The Meaning of zēr

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Abstract

The word זֵר (zēr) occurs ten times in the Hebrew Bible, where it designates a feature of several major cult objects in the tabernacle. What, specifically, does it mean? The tortuous history of exegesis related to this question is surveyed. Close attention is paid to the Septuagint and Letter of Aristeas, whose authors seem to have understood the word as referring to a guilloche molding, based on an etymological association with the word משזר. A novel solution is then proposed, according to which the זֵר should be identified with the cavetto cornice (German: Hohlkehlsims), a common element in ancient Near Eastern architecture and crafts. The cavetto cornice is a concave molding, quarter-circular in profile, which surrounds the top of a structure or object.

Keywords

זר – ark – table – incense altar – tabernacle – design

The word זֵר (zēr) occurs ten times in the Hebrew Bible. All its occurrences are in the priestly tabernacle pericopes of the Pentateuch, and it always designates a feature of a major cult object in the tabernacle. A זֵר adorns the ark (Exod 25:11, 37:2), the table (25:24, 37:11), the table’s מסגרת (25:25, 37:12) and the incense altar (30:3, 4; 37:26, 27). In all four cases the text specifies that the זֵר is made of gold (זהב) and is situated “around” (湎בר) the object it adorns (25:11, 24, 25; 30:3; 37:2, 11, 12, 26). However, this information is not sufficient to indicate what a זֵר is. What form does it take? And where on the objects is

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it located: top, bottom or middle? In this paper, a historical survey of exegesis surrounding this problem will be presented, after which a new solution will be offered.

1 Survey of Exegesis

a Septuagint and Related Texts
The Septuagint renders the word זֶר, in the case of the ark and the table, as κυμάτια στρεπτά (25:11) and στρεπτά κυμάτια (25:24), “twisted cymatia”; in the case of the table’s מסגרת—as στρεπτόν κυμάτιον (25:25), “twisted cymatium”; and in the case of the incense altar—as στρεπτὴν στεφάνην (30:3, 4), “twisted crowning”.1

1 The five remaining occurrences of זֶר in the MT are in the section Exod 35-40, where the Septuagint deviates drastically from the Hebrew text. Of these five, four (37:11, 12, 26, 27) are not represented in the Septuagint, but in Origen’s reconstruction they all appear as κυμάτιον. In the final occurrence (37:2 [LXX 38:2]), which pertains to theark, זֶר is represented in Codex A of the Septuagint as κυμάτιον, but the entire phrase in which it appears is missing in Codex B. John W. Wevers (Text History of the Greek Exodus [Göttingen, 1997], p. 257) argues that the longer text is original and the shorter text is due to parablepsis. But, unlike all the undisputedly original Septuagintal renditions of זֶר, the modifier στρεπτόν is missing in the longer reading; and κυμάτιον is in the singular, whereas the Septuagint’s translation of the parallel verse pertaining to the ark (25:11) has the plural κυμάτια. In both details the longer text is identical to the Origenian reconstructions. Therefore it seems more likely that the shorter text is original and the longer text is the product of a later attempt at harmonization with the MT. Lastly, in Exod 27:3, the Septuagint contains the instruction to make a στεφάνην for the bronze altar, where no such instruction exists in the MT; the reading in the Septuagint must reflect a different Vorlage, but it may be said that στεφάνην here is equivalent to MT [תַּחַת], which is phonetically similar to זֶר; see also Jer 52:18.

earth, suggesting that they understood them as evoking ocean waves. But κυμάτιον probably never had any direct connection with water, merely meaning “small swelling”. Indeed, in the *Lexicon* of Hesychius of Alexandria, the word is defined simply as a projection (ὑπεροχαί) in carpentry and masonry.

The Septuagint presumably uses the singular κυμάτιον in the case of the table’s מסגרת, rather than the plural κυμάτια, which it uses for the table and the ark, because the מסגרת, being itself an added element to the table and only a handbreadth thick (Exod 25:25), would not be large enough for multiple moldings.

The word the Septuagint uses to render the ר of the incense altar, στεφάνη, translated above as “crowning”, is a more common term, defined in LSJ as “anything that surrounds or encircles the head, etc., for defence or ornament”. The same word is used in the Septuagint to render the table’s מסגרת itself (25:25[x2], 27), so it could not have not been used to render the ר of the масגרת.

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**Figure 1** Ovolo and cyma reversa moldings.
without creating considerable awkwardness. Thus it may be that the translator regarded στεφάνη as the best translation for ר, but allowed himself to use it only in the case of the incense altar because it was most distant from the table’s מסגרת in the text. The word’s range of meanings, along with the Septuagint’s use of it to translate קסף in Deut 22:8, an addition to a roof to prevent people from falling off it, indicate that the translator envisioned the ר, at least in the case of the incense altar, as located at the top of the object.\(^5\)

In all four cases the translator adds the adjective στρεπτός (“twisted”, “wreathed”, etc.), which he also uses as a substantive equivalent to מָסר in Deut 22:12, a word designating some sort of attachment to a garment.\(^6\) This reveals that he associated the word ר with the root רָשָׁ, a fabric-related root peculiar to the Exodus tabernacle pericopes (21 occurrences, all in the participial hofʿal form מָסר).\(^7\) The root is usually understood as carrying the sense of “spin” (thread), and it is translated by the Septuagint itself with the verbs χλώθειν and νήθειν, both of which have that meaning. The reason the Septuagint uses στρεπτός and not forms of χλώθειν or νήθειν to describe the ר is probably that the former is more suitable for gold; it is used elsewhere in conjunction with the metal (Herodotus, Hist. 3.20).

The description “twisted” is somewhat vague, but is clarified by a section in the Letter of Aristeas (51-82; excerpted in Josephus, Ant. 60-84) that describes a table granted by Ptolemy Philadelphus to the Temple in Jerusalem. The table, which is said (56) to be constructed according to the Jewish scriptures (i.e. Exod 25:23-30) insofar as they provide explicit instructions, has a crowning (στεφάνη = מסגרת) with twisted cymatia (κυμάτια στρεπτά = ר). It is added (58-60) that these cymatia take the form of ropes (σχοινίδον) with precious stones interwoven between them. This more detailed description accords with the Septuagint and immediately brings to mind the guilloche a.k.a. plait-band pattern, which decorates moldings—particularly convex moldings—on Greek architecture in all periods,\(^8\) and is seen, for example, in the Erechtheum [Figure 2]. Thus it can be concluded that the authors of the Septuagint and the Letter of Aristeas interpret the ר as a guilloche molding.

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6 Tassels, according to BDB and HALOT.
7 Jastrow agrees with the Septuagint’s implied etymological view of רָשָׁ, understanding the verb to be a šafʿel form of biblical רָשָׁ. In HALOT, too, רָשָׁ is derived from II רָשָׁ, to which is attributed an essential meaning of “to turn”. See also Akkadian zeru, defined in CAD as “braided, plaited”, and zāru A, “to twist”.
A marginal comment in Greek Catenae manuscripts, possibly deriving from Aquila, \(^9\) translates זר in Exod 38:2 (pertaining to the ark) with the peculiar form χείλωμα, which is evidently related to χεῖλος. The latter is defined in LSJ as “lip” and metaphorically as “edge, brink, rim”, and is the word consistently used by Aquila to render שפה.\(^{10}\) This translation, which appears to be a contextual guess, has in view a projection encircling the ark’s top.

### b Targums, Vulgate and Rabbinic Exegetes

_Targum Onqelos_ and _Pseudo-Jonathan_ render זר as זיר or דיר. Neither form is otherwise known to have any meaning in Jewish Aramaic that makes sense in this context. In Syriac, zyrʾ means “collar” and, later, “crown”,\(^{11}\) but there is no reason to suppose that the targums’ audience was familiar with these meanings, which may themselves be influenced by interpretations of the word זר in Exodus. Thus it seems that these two targums simply transcribe the word without taking a stand on its meaning.

In _Targum Neofiti, Fragmentary Targum V_ and the Peshitta, זר is rendered as כליל, “crown”. This translation evidently stems from the assumption that זר is related to biblical נזר, also “crown”. Indeed, when נזר in the Hebrew Bible refers to a concrete object separate from the human body, it is almost always translated by _Targum Neofiti_ and the Peshitta, and by the other Aramaic

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9 The reading is ascribed to Aquila in Field’s edition of the Hexapla, but not in the Göttingen Septuagint (J. W. Wevers, Exodus [Göttingen, 1991]).

10 J. Reider and N. Turner, An Index to Aquila (VTSup 12; Leiden, 1966), pp. 254, 312.

targums, as (א) כליל (e.g. Exod 29:6, 39:30). Also holding this position is R. Shimon b. Yohai in Exodus Rabbah (34:2; followed by Rashi), who indicates that ר means כתר; and such an understanding seems to underlie two homilies of R. Yohanan in b. Yoma 72b as well. The Vulgate, too, translates ר in most cases as corona, though this is not the word it uses to translate זר.13

The view of the ר as a crown accords with the notion that the ark’s ר was situated at its top and projected above its lid, a notion expressed opaquely by R. Judah in b. Yoma (ibid.) and later more clearly by Rashi (ibid. and on Exod 25:11). Ibn Ezra (short commentary on Exod 25:11) shares this conception but deduces it from the text’s use of the preposition עליה, “upon it.”

Menahem ibn Saruq, while allowing for the possibility of a relation between ר and נזר, prefers to associate the former with the verbal form זריה (Ps 139:3) and explains it as a thing that surrounds.14 This etymology is accepted by Jonah ibn Janah,15 Rashi (on Ps ibid.), Ibn Ezra (ibid. and short commentary on Exod 25:11), Radaq (Ps ibid.) and Meiri (ibid.).

Bekhor Shor (on Exod 25:11, 24, 25:30:3), followed by Hizquni (ibid.), implausibly explains the ר of all the cultic objects said to have it not as a distinct feature at all, but simply as a gold coating for the parts that are not included in the separate instructions to coat the objects with gold. For the ark this means the upper, horizontal thickness of the sides; for the table—the vertical thickness of its top; for the table’s מסגרת—its upper and side surfaces; and for the incense altar—the vertical thickness of the board forming its top. In Midrash Hagadol (on Exod 25:11), on the other hand, a practical function is attributed to the ר of the ark: it holds the כפרת in place. Gersonides (on Exod 25:11, 24, 25) generalizes this idea to include the table and its מסגרת as well: the ר of the table holds whatever is placed on the table, and the ר of its מסגרת holds the top of the table itself. Gersonides does not propose a function for the ר of the incense altar.

c  
**Modern Scholarship**

In BDB, ר is defined equivocally as “circlet, border” (“orig. that which presses, binds”) and is derived from זר III (“press down and out”). In HALOT we find it

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12 In the case of the table, the Vulgate confusingly renders the ר of the table itself as labium, "lip" (Exod 25:24, 37:11); the ר מסגרת as coronam interrasilem, "embossed crown" (25:25, 37:12; cf. 1 Kgs 7:28), and coronam (25:27, 37:14), "crown"; and the ר מסגרת as coro-nam…-olam (25:25; cf. 1 Kgs 7:29), "little crown", and coronam (37:12). See further comments in C. Houtman, Exodus III (HCOT; Kampen: Kok Pharos, 2000), pp. 376-377.
13 The translation "crown" is also used in the Tyndale, Coverdale, Geneva, Bishop’s and King James Bibles, and in some older revisions of the last: Webster’s, RV, ASV and JPS.
defined as “frame, border” (*HALAT*: “Randleiste”), but derived from Akkadian *zirru*, meaning “reed hedge”.

A similarly generic definition with a different etymology is proposed by Yehoshua Grintz, who, with the aforementioned Catenae comment, takes the word to mean an encircling rim, and notes that *ḏr* in Egyptian means among other things “boundary” and “enclosing wall”.

Some modern commentators on Exodus offer more specific descriptions of the *זר*. Umberto Cassuto expresses a definite opinion on both its position and its form, maintaining that the *זר* of the ark is “an adornment in the form of a garland of flowers or leaves running right round the four sides of the ark on the outside, bisecting its height, and resembling in its form a similar adornment that was to be made for the table and its frame and for the altar of incense”. Unfortunately, he does not explain his reasoning. Benno Jacob argues that the *זר* possessed the same status as the rings and poles, and infers from this that the purpose of each *זר* is to fasten the rings to the object. Finally, William Propp, critiquing Jacob, suggests that the *זר* is positioned around the middle of the ark's height and serves the structural purpose of supporting the rings below it.

### 2 The *זר* as a Cavetto Cornice

The survey above demonstrates that a compelling identification of the *זר* has not been reached and suggests that etymology cannot lead to such an identification. What none of the surveyed exegetes appear to have done, however, is to search ancient Near Eastern wooden artifacts resembling the ark, the table and the incense altar for features that correspond to the *זר*. Because the descriptions of the tabernacle, its components and its furniture are recollective first and foremost of Egyptian craftsmanship, and because of the prized status of

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16 In congruence with these lexica, and possibly influenced by the Septuagint, many modern English-language translations of the Bible render *זר* as “border” (Darby, NET), the similar “molding” (*RSV, ESV, NRSV, NKJV, NAB, NJB, NIV, NLT, NJPS*), or both (*NASB*).


Egyptian furniture throughout the ancient Near East, such a search should naturally begin with the Egyptian material.

The cavetto cornice, a common element in Egyptian architecture and crafts, consists of a concave molding with a quarter-circular profile that surrounds the top of an object or structure [Figure 3]. This feature is at least as old as the 3rd Dynasty.

Ark
It has recently been argued that the ark is properly understood as a portable wooden chest made in typical Egyptian style, and that extant chests from ancient Egypt reveal parallels to almost every detail of the ark as described in priestly and other biblical texts. The cavetto cornice commonly appears on portable wooden boxes and chests from the 5th Dynasty onwards. Such items from the 18th Dynasty alone include a box with a shrine lid, several boxes from the tomb of Yuia and Thuiu, and several objects from the tomb of Tutankhamun [Figure 4].

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25 Killen, ibid.
26 Box with a shrine lid: ibid., 37, pl. 28. Boxes from the tomb of Yuia and Thuiu: ibid., 46-49, figs. 57-58. Objects from the tomb of Tutankhamun: Jaromir Malek (dir.), Tutankhamun:
Like the biblical ק, the cavetto cornice could be made of gold. This is illustrated by a beautiful specimen found on an obsidian box from Byblos bearing the name of the 12th Dynasty Pharaoh Amenemhet IV (c. 1798-1790 BCE) [Figure 5]. The excavator, Pierre Montet, describes it thus:

[The cornice has] three parts: 1. a rectangular frame made of gold, laid flat, exhibiting both inside and outside a small ledge; 2. a band, laid on edge, 10 millimeters high and just long enough to settle around the two rails [on the underside of the box’s lid]; 3. four sheets of gold soldered to each other to form a necking in a very refined style. The dimensions are calculated so that they can rest, at the bottom, on the edges of the box and, at the top, on the ledge of the flat frame. It is likely that the space between the band and the necking was filled with a cementing material.
and penetrated by six pegs, placed in the holes made in the thickness of the box.²⁷

b Table
The cavetto cornice also adorned ancient Egyptian wooden tables. Depictions of tables with cavetto cornices already appear in the 6th Dynasty mastaba of Mereruka (c. 2340 BCE), and two actual examples, from the 17th and 18th dynasties, are extant [Figure 6].²⁸ These tables display additional

![18th Dynasty table. From Killen, Vol. 1, pl. 109, credited to the Brooklyn Museum; reproduced by permission of the Brooklyn Museum.](image)

Figure 6 Cavetto cornices on wooden tables.

²⁷ P. Montet, Byblos et l'Egypte: quatre campagnes de fouilles a Gebeil (Paris, 1928-1929), 1, pp. 157-159; translated by the present writer. The original text reads: “… une cornice en trois parties: 1° un cadre rectangulaire en or, posé à plat, présentant à l’intérieur comme à l’extérieur un petit rebord; 2° un ruban, posé sur tranche, haut de 10 millimètres et juste assez long pour se fixer autour des deux traverses; 3° quatre feuilles d’or se soudant l’une à l’autre pour former une gorge de style très pur. Les dimensions en sont calculées pour qu’elles puissent s’appuyer, en bas, sur les bords du coffret et, en haut, sur le rebord du cadre plat. Il est probable que l’intervalles entre le ruban et la gorge était rempli d’un ciment où pénétraient six chevilles placées dans les trous pratiqués dans l’épaisseur du coffret.”

similarities to the table of the tabernacle as described in the Pentateuch: one is known to be made of acacia wood and sports proportions of approximately 2 W. × 3 H. × 4 L. (see Exod 25:23, 37:10). And both have a horizontal frame of stretchers connecting the legs at about mid-height, which may correspond to the table’s המסגרת (Exod 25:25[x2], 27; 37:12[x2], 14). Depictions of similar tables with cavetto cornices appear in several Phoenician artworks from the 1st millennium BCE.  

**Incense Altar**

As for wooden incense altars, they were not used in ancient Egypt, and this writer is unaware of any extant examples of such objects from elsewhere in the ancient Near East. However, many monolithic stone incense altars from ancient Israel have cornices. On the most carefully made specimens, the flaring of the cornice appears to be concave, indicating that the constructors were aiming for a cavetto-type cornice; this is most clear on the two altars from the temple in Arad; on these, however, the cornice protrudes from a groove and so its edges are in line with the sides of the altar [Figure 7].

Many of these altars display additional features of the incense altar as described in the Pentateuch: proportions of approximately 1 W. × 1 L. × 2 H. and horns (see Exod 30:2, 37:25). The altars are often encircled at mid-height or above with a conspicuous wide, rectangular-profile band. Seymour Gitin suggests equating this band with the זר and the cornice with the כרכב casually mentioned in Exodus (27:5, 38:4) as a feature of the bronze altar. But the text implies that the כרכב is at the altar’s middle, not its top. Thus, even without considering the ark and the table, the reverse is more likely: the band should be equated with the כרכב, and the cornice should be equated with the זר.

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32 For a large corpus of altars from Israel with a summary of their forms, see: S. Gitin, “Incense Altars from Ekron, Israel and Judah: Context and Typology”, *Eretz Israel* 20 (1989), pp. 52*-67*. Gitin refers to the cornice as a “rim”.

33 Ibid., p. 61*.

34 As maintained by Cassuto (*Exodus*, pp. 363-4), Jacob Milgrom (*Altar*, *Encyclopedia Judaica*, 2, pp. 760-767 at 762) and Propp (*Exodus*, p. 423).
7A. Altar from Megiddo. Photographed by the author with the cooperation of the Israel Museum, Jerusalem.

7B. Altars at the Arad temple. Photographed in situ by Eric D. Huntsman; reproduced by permission.

FIGURE 7 Cavetto-type cornices on stone altars from Israel.
In Egypt, large, stone altar platforms were usually furnished with typical cavetto cornices, as were some of the small, Syrian-influenced horned stone altars that appear in the Hellenistic period, such as the one at Karnak [Figure 8].

In summary, the cavetto cornice corresponds in every way with the biblical נ, and it appears to be the only feature of ancient Near Eastern material culture to do so. A reasonable conclusion is that they are one and the same. This conclusion is consistent with all the proposed etymologies covered in the survey above, except the one reflected in the Septuagint. Thus the word נ can confidently be provided with a definition without a resolution of the question of its etymology.