A longstanding controversy in Ancient Greek metrics concerns whether meters are sensitive to syllable weight distinctions more finegrained than heavy vs. light (cf. e.g. Maas 1962, Irigoin 1965, West 1970, 1982, 1987, Allen 1973, Devine & Stephens 1976, 1977, 1994, McLennan 1978). While it is clear, for instance, that the set of heavy syllables occupying hexameter longa is statistically different from that occupying bicipitia (e.g. a short vowel followed by a stop-liquid cluster is better represented in longa, West 1970: p. 1986), it is debated whether this discrepancy is motivated directly by the abstract weight template of the meter (e.g. West 1982:39: 'the biceps, being of greater duration [than the longum], requires more stuffing') or merely reflexive of other considerations, including the distribution of word shapes in meter (Devine & Stephens 1976, *et seq.*).

In this paper, we argue that subcategorical (e.g. intra-heavy) syllable weight is indeed regulated directly by the weight mapping conventions of the meter, even when the distribution of word shapes is factored out systematically using mixed effects modeling. In fact, this model permits us to extract a detailed continuum of subcategorical weight from a parsed (and vowel-length corrected) metrical corpus. For instance, in terms of the skeletal structure of syllable rimes, the following intra-heavy weight hierarchy is observed: $C_0VC < \{C_0VC_2, C_0VV\} < C_0VVC_1$ (every link significant at $p < .01$). Thus, even when we control for word shape and position in the word, C_0VVC_1 skews more strongly towards bicipitia than C_0VV, suggesting that the former is heavier. These effects are not, however, confined to the skeletal structure of the rime. For example, onset structure is also shown to affect weight as a small but statistically significant effect, in that syllables with filled onsets are more strongly attracted to bicipitia, all else equal, than those with empty onsets (cf. Maas 1962:89; recent treatments of onset effects on weight include Gordon 2005, Ryan 2010, and Topintzi 2010).

Thus, in addition to the categorical heavy vs. light distinction, the Greek poets were also sensitive to weight contrasts within the classes of heavies and lights, which assert themselves not as categorical restrictions but as statistically significant preferences. We demonstrate this for two meters, namely, Homer's hexameter (comparing heavies in longa to those in bicipitia) and Euripides' iambic trimeter (comparing heavies/lights in ancipitia to those in crucially heavy/light positions), situating the results with respect to similar studies we have conducted for Sanskrit meters. Parallels among these hierarchies, both across meters and across languages, support cognitive universals underlying the percept of syllable weight. More generally, as Devine & Stephens (1994) attest, metrical corpus analysis provides a remarkably detailed picture of linguistic competence, sometimes providing insights that go beyond what we can infer from the language's grammatical phonology.