sukka and eat there on the first night of Tabernacles. His proof, given in the name of Rabbi Simeon ben Yehozadaq, commences with the premise that there is an obligation to eat matza on the first night of Passover; since the term *hamisha asar* (‘fifteen’) occurs both in connection with Passover (Leviticus 23:6) and in connection with Tabernacles (Leviticus 23:34) we may infer that on the first night of Tabernacles, just as on the first night of Passover, there is an absolute obligation to eat, in accordance with the requirements of the festival. (*Sukka* 27a)

As a method of argument this appears somewhat arbitrary. The expression *hamisha asar* occurs several times in the Torah, e.g. Leviticus 27:7, where no link is made. Moreover, in neither of the cited occurrences does there seem to be any reason to connect the number with the obligation to

²³ In verses 25 and 26 cited above.

perform a specific ritual on the first night, and indeed, the Talmud itself derives this obligation from Exodus 12:18. It is surely on account of the perceived weakness of the argument that the later Talmudic rabbis (*Pesaḥim* 66a; *Nidda* 19b) declared that no-one should devise a *g'zera shava* on his own authority; the Yerushalmi (*Pesaḥim* 6:1 (33a)), however, would allow someone to devise a *g'zera shava* to support a known position.

The Thirteen Rules and the Evolution of Rabbinic Reasoning

Where did the Thirteen Rules come from?

We may at once discount the traditional view, stated by the French Talmudist Samson ben Isaac of Chinon (c. 1260 – c. 1330), that the rules were ‘Laws of Moses from Sinai’ [17] ; nothing like them is found in Jewish writings prior to the rabbinic period, not in the *peshet* commentaries of the Dead Sea Scrolls, in the voluminous writings of Philo and Josephus, nor in any other extant writings. Even the Tosefta’s claim that Hillel (early first century) formulated seven rules must be regarded with circumspection; the evidence that he actually used any of them other than the biblical *a fortiori* and some sort of analogy is scant, and in any case the stories we have about Hillel were not put in writing until centuries after his death, by which time they were being recounted in the language of a different era.

But perhaps we are asking the wrong question. For as long as people have interpreted texts they have made *a fortiori* inferences, drawn analogies, and worried as to the degree of generality of terms. There is no other way. The question is, when did they *abstract* rules from this and attempt to formulate a hermeneutic system? And why?

The answer lies in the need to defend a particular line of interpretation. When Pharisees argued with Sadducees, each side laying claim to the authentic interpretation of scripture and to authority that conferred, how could anyone decide which party was right? Later, when Christians appropriated the Hebrew scriptures as a foundation for their doctrines, how would the Sages persuade people that the Christian interpretation was wrong? Or that rival Jewish interpretations of Torah were inauthentic?

There was also a need to defend against charges of inconsistency and redundancy in the biblical text; the interpretive system showed that the inconsistencies were apparent not real, and that what appeared redundant, for instance the repetition of laws in Deuteronomy, revealed additional elements of Torah.

The need for defence, for drawing a line as to what interpretations were acceptable, must have become even more acute with the appearance of the Mishna early in the third century, giving definition to the teaching of the Sages. The earlier Sages of the Mishna were often guided in their decision-making by those ethical, social and political considerations which belong to the realm of 'second order rules'; texts were interpreted in conformity with such considerations, though this fact is often obscured by the weight of hermeneutic devices later inserted in our source materials. Towards the end of the period of formation of the Mishna, however, there is a fundamental change, a reluctance to rely on second-order justification, a search for certainty within the received holy text itself. The elevation of the hermeneutic rules to the role of prime justification for textual interpretation fills the vacuum created by the reluctance to argue on the basis of general ethical and moral principle. A rational approach, one which would reach decisions by weighing up circumstances and principles, yields to what is perceived as a safer, rule-based, mechanical one; and if Scripture is to be the final court of appeal, the best defence lies in securing the process of interpretation.

The Mishna does not itself incorporate the rules; it does not so much as mention *k'lal uf'rat*, even though it records rulings that are said in the Talmud to be based on *k'lal uf'rat*. Tosefta has a mere handful of allusions to the rules, but they are common in Midrash Halakha. This suggests that mid-to late-third-century Palestine is the time and place of their formulation and ordering.

Other lines of evidence point to the same conclusion.

Mishna *Shavu'ot* is the earliest source for the debate in Example 2 between Ishmael and Aqiva, but it makes no reference to rules of either *k'lal uf'rat* or *ribbui umi'ut* there or elsewhere. The Bavli (*Shavu'ot*) cites the claim of Rabbi Yoḥanan bar Nappaḥa of Tiberias (d. c. 279) that Ishmael expounded by *k'lal uf'rat* and Aqiva by *ribbui umi'ut*, while Tosefta (*Shavu'ot* ed. Zuckermann 1:7) Tosefta claims that Aqiva used *ribbui umi'ut* while Ishmael used both *k'lal uf'rat* and *ribbui umi'ut*.²⁴ Neither of these sources can have originated earlier than mid-third century, and the extant texts may reflect even later revisions.

²⁴ The Yerushalmi (*Sheqalim* 5:1 (48c)) refers 'he shall divide the spoil with the mighty' (Isaiah 53:12) to Rabbi Aqiva, who 'established the interpretation of *halakha* and *aggada*'. But some, it continues, say that the 'men of the great Synod' did this, and [Aqiva] established *k'lalot uf'ratot*!

Efforts by modern scholars to relate the recorded teachings of, for instance, Ishmael and Aqiva, to the methodologies attributed to them, reveal wide discrepancies.²⁵ Gary Porton comments on the passage cited earlier:

Although in [the above] Yoḥanan claims that Ishmael expounded the whole Torah by means of the general statement and specific statement, the Babylonian *gemara* does not contain pericopae which support this claim. Only the Palestinian Talmud contains evidence which support Yoḥanan's contention. Although Yoḥanan, a Palestinian, finds support in the Palestinian *gemara*, it is curious that Yoḥanan's statement appears in a document which contains no evidence to support this claim.²⁶

In the whole rabbinic corpus Porton finds only six of the Thirteen Rules (our numbers 1, 2, 3b, 4, 6 and 12a) in any statement attributed to Rabbi Ishmael, while the use of 20 *unlisted* techniques is attributed to him.²⁷ Summing up his exhaustive examination of the recorded exegetical practice of Rabbi Ishmael, Porton concludes:

The Ishmalean corpus does not provide sufficient evidence to support the claim that Ishmael exegeted scripture according to a set number of exegetical principles, that he knew the principles attributed to him at the opening of Sifra, or that he was a unique and inventive biblical interpreter. Furthermore, the Ishmalean corpus does not contain evidence to support the claim that Ishmael and 'Aqiba had different theories concerning the proper way in which one should interpret the Bible, that each employed "his own" techniques to interpret Scripture, or that any clear distinction can be drawn between the exegetical pursuits of these two masters.²⁸

All this suggests that the formulations and lists we have are the work of third-century Palestinian scholars attempting to consolidate the practice of forbears such as Ishmael and Aqiva; they are reconstructions rather than reports of how those Sages reasoned.

²⁵ [16] Vol. 4, pp. 160-211, especially 201 ff.

²⁶ [16] Vol. 4, p. 197.

²⁷ [16] Vol. 4, Table on pp. 201-3.

²⁸ [16] Vol. 4 pp. 209-10.

That ‘reconstruction’ of some sort was taking place was recognized at an early stage, as is illustrated by this anecdote of Rabbi Yoḥanan’s one-time disciple Rabbi Abbahu. Punning on the word *sofrim* (‘scribes’) in 1 Chronicles 2:55 — *sofer* can also mean ‘one who counts’ — he refers it to those who ‘turn the Torah into numbers ... 5 do not set aside heave-offering, dough is separated from 5 [cereals], 15 women exempt their sisters-in-law from levirate marriage, 36 offences in the Torah carry the penalty of excision, there are 13 rules about the remains of a clean bird, 4 kinds of tort, 40 minus one categories of work’²⁹ (Yerushalmi *Sheqalim* 5:1 (48c)). Abbahu seems to be saying that his contemporaries are consolidating the teaching of the Mishna by adding numbers to the text,³⁰ No great stretch of imagination is needed to conclude that at the same time the rulings and arguments of the Mishna period are being subjected to intense study — that is, after all, the main focus of the Talmud — and hermeneutic rules are being derived by induction from the practice of the Mishna teachers. These rules are for the first time articulated clearly and listed; prominent among them the Thirteen Rules attributed to Rabbi Ishmael.

Once a descriptive vocabulary emerged and a hermeneutic system was in place, the later rabbis of the Talmud were able to make general statements about their predecessors’ ways of reasoning, for instance characterising Ishmael’s interpretations in one way and Aqiva’s in another. What they had created was not a general system of logic of universal application, but a system tailored to the ‘rabbinic project’ of elaborating the law for their communities, and defending the claim (for their teachers as well as themselves) to correct interpretation of the biblical texts.

At this point, however, further problems arose. Two languages were now available to deal with extensionality: the language of *k’lal uf’rat* and the language of *ribbui* and *mi’ut*. Rather than treat these as alternative descriptions of one, basic process, the rabbis chose to see them as separate methodologies, positing two distinct schools of interpretation (Ishmael and Aqiva) where, in all likelihood, there had been only *ad hoc* differences. That is why it is so difficult to substantiate the ‘two schools’ hypothesis from the ample reports we have of the teachings of Ishmael and Aqiva.

Many of the subsequent developments with regard to *k’lal uf’rat* and *ribbui umi’ut* can be followed in Chernick’s [1] excellent analysis and the detailed lists provided in the Appendixes to his volume.

²⁹ These are all references to Mishna: *Terumot* 1:1; *Halla* 1:1; *Yevamot* 1:1; *Keritot* 1:1; *Tohorot* 1:1; *Bava Qama* 1:1; *Shabbat* 7:2.

³⁰ We should be thinking of an oral rather than a written text, though when the Mishna was actually committed to writing remains obscure.

His distinctions between the tannaitic, amoraic and late amoraic-saboraic forms of *k'lal uf'rat* etc., for instance, are illuminating, though the differences seem to me literary rather than logical.

What is interesting from the logical point of view is that, once the rabbis had devised a formal system of logic, elements of a 'second-order' language had to be devised to assess and where necessary modify the primary system. We have already had one example of this in our discussion of the *qal va-ḥomer*; at quite an early stage (in the Mishna itself) it was noticed that free application of this rule could produce unacceptable results, and that it was necessary to modify it by application of the principle of *dayyo*. Another, rather later, instance is the modification of the operation of *g'zera shava* by applying a series of higher-order controls as to what might be considered a 'free' (Hebrew *mufneh*) term, and therefore available for use in a *g'zera shava*; and the question is raised of whether both terms for comparison need to be *mufneh*, or one will suffice (e.g. *Shabbat* 64a). Much detailed research is needed before a proper assessment can be given of these developments, not least because of the tendency of the editors of the Talmud to project late developments back to the earlier Sages; it is not always possible to tell whether e.g. 'Rabbi Ishmael said X' represents a tradition about what he actually said, or whether it is a hypothesis meaning 'Had this question been posed to Rabbi Ishmael, he would have said X'.

Occasionally one catches an Amora in the act of inventing a new second-order rule. A *baraita* cited in B. *Men.* 55a/b notes that Lev. 2:11 says a grain offering is not to be *made* (general term) with leaven, whereas Lev. 6:10 says a grain offering is not to be *baked* (specific term) with leaven; from this it argues that a person would be liable for each specific act of preparation (kneading, rolling out, baking), not just for baking. The *baraita* does not use the vocabulary of *k'lal uf'rat*; indeed, as the *gemara* points out, application of Rule 4 would lead to the conclusion that a person would be liable for baking only. Then why is Rule 4 not applied? This, suggests Rabbi Aftoriki³¹, is because it cannot be used when the *k'lal* and the *p'rat* are far apart. This second-order rule is then itself debated by Ada bar Ahava (the attribution is questioned) and Rav Ashi. There are three other places where this second-order rule is discussed in the Bavli. In *Pes.* 6b the report is anonymous, in *BQ* 85a it follows a proposal of Rav Papa and in *Nid.* 33a Rava rejects it. The association with Rava, Rav Papa and Rav Ashi suggests a fourth-century Babylonian mooted of a rule to control *k'lal uf'rat* interpretation.

³¹ As Rabbi Aftoriki's father is cited (*BM* 5a) as teaching a *baraita* in the name of Rabbi Hiyya, he was probably fourth century.

In Conclusion

Everyone reasons, but only the few become conscious of *how* they reason, and still fewer can describe this in abstract, general terms. Those who stand outside their own thought processes and formalize them are doing some kind of ‘logic’. In this sense, there is indeed a ‘rabbinic logic’. The creation of this logic was an achievement of third-century Palestinian Judaism, and the Thirteen Rules attributed to Rabbi Ishmael are one of its clearest expressions; later generations, especially in Talmudic Babylonia, were able to build on these foundations. Rabbinic logic, unlike for instance Aristotelian logic, is not a general system of universal application, but closely tailored to the ‘rabbinic project’ of elaborating the law for the Jewish communities, and defending the rabbis’ claim to the mantle of scriptural authority. Resting on a constellation of assumptions about the Bible and its laws, it is guided by two formulas, the **formula of bijection**, and the **formula of adequate justification**; the first of these guarantees the relationship with scripture; the second ensures the internal coherence of the Law.

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Supplementary Notes

Manuscripts of Sifra

The oldest dated halakhic Midrashim are Sifra of 1073 (Vatican Library, no. 31) and Sifra of 1291 (Oxford, no. 151), which also includes the *Mekhilta*. The Codex Assemani which Finkelstein used as his primary text is undated, but probably 10th century.

Opening chapters of Zevahim

are a paradigm of development of the *middot* of interpretation. Perhaps this is because it was a training ground for students brought up on the idea of learning *qodashim* first. Also, it incorporates late Babylonian developments – is this perhaps a reason why we don't have Yerushalmi on *Qodashim*? (Though of course it would not explain the absence of *Hullin* etc.)

Is there a difference between heqesh and gezerah shava?

Zevahim 48a assumes there is, and that heqesh is superior:

Rav Papa: The word *mitzvot* occurs both with *hatat* (Lev 4:27) and with *asham talui* (Lev 5:17). Rabbi Aqiva uses this g.sh to say just as *hatat* is fixed (rich=poor), so *asham talui* only comes for a doubt where there is *qavua* (i.e. it is known he entered, but not know he was *tame*); others object that this is only half-use of g.sh, since full use would imply *hatat* is only for *safeq karet*. Rabbanan use heqesh (which one?) – the later passage (*asham talui*) learns from the earlier (*asham meilot* – but Lev 5:14-16 doesn't have the word *mitzvot*) that you don't need to spend a lot of money on *asham talui*.

This leaves me confused!

Zevahim 49b-50 assumes a significant difference between heqesh and gezerah shava. It looks as if heqesh is concept-dependent (e.g. 'head' and 'leg' being compared with regard to *parha b'kulo*) and gezerah shava is word-dependent. There are speculations about whether a result obtained through heqesh can itself form the basis for (a) another heqesh, (b) a *qal vahomer*, (c) *binyan av*. Are all these late Babylonian Amoraim? At least one (top of 50a) is given as Tanna d'bei Rabbi Ishmael, but what is 'd'bei Rabbi Ishmael'?

Ratio decidendi in Menahot 59a

The topic is which grain-offerings do or do not require oil and/or frankincense. The discussion hinges on Lev. 2:15, which is about *minhat bikkurim*, identified as the Omer offering:

ונתת עליה שמן ושמת עליה לבנה מנחה הוא

Minḥa hi implies there is something else on which you do *not* put oil. Is this *leḥem hapanim* (as assumed in the first part of the gemara's discussion) or is it *minḥat kohanim*?

What is the factor (the ratio decidendi) in virtue of which *minḥat bikkurim* requires oil?

It could be in virtue of any one of ואישים, הגשה, וצורה, חוץ, עשרון, כלי. All these are present in *minḥat kohanim*, but absent from *leḥem hapanim*.

Or it could be in virtue of any one of בשבתא, טמא, דאכיל, פיגולא, ציבורא, חובה. All these are present in *leḥem hapanim*, but absent from *minḥat kohanim*.

We conclude that *minḥat kohanim* requires oil, since the requirement of oil stems from נפש (Lev 2:1), the fact that it is a personal offering, unlike *leḥem hapanim*.

גמ'. תנו רבנן: +ויקרא ב' ונתת עליה שמן - ולא על לחם הפנים שמן ...

אמר מר: עליה שמן ולא על לחם הפנים שמן. אימא: עליה שמן ולא על מנחת כהנים שמן!

מסתברא מנחת כהנים הוה ליה לרבויי, שכן עשרון, כלי, חוץ, וצורה, הגשה, ואישים.

אדרבה, לחם הפנים הוה ליה לרבויי, שכן ציבורא, חובה, טמא, דאכיל, פיגולא, בשבתא!

מסתברא נפש. אמר מר: עליה לבונה ולא על מנחת נסכים לבונה. אימא: עליה לבונה ולא על מנחת כהנים

לבונה! מסתברא מנחת כהנים הוה ליה לרבויי, שכן עשרון, בלול, בלוג, מוגש, בגלל עצם. אדרבה, מנחת

נסכים הוה ליה לרבויי, שכן ציבורא, חובה, ואיטמי, בשבתא! מסתברא נפש. מנחה - לרבות מנחת שמיני

ללבונה. ואימא: להוציא! האי מאי? אי אמרת בשלמא לרבות - שפיר, אלא אי אמרת להוציא - למה לי? שעה

מדורות לא ילפינן. היא - להוציא שתי הלחם שלא יטענו לא שמן ולא לבונה. ואימא: להוציא מנחת כהנים!

מסתברא מנחת כהנים הוה ליה לרבויי, שכן עשרון, כלי, מצה, ועצם, הגשה, ואישים. אדרבה, [עמוד ב] שתי

הלחם הוה ליה לרבויי, שכן ציבור, חובה, טמא, דאכל, פיגולא, בשבתא, מתיר, תנופה, בארץ, בזמן, חדש,

והני נפישן! מסתברא נפש.

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תשובה היש הפרש בין דין כלל ופרט וכלל ובין דין רבוי ומיעוט ורבוי. +ע"י קדושין כ"א ב' וש"נ+ זהו מה שאני מבאר עכשיו +על כללי התלמוד הרחיב רבנו את הדבור גם ביתר חבוריו, כפי שיוצא מפורש מדבריו במעשה נסים עמ' נ"ג: והנה משרשינו יחיד ורבים הלכה כרבים ועם כל זאת במקומות רבים נתברר כי ההלכה כדעת יחיד וכו' וכפי אשר הרחיבנו בביאורו והארכנו לאמתו במאמרינו בקצת מספרינו אשר חברנו +

מי שמפרש מן החכמים ז"ל איזה פסוק במדת כלל ופרט וכלל מאמין שפרוש הפרט הכתוב בין שני כללות אינו שהדין אשר צוה ית' בפסוק זה יעשה רק בפרט הנזכר בין שני הכללות, כי לו היה הדבר כך, לא היה מזכיר בפסוק אלא כלל ופרט בלבד, ואנו יודעים שמכיון שהזכיר את הפרט אחרי הכלל ושתק, גלה שהדין לא יעשה אלא בפרט הנזכר, וזהו כמו שאמרו ז"ל +ריש ת"כ מדה ז' כלל ופרט אין בכלל אלא מה שבפרט.

ומצד אחר אינו מזכיר פרט בין שני כללות למען יהיה הדין הזה פועל בכל הכלל כולו, כי לו היה הדבר כך, לא היה מזכיר הפרט כל עיקר, או היה מזכירו ולא הזכיר לפניו כלל, אלא פרט וכלל לבד, ואנו יודעים שלא הזכיר הפרט בתחלה והכלל בסוף אלא למען יהיה הדין פועל בכלל כולו כמו שמצינו ז"ל אומרים +שם מדה ח' פרט וכלל נעשה כלל מוסף על הפרט ונתרבה הכל ובלשון דומה לזה.

ואולם מכיון שהזכיר הפרט בין שני כללות, כלל לפניו וכלל לאחריו, יודעים אנו שהדין פועל לא בכלל כולו ולא בפרט בלבד, אלא בפרט ובמה שדומה לו. ויוצא אפוא שהדין אינו פועל בדבר מן הכלל אלא בפרט ובמה שדומה לו בלבד.

בדרך משל, לו הנחנו שיש מכלל/בכלל/ עשרה דברים, שהזכיר הפסוק מהם אחד בפרט, ומן התשעה הנשארים יש שנים הדומים לו, אין הדין פועל אלא בשלשה דברים מן העשרה בלבד, האחד הנזכר בפרט והשנים הדומים לו, ונתבטל הדין מן שבעת הדברים הנשארים. ולולא הכלל הראשון, היה זה פרט וכלל והיה הדין פועל בכלל כולו, כמו שבארנו, והיה חל על העשרה גם יחד. ולולא הכלל האחרון, היה כלל ופרט ולא היה הדין פועל אלא בפרט בלבד, כמו שבארנו, והיה אפוא פועל באחד הנזכר בלבד, ולא פעל בשום דבר מן התשעה הנשארים. הרי הועיל הכלל האחרון לתת את הדין על השנים הדומים לאחד הנזכר: והועיל הכלל הראשון לבטל הדין מן השבעה שאינם דומים לאחד הנזכר, ונמצא שהדין פעל בשלשה דברים מן העשרה בלבד, שהם, ר"ל השלשה, פרט ודומה לו, וזהו ענין כלל ופרט וכלל אי אתה דן אלא כעין הפרט.

ומי שמבאר מן החכמים ז"ל את הפסוק הזה שפרשו מי שסובר בכלל ופרט וכלל, ברבוי ומעוט ורבוי, אומר: אני איני אומר על הפסוק הזה אלא שהוא רבוי ומעוט ורבוי, וענינו שהרבוי מקיף את כל הענין שקרא הראשון כלל, באפן שהדין פועל בסבת הרבוי על כל הפרטיות, והמעוט הוא שמיחד דבר אחד מתוך סכום הפרטיות הללו שלא יהיה הדין פועל עליו. ולפי זה אומר אני שברבוי חל הדין ופועל בכל הדברים, ולפי המעוט מתבטל הדין מאיזה דבר מן הדברים האלה ונשאר פועל על יתרם.

ובדרך משל, לו היו ברבוי עשרה דברים, ונזכר במעוט אחד מהם, נשאר הדין פועל על האחד הנזכר ובשמונה מן התשעה שלא נזכרו, ונתבטל מאחד מן התשעה שלא נזכרו, כי לא הועילה הזכרת אחד מן העשרה אחרי הזכרת הרבוי המקיף העשרה אלא למעט אחד לעומת התשעה שלא נזכרו, וילך הדין ויחול על תשעה דברים, האחד הנזכר ושמונה שלא נזכרו, ואפילו אם השמונה לא ידמו לאחד הנזכר, וזהו מה שאמרו +עירובין כ"ז ב', סוטה ט"ז ב', שבועות ד' ב', ועוד+ רבוי ומיעוט ורבוי +לפנינו נוסף תמיד: [ריבה הכל], אבל בכ"י כאן ליתא+ מאי רבי, רבי כל מילי, מאי מעיט, מעיט כך.

נמצא החלוק בין שתי הסברות, שמי שסובר כלל ופרט וכלל מעדיף את הפרט על הכלל, ועל כן לא יחול הדין אלא על הפרט ומה שדומה לו, ויבטל הדין מזולתו. ומי שסובר רבוי ומעוט ורבוי מעדיף את הרבוי על המיעוט, ועל כן לא יבטל הדין אלא מדבר שהוא לעומת הפרט הנזכר בלבד, ויחול הדין על זולתו.

ועתה אביא משל מדבריהם שיוסיף בהירות לענין. אמרו בגמרא סוכה +דף נ' ב'+ בפרוש הפסוק ועשית מנורת זהב טהור מקשה תעשה המנורה רבי דאריש /דריש/ כלאלי ופראטי /כללי ופרטי/ ועשית מנורת כלל זהב טהור פרט מקשה תעשה המנורה חזר וכלל, כלל ופרט וכלל אי אתה דן אלא כעין הפרט, מה הפרט מפורש שלמתכת אף כל שלמתכת. ור' יוסי בר' יהודה דריש רבוי ומיעוט, ועשית מנורת ריבה, זהב טהור מיעט, מקשה תעשה המנורה, חזר וריבה, ריבה מיעט וריבה, מאי רבי, רבי כל מילי, מאי מעיט, מעיט שלחרש.

הרי ברור, שמי שסובר כלל ופרט וכלל, מתיר לעשות מנורה מזהב המפורש בפרט, וממה שדומה לו, ר"ל שאר המתכת כמו כסף ונחשת וברזל ובדיל ועופרת, מכיון שכל אלה דומים לזהב בהיותם מתכת, ואינו מתיר לעשותה משאר מינים כעץ או אבן או חמר או חרש, אף על פי שהם נכנסים אל הכלל, כי הכלל ענינו כל דבר שאפשר לצור ממנו מנורה, יהיה מה שיהיה.

ומי שסובר רבוי ומיעוט ורבוי, מתיר לעשות המנורה מכל דבר, יהיה זה מתכת או עץ או אבן או מה שאפשר לצור ממנו מנורה חוץ מחרש לבד כי הוא נתמעט מחמת הזכרת הזהב, נמצא בעל הכלל ופרט וכלל אוסר כל דבר חוץ מן המתכת בלבד, ומה שאסר מרובה על מה שהתיר. ובעל הרבוי והמיעוט מתיר כל דבר חוץ מחרש בלבד, ומה שהתיר מרובה על מה שאסר.

ועל הדרך הזאת מתבאר פרוש כל מה שדומה לזה ממה שבארו שנמצאת בו פלוגתא אם ידרש בכלל ופרט וכלל או ברבוי ומיעוט ורבוי + עי' מדות אהרן פ"ו ופ"ז על ההבדל שבין כלל ופרט וכלל ורבוי ומיעוט ורבוי + וכבר כתבנו תמצית הבאור הזה בפירוש מסכת עירובין וכתב אברהם ברבי משה זצ"ל