Abstract
This entry discusses the linguistic (prosodic) features of the Ancient Greek poetic phenomenon of the metrical "bridge," a position in a line of verse where a word division is either disallowed or strongly disfavored.

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Ancient Greek, meter, sentence structure, linguistics, grammar

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Bridges
By: H. Paul Brown

The *bridge* (alternately *iunctura* or *zeugma*) is a difficult phenomenon to define, as it represents the absence rather than the presence of a certain feature, namely word division. Specifically, it has been noted that there are certain positions in the verses of various stichic meters where a word break is rarely found. Unlike other juncture phenomena such as *enclisis, sandhi, caesura*, and line end, the presence of a particular bridge may be heavily contingent upon period, genre, and author. The most commonly discussed bridges are the following:

1. **IAMBIC AND TROCHAIC METERS**

*Parson's Bridge:* A heavy syllable in an ancesps position may not end a word except before a primary caesura. This bridge is most commonly discussed in respect to the iambic trimester (Dramatic Meter), where it is usually filled by a molossus-shaped word (Devine & Stephens 1982:34). It is most robustly represented in the iambics of Attic tragedy, most weakly observed in those of comedy.

\[
\begin{align*}
\text{\textbf{x}--} \sim \, | \, \text{\textbf{x}--} \sim \, | \, \text{\textbf{x}--} \sim \, \text{\textbf{x}--} \sim \, \text{\textbf{x}} \parallel,
\end{align*}
\]

Maas (1962:34-35) notes a more general tendency to avoid word breaks following a heavy syllable (Syllable Weight) in an ancesps position in iambic and trochaic meters of the iambographers and the tragedians, and in the dactylo-epitrites of Bacchylides (Lyric Meter).

*Knox's Trochee Bridge:* In lines of iambic trimeter, a trochaic-shaped word should not end in the ancesps position of the last metron (position g), although longer words may.

\[
\begin{align*}
\text{\textbf{x}--} \sim \, | \, \text{\textbf{x}--} \sim \, | \, \text{\textbf{x}--} \sim \, \text{\textbf{x}} \parallel
\end{align*}
\]

Knox's *Iamb and Spondee Bridges:* This bridge is similar to the trochee bridge above. In lines of iambic tetrameter, either an iambic-shaped or spondaic-shaped word should not end in the ancesps position of the last metron (position 13).

\[
\begin{align*}
\text{\textbf{x}--} \sim \, | \, \text{\textbf{x}--} \sim \, | \, \text{\textbf{x}--} \sim \, \text{\textbf{x}} \parallel
\end{align*}
\]

2. **DACTYLIC HEXAMETER**

*Hermann's (A) and Meyer's (B) Bridges:* If the second or fourth foot of a line of hexameter (Epic Meter) is realized as a dactyl, no word break can separate the two light syllables. Hermann's and Meyer's bridges are referred to as trochaic bridges, since they exclude trochaic-shaped words. Meyer's bridge is largely restricted to lines containing a caesura after the heavy syllable in the third foot. These bridges are sporadically attested in Homer, but are much more consistently observed in later hexameter poets, especially Callimachus.

\[
\begin{align*}
\text{\textbf{--} \sim} \, | \, \text{\textbf{--} \sim} \, | \, \text{\textbf{--} \sim} \, \text{\textbf{--} \sim} \, \text{\textbf{--} \sim} \parallel, \\
\text{B} & \text{A}
\end{align*}
\]

*Naekey's Bridges* (West 1987:62; also known as the *Spondee Zeugma*, cf. Devine and Stephens 1984:11): There is a restriction on word breaks after a spondaic second, fourth, or fifth foot of a hexameter line. Such a break involving the fifth foot is especially rare, given the overall rarity of spondaic fifth feet.

\[
\begin{align*}
\text{\textbf{--} \sim} \, | \, \text{\textbf{--} \sim} \, | \, \text{\textbf{--} \sim} \, \text{\textbf{--} \sim} \, \text{\textbf{--} \sim} \parallel
\end{align*}
\]

"
"Trochaic Bridge" of the first hemistich: If the first or second foot is realized as a dactyl, no word break can separate the two light syllables. Meyer's bridge (B above) appears to be a specifically Callimachian refinement of a general tendency to avoid trochaic-shaped words, especially strings of them, in the first half of the hexameter.

\[ -\infty | -\infty | -\infty | -\infty | -\infty | -\infty | -\infty ] \]

The term "bridge" is occasionally applied to cases where an expected caesura, especially the primary caesura of the hexameter line, is not found, but the relevant positions are filled with a longer word. Such a caesura is then said to have been bridged.

\[ \infty | \infty | \infty | \infty | \infty | \infty | \infty | \infty | \infty | \infty | \infty ] \]

ēic sún te Mēnoiūtādēi kal hōs hētāroisín
'He went with the son of Menoites and with his companions' (Hom. Iliad 1.307)

Verses of this type are uncommon and constitute approximately 1% of the lines in early Greek epic. They are rarer still in later hexameter poets.

3. Explanations for the Phenomenon of the Bridge
Unlike the caesura and other forms of external juncture, the bridge, as a positionally determined avoidance of such juncture, does not have an obvious analogue in spoken discourse. Devine and Stephens note that there is a hierarchy of segment boundaries such that the rightmost margin of lexical words most commonly precedes a caesura position, and is least common before a bridge position. Conversely, word-internal juncture is most commonly found at a bridge position and is least common at a caesura position. The juncture between a lexical (host) word and an appositive (function word, enclitic, proclitic (Clitics), prepositive, postpositive), is possible, but less common, at both types of positions. As Devine and Stevens suggest (1984:14-30), there are two types of explanations for the occurrence of metrical bridges: metrical explanations and prosodic explanations.

3.a. Metrical Explanations
Metrical explanations often involve the idea that poets bridged certain positions in various stichic lines in order to avoid prematurely signaling a prosodic break, either a caesura, or the coda of the line. Such bridges are referred to as rhythmic bridges. In the case of the hexameter Meyer's and Hermann's bridges, as well as the various spondee zeugmata, may have functioned to prevent a sequence such as \[ -\infty |-\infty \] in the middle of the verse, which could be interpreted as the coda sequence \[ -\infty |-\infty \]. In the case of iambic and trochaic stichoi, on the other hand, Knox's trochee, iamb, and spondee bridges seem to prevent the false signaling of a caesura: \[ -\infty |-\infty | -\infty ] .

3.b. Prosodic Explanations
Two prosodic explanations are found: the stress theory (Allen 1973:274-296) and the durational theory (Devine and Stephens 1982). Allen's stress theory is based on his observations of a correlation "between word-placement and strong position in a corpus of Homeric and tragic verse" (Allen 1987:134); he posits a prominence for certain syllables in Greek that differs from the pitch accent, and which he interprets as a secondary stress accent (Accentuation). A prosodic rule assigns stress to the rightmost heavy syllable and then to any heavy syllables to the left of that syllable that are not directly adjacent to a stressed syllable. Thus
dnthriipos 'human' (masc. nom. sg.) would be assigned a ŠŠŠ stress pattern prepausally or before a consonant-initial word, but a ŠŠŠ pattern before a vowel-initial word. A word suchasgenomenin 'becoming' (masc./fem./n. gen. pl.), on the other hand, would always surface as ŠŠŠŠ. In Allen's model, prosodic bridges serve to ensure that there is no conflict between the positions of word stress and the head of any particular metrical foot (the strong position, or the arsis or ictus of that foot). We can see the correlation between metrical-foot head position and Allen's stress-placement rule in the following:

menin aleide, the Ia, Pelleialde6 Akhilleos
Š Š# Š Š# Š Š Š Š Š Š Š Š Š

'Godess, sing about the divine anger of Peleus' son Achilles' (Od. 1.1)

andra moi I ennepe, Mousa, pollutropon, I has mala polla
Š Š Š Š# Š Š# Š Š# Š Š Š Š Š Š

'Muse, tell me about the man of the many ways (suffered) very much' (Od. 1.1)

Devine and Stephens' durational theory is based on their contention that syllable weight is determined not only as traditionally described, but can be adjusted as follows. An algorithm assigns word-level durational nucleus ( + ) status to a heavy syllable if it does not stand adjacent to another heavy syllable (Devine and Stephens 1982:47-48). At the same time, a heavy syllable can be demoted from nucleus status (-) if it stands between two syllables assigned such a status. Lastly, under certain conditions, two adjacent light syllables may be assigned a shared status as a nexus and so function as a nucleus. Thus, forms such as an.thro.pos 'human' (gen. pl.) and gig.no.me.non 'becoming' (gen.pl.) are both assigned the contour [ + ], whereas an.thro.pos 'human' (nom.sg.), if followed by a pause or a consonant and so ending in a closed syllable, would be assigned the contour [ + ], while an.thro.pos 'human' (nom.sg.) when followed by a vowel and so ending in an open short syllable, would surface as[+]. Both demoted heavy syllables and pairs of light syllables acting as a nexus are taken to be less heavy than heavy syllables assigned the status of nucleus. An additional factor concerns the status of word boundaries. A boundary between lexical words can serve to add weight to a final syllable, especially in deliberate speech. This is more likely when the word boundary occurs before a caesura. Juncture in rapid speech, like that between a lexical word and an appositive, is less likely to add weight. This explains why the assignation of nucleus status is often necessary for the resolution of heavy metrical positions into two light syllables (∞), and why non-nucleus status is often necessary in long anepcs positions (Devine and Stephens 1984:133-4). Thus bridges serve to reduce the likelihood that prosodically weaker segments such as demoted heavy syllables and non-nuclear sequences of light syllables will appear in metrically strong positions in the verse.

BIBLIOGRAPHY