# "REDUCE, REUSE AND RECYCLE" PROLEGOMENA ON BREAKAGE AND REPAIR IN ANCIENT JEWISH SOCIETY: BROKEN BEDS AND CHAIRS IN MISHNAH *KELIM*

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### Introduction

There are many ways for a historian to write about a society, and the tools at his or her disposal are manifold and varied. The materials that we have chosen are somewhat unusual; the building blocks of our reconstruction are waste and rubbish. We intend to examine aspects of ancient Jewish history and Jewish society based on its debris and in particular, debris that is not discarded, but rather used, sometimes repaired and occasionally recycled into secondary use. In other words, we will study used and reused garbage. Litter and trash are our primary sources. Garbage is a mirror on our society. What you are is often what you break, throw out or do not and what people say and what garbage says are sometimes divergent.

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<sup>&</sup>lt;sup>1</sup> Technically, litter is garbage that is out of place. See William Rathje and Cullen Murphy, *Rubbish! The Archaeology of Garbage* (Tucson: The University of Arizona Press, 2001) p. 197. It is the proliferation of litter that sometimes jumpstarts recycling (Rathje and Murphy, *Rubbish!*, pp. 199–200).

<sup>&</sup>lt;sup>2</sup> This article is the first in a series of studies on breakage and recycling in ancient Jewish society. These studies are the outgrowth of our ongoing work in two other projects: Material Culture in Ancient Jewish Society, and Leisure Time Activities in Ancient Jewish Society and Culture. On the history of the academic discipline of Garbology see, for example, Rathje and Murphy, *Rubbish!* (n. 1). Rathje was one of the central figures at the University of Arizona in the establishment of the "Garbage Project," which studied the refuse of modern humanity, and one of the founding forefathers of modern Garbology. See also Susan Strassler, *Waste and Want: a Social History of Trash* (New York: Metropolitan Books, Henry Holt and Company, LLC, 1999) and

Theoretically, garbage is such a pervasive element in our society (after all, garbage is connected to almost every aspect of human activity, and waste is so central to our lives) that one might imagine that the study of waste would have attracted much academic interest. This, however, is certainly not the case and even modern garbology deals, for the most part, only with modern society. This conundrum is largely what differentiates garbology from archaeology. Archaeology usually deals with imperishables while garbology focuses on perishables and in particular the attempt to make the perishable imperishable through recycling. The archaeologist rarely has a chance to study the perishables of the ancient world; they have long disappeared. The recycled of the ancient world is for the most part unidentifiable. This helps explain why garbology has rarely been used in the study of the ancient world.<sup>3</sup>

We seek to somewhat circumvent this problem by making use of a rather radical strategy. While not disregarding the minimal relevant archaeological data, our primary source material will be literary, for the most part rabbinic, in particular the Mishnah and Tosefta of Tractate *Kelim*, which deals with issues of purity and impurity in relation to utensils.<sup>4</sup> While utensils are mentioned throughout rabbinic

Benjamin Miller, Fat of the Land: Garbage in New York: The Last Two Hundred Years (New York: Four Walls Eight Windows, 2000).

<sup>&</sup>lt;sup>3</sup> See Penelope Ballard Drooker (ed.), *Fleeting Identities: Perishable Material Culture in Archaeological Research* (Carbondale: Center for Archaeological Research, Southern Illinois University, 2001).

<sup>&</sup>lt;sup>4</sup> Translations of Mishnah *Kelim* are taken from Herbert Danby, *The Mishnah*: Translated from the Hebrew with Introductory and Brief Explanatory Notes (London: Oxford University Press; Geoffrey Cumberlage, 1933), with reference also to Jacob Neusner, The Mishnah: A New Translation (New Haven and London: Yale University Press, 1988) (Kelim, pp. 893–950) and to our own translation. Translations of the Tosefta are based on Jacob Neusner, The Tosefta: Translated from the Hebrew, Sixth Division, Tohorot (The Order of Purities) (New York: Ktav Publishing House, 1977), pp. 1–80, with our own occasional changes or emendations. Page numbers refer to the Hebrew text of Tosefta in ed. M. S. Zuckermandel, Tosephta: Based on the Erfurt and Vienna Codices with Parallels and Variants with "Supplement to the Tosephta" by Rabbi Saul Lieberman, M.A. (Jerusalem: Wahrrmann Books, 1970 [new revised edition]). Reference is also made to S. Lieberman, Tosefeth Rishonim, Part III— IV, Seder Tohoroth (New York and Jerusalem: The Jewish Theological Seminary of America, 1999 [First printing Jerusalem 1939]) and to Jacob Nachum Epstein, The Gaonic Commentary on the Order Toharoht Attributed to Rav Hay Gaon (Berlin: Mekize Nirdamim, 1924; Jerusalem-Tel-Aviv: Dvir, 1982) (Hebrew) for both text and commentary.

literature, the format of *Kelim*, as we shall see, provides detailed information, albeit secondary and often tangential, about broken utensils and their repair or lack thereof and occasionally of their secondary recycled use. Although the Mishnah and Tosefta (and indeed rabbinic literature in general) contain much of a theoretical nature, appropriate for the Beth Midrash, but not connected to life, it is hard to imagine that the detailed and technical descriptions of utensils and objects described in Mishnah and Tosefta Kelim, both whole and broken, represent technological fantasies rather than material reality. While discussions relating to issues of ritual cleanness may at times reflect more theory than practice or practicality, and we shall relate to certain potentially problematical aspects of this later on in our study, the discussions or depictions of the utensils in Kelim seem to be real, at least in the case of beds and chairs. Even if some of the cases of uncleanness are theoretical, this is not a serious problem for us, since what concerns us is the possibility, or lack of such, of using a bed or chair in a broken, repaired or recycled state, and not the intricacies of ritual purity. In future studies on breakage and *Kelim* we shall examine these issues in relation to other types of utensils.

We are, of course, far from the first to use rabbinic literature for studying the material culture of ancient Jewish society. However, as far as we know, we are the first to use this literature for the study of garbology in ancient Jewish society within the basic chronological boundaries of tractate *Kelim*. For the sake of clarity, we shall define these as the Late Roman period in Palestine, but they probably encompass a much longer time due to the slow changes in the development of utensils in the ancient world.

<sup>&</sup>lt;sup>5</sup> See Joshua Schwartz, "The Material Realities of Jewish Life in the Land of Israel, c. 235-638," in Steven Katz (ed.), *The Cambridge History of Judaism: IV, The Late Roman Period* (Cambridge: Cambridge University Press, 2006), pp. 431-456.

<sup>&</sup>lt;sup>6</sup> See Daniel Sperber, *Material Culture in Eretz-Israel during the Talmudic Period*, Vol. I (Jerusalem: Yad Izhak Ben-Zvi and Bar-Ilan University, 1995<sup>2</sup>), Vol. II (Jerusalem: Yad Izhak Ben-Zvi and Bar-Ilan University, 2006) (Hebrew) and the detailed bibliography cited in the introductions of both works.

<sup>&</sup>lt;sup>7</sup> There is no need for us to deal with matters of redaction regarding Mishnah or Tosefta *Kelim* since it has been shown quite conclusively that "la longue durée" can effectively also be applied to the history and development of utensils, implements and tools in the ancient world. Many changed little over the course of hundreds of years, from ancient times through the Middle Ages. See Joshua Schwartz, "Ball Playing in Ancient Jewish Society: The Hellenistic, Roman

ractate *Kelim* lists and discusses those vessels, implements and utensils that can or cannot become ritually defiled through various types of impurity. Different laws pertained to utensils made of different materials, such as clay, wood, stone, bone, metal, glass and dung, to the form and structure of these utensils, and to particular actions done to them or with them.<sup>8</sup> Broken utensils are susceptible to impurity if they maintain their original function, and they are "pure, i.e., not susceptible to impurity, if they do not.

The following general rules found almost entirely only in the *Kelim* corpus, sum up the situation:

- 1. "When they are broken they become insusceptible to uncleanness" (M *Kelim*2:1; 11:1; 15:1; BT *Shabbat* 16a). 9
- 2. "After they are broken they become insusceptible; but if again utensils are made of them they once more become susceptible" (M *Kelim* 2:1; 11:1; 15:1).
- 3. "It has ceased to belong to the category of vessel" (M *Kelim* 3:3; 3:4).
- 4. "When is its purification? When it will be worn out and no longer serves its original function" (T *Kelim* Bava Mezia 3:1, p. 581; 11:9, p. 590).
- 5. "If the primary purpose is annulled the secondary purpose is annulled also" (M *Kelim* 19:10; 20:1; 22:7; T *Kelim* Bava Mezia 10:2, p. 588; 10:3, p. 588).
- 6. "If an article is changed into a use of like category, it remains unclean; but if into use of a different category, it becomes clean" (M *Kelim* 28:5).

and Byzantine Periods," *Ludica, annali di storia e civilta del gioco*, 3 (1997), 139–161. Thus, it matters little if the Mishnah or Tosefta tradition refers to the second or third century CE and probably little changed regarding these implements for many centuries afterwards. For the record, however, Mishnah *Kelim* probably contains much of what Judith Hauptman describes as urMishnah, or what used to be described as "early," and the same seems to be true for Tosefta *Kelim*. See Judith Hauptman, "The Tosefta as a Commentary on an Early Mishnah," *Jewish Studies Internet Journal*, 4 (2005), 109–132 and idem, *Rereading the Mishnah: A New Approach to Ancient Jewish Texts* (Tuebingen: Mohr Siebeck, 2005).

<sup>&</sup>lt;sup>8</sup> See the introductory comments of Hanoch Albeck, *Shishah Sidrei Mishnah*, *Seder Taharot* (Tel-Aviv: Bialik and Dvir, 1959), pp. 11–17.

<sup>&</sup>lt;sup>9</sup> M *Kelim* 2:1 and 15:1 refer to wooden, leather, bone, or glass utensils. M *Kelim* 11:1 mentions metal utensils. See also 16:1 on unclean wooden utensils broken into two pieces and becoming clean.

This implies that an article that is considered to be susceptible to impurity still functions in its initial or original form, whether it is broken or not, while an object that is considered pure no longer maintains its original purpose, and although it might function in a secondary form, it remains unsusceptible to impurity. However, it is important to remember that we are not dealing with questions of purity per se and that all of this is important for us only in that it helps define what is "broken," "repaired," "reused" or "recycled" into secondary usage.

# Garbage and Recycling in Brief

"Recycling itself is probably as old as – indeed, seems to be a fundamental characteristic of – the human species. The archaeological record is crowded with artifacts that display the results of recycling behavior." Recycling was the result of it not always being clear what to do with garbage. Should one leave it where it was or fell, in the house, courtyard, or street, which would result very often in pungent unpleasant results; or bury it near or further away from one's town or dwelling, requiring time and effort; or cart it to a dump, also requiring time and effort? While scavengers might have removed some of it for use or recycling, garbage, even in ancient times, continued piling up. Recycling and continued use of broken implements for as long as possible, of course, reduced some problems of waste control. Ancient society was not a "waste maker" society.

On the other hand, recycling and using broken implements reflected an almost inbred aversion in the ancient world to a "throwaway society." Implements were either expensive, difficult to make or replace, or provided parts that might be used for recycling. This even resulted in a phenomenon known as "provisional discard." "Junk" might be kept around the house until some use was found for it as a

<sup>&</sup>lt;sup>10</sup> Rathje and Murphy, *Rubbish!*, pp. 191–192.

<sup>&</sup>lt;sup>11</sup> *Ibid.*, pp. 37–38. From analyzing the finds in "middens," or piles of refuse, archaeologists learned that people did occasionally throw away perfectly good tools or implements.

<sup>&</sup>lt;sup>12</sup> "See Strassler, *Waste and Want*, p. 21, who makes reference to the fact that 17th-century Dutch paintings depict, as a matter of commonplace reality, broken plates and bowls sitting on shelves along with the intact ones.

<sup>&</sup>lt;sup>13</sup> See, however, Rathje and Murphy, *Rubbish!*, pp. 30–52.

whole or in part.<sup>14</sup> Reuse might have been by the householder or by those who scavenged and used the implements either for themselves or sold them.<sup>15</sup> In addition, while trash was a function of class, and clearly, the well-to-do would make more trash and could discard objects with less concern than their poorer neighbors or fellows, they seem to have respected thrift concerning objects and implements.<sup>16</sup>

Sitting and Sleeping: Stool, Chair and Bed

Ideally, we would have preferred discussing garbage and recycling in general and in toto in ancient Jewish society, but this would have become a monumental undertaking. In this first study, we shall concentrate on household garbage and recycling as it relates to some basic social habits.

Two of the most basic social and domestic habits are sleeping and eating.<sup>17</sup> These habits, and their attendant postures of reclining and/or sitting, had marked influence on the appearance and development of furniture like beds, couches, stools, chairs, benches and tables. The effects of these types of furniture were profound for human culture, with their development and changes sometimes offering glimpses into collective ideas about status, comfort, order and even beauty.<sup>18</sup> These

<sup>&</sup>lt;sup>14</sup> See Kathryn Kamp, "From Village to Tell: Household Ethnoarchaeology in Syria," *Near Eastern Archaeology*, 63:2 (2000), 84–93.

<sup>&</sup>lt;sup>15</sup> Strassler, *Waste and Want*, pp. 11–12. Both possibilities reflect the fact that the average householder in pre-industrial society was "handy" enough to make at least essential repairs for reuse or recycling.

<sup>&</sup>lt;sup>16</sup> *Ibid.* p. 9, pp. 136–140.

<sup>&</sup>lt;sup>17</sup> It is not coincidental that two out of three mandatory provisions a husband must make for his wife relate to these needs and furniture. See M *Ketubbot* 5:8 for the husband's requirements concerning the provision of food and a bed or mat. Cf. T *Ketubbot* 6:8 (pp. 77–78, ed. Lieberman), on an orphan wishing to marry at the expense of the community; he is first provided with a bed and bedding. If orphans and women slept on beds, it is clear that men did too.

Traditional: Papers of the Conference Held at the Institute of Archaeology, University College London, June 28 to 30, 1993 (Mainz: Philipp von Zabern, 1996), p. xxiii. In the Bronze and Iron Ages, mats were preferred to beds. On the wooden bed discovered in a Jericho tomb, see Irit Ziffer, "At That Time the Canaanites Were in the Land": Daily Life in Canaan in the Middle Bronze Age 2 2000–1550 B.C.E. (Tel Aviv: Eretz Israel Museum, 1990), pp. \*21–\*22. A number of wooden crossbars extended across the width of the bed, and one slept on the bare wood, making sleep fairly uncomfortable. Only later would ropes replace the crossbars and a mattress be introduced. Mud brick beds were

utilitarian and movable types of furniture are considered primary, as opposed to ancillary and secondary furniture and utensils like boxes, chests, pottery etc. 19 We shall deal with broken, repaired or recycled furniture for reclining and/or sitting. As tables are usually connected to eating, and serve no reclining or sitting purpose, they will be treated in a different study. Indeed, while beds, couches, chairs and benches might also be connected to eating, we shall deal only with those in which sitting, reclining or sleeping is of primary importance. In addition, we shall study only those beds and chairs that function as household furniture.<sup>20</sup> Since beds and chairs comprise most of the furniture of the ancient household in general, our observations, based on a seemingly limited selection of utensils, should provide a good introduction to ancient Jewish garbology and provide additional insights into understanding the material culture and social history of the Jews. Since, however, "Jewish furniture," or the furniture of the Jewish house, did not appear or develop in a vacuum, it is necessary to first understand something about ancient furniture in general, in

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also discovered in Jericho. See also Robbie G. Blakemore, History of Interior Design Furniture from Ancient Egypt to Nineteenth-Century Europe (New York: Van Nostrand Reinhold, 1997), pp. 15–19, on seat furniture in Egypt; and pp. 20-21, on beds there. The Egyptian bed provided somewhat more comfort than the Jericho bed described above, having a surface of interwoven material. Stools were popular at all levels of Egyptian society. At first, chairs were status symbols, but eventually they were also used in ordinary households. On the chair in general, and particularly on its historic development, see Galen Cranz, The Chair: Rethinking Culture, Body and Design (New York-London: Norton, 1998), and pp. 30-35 on the Egyptian chair (as well as on Neolithic pottery models from the Balkans depicting women sitting on four-legged chairs with backs). Cf., however, the review of Rani Lueder (http://www.humanicses.com/galencranzthechair.htm#galencranz) on Cranz's work. While the book is of groundbreaking importance regarding historical perspective, as well as regarding holistic aspects of the chair, its discussion on ergonomics is problematical.

<sup>&</sup>lt;sup>19</sup> Harold A. Liebowitz, "An Overview," in the article "Furniture and Furnishings," in Eric M. Meyers (ed.), *The Oxford Encyclopedia of Archaeology in the Near East* (New York–Oxford: Oxford University Press, 1997), II, 352.

<sup>&</sup>lt;sup>20</sup> Cf. M *Kelim* 24:8. We are dealing with beds intended for lying upon, unlike the beds of glass- or harness makers, which were not intended for this purpose. Neither are we dealing with wooden blocks upon which stone-masons might sit, nor wagon drivers' seats. Cf. Daniel Sperber, *Material Culture in Eretz-Israel during the Talmudic Period* (Jerusalem: Yad Izhak ben-Zvi and Bar-Ilan, 2006), II, pp. 126–133 (Hebrew).

particular that of the Greco-Roman world, which served as the background milieu of Jewish society and material culture. We shall, therefore, briefly discuss Greco-Roman beds and chairs and then begin our odyssey into the realm of broken furniture.<sup>21</sup>

### Greco-Roman Beds and Chairs

Ancient furniture developed out of the desire for comfort, the occasional need for protection, and sometimes to provide status markers.<sup>22</sup> Chairs give support to the back and beds improve the quality of sleep. Sitting or sleeping on the bare ground or even on mats of various types, was usually uncomfortable, especially in winter or dampness; it was sometimes dangerous because of snakes and other vermin found at ground level. For the most part, it was restricted to

<sup>21</sup> Our debt to Samuel Krauss on all matters of material culture, including beds and chairs, is immense. See Samuel Krauss, Talmudische Archaeologie (Leipzig: Gustav Flock, 1910; rpt. Hildesheim: G. Olms, 1966), I-III; idem, Oadmoniot Ha-Talmud (Berlin-Vienna-Tel-Aviv: Dvir, 1924-45), I-II. On chairs and beds, see Talmudische Archaeologie, I, pp. 60–65 and Qadmoniot, II, 1, pp. 17–50. We refer to the expanded and more detailed Hebrew version in Qadmoniot. On chests and similar furniture, important for secondary sitting/reclining, see pp. 51–56. On chairs and beds in the Ancient Near East and in Greece, see Helmut Kyrieleis, Throne und Klinen: Studien zur Formgeschichte altorientalischer und griechischer Sitz- und Liegemoebel vorhellenistischer Zeit (Berlin: Walter de Gruyter; Jahrbuch des deutschen archaeologischen Instituts, 24, 1969). See also the article, Furniture and Furnishings, in Eric M. Meyers (ed.), The Oxford Encyclopedia of Archaeology in the Near East (New York-Oxford: Oxford University Press, 1997), II, 352-362 (= Harold A. Liebowitz, "An Overview," 352-354; Beth Alpert Nakhai, "Furnishings of Bronze and Iron," 354–356; Ephraim Stern, "Furnishings of the Persian Period," 356-358; Ann Killebrew, "Furnishings of the Hellenistic, Roman and Byzantine Periods," 358-362) and cf. Yehuda Fintsi, Woodcraft in the Biblical Period in the Light of Comparative Material from the Ancient Near East and Rabbinic Literature, unpublished doctoral dissertation, Bar-Ilan University, 1985, I, pp. 51–60 (chairs), pp. 61–70 (beds). See also Shmuel Safrai, "Home and Family," in S. Safari and M. Stern, Compendia Rerum *Iudaicarum ad Novum Testamentum: The Jewish People in the First Century:* Historical Geography, Political History, Social, Cultural and Religious Life and Institutions (Assen/Amsterdam: Van Gorcum), pp. 735–746.

<sup>22</sup> Cf. Cranz, *The Chair*, pp. 25–64 (see n.18 above). Ancient chairs often reflected the relationship of power between rulers and the ruled. Modern-day chairs in homes, offices, schools etc. might also reflect differences between men and women, young and old, bosses and employers, etc.

the poor, who had no choice in the matter, or to ascetics of various types, philosophical persuasions and religions who did so out of choice. <sup>23</sup> Chairs and beds were usually found among sedentary rather than nomadic populations and were seldom found in "primitive" houses. <sup>24</sup>

While there are differences between Greek and Roman furniture, these are not very important for us in respect to the Palestinian house of the Greco-Roman period, which did not necessarily follow or reflect the strict chronological development of the outside world. Therefore, our comments here will be of a general nature in relation to the Greek and Roman worlds.

<sup>&</sup>lt;sup>23</sup> Harriet Crawford, "The Earliest Evidence from Mesopotamia," in Hermann, The Furniture of Western Asia, pp. 33–39. See in general, Hollis S. Baker, Furniture in the Ancient World: Origins and Evolution, 3100-475 B.C. (New York: Macmillan, 1966); Michael Roaf, "Architecture and Furniture," in Hermann, The Furniture of Western Asia, pp. 21–28; Kim Gurr, Leon Straker and Phillip Moore, "A History of Seating in the Western World," Ergonomics, 12 (1998) (http://www.uq.edu.au/eaol/june 98/seating.pdf). Cf. Joshua Schwartz, "Material Culture and Rabbinic Literature in the Land of Israel in Late Antiquity: Beds, Bedclothes, and Sleeping Habits," in Lee I. Levine, Continuity and Renewal: Jews and Judaism in Byzantine-Christian Palestine (Jerusalem: Dinur Center for the Study of History, Yad Ben-Zvi and Jewish Theological Seminary of America, 2004), pp. 197–209 (Hebrew). There were, of course, exceptions to the rule about sitting/reclining on the ground. Cf. A. N. Newell, "The Cross-legged Posture," Man, 34 (1934), 192–193. See also Cranz, *The Chair*, pp. 25–30, on sitting on the ground in Eastern culture. Yizhar Hirschfeld, The Palestinian Dwelling in the Roman-Byzantine Period (Jerusalem: Franciscan Printing Press and Israel Exploration Society; Studium Biblicum Franciscum, Collectio Minor 34, 1995), p. 276, connects the use of beds to the size of the bedroom (kiton), at least in the rural sphere. If the kiton was large enough for a bed, then one was used and if not, then a sleeping mat was used. Hirschfeld exaggerates the issue of "luxury" in relation to sleeping in a bed. The tradition in *Leviticus Rabbah* 34:16 (p. 814, ed. Margoliot), brought by Hirschfeld, does not contrast a rich man sleeping in a bed and a poor man sleeping on the floor, but rather an average householder and a poor man; and indeed, the abject poor may have had to sleep on the ground, with neither the comfort of a bed nor mat. On the use of mats, see our article cited above and cf. n. 17 above.

<sup>&</sup>lt;sup>24</sup> See John Pile, *A History of Interior Design* (London: Laurence King, 2000). Most "primitive" people sit on the ground that also serves as a table. They have no constructed bedsteads, and at best use mats. Other types of rudimentary furniture may be found there, however, particularly for storage.

Greek furniture was generally simple and tasteful, and sometimes elegant. Roman furniture was a continuation of Greek furniture. While there were some Hellenistic elaborations, little independent development was exhibited.<sup>25</sup> The houses were uncluttered, even sparse, and contained mostly chairs, stools, couches (or beds), tables and chests. Thus, our examination of "bare-bones" furniture would appear more comprehensive than at first glance.

There were three basic types of Greek chairs or stools. The *diphros* was backless and the least dignified of all sitting furniture. It could be rectangular, sometimes foldable (*diphros okladias*) and a cushion or rug might be added for padding. The *klismos* was a chair having a back for support and comfort, and the *thronos* was the most elegant of them all, with different types of legs (ending in animal feet, rectangular, turned, or solid body without feet) and especially popular for state occasions.<sup>26</sup> Benches, used in schools and theaters, will not concern us here. Despite all this, the Greeks were not averse to sitting on the ground.<sup>27</sup>

The Greek *kline* combines bed, couch and sofa and was used for both sleeping and meals. It had a wooden bedstead and possibly a headboard, which could serve as a backrest for sitting or reclining. Its legs were like those of the *thronos*. They might be bronze and have an inlay and plaiting of gold or tortoise shell. Cords or leather stretched across the frame and cushions or blankets would be piled on top of them.<sup>28</sup> There were also various types of footstools, for additional comfort or for ascending to the above-described furniture.<sup>29</sup>

<sup>&</sup>lt;sup>25</sup> Gisela M. A. Richter, *Ancient Furniture: A History of Greek, Etruscan and Roman Furniture* (Oxford: Clarendon Press, 1926). Cf. Pile, *Interior Design*, p. 34. Roman furniture developed from Greek prototypes with a tendency toward greater elaboration of ornamental detail and the use of fine woods and inlays of ivory or metal. See also Blakemore, *Interior Design Furniture*, p. 35, p. 52. While the Egyptians tended toward naturalism in their furniture renditions, the Greeks emphasized stylization. The Romans became disseminators of Greek furniture and it is often difficult to differentiate between the two types, in spite of the occasional Roman predilection for opulence in furniture design.

<sup>&</sup>lt;sup>26</sup> Richter, pp. 30–53; Gurr et al., "A History of Seating"; Blakemore, *Interior Design Furniture*, pp. 35–36. Cf. Cranz, *The Chair*, pp. 35–36, on the differences between Greek "slumping" and Egyptian upright posture.

<sup>&</sup>lt;sup>27</sup> Gurr et al., *ibid*.

<sup>&</sup>lt;sup>28</sup> Richter, *Ancient Furniture*, pp. 54–71. Blakemore, *Interior Design Furniture*, p. 37. Cf. Leonhard Schmitz, art. *lectus* in, William Smith, *A Dictionary of Greek and Roman Antiquities* (London: Murray, 1875), pp. 673–675. See also Anthony Rich, *A Dictionary of Roman and Greek Antiquities with nearly 2000* 

Little changed in terms of furniture design during the Roman period; the Romans kept the basic design, but added occasionally to ornamentation and decoration. The *sella* was a general term for any kind of seat or chair, but was especially used for types of stools, both folding and non-folding. The folding *sella curulia* or chair (or stool) of state is not of much concern for us nor is the *sella gestatoria*, which is a sedan. Many different types of *sellae* could be found in the Roman house, as well as the *bisellium*, which was large enough to seat two. The *klismos* developed into the *cathedra*, which was a chair with a back, very often associated with use by women, as opposed to the *sella*, which was used by both sexes. The *thronos* turned into the *solium* and the *kline* of the Greeks became the *lectus* of the Romans, only more elaborate. As in the Greek house, there were various types of footstools, used for the same purposes.

Since there was not a large amount of furniture in the Greco-Roman house, whether of the upper classes or of the lower ones, the inhabitants could usually allow themselves furniture made by an artisan, whether a furniture maker or a more multi-functional craftsman.<sup>35</sup> Such furniture was, of course, not cheap and it is likely

engravings on wood from ancient originals illustrative of the industrial arts and social life of the Greeks and Romans (New York: D. Appleton & Company, 1874), arts. lectulus, lectus, pp. 375–376.

<sup>&</sup>lt;sup>29</sup> Richter, *Ancient Furniture*, pp. 72–75.

<sup>&</sup>lt;sup>30</sup> See Blakemore, *Interior Design Furniture*, pp. 53–54.

<sup>&</sup>lt;sup>31</sup> Rich, art. *sella* in *Dictionary*, pp. 593–594 and William Ramsay, art. *sella* in William Smith, *Dictionary*, pp. 1014–1016. See also Richter, *Ancient Furniture*, pp. 125–129.

<sup>&</sup>lt;sup>32</sup> Rich, *Dictionary*, p. 134, art. *cathedra*, Smith, *Dictionary*, art. *cathedra*, p. 257; Richter, *Ancient Furniture*.

<sup>&</sup>lt;sup>33</sup> Richter, *Ancient Furniture*, pp. 119–124.

<sup>&</sup>lt;sup>34</sup> Rich, *Dictionary*, arts. *lectulus*, *lectus* (see n. 28 above); Smith, *Dictionary*, art. *lectus*, pp. 673–675. See in general the articles cited in Rich, Comprehensive Index, "chairs," "beds and couches" in *Dictionary*, p. 750; Richter, *Ancient Furniture*, p. 130; Schwartz, "Beds" (see n. 23), and Daniel Sperber, "Jacob's Headstones and the Roman Bed," in Daniel Sperber, *Material Culture in Eretz-Israel during the Talmudic Period, Vol. II* (Jerusalem: Yad Ben-Zvi and Bar-Ilan, 2006) (Hebrew), pp. 140–145.

<sup>35</sup> See Xenophon, *Cyropaedia*, 8.2.5: "For in small towns the same workman makes chairs and doors and plows and tables, and often this same artisan builds houses...". Xenophon continues, stating that such an artisan could not be proficient in all of this. In large cities, however, it was indeed possible to specialize and such an artisan would have been very proficient in his area of specialization (translation found in: <a href="http://www.perseus.tufts.edu/cgi-">http://www.perseus.tufts.edu/cgi-</a>

that every effort was made to repair damage; and it is unlikely that damaged furniture would easily be discarded.

So far we have mostly discussed sitting or reclining on furniture, and have pointed out that the Greeks sometimes sat on the ground, despite the generally negative connotations of this position. They might also have sat or reclined on furniture not meant for those purposes. They might lean or sit on a chest, thus turning it into an *ad hoc* chair. Sometimes this *ad hoc* change became more permanent (something described as the "barrel-chair" phenomenon—meaning, of course, that a barrel was turned into a chair), whether through actual construction or just a shift in position. While common in poorer households due to the expense of furniture, it might also be related to recycling and possibly to "provisional discard," mentioned above. With all this in mind, we shall now study the furniture of *Kelim*—broken, repaired and recycled.

bin/ptext?doc=Perseus%3Atext%3A1999.01.0204&layout=&loc=8.2.5). In any case, a householder would not have built the furniture, although he might have made the repairs. On the materials and construction of Greek furniture, see Blakemore, *Interior Furniture Design*, pp. 33–35, and on the Roman period, pp. 52–53.

36 See, for example, Strassler, *Waste and Want*, p. 20. See also Pile, *Interior* 

<sup>&</sup>lt;sup>36</sup> See, for example, Strassler, *Waste and Want*, p. 20. See also Pile, *Interior Design*, p. 51. Early medieval chair design was often the result of modification of chest construction. A box chest could be modified into a seat, sometimes with an additional upward extension to form a back, or other extensions to form arms. "Real" chairs at this time were primarily symbolic objects used by royalty, bishops etc. At this time, even "real" stools served as status markers. Use, however, might be made of benches.



Figure 1: Roman cathedra



Figure 2: Roman cathedra supina



Figure 3: Sella

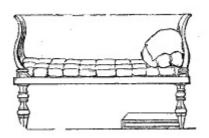


Figure 4: Roman lectus

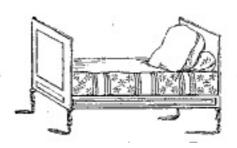


Figure 5: Roman *lectulus* 



Figure 6: Greek kline

Kelim: Broken Chairs and Beds

Our discussion will revolve around three categories of "breakage": broken beds, chairs, and their continued use, repair and reuse in original capacity, and "recycling" or secondary use.

- 1. Broken beds and chairs: This category will be divided into three sub-categories: simple breakage, purposeful breakage, and external breakage. These categories will be discussed within the framework of primary sitting/reclining and secondary sitting/reclining, when possible. The first framework relates to breakage of furniture intended for sitting or reclining, while the second relates to broken "furniture" not initially intended for those activities. This is not to be confused with "secondary use", which, as we shall see, relates to broken furniture being used for non-sitting or reclining purposes.
- a. Simple breakage: simple breakage of beds within the framework of primary reclining and their continued use. Ideally, in order to understand what is broken, it is first necessary to understand what is whole, i.e., what can break. Fortunately, a number of sources provide such information, and even make qualitative statements regarding the importance of some of the bed's components. Not all of the furniture's components are considered essential. Since Kelim deals with furniture in relation to ritual purity, components that remain "pure," or cannot become impure within the bed/chair framework, are considered non-essential. Thus, halakhic status becomes critical for understanding the essential nature of the furniture, whether whole or broken. We shall briefly describe the whole before dealing with the broken.

M Kelim 18:3 states: "The bed-poles,<sup>37</sup> the bed-base,<sup>38</sup> and the cover are not susceptible to uncleanness. Only the bed itself and the

http://www.biu.ac.il/JS/JSIJ/5-2006/Schwartz.pdf

<sup>10:3,</sup> which mention the קינוף and the קינוף, two different types of bed-poles. The קינוף is defined as a corner bed-pole. M Sukkah refers to a sheet attached to the four poles, creating a "tent-like" structure over the mattress and ropes. The נקליטים were two poles at the middle of either end of the bed to which a sheet or covering might be attached high over the bed. See Epstein, Perush Ha-Geonim, p. 51 and the notes ad loc., Krauss, Qadmoniot Ha-Talmud, pp. 46–47 and Fintsi, Woodcraft, p. 69. This type of bed, however, should not be confused with the elaborate beds with canopies and curtains that began developing from the Middle Ages onwards. Those beds, as opposed to the beds we are studying, were not movable. Cf. Pile, Interior Design, p. 67.

<sup>&</sup>lt;sup>38</sup> Hebrew: וחמור. For an explanation, see Epstein, *Perush Ha-Geonim*, p. 52.

bed-frame are susceptible." Thus, the essential parts of the bed are the rectangular, wooden<sup>39</sup> bed-frame and the "bed" itself, composed of four planks (or rails) attached to the frame along the length and width of the bed. Poles in the middle of the front and back of the bed (from which a sheet or covering might be extended to form a "roof," in the case of a somewhat elaborate bed), a base on which the frame might have been placed, and the bed covers, were not considered essential. T Kelim Bava Mezia 8:3 (p.587) elaborates regarding the frame and the bed itself: "The boards<sup>40</sup> of the 'lectica' are not susceptible. The rails of the frame, 42 even though they are separated and lying in the four corners of the house are susceptible." We have seen above that the Greek kline became the Roman lectus. The generic kline also became the *lectica*, which was technically a couch or litter for transporting invalids or the dead, but also became "luxury furniture" in the Hellenistic and Roman worlds and was close enough to being a bed according to the definition of the rabbis.<sup>43</sup> Thus, the boards of the lectica were not susceptible to impurity. Since this would seem to contradict the Mishnah, it is likely that the Tosefta meant that the boards were separate from the bed, as is evident from "rails of the frame." In any case, the frame is the most important part of the bed,

The frame and most essential bed components were constructed of wood. This is so even when beds are described as being of "ivory" (e.g., Amos 6:4) or of "iron" (Deut. 3:11). The *wooden* frame was plated with these materials. See, for example, Allan R. Millard, "King Og's Iron Bed: Fact or Fancy," *Biblical Review*, 6 (2) (1990), 16–21. See especially p. 17 on the wooden bed found in the eighth-century BCE royal tomb at Salamis, Cyprus. See also the reconstruction of a wooden bed frame (with rope webbing beneath a woolen blanket) in Ann Killebrew and Steven Fine, "Qatzrin: Reconstructing Village Life in Talmudic Times," *Biblical Archaeology Review*, 17 (3) (1991), 56.

<sup>&</sup>lt;sup>40</sup> Hebrew: הדפין.

<sup>&</sup>lt;sup>41</sup> Hebrew: קיטליאקי, corrected by Krauss, *Qadmoniot*, p. 35 to ליקטיאקי, which is clearly the *lectica* or *lekttikion*.

<sup>&</sup>lt;sup>42</sup> Hebrew: הגשישין.

<sup>&</sup>lt;sup>43</sup> Leonhard Schmitz, art. *lectica* in William Smith, *Dictionary*, pp. 671–673. See also Daniel Sperber, *Material Culture in Eretz-Israel during the Talmudic Period* (Ramat-Gan: Bar-Ilan and Yad Izhak ben-Zvi, 2006), II, p. 126 (Hebrew) and the sources cited *ad loc*. Sperber relates to a source which mentions the *lectica* גולגיקין as. Sperber's discussion deals mostly with the sedan elements of the *lectica*. On the bed elements see Krauss, *Qadmoniot*, p. 35.

whether whole or in parts, and indeed beds and chairs are known as "framework furniture." <sup>1,44</sup>

The Tosefta continues: "The four legs in the four corners are susceptible. The rest (of the legs) are not susceptible." Another key element of the bed, according to the Tosefta, was its legs in its four corners and only those four legs were essential. In sum, the essential parts of the bed are the frame and its components, which are four boards attached to the frame, to form the "bed" and four legs. The rest is icing, as it were, on the cake. We can now discuss simple breakage.

Household furniture, like beds or chairs, breaks for any number of reasons. Furniture gets banged, things fall on it, there is constant wear; there might also be heat, light or water damage. Moving it incorrectly or dragging it can also cause damage. Damage might be the result of a long process, such as protracted pressure on a crack, which was either evident or not, or the result of some more cataclysmic event. Often the bed was a "family bed," the family piling into it at the same time, adding more pressure to frame and parts. <sup>46</sup>

The first breakage tradition relates to "total" breakage and is all-inclusive in the sense that it relates to all sitting and reclining furniture. T *Kelim* Bava Mezia 5:11 (p. 584) states: "The bed, and the chair, and the stool and the *cathedra*, and the crib which fell apart<sup>47</sup> are not susceptible to uncleanness. A bed which fell apart, every component part is susceptible to uncleanness (individually). And the Sages admit to Rabbi Meir and to Rabbi Simeon that ropes (of the mattress) are not considered attached to the bed until he weaves in three ropes in each direction." Any sitting or reclining furniture that falls apart is clearly broken and not susceptible, therefore, to uncleanness. This does not mean, however, that it would not be used if broken. Thus, a tradition in *Lamentations Rabbah* (1, p. 47, ed. Buber)

<sup>&</sup>lt;sup>44</sup> See Joseph Aronson, *The Encyclopedia of Furniture, Third Edition—Completely Revised* (New York: Crown Publishers, 1965), s.v. "construction," cols. 146–148. Casework furniture includes receptacles or storage devices. We shall see below that casework furniture might also be used for sitting or reclining.

On the reasons for breakage and damage see, for example: http://www.bbc.co.uk/antiques/antiques care/furniture.shtml

or <a href="http://www.bafra.plus.com/antique/htm">http://www.bafra.plus.com/antique/htm</a> and the numerous links in both of these sites.

<sup>&</sup>lt;sup>46</sup> See, for example, M *Niddah* 9:4 and BT *Berachot* 24a. Cf. Luke 11:7.

<sup>&</sup>lt;sup>47</sup> Hebrew: שנתפרקו, which could also be translated as "came apart." And *contra* Neusner, "were untied."

<sup>&</sup>lt;sup>48</sup> On the ropes cf. M *Kelim* 19:1.

tells of four Jerusalemites who went to Athens. At night, their host gave each a bed, but the bed of one was broken.<sup>49</sup> The tradition does not explain how it was broken and mentions only that it was still possible to sleep on it, although it was almost like sleeping on the ground.

Returning to the *Kelim* tradition on breakage just cited above, some of the individual components of the broken bed might have been undamaged and therefore, might still be usable as furniture or as a utensil. Ropes, however, which form the mattress of the bed, are not considered essential to it unless there are a significant number of such ropes. While the components that might be thought susceptible to uncleanness are clearly those defined in other sources as essential, e.g., those described above, rather than the non-essential components, like cups under the legs, this need not be so when beds and other furniture are totally falling apart. In that case, any part of the broken bed would probably be used again, if possible and thus every component might be susceptible to uncleanness.

A bed might break or fall apart in various ways. T *Kelim* Bava Mezia 9:2 (pp. 587–588) describes a bed whose "inner parts" were damaged and the ropes, which served as support for the mattress (or as the mattress itself), were not fastened. <sup>51</sup> If, however, it was still

<sup>&</sup>lt;sup>49</sup> Aramaic: ערשא פחיתא, translated by Sokoloff as a "broken bed." See Michael Sokoloff, *A Dictionary of Jewish Palestinian Aramaic of the Byzantine Period* (Ramat-Gan: Bar-Ilan, 1990), p. 428 s.v. פחת.

<sup>&</sup>lt;sup>50</sup> Hebrew: מעיין. The translation is that of Neusner.

<sup>51</sup> The ropes might have been tied around the bed frame and the knots or fastenings might easily have become loose. However, it would also have been possible to drill holes along the sides of the bed frame, pass the ropes through them and then "fasten" the ropes. This type of fastening would have been of a much more permanent nature. However, drilling like this would probably require the work of a professional, and if done by an amateur, might weaken the bed frame, causing damage later on, although providing a stronger mattress in the short term. Cf. Fintsi, Woodcraft, p. 65. Cf. also Nachum Cohen, Leather and Leather Products in the Mishnah and Talmud Periods, unpublished MA thesis, Bar-Ilan University, 1995 (Hebrew), pp. 32-33 and especially the illustrations on pp. 32a-b of the looping of ropes over the frame or through holes in the frame, respectively. In both cases, the ropes are depicted as crisscrossed, but there were also other possibilities. See Fintsi, Woodcraft, p. 310 n. 64 and cf. BT Moed Katan 10a. Cf. also M Nedarim 7:5 on the דרגש and its relation to the bed. While the meaning of this is not completely clear, it is often translated as a chaise lounge. See Krauss *Qadmoniot*, pp. 48–49. The ropes or webbing of this were apparently of leather. See Cohen, *Leather*, pp.

possible to lie or sit on the bed, perhaps along the frame, or on the damaged inner parts, then the bed was susceptible to uncleanness. If one could sit or lie on it, it was still technically a bed. If the unfastened ropes of the mattress stuck out, they were susceptible to uncleanness because they might be used again in the bed. Ropes then had to be fastened in a significant manner, as we saw above, or have potential for reuse if they were to be considered an integral part of the bed. The ropes were apparently not totally necessary for the bed, since the mattress could have been constructed in a different manner; and since the ropes were so multifarious, they could always be put to other uses. This tradition also states that the bed might still be used when broken and under such circumstances would be susceptible to uncleanness. The use described above would certainly not make for comfortable sleeping, but comfortable or not, and "bed" or not, it still functioned as a bed.

Other sources provide more detailed information regarding the breakable parts of the bed. The bed described in M *Kelim* 18:6 had contracted *midras* impurity and one of the long sides of the bed had broken. It was repaired and the second long side broke and was repaired. The bed remains unclean or susceptible to uncleanness. This is clear because, as we have seen above, what is broken is essential, but is repaired. A bed with both sides broken has seen better days. Nevertheless, as we shall see, every effort is made to "save" these beds, to repair them and to avoid discarding them. They were too expensive to simply discard.

We do not know the exact nature of the breakage described or what caused it. Although a common cause of breakage was damage to a bed's joints, this does not seem to be the case here. The sides were repaired, and there is no hint in the source of joint damage or of the bed being rickety.<sup>52</sup> Perhaps the sides cracked; the damage could not have been too severe, because the repair did not include replacement. In any case, the Mishnah concludes by stating: "But if the second was broken before the first could be mended the bed becomes clean." If two (long) sides of the bed break, the bed might continue being used, but would no longer be a "halakhic bed." Its essential parts were

<sup>31–32</sup> and the illustration on page 31a on the knots and fastenings of these leather ropes. The sources, however, do not deal with breakage of the דרגש.

<sup>&</sup>lt;sup>52</sup> On bed joints see, for example, Brian D. Hingley, *Furniture Repair and Finishing* (Upper Saddle River, New Jersey: Creative Homeowner), pp. 94–102. On loose joints in chairs see pp. 73–76.

broken or non-functional and it was clean. Here too the damage seems to relate to the sides rather than to the joints.

In order to erase impurity, parts of the bed needed to be removed or replaced. This was the case described in M Kelim 19:6: "If from a bed (that was unclean) two longer sides were taken away and two new ones were made for it, yet the sockets remained unchanged, if the new sides were broken the bed still remains unclean; but if the old sides are broken, the bed becomes clean, since all is determined by the old sides." Both long sides were removed, while the sockets or joints remained. New sides were installed and they broke; the joinery had likely been defective or incompetent. The Mishnah, of course, does not care about the mechanics of the breakage; and while it is always possible that it is simply describing a theoretical possibility, the reallife utensils and implements mentioned in *Kelim* seem more related to real life than to abstract pilpul. Thus, it is legitimate to ask what might have been a "real-life" cause for such immediate breakage. Did old planks replace the impure ones? Perhaps the joints were not fit correctly. 53 Were the planks placed correctly in the joints? It is evident that there was a desire to continue using the bed as well as to return it to a status of ritual purity. As we shall see time and again, this desire often resulted in intentional damage and breakage that consequently resulted in further damage and breakage. This seemed almost built into the system.

Up until now, we have mentioned only the construction components of the bed. There might also have been a mattress and pillows. Their potential for uncleanness depended upon whether they could serve as "receptacles." If the mattress or pillow could no longer serve as a "receptacle," i.e., it was damaged to such an extent that the "stuffing" could no longer be held in it, it was pure. However, if one could sit or lie on them on a bed they would be susceptible to *midras* impurity (M *Kelim* 20:1).

Chairs and stools were simpler in construction and design than beds and fewer parts could break. This is especially so since chairs in most houses were probably stools since chair backs and sides were

Today there are six general types of primary joints: plain butt, rabbeted, doweled, mortise and tenoned,, splined and dovetailed; and there are infinite variations of these joints. See Aronson, *Encyclopedia*, s.v. "construction," col. 148 and the illustration on cols. 146–147. Most of these existed in furniture construction of the ancient world. See, for example, <a href="http://www.theatre.ubc.ca/dress\_decor/ancient\_world\_furniture\_egypt.html">http://www.theatre.ubc.ca/dress\_decor/ancient\_world\_furniture\_egypt.html</a> and <a href="http://www.si.edu/SCMRE/takingcare/fundconst.htm">http://www.si.edu/SCMRE/takingcare/fundconst.htm</a>.

considered a luxury.<sup>54</sup> From a halakhic standpoint, the question was whether one could continue to sit on a broken chair qua chair. If so, it was susceptible to uncleanness and if not, it was unsusceptible. If one stool leg broke, the stool could no longer be sat on, and was thus unsusceptible to uncleanness because it could not function as a stool. If two legs broke it was also no longer a stool and unsusceptible to uncleanness, unless it was one handbreadth high because then one could sit on it and then it became again susceptible to uncleanness. Likewise, a footstool used to ascend to a bed or chair that lost one of its legs was still a footstool and susceptible to uncleanness (M Kelim 22:3) and could apparently still be used despite its broken state. A stool might also lose its seat boards if they were not fastened well or through extended usage (M Kelim 22:4; 22:5).55 It is unlikely that there would be much sitting on such a stool even if there was a view that the seat still might be susceptible to uncleanness, or that the stool might be turned on its side to allow for sitting. 56 Sometimes only the middle part of the seat board broke, so that one could still sit on the remaining boards (22:6) or two contiguous planks might break and in such a case it was unclear whether the chair could still be used (22:7). These same general rules applied to such "special chairs" as stools with leather-covered metal seats used in lavatories. 57 In such seats,

<sup>&</sup>lt;sup>54</sup> Fintsi, *Woodwork*, p. 57. Cf. M *Zabim* 4:4 on chairs and benches without back or side support. Sitting on stools was not necessarily considered comfortable. See BT *Ketubbot* 111a.

<sup>&</sup>lt;sup>55</sup> In simpler chairs or stools, instead of seat planks, there might have been ropes or plaited straw drawn through and across holes in the frame. See Fintsi, *Woodwork*, pp. 57–58. These options would obviously have been cheaper than using wood.

<sup>&</sup>lt;sup>56</sup> 22:4 technically refers to a bride's chair. We have no idea what this seat looked like and why it was different from any other. Throughout history, bridal chairs have been decorated. This Mishnah also appears in M *Eduyot* 1:11 and served as a source for one of the controversies not only of the Houses of Hillel and Shammai, but also of Hillel and Shammai themselves. See Israel Ben-Shalom, *The School of Shammai and the Zealots' Struggle against Rome* (Jerusalem: Yad Izhak Ben-Zvi and Ben-Gurion University, 1993), p. 86 (Hebrew). In Shammai's view, it not matters not whether the seat or even the frame of the chair was broken. Once a bridal chair, always a bridal chair, at least in terms of the rules of ritual purity. According to Hillel, there was a connection between intent and action; according to Shammai, in these and in a few other matters, this connection did not exist (Ben-Shalom, pp. 82 ff.).

<sup>&</sup>lt;sup>57</sup> See Eyal Baruch and Zohar Amar, "The Latrine (Latrina) in the Land of Israel in the Roman-Byzantine Period," *Jerusalem and Eretz-Israel*, 2 (2004),

the seat might also come apart from the base of the metal chair. This might also happen to a simple stool (22:10). These chairs might still be used in this broken state. In the final analysis, the chair might just fall apart altogether (T *Kelim* Bava Bathra 1:12, p. 591).

As mentioned above, sitting or lying on the ground was not very popular and if real beds or chairs were unavailable for sitting or reclining, use might have been made of something else. This brings us to the second part of our discussion on simple breakage: broken furniture (or other implements) that had the potential for serving as substitute beds or chairs. As we mentioned in our discussion of Greco-Roman furniture above, this was known as the "barrel-chair" phenomenon, literally meaning taking a barrel, broken or not, and turning it into a chair, permanent or temporary: one object, broken or not, was converted into another, permanent or not.<sup>58</sup> This reflects the general tendency of avoiding disposal of anything and of continuing to use implements in primary or secondary usage as long as possible.

Secondary sitting/reclining could take place on almost anything. Thus, a household box or chest, the type of furniture known as "casework furniture," might also serve for sitting, i.e., serve as a temporary vehicle of "framework furniture." If it broke on top, though, sitting became impossible (19:7). However, if it broke on the side, one could still sit on it, provided it was not too high or had no rim that was too high or deep to make sitting impossible (19:9). It is not too clear, though, how much sitting would have taken place on a damaged dung-basket (19:10).

One might also sit on packing bags, fodder bags, shepherds' wallets, traveling bags, goatskins, spice bags and food wallets. Not all of these were household utensils, but some were brought into the house or its immediate environs to avoid sitting on the ground. Usable even when damaged, not all these objects retained susceptibility to *midras* impurity (20:1).<sup>61</sup> A cracked or broken household trough might

<sup>27–50</sup> and especially 43 and n. 25. Cf. *passim* T *Kelim* Bava Bathra 1:14 (p. 591, ed. Zuckermandel), BT *Eruvin* 10b and BT *Shabbat* 138a.

<sup>&</sup>lt;sup>58</sup> See above, n. 36.

<sup>&</sup>lt;sup>59</sup> See Aronson, *Encyclopedia*, cols. 146–148.

<sup>&</sup>lt;sup>60</sup> Cf. T Kelim Bava Mezia 10:3–4 (p.588).

<sup>&</sup>lt;sup>61</sup> Since their primary purpose was as a "receptacle" and not for sitting, if they were damaged they fell within the purview of the rule: "If the primary purpose is annulled the secondary purpose is annulled also" (M *Kelim* 19:10; 20:1; 22:7; T *Kelim* Bava Mezia 10:2, p. 588; 10:3, p. 588). See our discussion above. Secondary sitting might also take place in a baking trough (24:3), a box with an

turn into a chair, in the true barrel-chair tradition, although some Sages felt that at least in terms of susceptibility to ritual impurity, some type of concrete action had to be undertaken to turn the broken trough into a chair, such as smoothing rough spots to allow for a degree of comfort while sitting. The lack of such, though, did not inhibit secondary sitting (20:2; 20:4). The same is true regarding a large basket filled with rags or straw that might also serve as a seat, but is not considered one in terms of *Halakhah*, unless the materials were tied together, giving some type of chair form (22:9). Torn rags placed on chairs might represent the desire to cover the chair and not sit directly on it (27:12). Interestingly enough, only these rags might end up in the garbage, at least according to *Kelim*. As we shall see below, every effort would be made to continue using broken furniture or repair it.

b. *Purposeful breakage*: If very little in the Jewish household, especially the furniture we have been describing was ever discarded, and every effort was made to repair and even maintain continued use when broken, why would there ever be purposeful breakage?<sup>64</sup> By this point in our discussion, this should now be clear. If furniture was impure, one way to render it clean again and even unsusceptible to further *midras* impurity was by breaking it. The key was to break it

opening on its side (24:4), a leather cover of a barber (24:5), a papyrus writing tablet (24:7), a refuse basket for dung (24:9), a mat (24:10), a water-skin (24:11), a hide (24:12), a sheet (24:13), a napkin (24:14), a hunter's leather glove (24:15) and a young girl's hair-net (24:16). Damage or breakage is not mentioned in these cases.

<sup>&</sup>lt;sup>62</sup> Cf. T *Kelim* Bava Mezia 11:1–3 (p. 589).

<sup>&</sup>lt;sup>63</sup> "Sitting for a moment" is also mentioned in relation to sitting on various stumps of olive trees and blocks of date palms and the like (T *Kelim* Bava Bathra 2:1–2, pp. 591–592), but no breakage was involved. Four elders in Sepphoris also dealt with a column or pillar that had been whittled into a chair with a plane. Here too, though, there was no breakage involved (T *Kelim* Bava Bathra 2:2–3, pp. 591–592). Cf. Sperber, *Material Culture*, II, 36–42.

<sup>&</sup>lt;sup>64</sup> We refrain from discussing "polemical" extra-*Kelim* traditions on purposeful breakage. See, for instance, *Lamentations Rabbah*, Petihta 17 (p. 7b, ed. Buber) on the pagan mime in Caesarea who made fun of the Jews in his performance there by depicting them as breaking their wooden beds for use as fuel. They were forced to do this because they spent all their money providing for the Sabbath and had nothing left for weekday expenses. It is impossible to know how realistic the tradition or the depiction is, but it is clear that it was assumed that the Jews of Caesarea slept on wooden beds. See Schwartz, "Beds," p. 204.

enough to rid it of impurity, yet allow continued usage in some form or another. Sometimes this purposeful breakage was "technical," i.e., the piece was dismembered or components removed in a "surgical manner," hopefully leaving the pieces intact but fulfilling the need to "break" the furniture for purity reasons. In addition, sometimes it was necessary to take the bed apart in order to immerse components in a mikvah as part of the purification process (M *Kelim* 19:1). 65

M Kelim 18: 5 tells what happens when a bed contracts midras impurity and someone removes one of the planks of the head or foot of the bed, and two legs. In such instances, the bed remains unclean, i.e., it still clearly functions as a bed, as it might be propped up or leaned against something. 66 However, if one of the long sides and two legs were taken off, the Sages rendered it pure, although R. Nehemiah still considered it halakhically a bed, and impure. R. Nehemiah probably thought that such damaged beds could still be used, while the Sages thought this unlikely. Some actions clearly made the bed either too wobbly to function or too close to the ground to be considered a bed: cutting off two joints, in which the planks were fastened or "joined," at a diagonal, cutting off a handbreadth from two legs at a diagonal; or reducing the height of the whole bed to less than a handbreadth. Yet we must remember the tradition cited above regarding the Jerusalemite visiting Athens who slept on such a bed. What was accomplished by the breakage? Was the bed still usable or was the householder interested in using the parts of the bed? Apparently, these beds were sometimes still used as beds despite being quite broken.

Sometimes it was more important to what extent the components were "fastened" to the bed than whether the bed continued to function as a bed. M *Kelim* 18:3 states that bed-poles are not integral parts of the bed, and T *Kelim* Bava Mezia 8:4 (p. 587) further defines this according to whether the poles were "permanently" attached to the bed or not. If they were, and if one broke or removed them, this would render the bed clean. If they were not permanently attached, breaking or removing them did not change the bed's ritual status. The same was

<sup>&</sup>lt;sup>65</sup> See BT *Shabbat* 138a on the *kise galin*, which according to Rashi and Rabenu Hannael *ad loc*. was a type of chair that could be disassembled and reassembled. Cf. Fintsi, *Woodcraft*, p. 59 and Krauss, *Qadmoniot*, p.23. However, Tosafot, s.v. *kise galin*, disagrees and sees this as a type of chair with a canopy. The same two options apply to the מטה גללניתא mentioned in BT *Shabbat* 47b.

<sup>&</sup>lt;sup>66</sup> Cf. T *Kelim* Bava Mezia 8:5–6 (p. 587).

true of the boards of a straw bed or mattress.<sup>67</sup> If they were permanently attached, their removal removed the "bed status" of the bed. If they were not, their removal did not.

Sometimes it was also important what one did with the components. T *Kelim* Bava Mezia 8:8 (p. 587) states that taking apart a bed and dividing it into eight "beds," meaning pieces of the bed, does not render any of it pure since the pieces could be refastened to form the original bed. However, if one of the pieces ("bed") were attached to something else with a (metal) nail, it would seem that there was no intent to reuse it for the original bed and that part would be free of the original impurity of the first bed. The use of a nail is especially significant since bed (and chair) joinery was usually done with glue rather than nails, to enable the removal and replacement of parts. Use of a nail on a (former) bed part when making another piece of furniture or utensil signified the end of the connection between the original bed part and the bed.<sup>68</sup>

As we shall see below, parts were occasionally reused. M *Kelim* 18:7 describes a situation in which the leg of a bed defiled with *midras* impurity was attached to a bed that was not impure, obviously rendering the bed itself impure. In order to remedy this situation, the leg was broken off or removed. Care was probably taken to make the

<sup>&</sup>lt;sup>67</sup> Hebrew: סטיכס, which is the Greek *stibas*, a bed of straw.

<sup>&</sup>lt;sup>68</sup> On the use of vegetable glue in furniture construction in ancient times, see http://www.theatre.ubc.ca/dress decor/ancient world furniture egypt.htm On the historic use of wood glue in relation to furniture, see http://www.popularmechanics.com/home-improvement/furniture/123086.html. Metal nails were either too expensive to be used in construction of household furniture or required the work of a professional. Conversely, they were sometimes seen as a sign of shoddy craftsmanship in the construction of furniture. Ancient joinery did of course make use of (wooden) pegs like in the case of the square peg (tenon) and square hole (mortise) prominent in the tenon-mortise joint. Due to the success of this type of joinery, it continued in use even after the use of metal nails became more prominent in furniture construction (see <a href="http://www.si.edu/SCRME/takingcare/fundconst.htm">http://www.si.edu/SCRME/takingcare/fundconst.htm</a>). For a different view regarding the use of nails in chair construction see Fintsi, Woodwork, p. 59 (p. 304, n. 84). Fintsi refers to T Bava Kama 10:8 (ed. Lieberman, p. 51) and parallels, regarding a carpenter hammering in a nail while attempting to fix a chest and similar items of furniture, and states that the carpenter is responsible. Then the Tosefta continues to discuss the case of an artisan who was commissioned to construct a chair but constructed a bench, and vice versa. No mention of nails appears here, but Fintsi assumes that if nails were mentioned in one type of furniture, they were used in all types mentioned in the tradition. There is no reason for this assumption.

break as neat as possible to allow reuse of the leg. Once again, though, the act of "breaking" on purpose is related to the desire to remove a state of ritual impurity.<sup>69</sup>

Breaking on purpose might also be connected to secondary sitting or reclining. Thus, to avoid sitting on the floor one might rip a cloth and use it as a mat. If such a cloth was cut (i.e., "broken on purpose") and measured one square handbreadth, it was large enough to sit on and was susceptible to *midras* uncleanness (M *Kelim* 27:4).

- c. External breakage: The last category of breakage is external, i.e., somebody other than the owner or user of the bed/chair, or the immediate household members, causes the breakage. M Kelim 18:9 tells of an unclean bed, half of which was stolen. As we noted above, beds were one of the few items of household furniture that were expensive. We have no idea how the bed was taken apart, and what half of the bed means. Does it mean half of every component, or half of the sum total of components, leaving the other half intact. The continuation of the Mishnah states that the latter was intended. Whatever the meaning of the Mishnah, the bed was no longer a bed and therefore became ritually clean. The Mishnah also describes half of the bed as being lost or split by partners. In all of these cases, the bed became clean. If it were reassembled, it would again become susceptible to impurity.
- 2. *Repair:* As we have seen, very little was thrown away and many broken or damaged beds and chairs were used even in this state. Continued use of broken or damaged furniture usually produces more damage or breakage, and if the furniture is not fixed or repaired, it will ultimately become useless. It is not surprising that efforts were made to repair broken furniture. This was a problem since repairs that are more serious undoubtedly required the work of a professional, who was not always available. However, basic "assembly" or joinery

<sup>&</sup>lt;sup>69</sup> Cf. T *Kelim* Bava Bathra 1:14 (p. 591). The possibility or impossibility of breaking or dismantling furniture including its legs would determine whether the broken furniture would be susceptible to uncleanness.

<sup>&</sup>lt;sup>70</sup> See Fintsi, *Woodcraft*, p. 56. The chair frame was usually the work of a professional. See, for instance, T *Kelim* Bava Bathra 1:12 (ed. Zuckermandel, p. 591). See also T Bava Kama 10:8 (p. 51, ed. Lieberman) on a woodcraftsman (*harash*) commissioned to construct a chair or bench and cf. Meir Ayali, *Poalim ve-Omanim: Melachtam ve-Maamadam be-Sifrut Haz"al* (Givatayim, Yad la-Talmud, 1987), p. 18, and p. 125 (s.v. *nagar*).

repairs might have successfully been undertaken by the average householder, his friends, family, or a semi-professional.<sup>71</sup> Ultimately, however, non-professional repairs, done without proper tools or materials, would probably have facilitated further breakage.

Basic assembly would be considered, e.g., attaching a new or replacement leg to a chair or bed, but not constructing the leg itself. This type of basic repair would have required basic tools probably available in every household, and basic construction materials, mostly wood, and glue, probably of a vegetable variety, for joinery. Perhaps some bed or chair parts could be reattached or strengthened with ropes or cords, as was the case with the chair whose repaired parts were thus tied together (T *Kelim* Bava Bathra 1:12, p. 591). Most of the repairs were limited to simple matters and the fact that parts could be disassembled and reassembled easily made the possibility of these basic repairs more likely (M *Kelim* 19:1). Some of the sources to be cited have been dealt with above when describing breakage. Our discussion will be brief, and will relate to matters of repair.

We have already discussed M *Kelim* 18:6, which relates the case of a *midras* impure bed where one long side broke and was repaired, and then the same happened to the other side. It was not clear how the long sides broke, but apparently the damage was not too serious because they were repaired rather than replaced. The breakage and repair do not seem to be related to the joint, which often remained quite strong, and thus not prone to breakage. The repair seemed to require some basic woodwork that would also prevent the second side from breaking before the first was mended. The Mishnah concludes by pointing out that the second might have broken before the first was repaired, indicating that the breakage might have been somewhat

<sup>&</sup>lt;sup>71</sup> See Aronson, *Encyclopedia*, col. 147. Cf. Hingley, *Furniture Repair* (see n. 52 above). A good deal of breakage in modern-day beds and chairs takes place in the joints and thus much "home repair" today is devoted to the structural repair of joints. There is no reason why this should have been different in the past. On "amateurs" being able to make basic repairs on furniture see, for instance: Hingley, *Furniture Repair*; John Rodd, *Repairing and Restoring Antique Furniture* (New York: Sterling, 1954); and Ralph Parsons Kinney, *The Complete Book of Furniture Repair and Refinishing New Revised Edition* (New York: Scribner, 1984). The ancients were undoubtedly no less handy than we moderns are. On the tools necessary for furniture construction (such as saws, drills, axes, adzes, mallets, chisels, squares and awls, etc.), see Harold A. Liebowitz, "An Overview," in Meyers, *Encylopedia*, II, 353–354.

<sup>&</sup>lt;sup>72</sup> Krauss, *Qadmoniot*, II, 1, pp. 81–85.

serious after all. In any case, the repair seems to be limited to woodwork and assembly.

This was not so in M *Kelim* 19:6. The bed was impure, and both sides were removed and replaced by new ones. The joints, however, were not replaced, implying either that they were not broken or damaged or that it was difficult or impossible to repair them. The latter case is probable, bearing in mind that replacing the sides was unsuccessful, as the new sides also broke. Either the joints, which had not been repaired, made the new sides prone to damage, or the new sides were of low quality, did not fit, or could not withstand the pressure and usage, while the joints could.

We saw above that bed legs might break. Sometimes the bed would continue to be used in a broken state, but sometimes repairs would be made, a new leg replacing the old. If, these repairs were done by the householder or by another non-professional furniture maker, the new leg would most likely have come from another bed. This "new" leg then would hardly be new. M *Kelim* 18:7 tells of a bed leg that had contracted *midras* impurity while attached to a bed that was pure, and was subsequently removed in order to restore the bed to a state of ritual purity. The bed leg was probably glued rather than nailed, thus making it easier to facilitate its removal if necessary.

We discussed the case of external breakage (M *Kelim* 18:9), where half a bed was stolen, lost or divided. The Mishnah continues that the stolen, lost or divided half might be returned and reassembled or repaired. The original breakage was relatively easily repairable, i.e., the original bed had been divided in a manner allowing both "beds" to function as such, even if not from a halakhic standpoint.

3. Secondary Usage or Recycling: There were undoubtedly cases in which it was impossible to fix or use broken beds or chairs. There would, however, have been some attempt to use the parts for something else. This was not merely a matter of a recycling or repair mentality prevalent in ancient society (and largely even in modern society), but was also connected to the laws of ritual purity.

Thus, recycling often provided the added bonus of making the new utensil unsusceptible to uncleanness, based on the principle of: "If the primary purpose is annulled the secondary purpose is annulled also" (M Kelim 19:10; 20:1; 22:7; T Kelim Bava Mezia 10:2, p. 588; 10:3, p. 588). If the utensil's function in recycled form had been possible in its primary form, and the primary utensil had been totally broken and therefore not susceptible to impurity, then the recycled form was also

not susceptible to impurity, even if the new utensil functioned successfully. The issue revolved around the possibility of secondary usage in the original utensil. This, however, was limited by a second rule: "If an article is changed into a use of like category, it remains unclean; but if into use of a different category, it becomes clean" (M Kelim 28:5), i.e., secondary or recycled usage was not similar to the primary usage. All of this made it profitable for householders to find secondary usage for broken utensil parts, preferably not related to primary, original usage.

The first four sources relate to the "mattress"—the ropes used to construct the webbing as well as the bedclothes placed on it. 73 M Kelim 19:2 deals with the ropes used in constructing the mattress or bed webbing and particularly to the extra rope hanging over the sides. If this rope is shorter than five handbreadths, then it is unsusceptible to uncleanness because it is too short to be used for any other purpose should it be cut off. Rope measuring between five and ten handbreadths becomes susceptible to uncleanness because it can have secondary usage for beds. The Mishnah gives an example that accentuates the active connection of these traditions to Temple period activities. These ropes could be used to tie up the Passover sacrifice and to hang up the animal's bed, in which it was kept and before being lowered down for sacrifice. Rope over ten handbreadths in length is considered pure, i.e., has no secondary purpose, which is hard to fathom, or its secondary purpose would be totally removed from any use concerning any form of bed. This is different from the example the Mishnah gave in which the ropes were technically still "tied" and connected to a bed, albeit not to the type of bed we have been dealing with.74

The next *Mishnah* (19:3) relates to secondary use of the bedclothes placed on top of the above-described webbing. If the remnants are at least seven handbreadths long, they might be used as a covering for a donkey's back, and would thus be susceptible to uncleanness. It is unclear whether these remnants were cut off because they were too long for the bed and mattress, or whether they were frayed and no longer served a purpose on the bed. In any case, one continued sitting

<sup>&</sup>lt;sup>73</sup> Perush Ha-Geonim, p. 52 defines מיזרן or "mattress" as technically being a woolen garment or cloth that important people would place under their bedclothes and on top of the webbing.

<sup>&</sup>lt;sup>74</sup> Interestingly enough T *Kelim* Bava Mezia 9:3–4 (p. 588) mentions the legal principle but skips the example, perhaps reflecting the later redaction and subsequently different interests of Tosefta.

on these bedclothes, which explains why they retained the status of being susceptible to uncleanness. Damaged bedclothes (20:1) might still be used on the bed itself or in some other sitting capacity, which is why they remained susceptible to *midras* uncleanness. A bed sheet could be turned into a curtain<sup>75</sup> and apparently might still be returned to the bed, as we learn from the fact that this "curtain" still maintained its susceptibility to *midras* uncleaness (M *Kelim* 20:6; 27:9).<sup>76</sup> Only when steps were taken to make it a permanent curtain was it clear that the sheet would not return to the bed. These steps might be sewing or tying the curtain/sheet or fixing it in place as a curtain.<sup>77</sup>

The sides might also be used as beams (T *Kelim* Bava Mezia 11:7, p. 589). The beams might be returned to the bed to serve once again as sides, and vice versa, unless they had been nailed down. This changing back and forth, similar to the case of the bed sheet, had repercussions, of course, regarding the ritual purity of beams and/or sides of the bed; and all of this in relation to how damaged the beam/side was. As in the case of the sheet, the sides or beams were not totally damaged; they could be used either as beams or as bed parts as needed. This ended, though, when the beams were nailed into the ceiling or elsewhere for use in household construction. This was

<sup>&</sup>lt;sup>75</sup> The curtain, made from a bed sheet, might have served as a partition between rooms. See Hirschfeld, *Dwelling*, p. 267. See T *Pesahim* 1:3 (pp. 140–141, ed. Lieberman) and parallels on a bed serving as a room partition. Thus, both bed and former bedclothes might eventually serve the same purpose.

<sup>&</sup>lt;sup>76</sup> See, however, Hanoch Albeck, *Shishah Sidre Mishnah: Seder Taharot* (Jerusalem-Tel Aviv: Mossad Bialik-Dvir, 1959, p. 529 (Addenda and Additional Notes to 20:6). There are differences between actual *midras* uncleanness and "contact" with such uncleanness and this serves as a source of a dispute between the Sages and R. Yossi in 27:9. None of this has particular import for our purposes regarding the secondary usage of the sheet.

T Kelim Bava Mezia 11:8 states that the switch from sheet to curtain is not dependent upon an act but rather on the state of the sheet: "When it is worn out and does not serve its [former] function." See also 11:9–10 on a sheet turning into a sail for a ship or sheets and blankets placed on the ground. On reverse recycling vis-à-vis boats and furniture, albeit in a more modern age, see Pazit Offner-Dines, "Old Boats are Not Thrown Out," *Ha-Aretz*, *Galeria*, 17/03/06, p. 3 (Hebrew), who writes about a Thai craftswoman who constructs sofas, chairs and tables out of old discarded wooden boats. Blankets placed on packed-earth floors provided some degree of comfort. We have discussed above, in detail, the desire to avoid sitting or reclining on the floor, and these blankets were better than nothing. Cf. Joshua Schwartz, "A Child's Cart': A Toy Wagon in Ancient Jewish Society," *Ludica: annali di storia e civilita del gioci*, 4 (1998), pp. 13–14 and the literature cited *ad loc*.

also true regarding use of (damaged) bed mats, which could also double as "beams" in some form or another.<sup>78</sup>

Conclusions: Reduce, Reuse, and Recycle

Damage to household furniture was inevitable, whether all at once or over time, whether to the whole or to its parts, essential or secondary. Beds and chairs are framework furniture. Therefore, their critical components were the frames and their parts, and especially the joints facilitating the connections between them. Beds, more complex than chairs, had a more complex frame with more parts susceptible to damage or breakage. What defined a part as essential would often be determined by its relationship to other parts. Thus, mattress webbing was certainly critical to beds. While theoretically, one might find some way to sleep or recline in a bed without such webbing, it would be uncomfortable. Despite the logic of making ropes and webbing "essential," they were not considered critical a priori, and became so only after a significant number of webbing ropes were attached; and even these had to have potential for reuse, making them important qua their independent status as ropes. Otherwise, the webbing was not considered a true framework component.

Kelim relates to the frame and its critical parts in terms of ritual purity; but it is easy to see that these are also the essential and expensive parts of beds and chairs, and would have been constructed and later repaired by a professional. Possibly, the reference to stolen beds or bed parts reflects the need to replace precisely this type of part. Repairs might have been so difficult, or replacement so expensive, that stealing a part might have been the only other "viable option."

Other types of broken furniture might serve as primary or secondary beds or chairs, embodying the barrel-chair phenomenon. In addition, the desire to avoid sitting on the ground was so great that any

The have not dealt with bed mats in our study, mainly because there are no breakage traditions, apart from this one. The mat in question was either the *xaladrion* or the *psiathon*. See Schwartz, "Material Culture and Rabbinic Literature" (see n. 23 above), p. 201. The former was a "carpet" or "mat" while the latter was a mat of straw or reeds. See M *Ketubbot* 5:8. A husband was required to give his wife not only a "bed" but also a χοτ. The χοτ that appears in T *Kelim* has been explained as a mat of reeds, and was apparently more comfortable than one of straw. This then is one form of *psiathon* and could also have been used in simple construction.

type of broken household utensil or furniture, whether indoor or outdoor, might become a temporary chair or bed.

A unique aspect of the relationship between householders and their furniture pertained to the laws of ritual purity. Rabbinic sources give the impression that matters of purity concerned Jewish householders, and while one might argue that this reflects that literature rather than reality, archaeological remains support a claim to the contrary.<sup>79</sup> This being the case, there was probably at least a general desire among householders to avoid having their furniture in a state of ritual impurity. Regarding foundation furniture, this was mostly impurity of the *midras* type, which was the direct result of sitting or reclining. While components of the bed/chair might be taken apart and immersed in a *mikveh*, the easiest way to obviate the impurity was to break the utensil. According to Kelim, householders often walked a fine line between purposely breaking furniture to render it halakhically clean, while trying to maintain the original use and purpose de facto, even if Halakhah did not recognize this de facto status, to the benefit of the householder. However, every now and again, the Sages or individual rabbis expressed some concern at this subterfuge and reevaluated the relationship of *Halakhah* to everyday reality.

Continued use of broken or damaged beds or chairs would eventually result in further damage or breakage and would make sitting/reclining increasingly uncomfortable. Repair would be required: perhaps not total repair, which would again render the furniture susceptible to uncleanness, but enough to allow normal usage. Most householders were apparently capable of basic assembly or joinery repairs and possessed the tools to do so. The lack of professional expertise might explain continued breakage, although in general, few repairs were permanent. Multiple or repeated repairs might have prevented some breakage for a while, but eventually the use of "repaired" furniture took its toll. In addition, amateur repairs were probably done using poor quality and inappropriate materials.

<sup>&</sup>lt;sup>79</sup> See Eyal Regev, "Non-Priestly Purity and Its Religious Aspects according to Historical Sources and Archaeological Findings," in M.J.H.M. Poorthuis and J. Schwartz, *Purity and Holiness: The Heritage of Leviticus* (Leiden–Boston–Koeln: Brill; Jewish and Christian Perspective Series, 2, 2000), pp. 223–244a and the literature cited there. Cf. Boaz Zissu, *Rural Settlement in the Judaean Hills and Foothills from the Late Second Temple Period to the Bar Kochba Revolt*, unpublished doctoral dissertation, Hebrew University of Jerusalem, 2001, pp. 235–239 (Hebrew).

When the furniture or its parts became unusable for its primary purpose, there were two possibilities. Either the object was discarded, or the whole or its parts used or saved for secondary usage. According to the literature we have examined, Jewish householders probably had two motives in recycling. One was to avoid waste and discarding any type of object. There was always a use for something. However, since when an unclean object or its parts took on a clear-cut and (mostly) permanent secondary function, it became clean, channeling the object to different usage provided a solution for impurity. In households with ritual purity concerns, there was probably a constant recycling process of utensils and objects taking on new functions. In households where ritual purity was less of a concern, or no concern at all, it is likely that the more "universalistic" criteria governing the need to recycle kicked in.

The recycling traditions in *Kelim* refer to beds rather than chairs, and deal with almost all essential bed parts and bedclothes. While such traditions might also conceptually include recycling chairs, there might have been less recycling of chairs because of their simpler construction. There were few components and when they broke, usage became difficult or impossible, and little could be done with the parts. In addition, the barrel-chair phenomenon discussed above made replacement "chairs," at least temporarily, easier to come by, and thus, broken chairs might have been discarded more often than broken beds.

The bed-chair traditions of *Kelim* describe a society seemingly comfortable with the norms of the modern-day "3Rs of ecology": reduce, reuse and recycle. Reduction is two-fold: less consumption and less disposal. We have seen that household furniture was minimal, beds and chairs providing that small degree of comfort and sometimes prestige that made ancient life more civilized. We have also seen that every attempt was made to limit disposal of broken implements in general, and beds and chairs in particular. They were expensive, not easily replaceable, and only a real catastrophe would cause their total discard. Thus, reuse and recycling seem to have been central in the householder's mentality. What remains is to try to determine the reasons for this, or at least to expand upon its operative mechanisms.

<sup>&</sup>lt;sup>80</sup> On the 3Rs (and sometimes "recovery" is added to the list), see, for instance, <a href="http://www.epa.gov/epaoswer/non-hw/muncpl/reduce.htm">http://www.epa.gov/epaoswer/non-hw/muncpl/reduce.htm</a>; <a href="http://www.moea.state.mn.us/reduce/index.cfm">http://www.moea.state.mn.us/reduce/index.cfm</a>

and <a href="http://www.ns.ec.gc.ca/udo/reuse.html">http://www.ns.ec.gc.ca/udo/reuse.html</a> and the numerous links and bibliography cited *ad loc*.

We have seen that most of ancient society refrained from becoming a "throwaway society." Is the reality described in *Kelim* simply reflective of an ideal? *Kelim* deals with laws of ritual purity and matters of "clean" and "unclean." While it might be argued that this is simply the background for most dicta relating to objects, utensils, implements, furniture and the like dealt with in this tractate, it might also be claimed that there is something much more essential in the treatment of these objects there.

It is hard to imagine that a technology-oriented tractate like *Kelim* simply reflects the academic or theoretical musings of the academy or beth midrash, with little application to the everyday life of householders. Everyday matters of ritual cleanness were apparently significant to the latter. Yet it is hard to imagine that the average householder (or probably even rabbi for that matter) could keep track or follow the minutiae of the decisions pertaining to the numerous utensils mentioned in Kelim dealing with everyday life; and some of the technological discussions seemed to relate more to the house of study than to life. The average householder probably related to the general principle that a "broken" implement was not susceptible to ritual uncleanness. Was the continued use of "broken" utensils a reflection of the desire to avoid impurity? The implement really needed to be "broken," but that could always be a matter of interpretation and even the rabbis could not always agree on what was broken or not. We discussed above the subterfuge of using "broken" utensils. This subterfuge undoubtedly greatly contributed to reduction: the continued use of broken implements provided protection against impurity while new utensils were susceptible to impurity. For those for whom ritual purity was of no concern more general factors governed their use of these utensils.

Repair or reuse, however, might have been problematic for those who had at least some concern for ritual purity. By repairing the utensil for more comfortable or efficient reuse, one reopened a Pandora's Box of susceptibility to impurity. Bearing in mind that repairs were at the household rather than professional level, the repair might have left the utensil tottering on the halakhic boundary of breakage. Playing with the boundaries of effective repair established by the rabbis, the householder might have continued to maintain the subterfuge. When repair or reuse was impossible, recycling, or changing the (halakhic) essence of the utensil or implement allowed for continued use in a new form that provided protection against impurity.

The laws of ritual purity seemed to have provided an additional set of checks and balances against waste and strengthened inherent tendencies towards object thrift, at least regarding the household furniture that we have examined. It is not impossible that inherent tendencies toward object thrift aroused some interest in ritual purity, at least in respect to these utensils. What remains to be seen, however, and this will be examined in further studies, is whether the trends described above were applicable to all types of utensils and implements, common and cheap ones, for example, in addition to fairly expensive ones like household furniture, or whether we have described phenomena of a more local and limited nature. Our impression is that the former is true, and we shall continue studying this subject in the future.