

# Examining the nexus of design, motion, and the mind to inform effective moving character creation

## Research Context

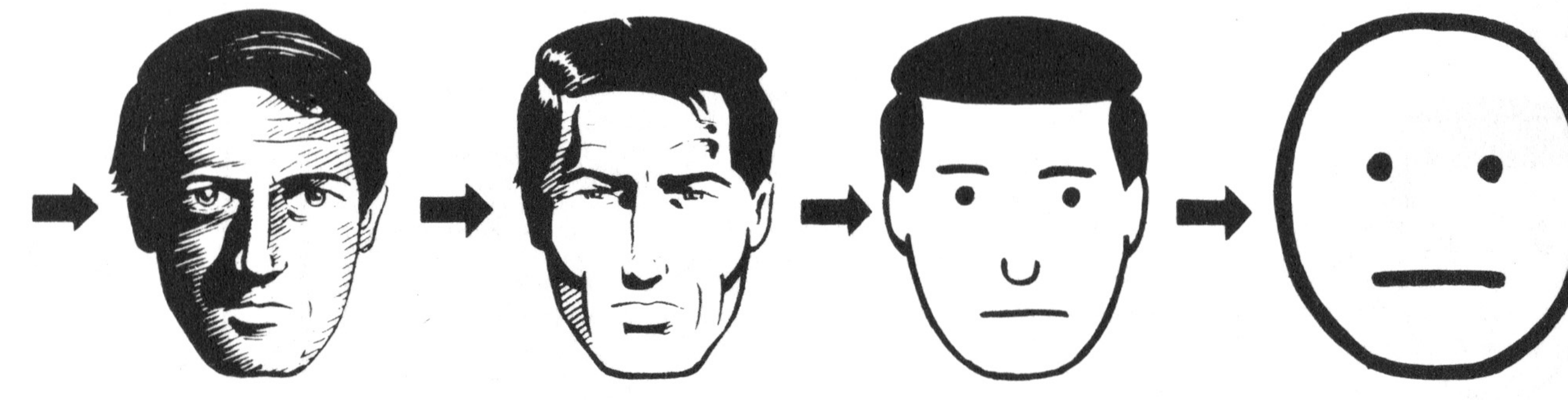
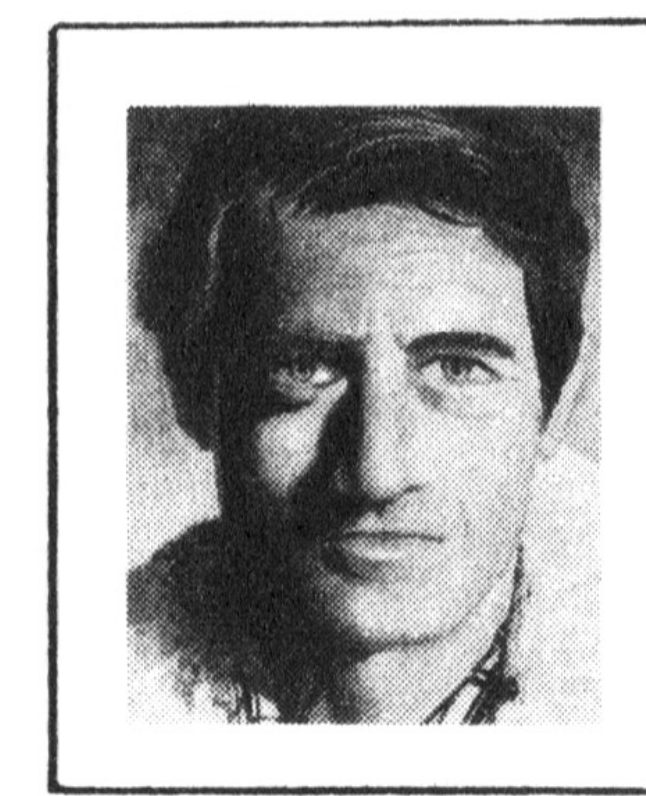
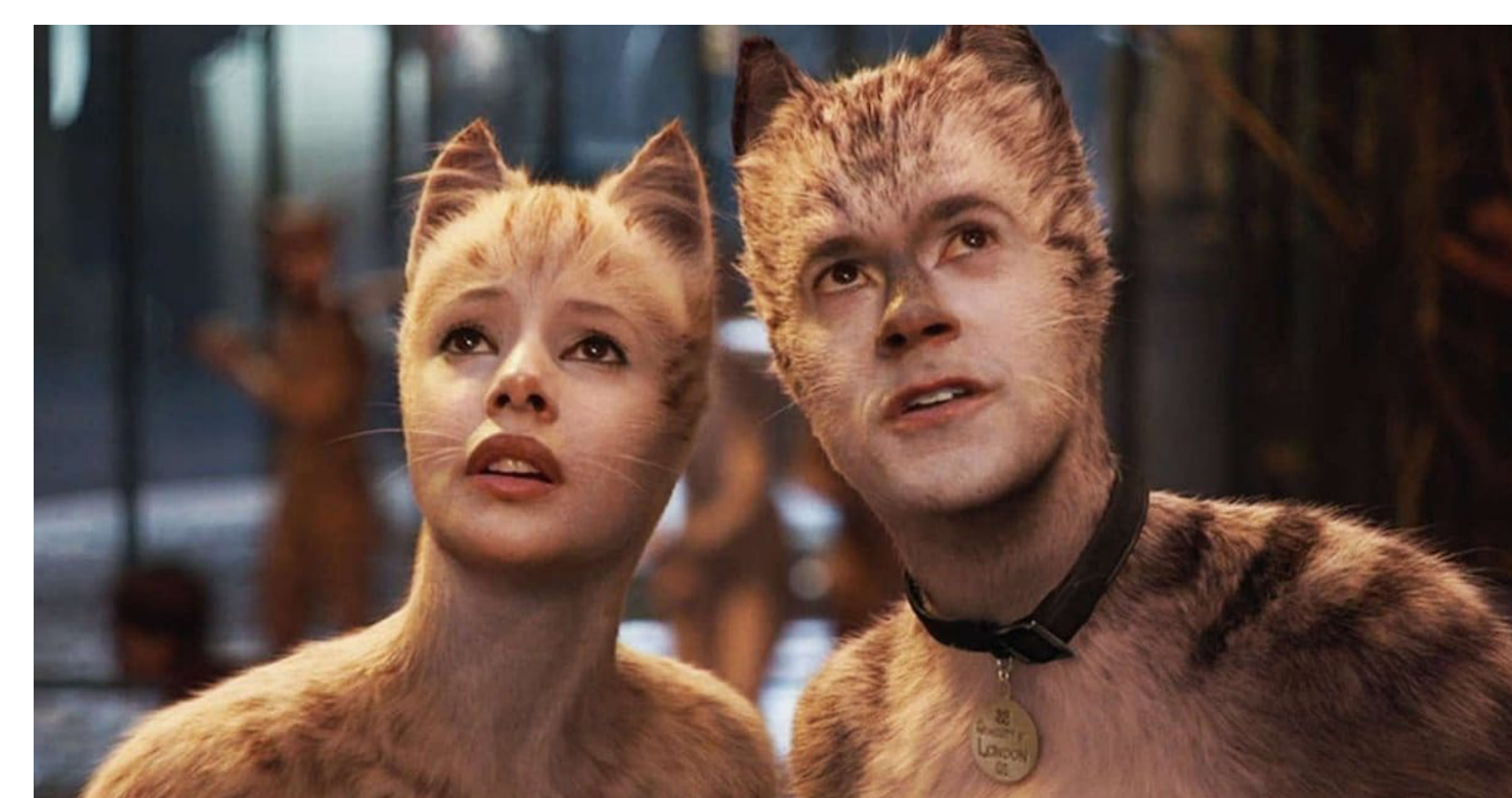
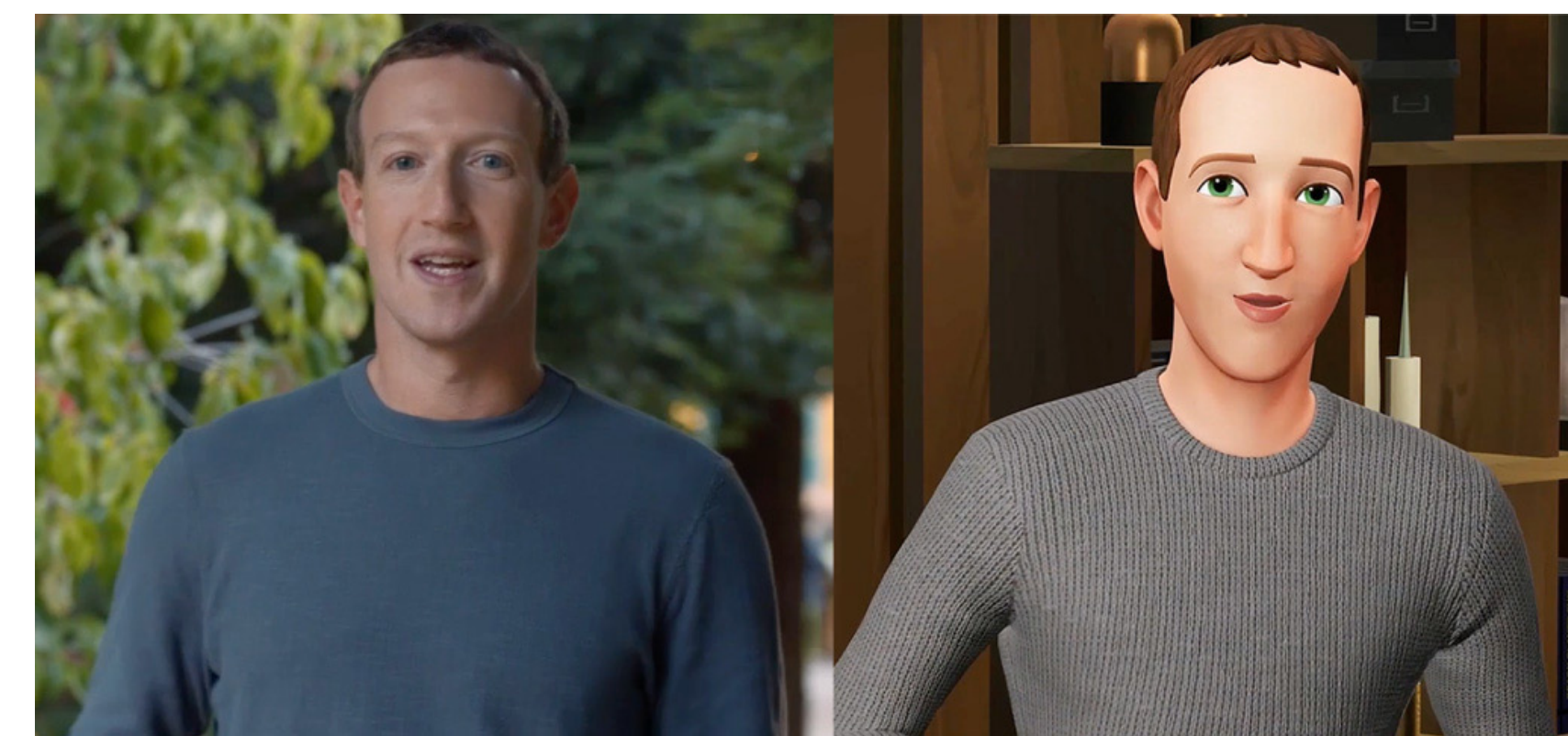
Character design for motion is used in all fields in which there is a depiction of a being with the illusion of life, whether they exist in the physical world (robotics, puppetry, costuming), or in the pictorial or virtual world (animated cartoons, games, avatars). Effective characters are those that engage with the audience, player, or user in a contextually expected way, avoiding an uncanny sensibility to their appearance or movement, and reinforcing their intended role in the story, game, or product interface. A character's purpose, to entertain, communicate, or interact, will generally inform their design and movement style and range.

Characters are utilized and designed by professionals in many varying fields, to varying success. Well funded Hollywood studios with access to professional character designers will occasionally make a film with characters that fail to effectively engage with audiences because of how they look or how they move. Roboticists struggle to avoid the "uncanny valley" of robot designs that appear to resemble humans closely, but are off-putting. Massive tech companies struggle to impress the public with "metaverse" characters that are bland, legless, human avatars, and wonder why.

With so many high-profile character design failures and the ongoing struggle to design appealing characters for a variety of purposes, is it possible that an examination of qualities of designs might reveal clusters of successful design choices in certain contexts or usages? Additionally, could an examination of the ingrained reasons deep in the human psyche which cause us to engage with characters and stories in the first place lead to better design choices? Are there clues at the nexus of design, motion and the human mind where we might recognize patterns that tend to be associated with successful character design for motion?

## Research Objective

Study moving character designs while considering the cartoon abstraction/realism, iconicity/detail, unnatural/natural movement, relative anthropomorphism, cute/grotesqueness, mundanity/fantastic nature of the design in relation to audience/user appeal and engagement versus disinterest/uncanny disgust to examine whether useful patterns exist.



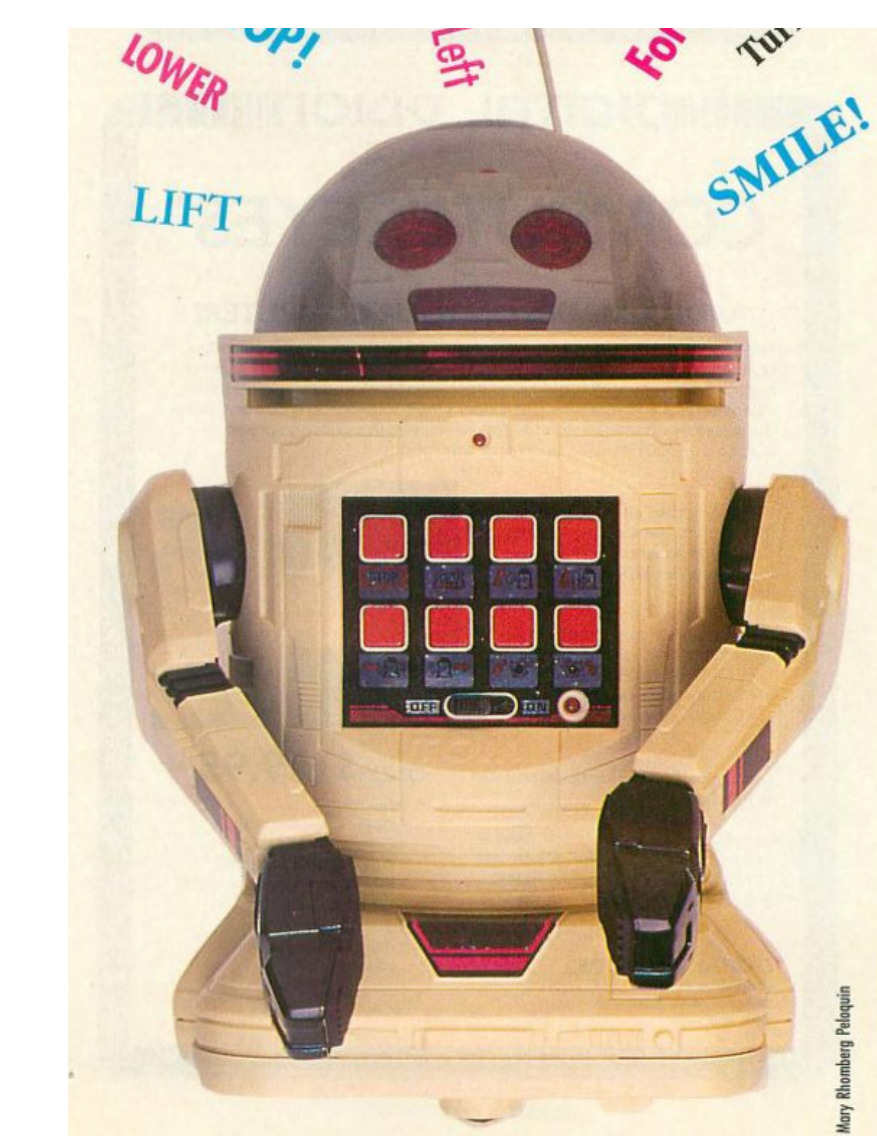
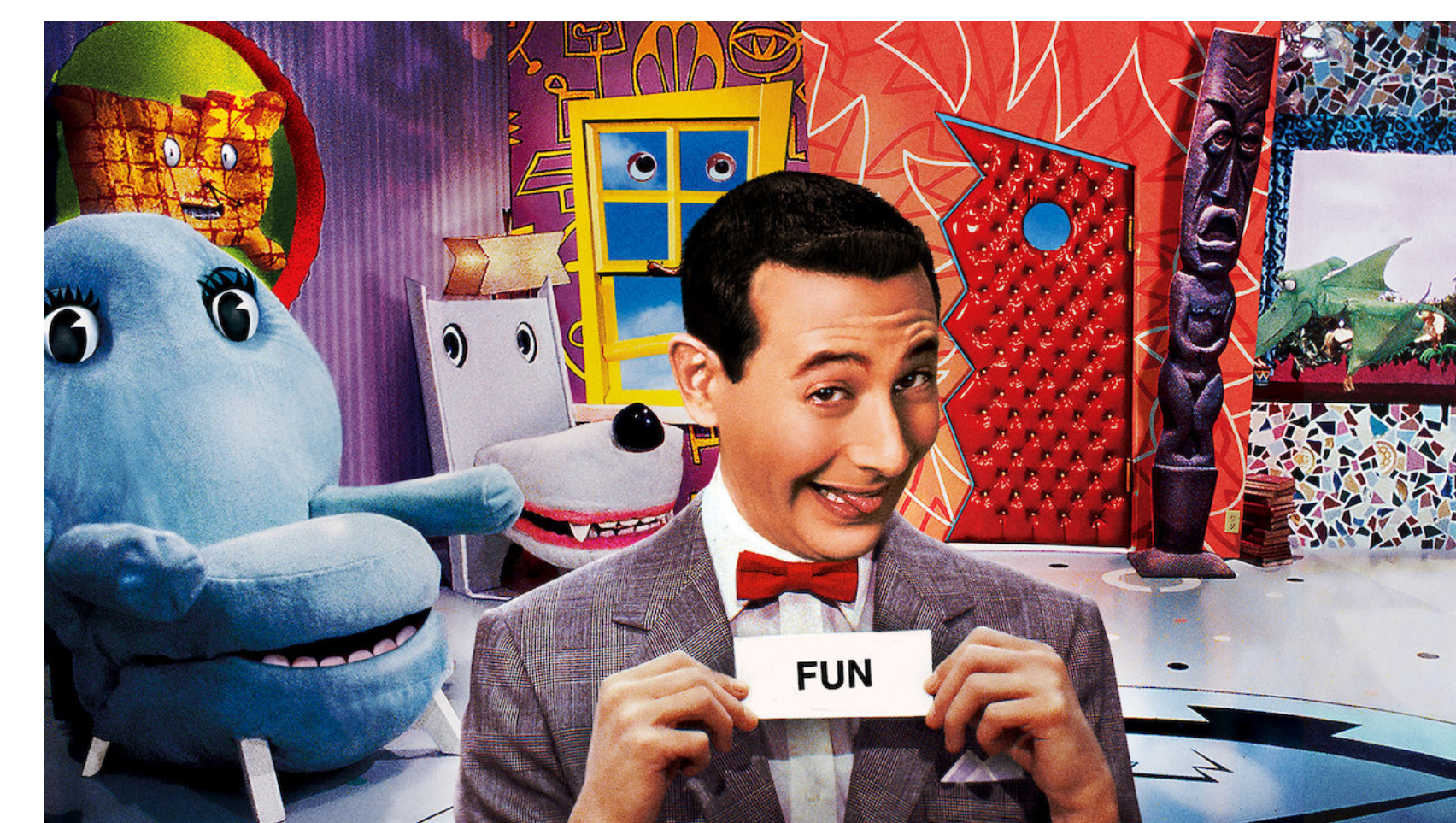
Scott McCloud

## Research Questions & Activities

- Will categorizing characters from a broad range of applications and contexts reveal clusters of design choices that are usually successful and unsuccessful? (Relative successful/unsuccessful value will be determined in context of each example, informed by available information.)

- Will researching multiple design qualities for each character and comparing them be more effectively recorded and analyzed in a spreadsheet, along cartesian plane graphs, in venn diagrams, or through some other method?

- Can analyzing moving character qualities based on design and movement provide enough insight into their relative appeal without considering the narrative qualities that some characters also have, for example their personality, actions in a narrative, and backstory?



- Categorize characters from a broad range of applications and contexts and analyze to potentially reveal clusters of successful and unsuccessful design choices. Include data on genre and type of context so that results can be drilled-down to examine specific areas.

- Explore the organization of data and ways to present and analyze it.

- Include in data categories that record the character's relative amount of additional character development (none, minor character, main character), and their role (protagonist, antagonist, etc.) to provide possibility of filtering results.



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