

# **Movement Speed and Accuracy in Space and Time**

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The movement speed-accuracy relation is one of the most robust in motor control with Fitts' (1954) law being still perhaps the center piece of both theory and experiment. The movement speed-accuracy relation leads to the long held notion of a trade-off whereby the performer trades movement speed for accuracy. In this talk I will outline some of the limitations of this generally accepted relation and also discuss issues that arise from trying to develop a more comprehensive framework for the speed-accuracy issue. Issues to be discussed include: a) that the fundamental relation is one of trading spatial error for timing error rather than movement speed for accuracy; b) that a movement space-time framework is the framework to consider the issue of speed and accuracy; and c) the question of whether a single dependent variable can adequately capture the movement speed-accuracy relation in a way that is useful for a theory of the movement speed/accuracy relation.