

# **Designing Fictional Spaces:**

**That Contradict Architectural  
Reality While Supporting  
Sustainable Design**

By: Noël Michel

## **Thesis Question & Process:**

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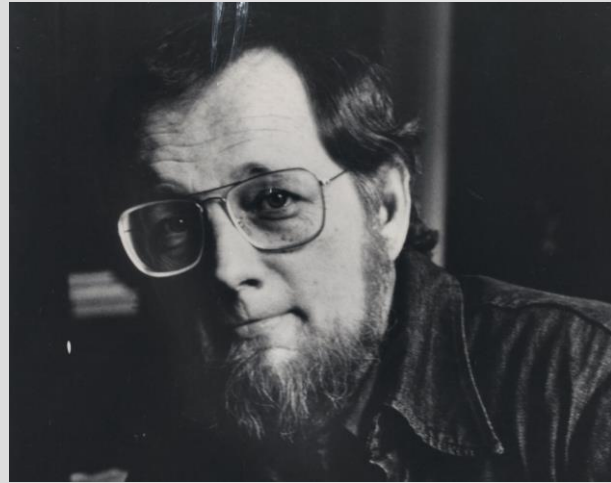
**Is it possible to model fictional stories?**

**What do these stories teach us about STEM and sustainable design?**

- a. Choose three stories to model and analyze
- b. Literary and STEM analysis of each story
- c. Model the story: 3D → 2D Imagery
- d. Discover Interesting Questions

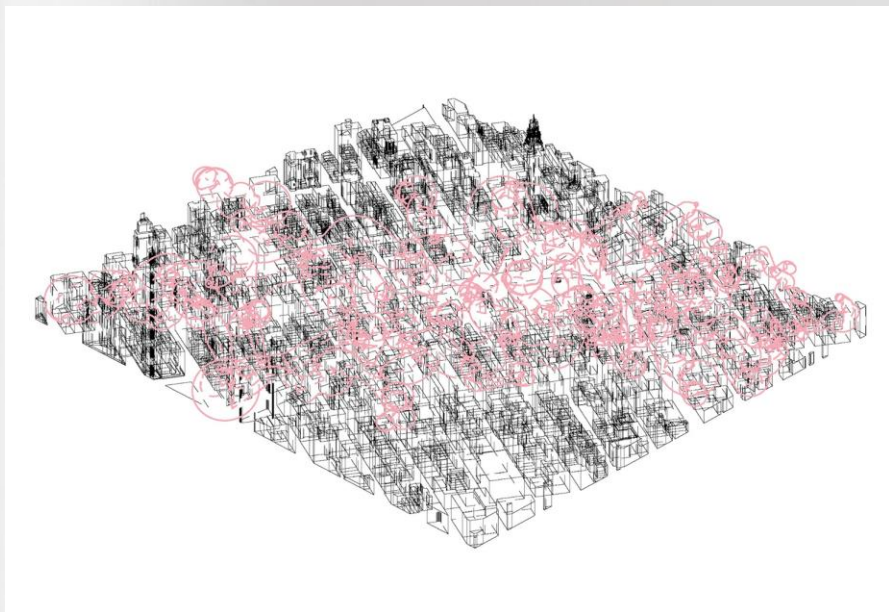
# Story 1: The Balloon

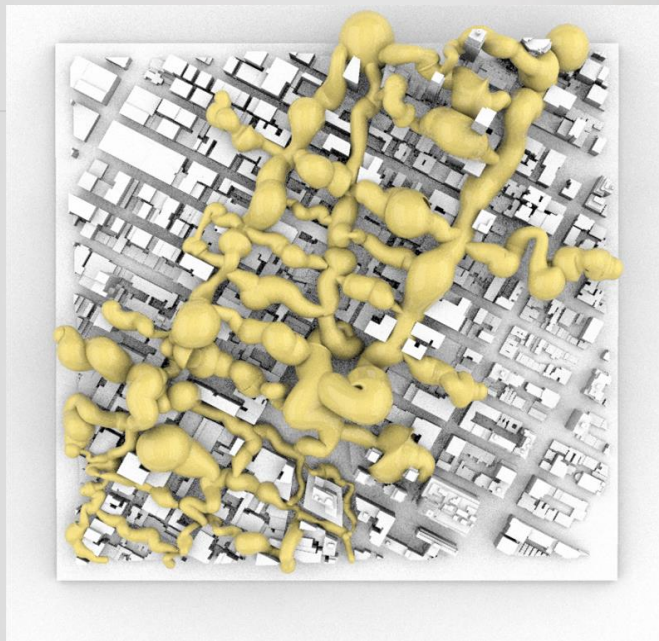
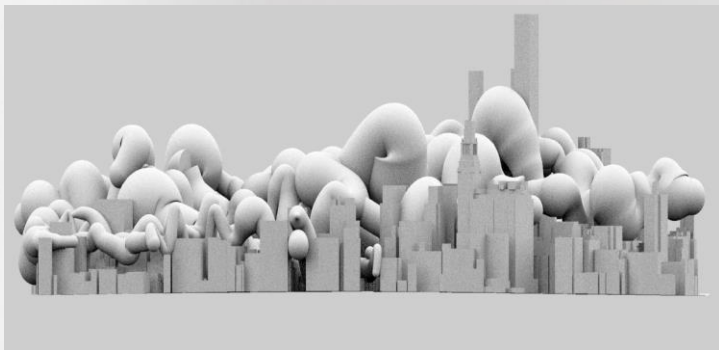
*By Donald  
Barthelme, 1968*



**Figure 1:** Author of The Balloon, Donald Barthelme [1]

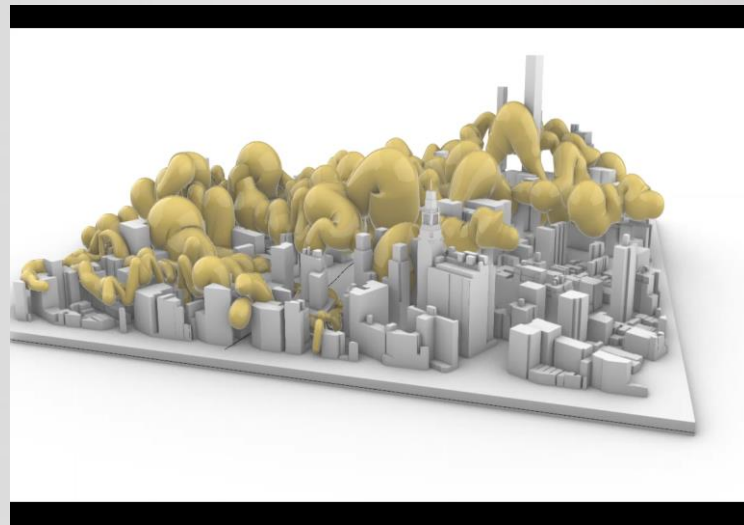
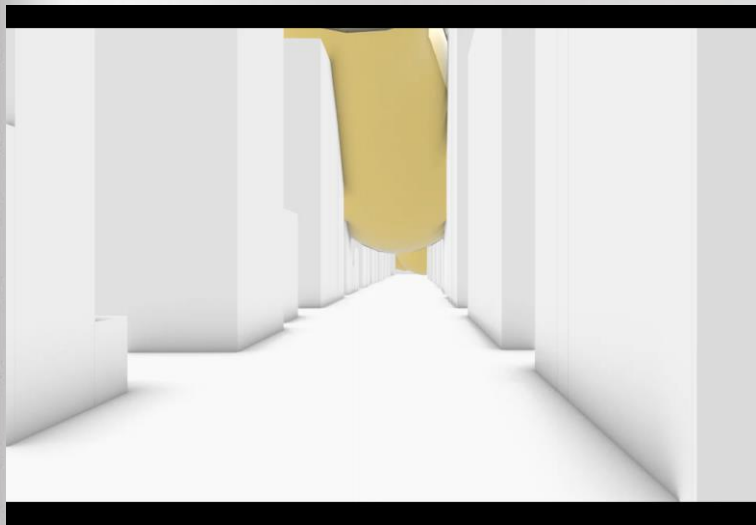






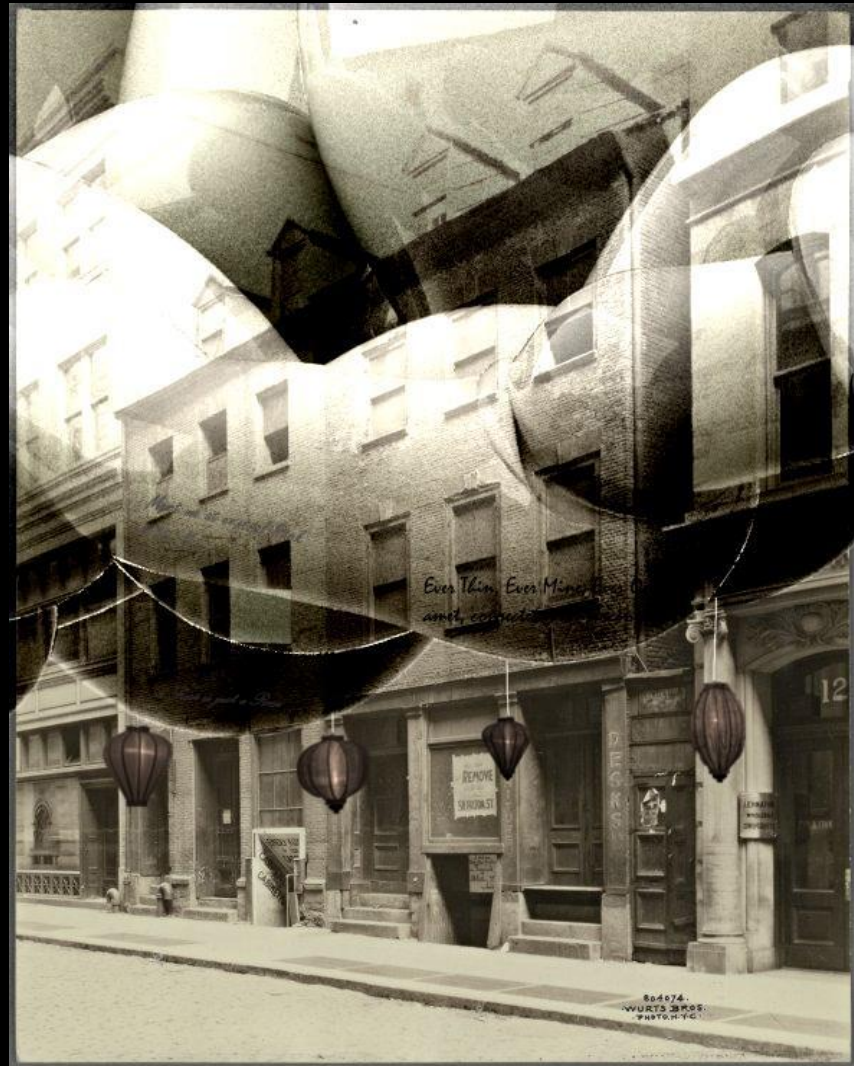
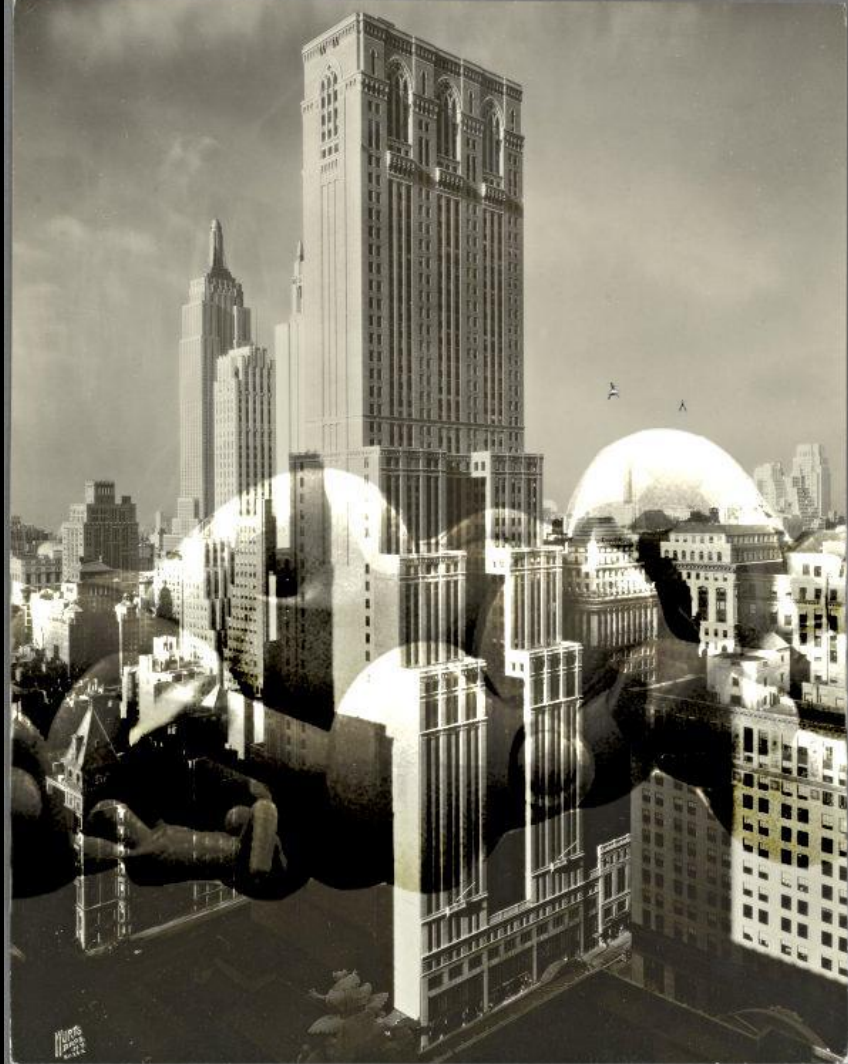


# *Videos of Model*













## Interesting Facts

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**The Balloon would be 949,259,520 cubic feet about  
1,000,000,000 cubic feet**

*Largest Balloon in History was 1987 Virgin Atlantic. 2.3 million cubic feet  
500,000,000x smaller*

**80,000,000 Tanks of Helium**

*About 60,000,000 lbs would be needed to weigh it down*

**Running out of Helium**

*Helium is a non-renewable resource and the world is depleting it*





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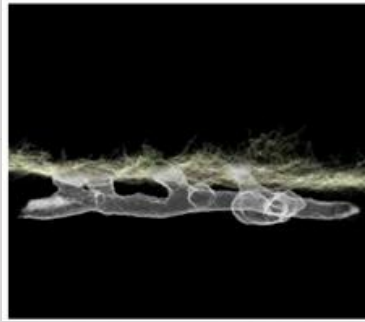
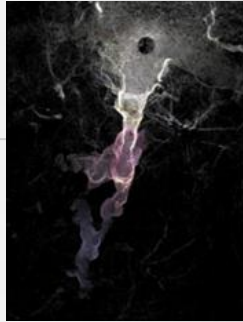
# Story 2: The Burrow

*By Franz Kafka, 1931*

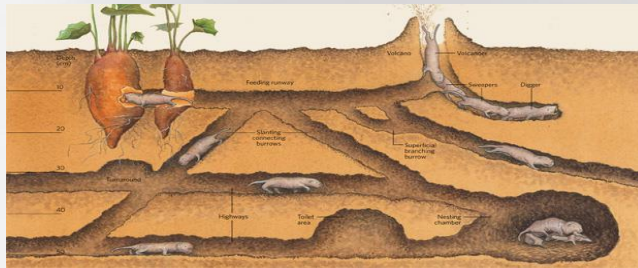


**Figure 3:** Author of The Burrow, Franz Kafka [6]

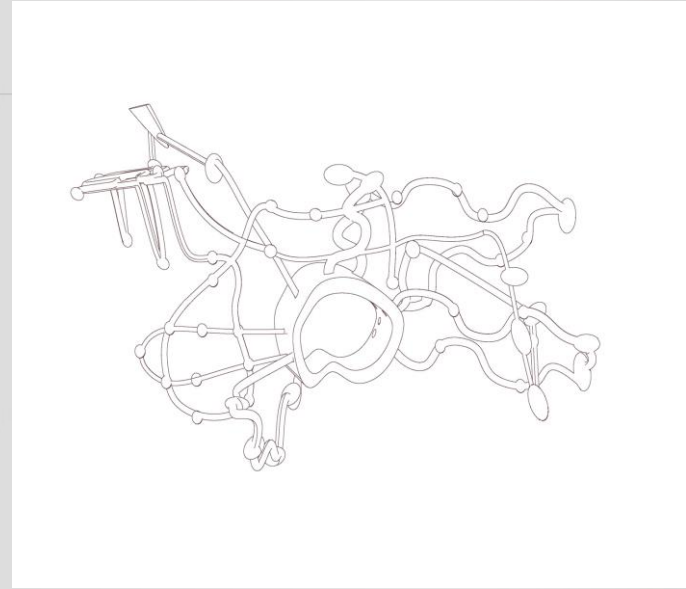


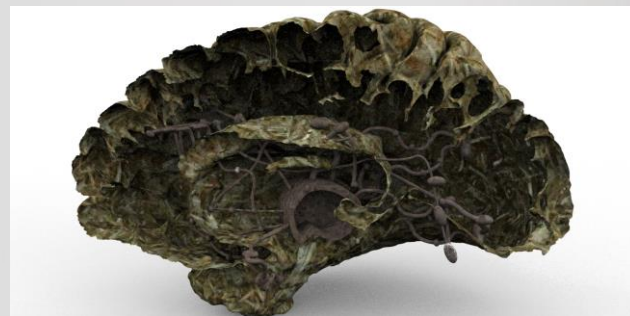
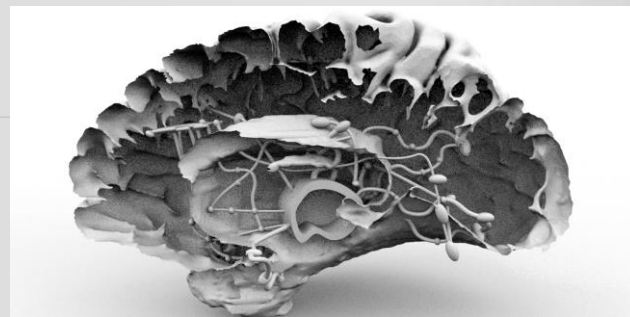
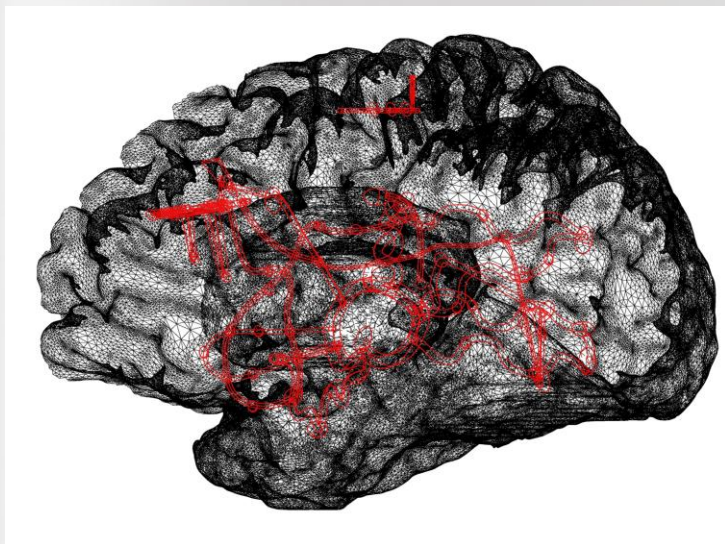


**Figure 1:** Audio Visual Representation of The Burrow by Wolfgang Novotny with Archiprix.org [9]



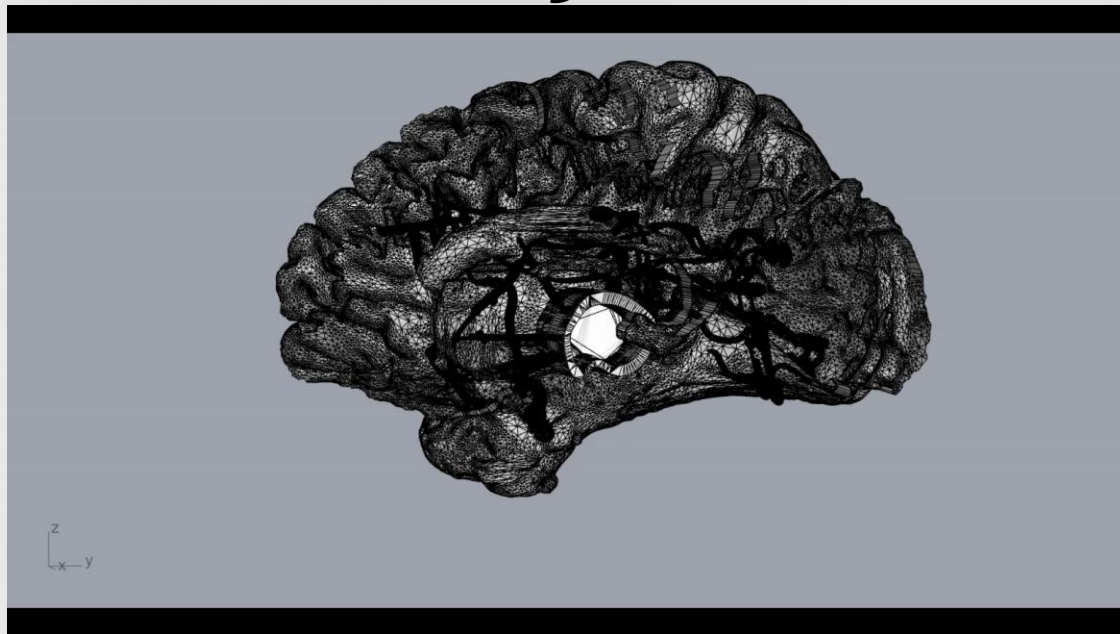
**Figure 1:** Standard Mole Burrow [10]

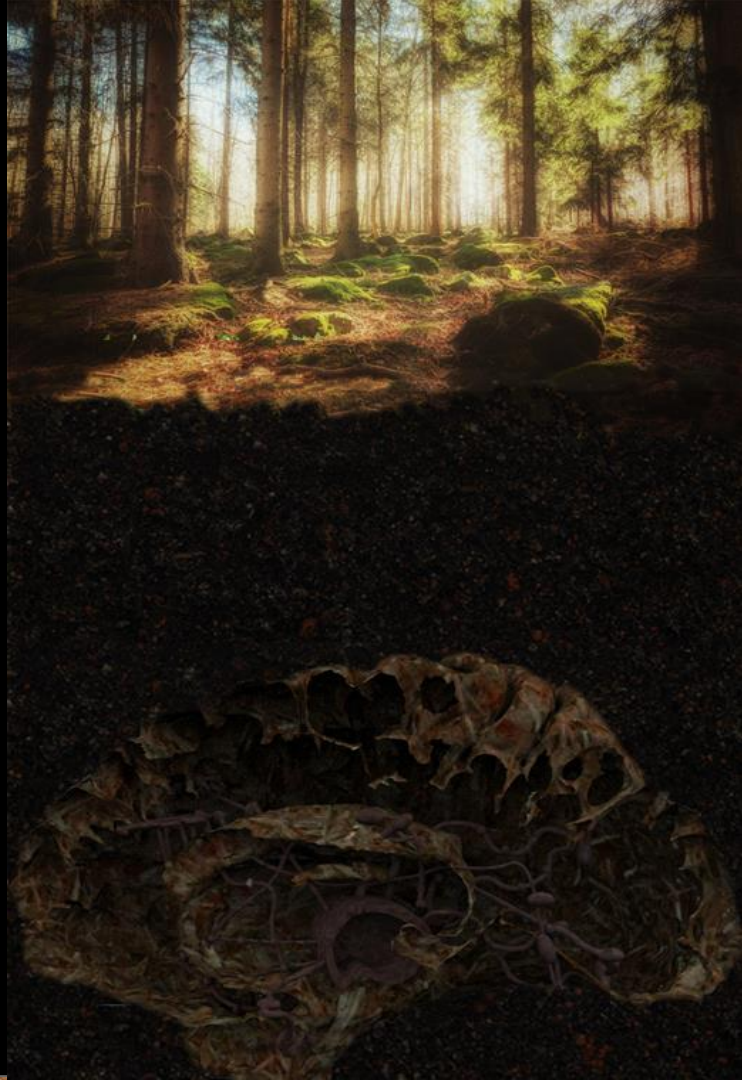




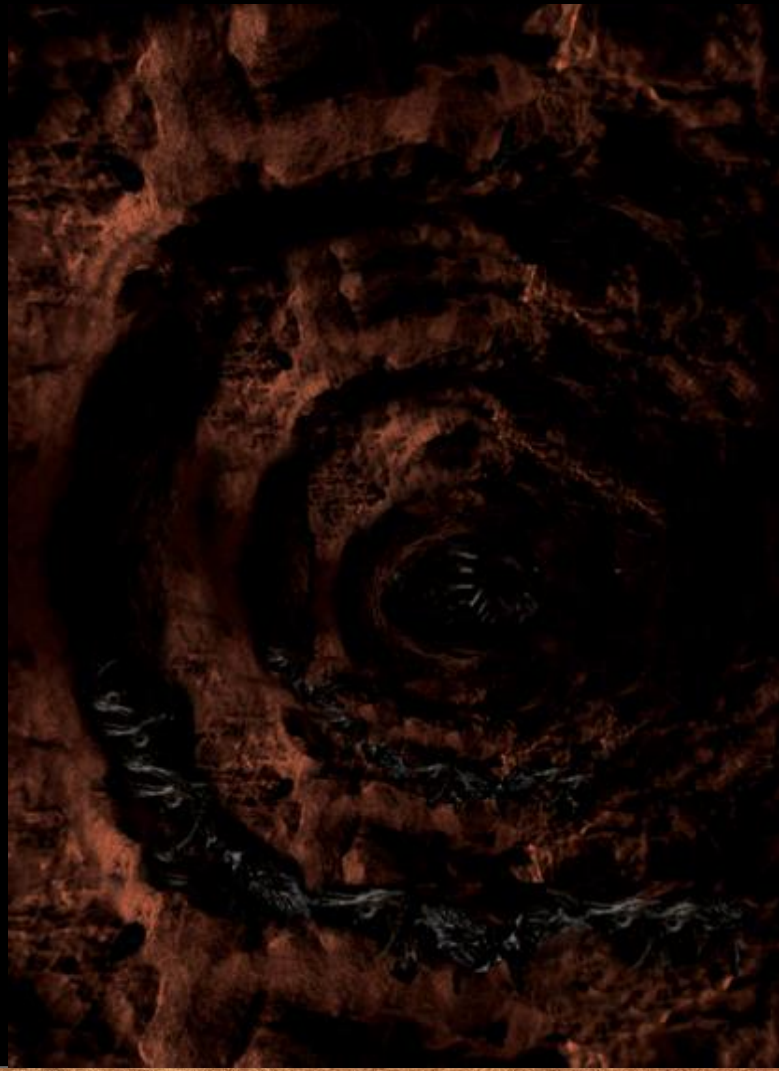


# *Videos of Model*









## Interesting Facts

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**Burrow would store 1,090 lbs of food**

*Protein only, humans can survive on meat only however medical disadvantages appear*

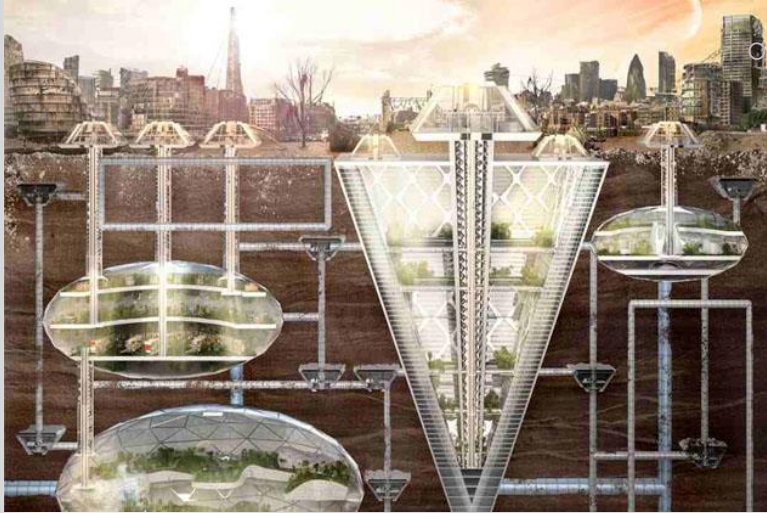
**If Human Size the Burrow would be about 1.23 miles long**

*The Burrow would probably be 250 feet underground as well*

**If you took no breaks, and shoveled nonstop it would take 36,080 hours or 1,503 days to dig the burrow**



# Going Underground



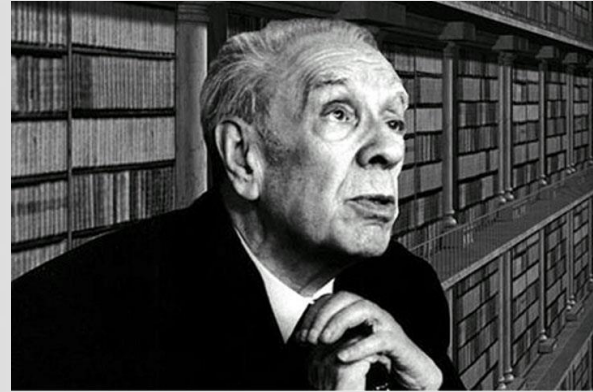
**Figure 4:** Underground Civilization [17]

## Future

- Humans may build underground cities in the future.
- However, living underground, does it foster a feeling of dread that can build to become insanity?

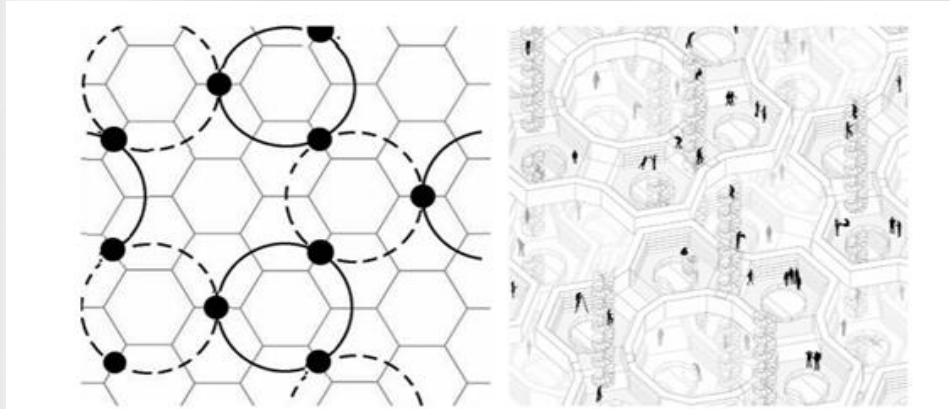
# Story 3: The Library of Babel

*By* Jorge Luis  
Borges, *1941*



**Figure 5:** Author of *The Library of Babel*, Jorge Luis Borges

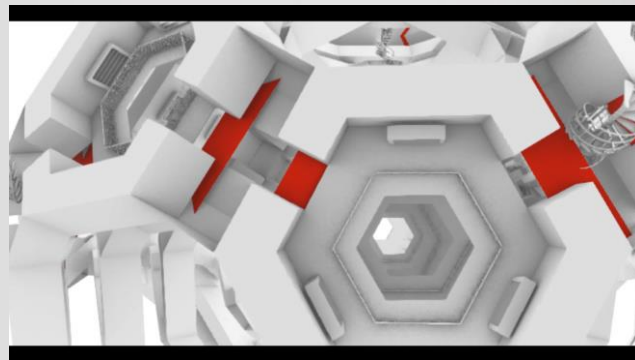




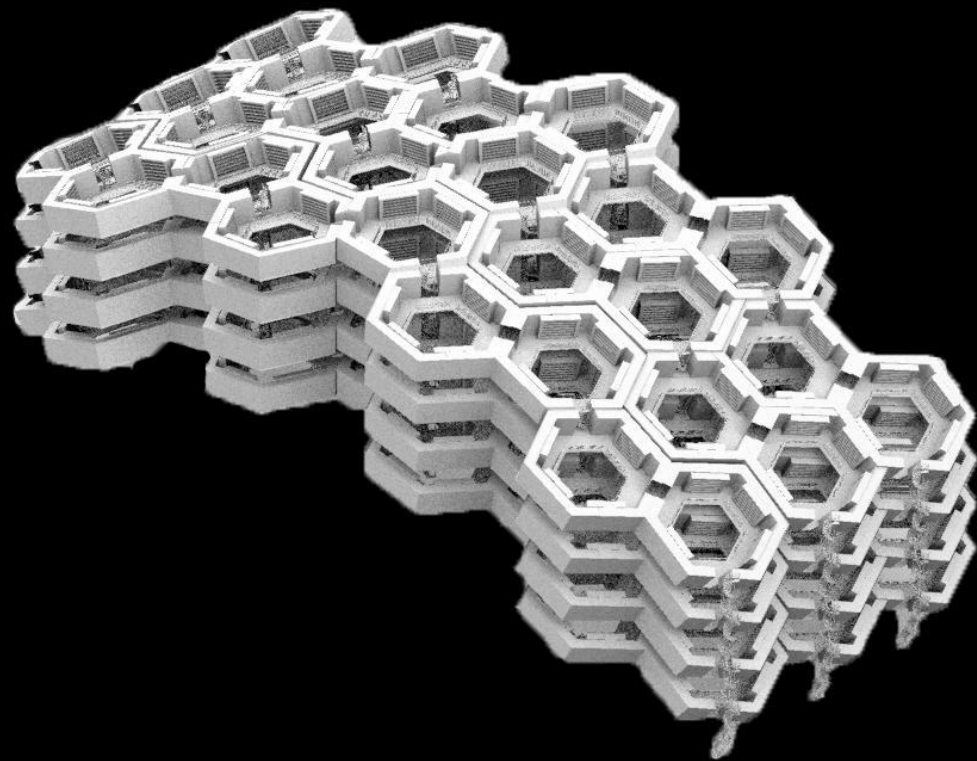
**Figure 6:** *Rice+Lipka Model* **Figure 4:** *The Universe* © Rice+Lipka Architects [19]



# *Videos of Model*

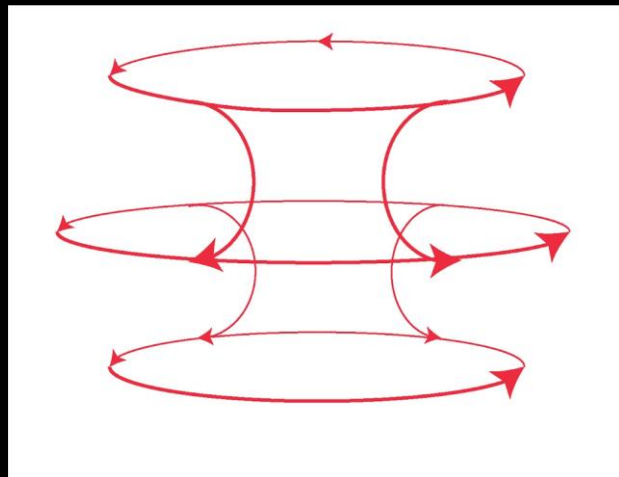
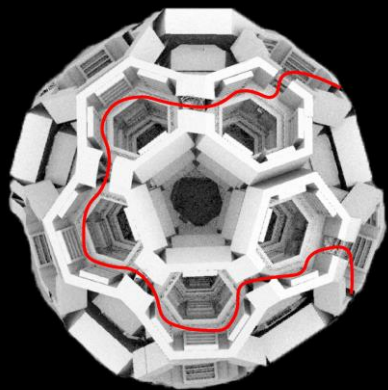
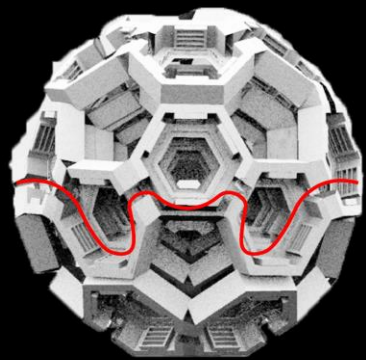












**If the library is the Universe as the story states with every book ever written from 25 symbols....**

**The library would be semi-infinite with about  $1^{1,834,079}$  books.**

**The Library would have about  $1^{1,834,076}$  Rooms.**

*The biggest number is a googol which is  $1^{100}$*

*The library is 1,8340 googol's big....*



# Utopia

*noun*

1. an imagined place or state of things in which everything is perfect [#]



**Figure 7:** The Tower of Babel by Pieter Bruegel the Elder

# THANKS!

**Any questions?**



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