

# **Locomotion language in the wild: Biomechanical constraints and caveats**

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**Abstract:** Semantic systems vary substantially across languages, but may nonetheless be constrained by structure in the world. Malt et al. (2008) advanced such an argument in the domain of locomotion. In their study, speakers of English, Spanish, Japanese, and Belgian Dutch named video clips of an individual locomoting on a treadmill. In all four languages, naming respected the distinction between walking and running gaits, suggesting a universal semantic constraint based on a biomechanical discontinuity. Here, we replicate this finding using a more complex and naturalistic stimulus set (clips from film trailers and online videos containing locomotion), and show that it generalizes to additional languages (Mandarin and Korean) and dialects (Netherlands Dutch). At the same time, we find that naming sometimes crosscuts the biomechanical walk-run distinction when locomotion is ambiguous. In the case of Dutch, we find that basic-level locomotion terms sometimes take on superordinate meanings, straddling the basic-level category boundary.