



## Modeling Gender as a Multidimensional Sorites Paradox

Hypatia

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### Abstract

Gender is both indeterminate and multifaceted: many individuals do not fit neatly into accepted gender categories, and a vast number of characteristics are relevant to determining a person's gender. This article demonstrates how these two features, taken together, enable gender to be modeled as a multidimensional sorites paradox. After discussing the diverse terminology used to describe gender, I extend Helen Daly's research into sex classifications in the Olympics and show how varying testosterone levels can be represented using a sorites argument. The most appropriate way of addressing the paradox that results, I propose, is to employ fuzzy logic. I then move beyond physiological characteristics and consider how gender portrayals in reality television shows align with Judith Butler's notion of performativity, thereby revealing gender to be composed of numerous criteria. Following this, I explore how various elements of gender can each be modeled as individual sorites paradoxes such that the overall concept forms a multidimensional paradox. Resolving this dilemma through fuzzy logic provides a novel framework for interpreting gender membership.

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