The Aleph & Other Metaphors for Image Generation Models

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Microsoft

NEURAL INFORMATION PROCESSING SYSTEMS

Metaphors as Provocations

We use metaphors to understand, explain, and tell stories about the world.

They are useful until they are not. That is OK.

The metaphors we choose as designers shape what people can do with what we create.

Metaphors suggest affordances.
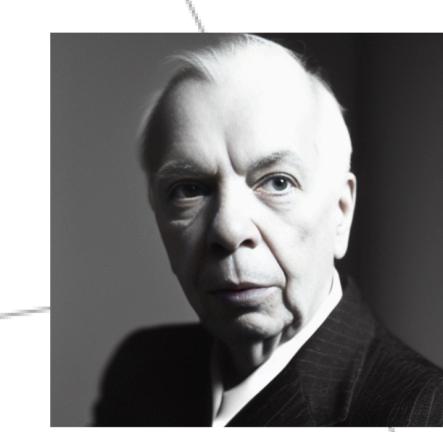
Why Infinites?

An infinite library has all the (even nonsensical) books that can exist. IGMs promise engines that can produce any image a person can imagine.

Jorge L. Borges produced stories that often provoked us to think about the infinite. "El Aleph" and "La Biblioteca de Babel" are two key readings.
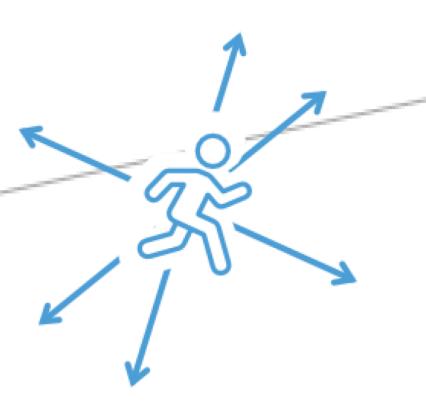
Prompt: A portrait of jorge luis borges, black and white, depth of field, photography
Steps: 25, Sampler: Euler_a, CFG scale: 7, Seed: 3533637492, Size: 512x512, Model hash: 7460a6fa

Infinite Libraries Can Help People Understand IGMs From a HCML Lens

Libraries offer relatable affordances that map well to IGMs.

The **latent space** is the library.

Dimensions within the space are the hallways.

CLIP embeddings are the librarian/index.

Images are books.

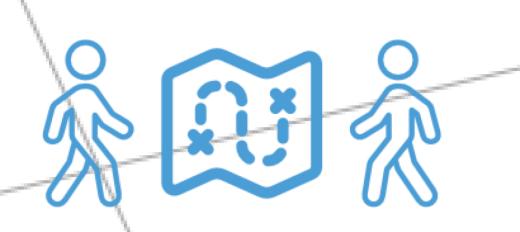## How These Metaphors Inspire Design and Development for IGMs (a starter list)

Interact with the librarian: Have rich, multimodal, explainable prompts and outputs.

Navigate and explore the hallways: Have deliberate, semantic ways to explore the latent space. Define, refine and personalize hallways.

Leverage and help other visitors: As readers find books, they support the mapping of the space, as well as making, using and sharing book annotations.

These provocations are a starting point to think about how we present IGMs to others, how we expect them to be used, and what affordances we include by design.

Endless Library by Denis Loebner - ArtStation