The hypothesis that metrical competence is grounded in linguistic competence has driven much of the research in generative metrics in recent decades (Halle and Keyser 1966, 1971; Kiparsky 1977; Hayes 1988, 1989; Prince 1989, a.o.). One of the fundamental research questions in metrics concerns the nature of the constraints or rules that regulate meter: how do they interact and how do they relate to the constraints or rules in phonology?

In this talk I will present a new theory of meter that conceives it as faithfulness to prosodic structure, in Optimality-Theoretic terms (Meter As Faithfulness, or MAF). The theory contains two independent components. First, the theory of templates (not covered in this talk) describes the possible rhythmic patterns used as meters in the world's poetic traditions, as well as the complexity and markedness of those patterns. In this talk I will focus on the second component of the theory, viz. the theory of realization, which treats those templates as partial underlying forms and regulates their relationship to surface text using the ordinary faithfulness mechanisms of OT independently motivated by prosodic phonology. Metrical constraints are stated in the standard correspondence terms, applying at various levels of the metrical grid. Two families of faithfulness constraints operate on prosodic structure: those that regulate prominence (the Max and Dep families) and those that regulate constituency (the Align family). Thus, in MAF, metrical constraints are identical to ordinary phonological constraints.

The architecture of Realization Theory is schematized in (2). Templates and underlying forms of text are submitted to Gen, which generates a candidate set consisting of template-text (TT) correspondence relation, as well as the null parse. The full correspondence structure is shown in (3). Eval, which contains both the standard OT constraints and TT correspondence constraints such as those in (1), picks a template-text pair or the null parse, depending on the ranking between TT correspondence and *Null. If the null parse is optimal, the text cannot be set to the given template; otherwise, the grammar generates the text's metrical parse. The ranking of TT correspondence with respect to *Null determines how far the prosodic structure of a given line is allowed to deviate from the template.

I will develop a basic analysis of English iambic pentameter within MAF. In particular, I will show that the well-known restriction on stress of polysyllabic words in weak positions in iambic meters follows from the constraints themselves. Stress of polysyllabic words incurs both a Max-TT and a Dep-TT violation, while stress of a monosyllable incurs only a Dep-TT violation. Likewise, the pattern of mismatches between metrical and prosodic structure found in poets such as Milton and Donne (Kiparsky 1977) finds a natural account in terms of TT correspondence.
(1) a. MAX-$n$
   If $x$ is an input $n$-level gridmark, then there is an output $n$-level gridmark $y$ such that $x \Re y$.
   b. DEP-$n$
   If $y$ is an output $n$-level gridmark, then there is an input $n$-level gridmark $x$ such that $x \Re y$.
   c. NOFLOP-$n = \text{MAX-$n \& DEP-$n$}$

(2) /text, template/$\rightarrow$ GEN $\rightarrow$ template-text pairs $\rightarrow$ EVAL $\rightarrow$ t-t pair or $\emptyset$

(3) TTemplate

TT Correspondence

/input of TEXT/ $\leftrightarrow$ [output of TEXT]

IO Correspondence