Beaming Science Fiction into the Science & Faith Conversation

Andy Walsh

2018 ASA Meeting

Gordon College

200th Anniversary of *Frankenstein*

Richard Rothwell [Public domain], via Wikimedia Commons

Maraisea [CC0], via Pixabay

Frankenstein: Boon to Humanities Classes

- Should there be limits to human ambition?
- What are the defining qualities of humanity?
- How do we treat those who are different?
- Why do we need limits on scientific experimentation?

Why do we need limits on scientific experimentation?

- "Frankenstein in the Age of CRISPR-Cas9"
  - *Nautilus*, October 20, 2017
- "Why fast food chains sell Frankenfood"
  - *CNN Money*, June 28, 2018
- "Oops, I created a frankenfood monster: how we made Nutellasagna"
  - *The Guardian*, April 23, 2018

Stories Make the Abstract Concrete

- Stories provide data points
  - Biomedical Ethics needs to cover Drs. Frankenstein & Moreau
  - Theology needs to cover Drs. McCoy & McCoy
- Stories make unfamiliar ideas accessible
  - Works for science like chaos theory & machine learning
  - Works for grace and natural theology

Religion as a Stage of Development: *Star Trek*

- Religion is a cultural construct that loses force in multicultural contexts
- Religion is how we explain what we don't understand
- Religion is an expression of ignorance

From *Star Trek Into Darkness* © Paramount Pictures

The Natural and the Supernatural: *Star Wars*

- "All that surround us is the foundation of life, the birthplace of what your science calls midi-chlorians, the foundation of what connects the Living Force and the Cosmic Force." - Yoda, *Star Wars: The Clone Wars* "Destiny"

- "…there's this world of creatures that operate differently than we do. I call them the Whills. And the Whills are the ones who actually control the universe. They feed off the Force." - George Lucas, *James Cameron's Story of Science Fiction*

Rationality of Religion: *Incredible Hercules*

- "Mankind shall evolve past mindless, superstitious obedience to their gods."
- "So reason may flourish at last" - Athena, actual Greek god
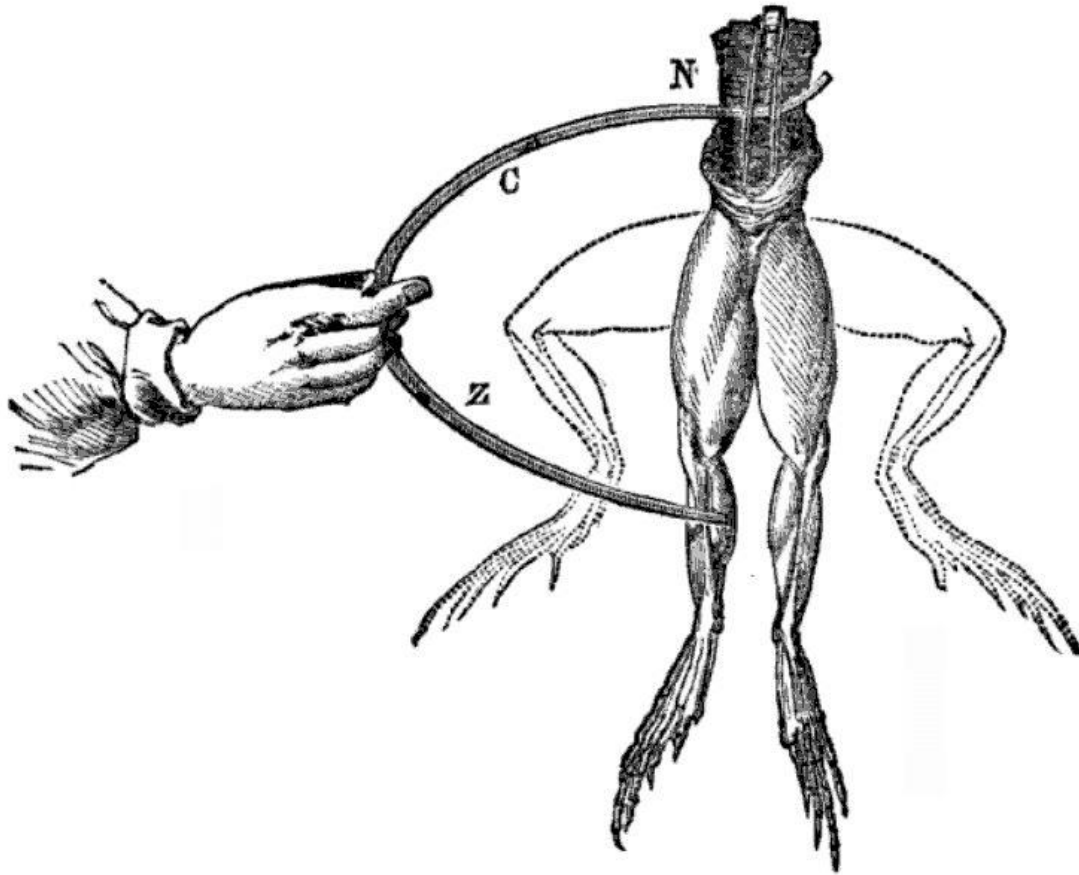

Incredible Hercules #126 © Marvel

Different Spaces, Different Identities: *Ms Marvel*
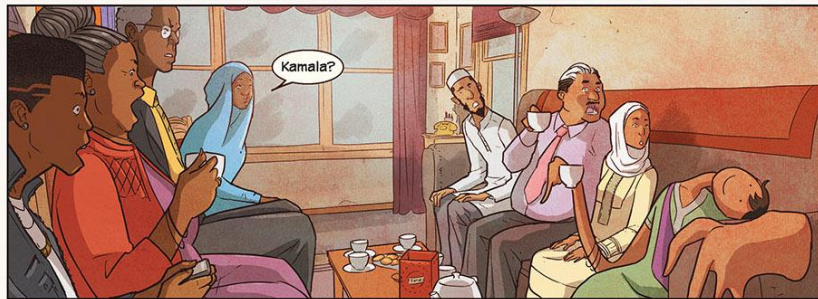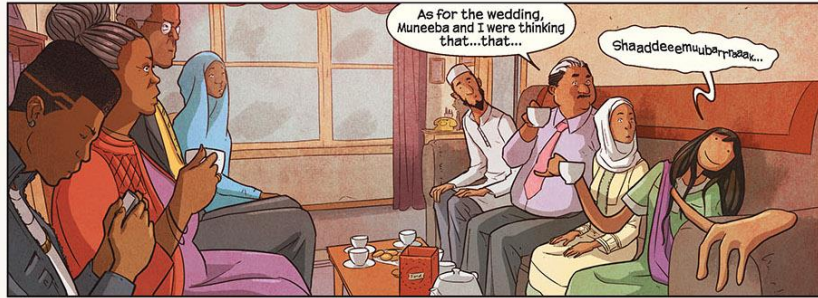
- Kamala Khan is a first-generation Pakistani-American teen

- Is she same person at home, at the mosque, and at school?

- Is she the same person on-line and in real life?

- Is she the same person when she's a superhero?

Frankenstein also introduces galvanism

"...a theory which he had formed on the subject of **electricity and galvanism**, which was at once new and astonishing to me. All that he said **threw greatly into the shade** Cornelius Agrippa, Albertus Magnus, and Paracelsus"

By Luigi Galvani [Public domain], via Wikimedia Commons

How is Science Done: *Ant-Man*
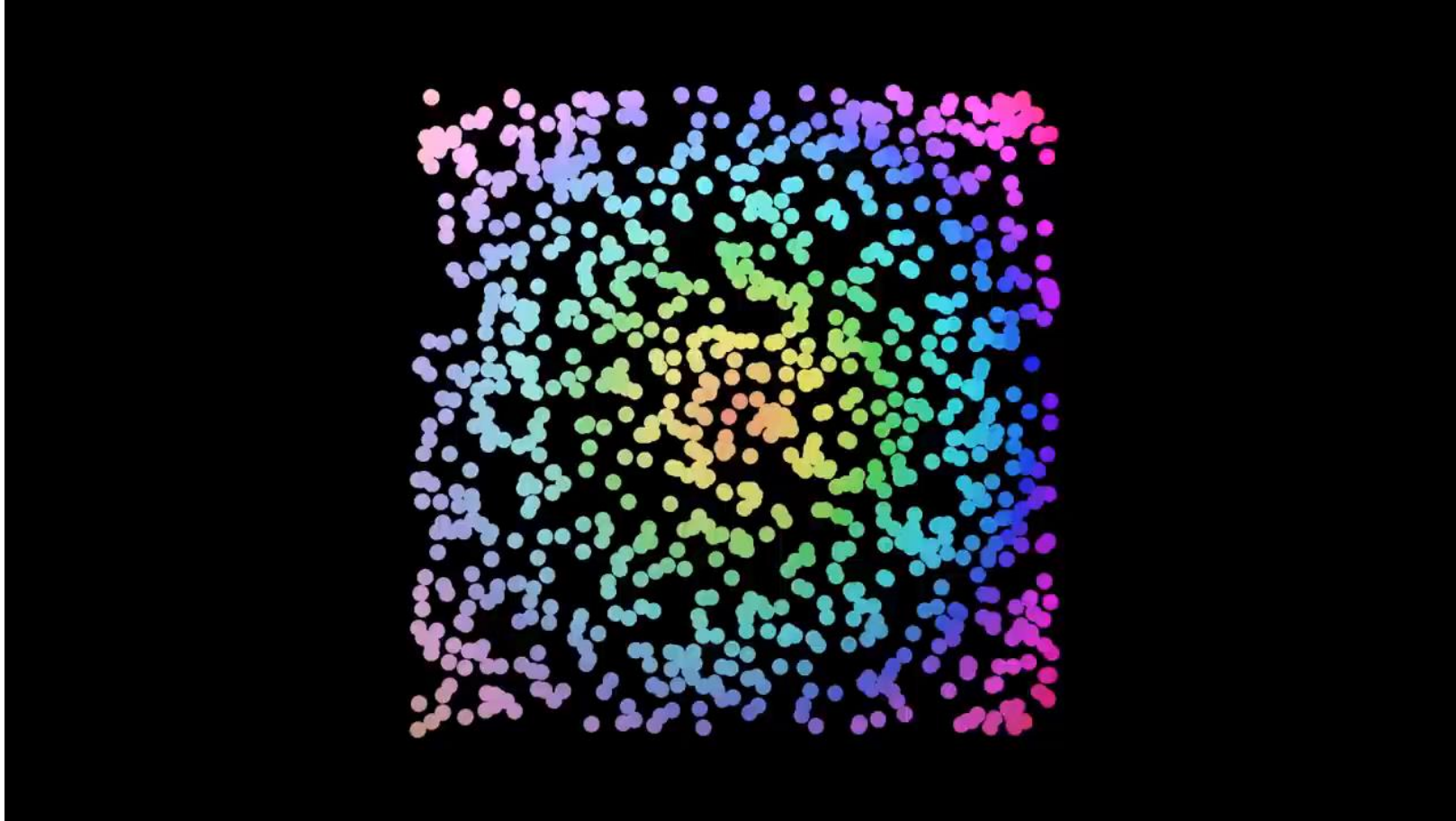
Computer Science: *Squirrel Girl*

The Unbeatable Squirrel Girl #7 © Marvel
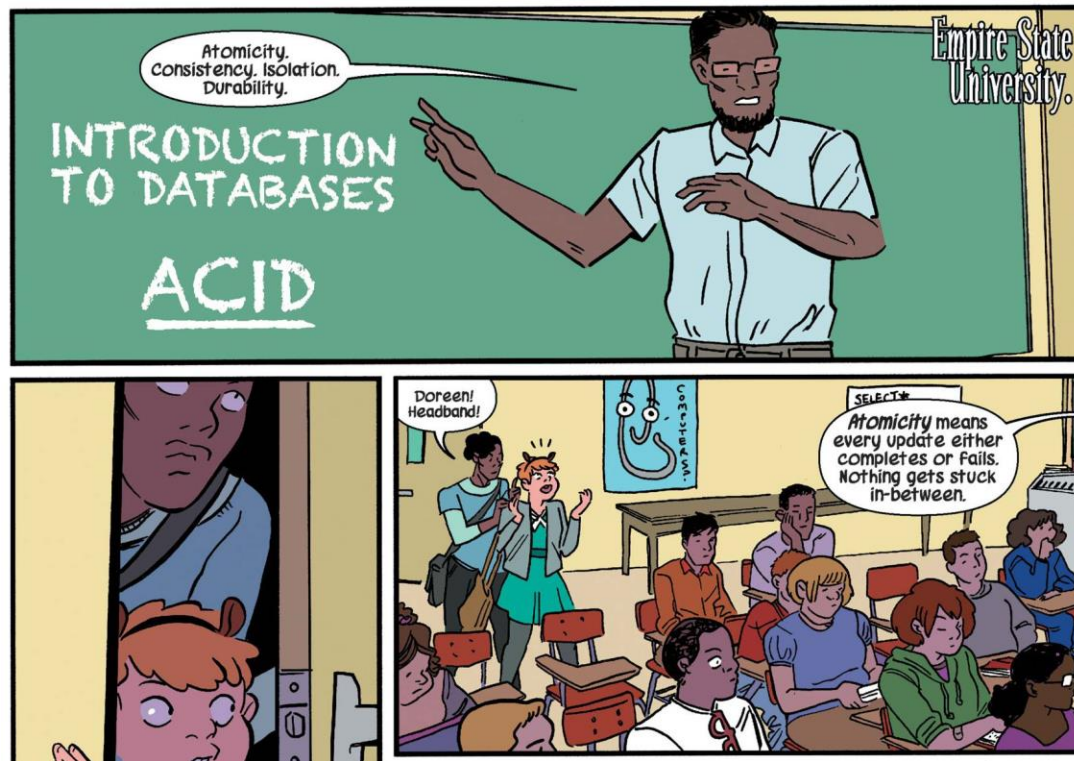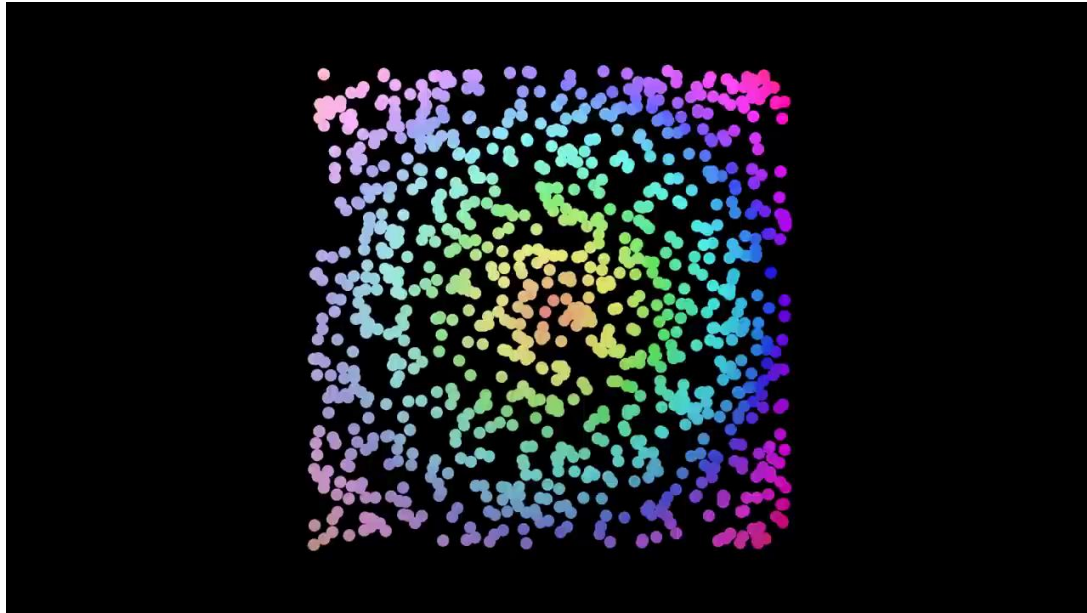
- ACID Database Properties
- C++
- Flow Control
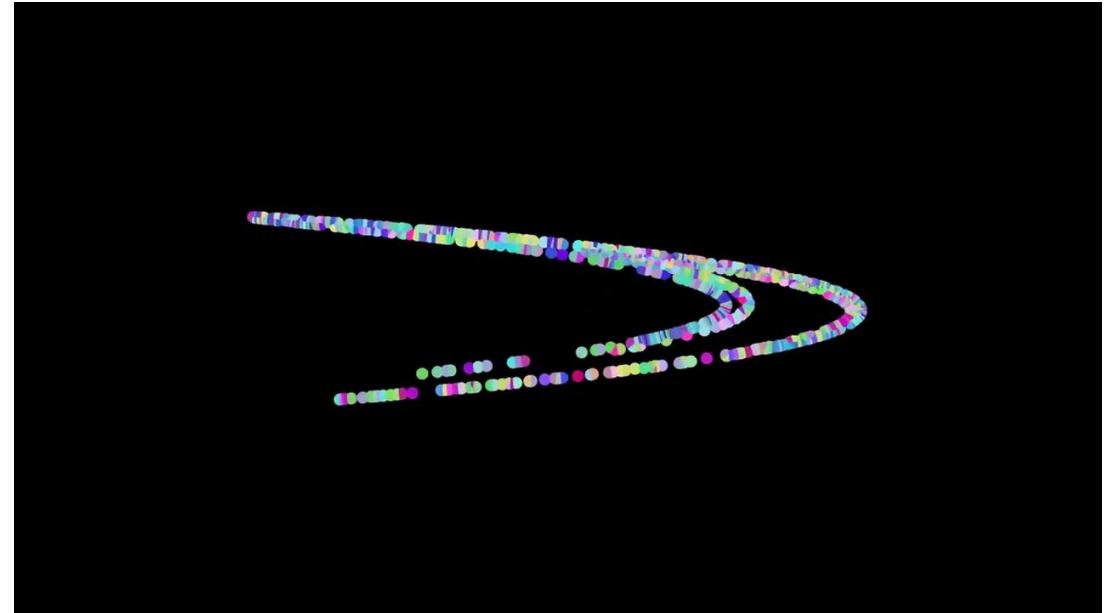- Thinking like a programmer

Chaos Theory Mathematics: *Jurassic Park*

By Andy Walsh

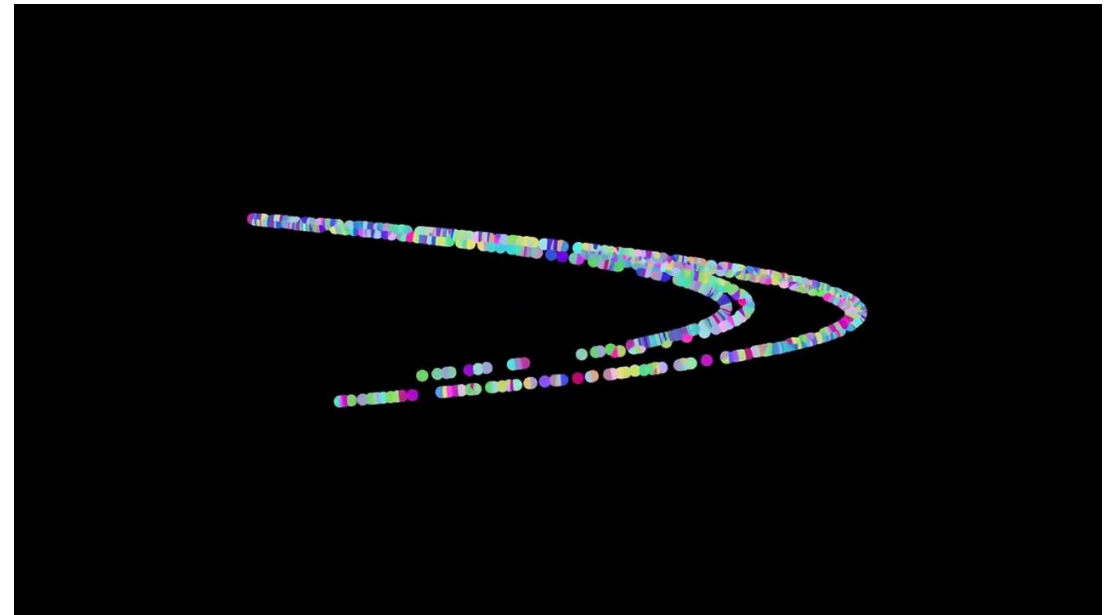# Chaos Theory Mathematics: *Jurassic Park*

By Andy Walsh

By Andy Walsh

# Grace, Sovereignty & Chaotic Dynamics

- Sensitivity to initial conditions
  - Particulars matter
  - Freedom is real
- Attractors
  - There is a plan
  - The plan includes grace, can be accomplished multiple ways


By Andy Walsh

Machine Learning: *X-Men*

- Underfitting – model cannot represent the full solution
  - *Uncanny X-Men* vol 2 #1-3
  - Mr. Sinister uses an evolutionary algorithm to predict behavior
  - Fails when X-Men employ new members & tactics

By Andy Walsh
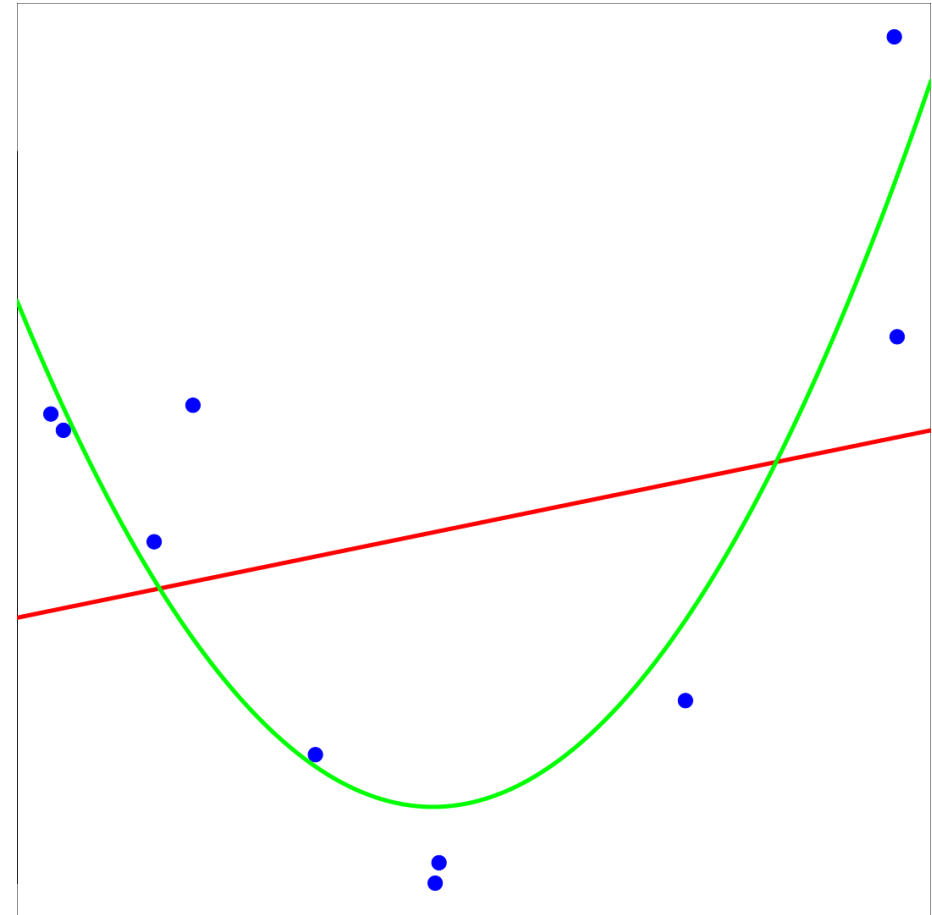
Machine Learning: *X-Men*

- Overfitting – model fits the particulars of one dataset; can't generalize
  - *Wolverine & the X-Men* vol 1
  - Kid antagonists try to replicate past villains' plans, down to costumes
  - X-Men kids don't repeat the mistakes of their predecessors

By Andy Walsh
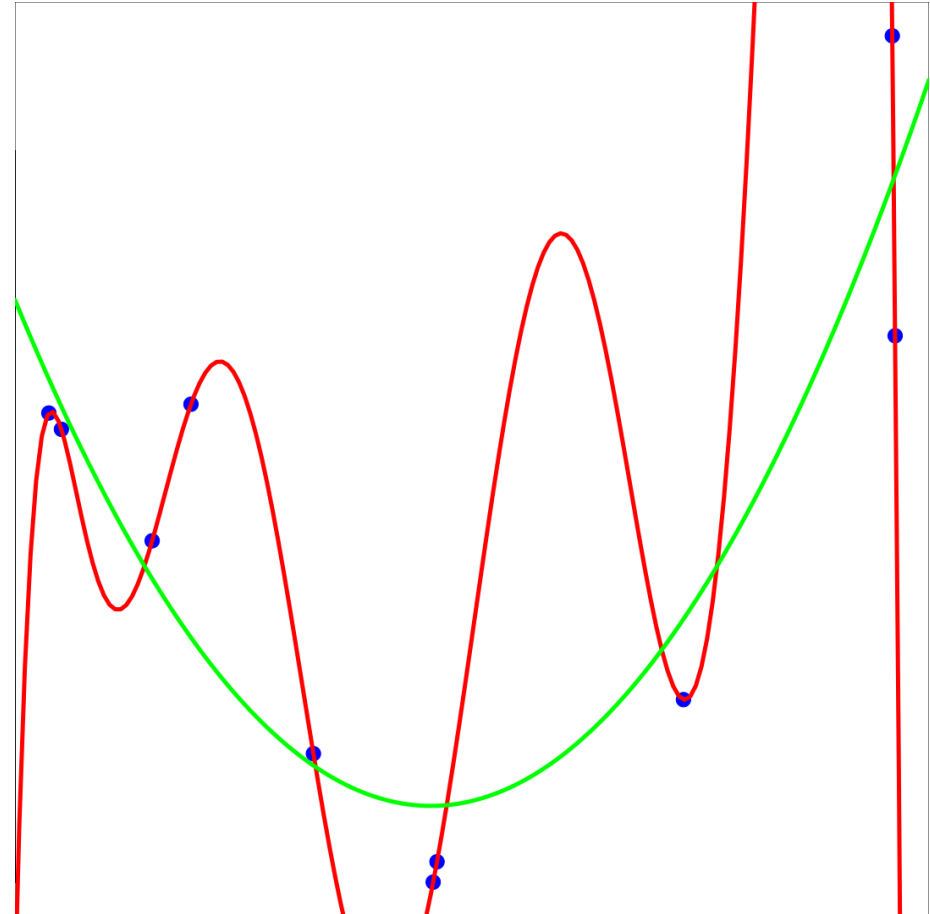
Machine Learning & Natural Theology

- The Bible & Christian tradition define the shape of possible theologies
- Science provides data for which those theologies need to account
- A good understanding of both balances the problems of:
  - Standing for nothing & falling for everything
  - Being too heavenly minded & of no earthly good
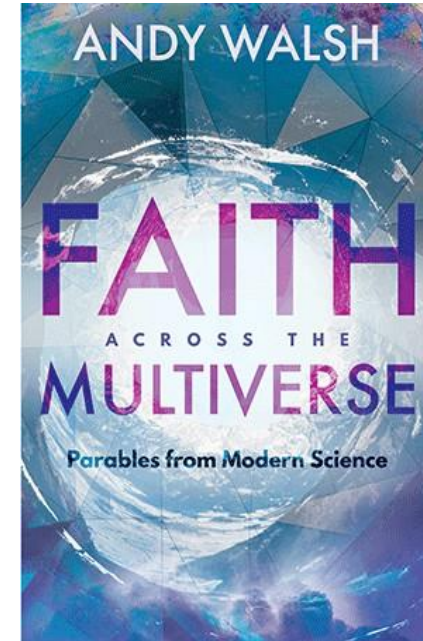
May We Have a Word: *Arrival*

- Words are only useful if we share concepts
  - "War" vs "A desire for more cows"
  - "Weapon" vs "Tool"
- No one has a complete set of concepts
  - Heptapods understand time very differently
  - Maybe differently enough that it isn't even 'time'
- New words at the very least simplify communicating new concepts

Conclusions

- Stories are relevant to faith & science conversations
- Stories can illustrate scientific concepts
  - In the text
  - In the subtext
- Scientific concepts can bring new language to theology

Questions?

- Email: andywalsh1218@gmail
- Twitter: @madroxdupe42
- Blog: blog.emergingscholars.org
  - Science topics every Wednesday
  - Other writers throughout the week

ANDY WALSH

FAITH ACROSS THE MULTIVERSE

Parables from Modern Science

Available now!
50% off at ASA!