

# **An interactive demonstration of counterfactual truth conditions\***

Proposal for a Bachelor Thesis (v0.5, 3 August 2022)

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## **Problem: Representation of directed weighted graph-edges**

display numbers -> adds a lot of clutter create a hierarchy of different arrows, representing a handful of differently weighted

edges -> cannot find good looking design using only one arrow property, when multiple properties are modulated the hierarchy becomes unclear

scale thickness of arrows -> hard to gauge whose arrows value is higher in comparison, also ugly

position small fuel/energy icon aside arrows -> adds a lot of clutter

only display numbers, when hovering over arrows -> users need to think forward to solve the levels and having to hover over arrows all the time is tedious

Replace edges with linear paths of arrows, with the number of arrows equaling the weight of the edge -> creates hard layout problems, adds a lot of clutter

Place big stars or planets along arrows, with their number equaling the edge weight (indicating stops on the journey) -> hard to distinguish stars from background stars, users have to tediously count stars, stars may be distracting clutter

Add crosssections to the arrow, like on a ruler -> doesn't look good, spacing of crosssections becomes inconsistent (feels weird)

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\*Further title proposals: (B) Creating an educational computer game about counterfactuals in terms of a centered system of spheres (C) Implementing a computer game illustrating the truth conditions of counterfactuals as variably strict conditionals