

Welcome to the future.



Problems at Verizon

Verizon outage map

Verizon offers mobile and landline communications services, including broadband internet and phone service. Verizon Wireless is a wholly owned subsidiary of Verizon.



Sections

The Washington Post
Democracy Dies in Darkness

Alyssa Goodman

Tech Consumer Tech Future of Transportation Innovations Internet Culture Space Tech Policy Video Gaming

Technology

Big Internet outages hit the East Coast, causing issues for Verizon, Zoom, Slack, Gmail

Internet outages and slowed services hit many areas of the East Coast just as the work and school day was ramping up Tuesday.

The Prediction Project

The Past and Present of the Future



HOME ABOUT MATERIALS COURSES TALKS WRITINGS PRESS FORUM

Search Site

Prediction Essentials

Take a look at the essential elements of the course, including the framework for predictive systems.



Omens & Oracles

Gain insight into prediction as a human venture by studying the most ancient forms of prediction in Omens and Oracles.



Rise of Theory

Learn how humanity moved from mystical divination practices to genuine, scientific theories to explain natural phenomena.



Modern Prediction

Discover the cutting edge predictive methods and modeling from preminent experts across many fields.



How it all fits together

Our project has four main sections, fitting together to offer a broad overview of how humanity has predicted its future throughout history



The Prediction Project, 2021

PREDICTIONX: THE PAST & PRESENT OF THE FUTURE



ESSENTIALS

Predictive Systems Framework

The "Padua Rainbow"

Understanding Uncertainty

Study Design

Timelines

Why predict?



Omens, Oracles & Prophecies

Mesopotamian
Haruspicy

Roman
Augury

Chinese
Oracle Bones

Oracle
of Delphi

Aztec
Rituals

Egyptian
Priests

Tarot

**The
Diviner's
Guide**

Turkish
Tasseography

Maya
Spacetime

Yoruba
Ifa

Casting
Lots

Greek
Astronomy

Astrology

Comets
of Doom

**cross-cultural
conversations**



THE RISE OF THEORY

Ancient
Mesopotamia,
Egypt, Greece &
Rome
Islamic Science

**The Path
to Newton**

▶ Indian
Mathematics
European
Renaissance

The Royal Society

**Lost without
Longitude
(Navigation)**

Help, I'm Lost!
Tools of the
Navigator



MODERN PREDICTION

Health

- ▶ Epidemiology
- ▶ Personal Genomics
- ▶ Population Genetics

Wealth

- ▶ Climate & Wealth
- ▶ Behavioral Economics

The Future of the Future

- ▶ AI, Derek's Day
- ▶ Philosophy
- ▶ Uncertainty

Earth

- ▶ Climate & Energy
- ▶ Climate Policy
- ▶ Tent Tarot
- ▶ Earthquakes

Space

- ▶ Futures of our Universe
- ▶ SETI



Interactive Resource

▶ video(s)

Coming Soon

visit predictionx.org for more information on the Prediction Project



Harvard College
Program in General Education
Explore. Expand. Engage.

predictionx.org



HarvardX





(Ever-Evolving) Syllabus

PREDICTION: THE PAST & PRESENT OF THE FUTURE

Harvard GenEd 1112, Spring 2021, Zoom, Tuesdays & Thursdays 1:30-2:45 PM

[COURSE CANVAS SITE \(with Zoom links\)](#) • [PREDICTION PROJECT WEB SITE](#)

INSTRUCTOR

Prof. Alyssa GOODMAN, *Robert Wheeler Willson Professor of Applied Astronomy and co-Director for Science, Radcliffe Institute for Advanced Study*

Office Hours: Friday, 3:30 PM Boston time, on zoom ([links](#)).

Contact: agoodman@cfa.harvard.edu

INSTRUCTIONAL STAFF

Teaching Fellows in this course will lead discussion sections once per week, at times to be arranged. Each will have a one-hour office hour, on zoom.

Andrew Deloucas, *Ph.D. candidate in Assyriology, Graduate School of Arts and Sciences*

Office Hours: TBA

Contact: adeloucas@g.harvard.edu

Drew Lichtenstein, *Instructional Designer*

Office Hours: TBA

Contact at: drewlich217@gmail.com

In addition to the Teaching Fellows, two undergraduate PredictionX project team members, who are also GenEd 1112 alumni, will join us during class to facilitate discussion. Feel free to also contact them with questions as-needed.

London Vallery, *History of Science concentrator (Technology, Information, and Society Track - Astrophysics), Harvard College*

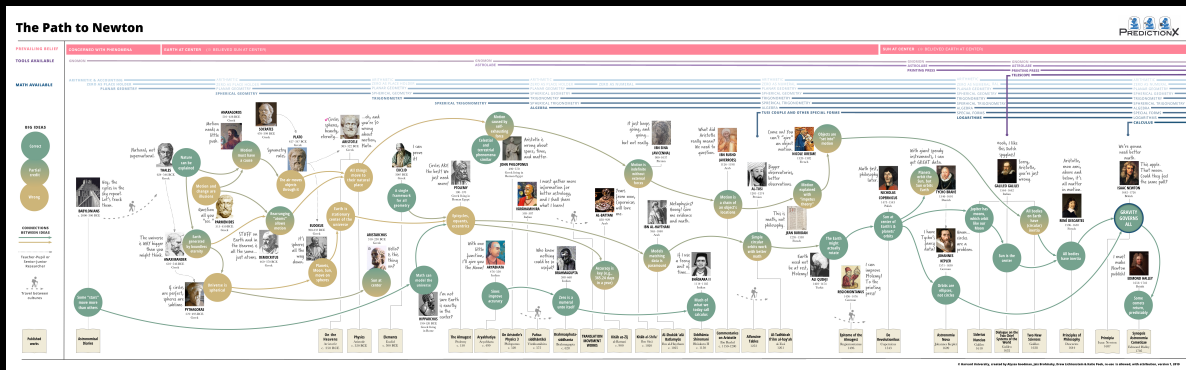
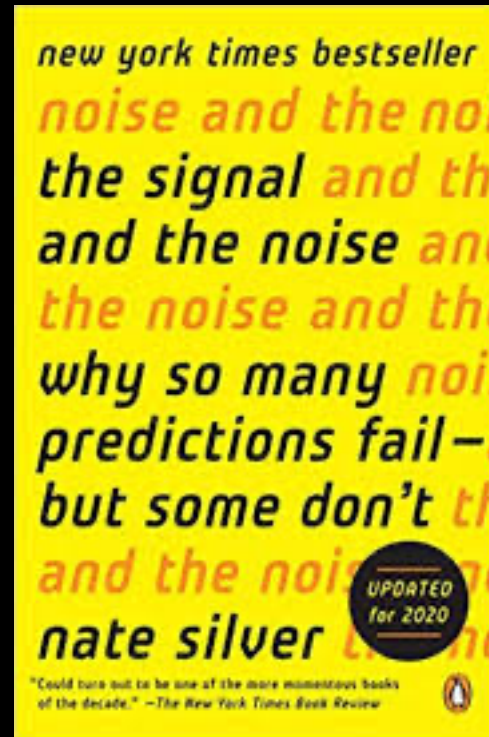
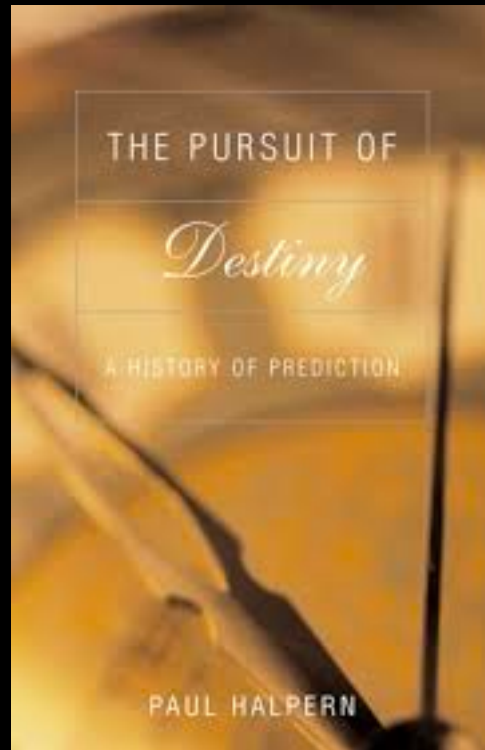
Contact at: londonvallery@college.harvard.edu

Elliott Hyman, *Social Studies concentrator with a secondary in Environmental Science and Public Policy (Climate Change Policy focus field), Harvard College*

Contact at: elliottthyman@college.harvard.edu

*We will go over all the parts of
the syllabus this week
(just not right now).*

Yes, the course is very “multimedia”...



Movies students might choose for “extra credit” in GenEd 1112

(you can also suggest an additional option & clear it with your TF for credit)
The course staff will be hosting a screening of one movie per genre throughout the semester. If students would like to stream movies together, we suggest using [TwoSeven](#) or [Metastream](#)

Action

- Minority Report
- Kingsman: The Secret Service
- Now You See Me
- The Hustle
- Jurassic World
- San Andreas

Comedy

- 22 Jump Street
- Ride Along
- This is the End
- Holmes & Watson
- Tower Heist

Children's

- Wall-E
- Tomorrowland
- Meet the Robinsons
- The Princess and the Frog
- Zootopia

Drama

- The Big Short
- The Social Network
- The Wolf of Wall Street
- Parasite
- Contagion

Fantasy/Sci-Fi

- Gattaca
- Interstellar
- Her
- The Hunger Games
- Inception
- Arrival

Horror/Thriller

- Happy Death Day
- Us
- A Quiet Place
- Train to Busan
- Bird Box

Non-Fiction

- [Cosmos: A Spacetime Odyssey: When Knowledge Conquered Fear](#)
- [EVOLUTION AND CHARLES DARWIN - NOVA - Discovery History Science](#)
- An Inconvenient Truth
- Living in the Future's Past
- Mucho Mucho Amor

Prediction: Week 1

Who is Alyssa?

Where did this course
come from?

Who are you?
Poll

What's the course about?
(overview diagram)

What do you think/know about Prediction?
Poll

predictionx.org
demo

Syllabus/Canvas
demo

edX
demo

LabXchange
demo

Why predict?

Framework
for Predictive Systems

Padua Rainbow

How do weather forecasts work?
survey

Breakout Room
discussions

full class
discussion

take-a-sweater
demo

uncertainty
(tables)

uncertainty
(full group)

Your future in GenEd1112

Prediction Journals

YOUR Predictive System

What's a *prediction*?
survey

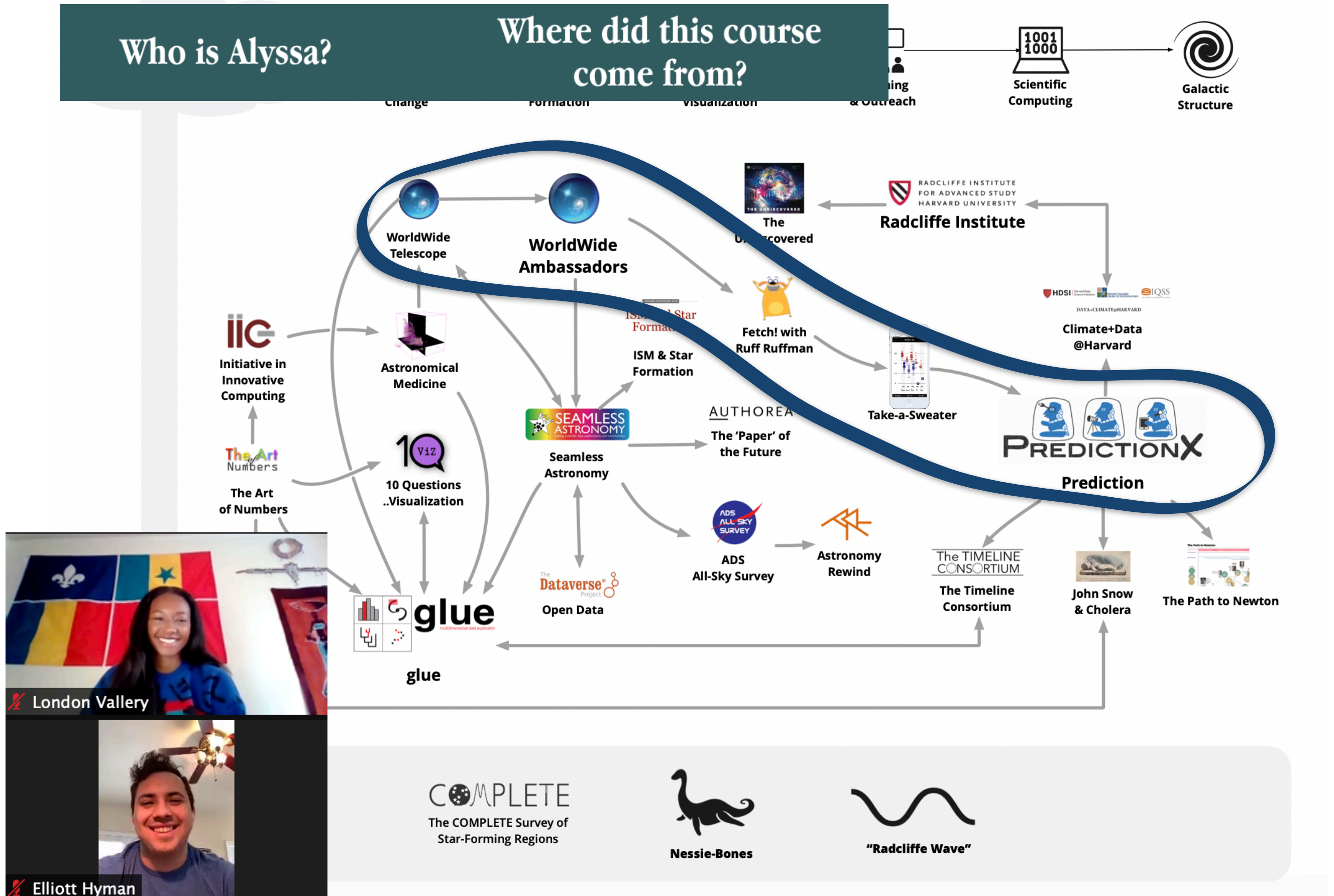
Breakout Room
discussions

full class
discussion

Why & how is a physicist interested in Cuneiform tablets?

Who is Alyssa?

Where did this course come from?



Prediction: Week 1

Who is Alyssa?

Where did this course
come from?

Who are you?
Poll

What's the course about?
(overview diagram)

What do you think/know about Prediction?
Poll

predictionx.org
demo

Syllabus/Canvas
demo

edX
demo

LabXchange
demo

Why predict?

Framework
for Predictive Systems

Padua Rainbow

How do weather forecasts work?
survey

Breakout Room
discussions

full class
discussion

take-a-sweater
demo

uncertainty
(tables)

uncertainty
(full group)

Your future in GenEd1112

Prediction Journals

YOUR Predictive System



What's a *prediction*?
survey

Breakout Room
discussions

full class
discussion

Where are you from? (up to 5 places)





**What is (are) your
concentration(s)/interests? (up to 3
replies)**

Where are you now?



Prediction: Week 1

Who is Alyssa?

Where did this course
come from?

Who are you?
Poll

What's the course about?
(overview diagram)

What do you think/know about Prediction?
Poll

predictionx.org
demo

Syllabus/Canvas
demo

edX
demo

LabXchange
demo

Why predict?

Framework
for Predictive Systems

Padua Rainbow

How do weather forecasts work?
survey

Breakout Room
discussions

full class
discussion

take-a-sweater
demo

uncertainty
(tables)

uncertainty
(full group)

Your future in GenEd1112

Prediction Journals

YOUR Predictive System

What's a *prediction*?
survey

Breakout Room
discussions

full class
discussion

The Prediction Project, 2021

PREDICTIONX: THE PAST & PRESENT OF THE FUTURE



ESSENTIALS

Predictive Systems Framework

The "Padua Rainbow"

Understanding Uncertainty

Study Design

Timelines

Why predict?



Omens, Oracles & Prophecies

Mesopotamian
Haruspicy

Roman
Augury

Chinese
Oracle Bones

Oracle
of Delphi

Aztec
Rituals

Egyptian
Priests

Tarot

**The
Diviner's
Guide**

Turkish
Tasseography

Maya
Spacetime

Yoruba
Ifa

Casting
Lots

Greek
Astronomy

Astrology

Comets
of Doom

**cross-cultural
conversations**



THE RISE OF THEORY

Ancient
Mesopotamia,
Egypt, Greece &
Rome
Islamic Science

**The Path
to Newton**

▶ Indian
Mathematics
European
Renaissance

The Royal Society

**Lost without
Longitude
(Navigation)**

Help, I'm Lost!
Tools of the
Navigator



MODERN PREDICTION

Health

- ▶ Epidemiology
- ▶ Personal Genomics
- ▶ Population Genetics

Wealth

- ▶ Climate & Wealth
- ▶ Behavioral Economics

The Future of the Future

- ▶ AI, Derek's Day
- ▶ Philosophy
- ▶ Uncertainty

Earth

- ▶ Climate & Energy
- ▶ Climate Policy
- ▶ Tent Tarot
- ▶ Earthquakes

Space

- ▶ Futures of our Universe
- ▶ SETI



Interactive Resource

▶ video(s)

Coming Soon

visit predictionx.org for more information on the Prediction Project



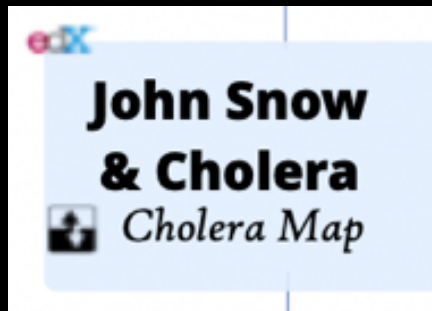
Harvard College
Program in General Education
Explore. Expand. Engage.

predictionx.org



HarvardX





John Snow & Cholera

Home Course Discussion Progress Timeline Glossary @PredictionX on Twitter

Welcome to HarvardX's PredictionX!



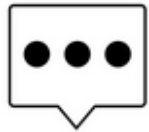




Mini-Course: John Snow and the Cholera Outbreak of 1854

Support

Course Updates and News

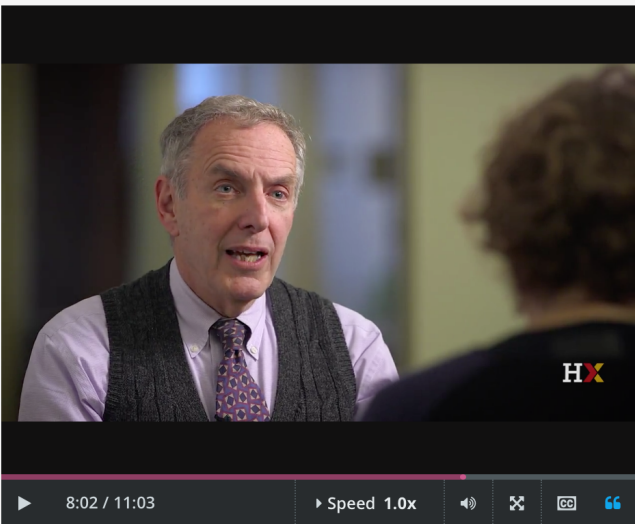
September 12, 2016 [Hide](#)

PredictionX: John Snow and the Cholera Outbreak of 1854



[Snow and Cholera](#)[Expert Conversations](#)[The Map](#)[Timeline](#)[Extra Material](#)[Assessments](#)[PredictionX](#)

A Conversation with Experts

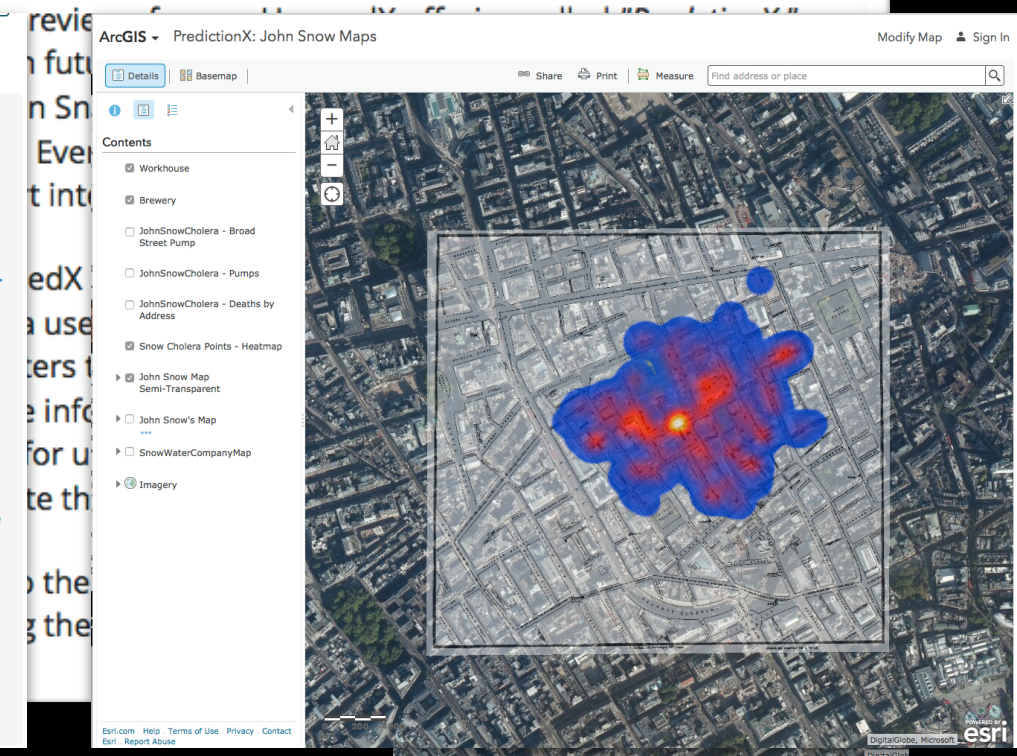


8:02 / 11:03 Speed 1.0x

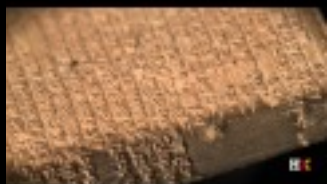
Video
[Download video file](#)

John Snow Society mag.
ROSALIND: Yes.
So he had, if you like, he'd got the data.
And this was just another way of demonstrating it.
It wasn't how he solved the outbreak.
DON: When I talk to my students about this, I always ask them, **so did John Snow perform a case control study,**
which is fundamental in epidemiology.
It's the greatest tool for working up outbreaks that we have.
In a case control study, you study the exposure of the cases,
in this case, water pumps, and the exposure
of the controls, the people who were

Transcripts
[Download SubRip \(.srt\) file](#)
[Download Text \(.txt\) file](#)



featuring Don Goldmann, AG & Rosalind Stanwell-Smith



“Modern Prediction” Interviews at PredictionX.org



Prediction & Philosophy

Agustin Rayo

Prediction in Astrophysics

Avi Loeb

Artificial Intelligence

Ben Shneiderman

Predicting Health, and Earthquakes

Brendan Meade and Susan Murphy

Prediction & Psychology

Dan Gilbert

The Future of Energy and the Earth

Dan Kammen

Behavioral Economics

David Laibson

Personal Genomics

George Church

Climate Change

Gina McCarthy

Population Genetics

Immaculata De Vivo and Peter Kraft

The Search for Extraterrestrial Intelligence

Jill Tarter

Epidemiology

Megan Murray

Philosophy & Prediction

Ned Hall

The Business of the Future of Energy and the Earth

Rebecca Henderson

Uncertainty in Science

Stuart Firestein

Which topics interest you most (choose up to 3)?

PREDICTIONX: THE PAST & PRESENT OF THE FUTURE



ESSENTIALS

Predictive Systems Framework

The "Padua Rainbow"

 **Understanding Uncertainty**

Study Design

 **Timelines**

Why predict?



Omens, Oracles & Prophecies

Mesopotamian
Haruspicy

Roman
Augury

Chinese
Oracle Bones

Oracle
of Delphi

Aztec
Rituals

Egyptian
Priests

Tarot

**The
Diviner's
Guide**

Turkish
Tasseography

Maya
Spacetime

Yoruba
Ifa

Casting
Lots

Greek
Astronomy

Astrology

Comets
of Doom

**cross-cultural
conversations**



THE RISE OF THEORY


Ancient
Mesopotamia,
Egypt, Greece &
Rome
Islamic Science

**The Path
to Newton**

▶ Indian
Mathematics
European
Renaissance

The Royal Society

**Lost without
Longitude
(Navigation)**

 **Help, I'm Lost!**
Tools of the
Navigator



MODERN PREDICTION


Health

- ▶ Epidemiology
- ▶ Personal Genomics
- ▶ Population Genetics

Wealth

- ▶ Climate & Wealth
- ▶ Behavioral Economics

The Future of the Future

- ▶ AI, Derek's Day 
- ▶ Philosophy
- ▶ Uncertainty

Earth

- ▶ Climate & Energy
- ▶ Climate Policy
- ▶ Tent Tarot
- ▶ Earthquakes

Space

- ▶ Futures of our Universe
- ▶ SETI



Interactive Resource

▶ video(s)

Coming Soon

visit predictionx.org for more information on the Prediction Project

Which topics do you know the most about?

(choose up to 4)

PREDICTIONX: THE PAST & PRESENT OF THE FUTURE



ESSENTIALS

Predictive Systems Framework

The "Padua Rainbow"

Understanding Uncertainty

Study Design

Timelines

Why predict?



Omens, Oracles & Prophecies

Mesopotamian
Haruspicy

Roman
Augury

Chinese
Oracle Bones

Oracle
of Delphi

Aztec
Rituals

Egyptian
Priests

Tarot

**The
Diviner's
Guide**

Turkish
Tasseography

Maya
Spacetime

Yoruba
Ifa

Casting
Lots

Greek
Astronomy

Astrology

Comets
of Doom

**cross-cultural
conversations**



THE RISE OF THEORY

Ancient
Mesopotamia,
Egypt, Greece &
Rome
Islamic Science

**The Path
to Newton**

▶ Indian
Mathematics
European
Renaissance

The Royal Society

**Lost without
Longitude
(Navigation)**

Help, I'm Lost!
Tools of the
Navigator



MODERN PREDICTION

Health

- ▶ Epidemiology
- ▶ Personal Genomics
- ▶ Population Genetics

Wealth

- ▶ Climate & Wealth
- ▶ Behavioral Economics

**The Future
of the Future**

- ▶ AI, Derek's Day
- ▶ Philosophy
- ▶ Uncertainty

Earth

- ▶ Climate & Energy
- ▶ Climate Policy
- ▶ Tent Tarot
- ▶ Earthquakes

Space

- ▶ Futures of our Universe
- ▶ SETI



Interactive Resource

▶ video(s)

Coming Soon

visit predictionx.org for more information on the Prediction Project

Which topics do you know next-to-nothing about? (choose up to 5)

PREDICTIONX: THE PAST & PRESENT OF THE FUTURE



ESSENTIALS

Predictive Systems Framework

The "Padua Rainbow"

 **Understanding Uncertainty**

Study Design

 **Timelines**

Why predict?



Omens, Oracles & Prophecies

Mesopotamian Haruspicy

Roman Augury

Chinese Oracle Bones

Oracle of Delphi

Aztec Rituals

Egyptian Priests

Tarot

The Diviner's Guide

Turkish Tasseography

Maya Spacetime

Yoruba Ifa

Casting Lots

Greek Astronomy

Astrology

Comets of Doom

cross-cultural conversations



THE RISE OF THEORY


Ancient Mesopotamia, Egypt, Greece & Rome
Islamic Science

The Path to Newton

▶ Indian Mathematics
European Renaissance

The Royal Society

Lost without Longitude (Navigation)

 **Help, I'm Lost!**
Tools of the Navigator



MODERN PREDICTION


Health

- ▶ Epidemiology
- ▶ Personal Genomics
- ▶ Population Genetics

Wealth

- ▶ Climate & Wealth
- ▶ Behavioral Economics

The Future of the Future

- ▶ AI, Derek's Day 
- ▶ Philosophy
- ▶ Uncertainty

Earth

- ▶ Climate & Energy
- ▶ Climate Policy
- ▶ Tent Tarot
- ▶ Earthquakes

Space

- ▶ Futures of our Universe
- ▶ SETI



Interactive Resource

▶ video(s)

Coming Soon

visit predictionx.org for more information on the Prediction Project

What's a "Prediction"? (v1)

Prediction: Week 1

Who is Alyssa?

Where did this course
come from?

Who are you?
Poll

What's the course about?
(overview diagram)

What do you think/know about Prediction?
Poll

predictionx.org
demo

Syllabus/Canvas
demo

edX
demo

LabXchange
demo

Why predict?

Framework
for Predictive Systems

Padua Rainbow

How do weather forecasts work?
survey

Breakout Room
discussions

full class
discussion

take-a-sweater
demo

uncertainty
(tables)

uncertainty
(full group)

Your future in GenEd1112

Prediction Journals

YOUR Predictive System

What's a *prediction*?
survey

Breakout Room
discussions

full class
discussion

**Predictionx.org
demo**

**Syllabus/Canvas
demo**

**edX
demo**

**LabXchange
demo**

Prediction: Week 1

Who is Alyssa?

Where did this course
come from?

Who are you?
Poll

What's the course about?
(overview diagram)

What do you think/know about Prediction?
Poll

predictionx.org
demo

Syllabus/Canvas
demo

edX
demo

LabXchange
demo

Why predict?

Framework
for Predictive Systems

Padua Rainbow

How do weather forecasts work?
survey

**Breakout Room
discussions**

**full class
discussion**

take-a-sweater
demo

**uncertainty
(tables)**

**uncertainty
(full group)**

Your future in GenEd1112

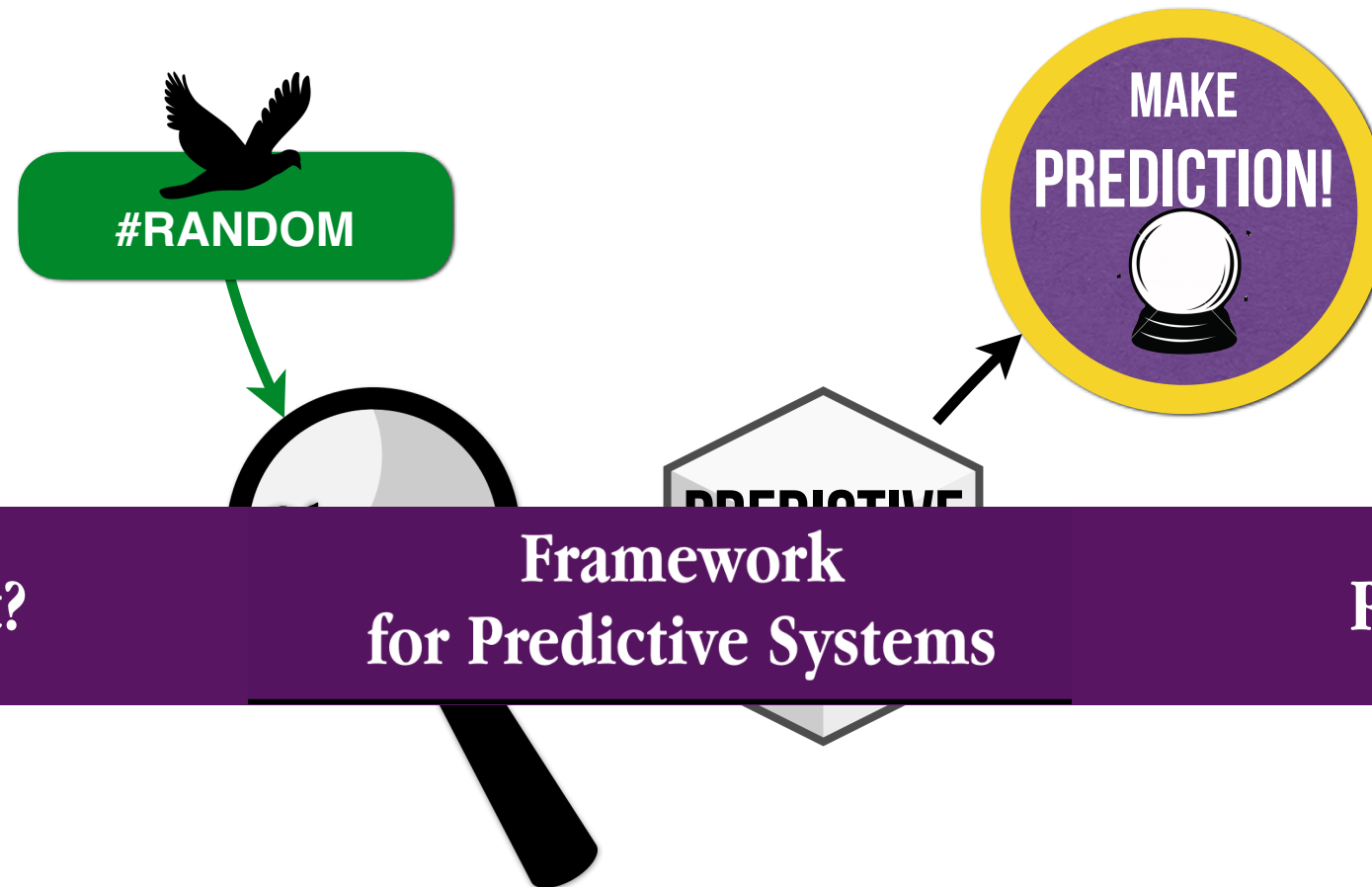
Prediction Journals

YOUR Predictive System

What's a *prediction*?
survey

**Breakout Room
discussions**

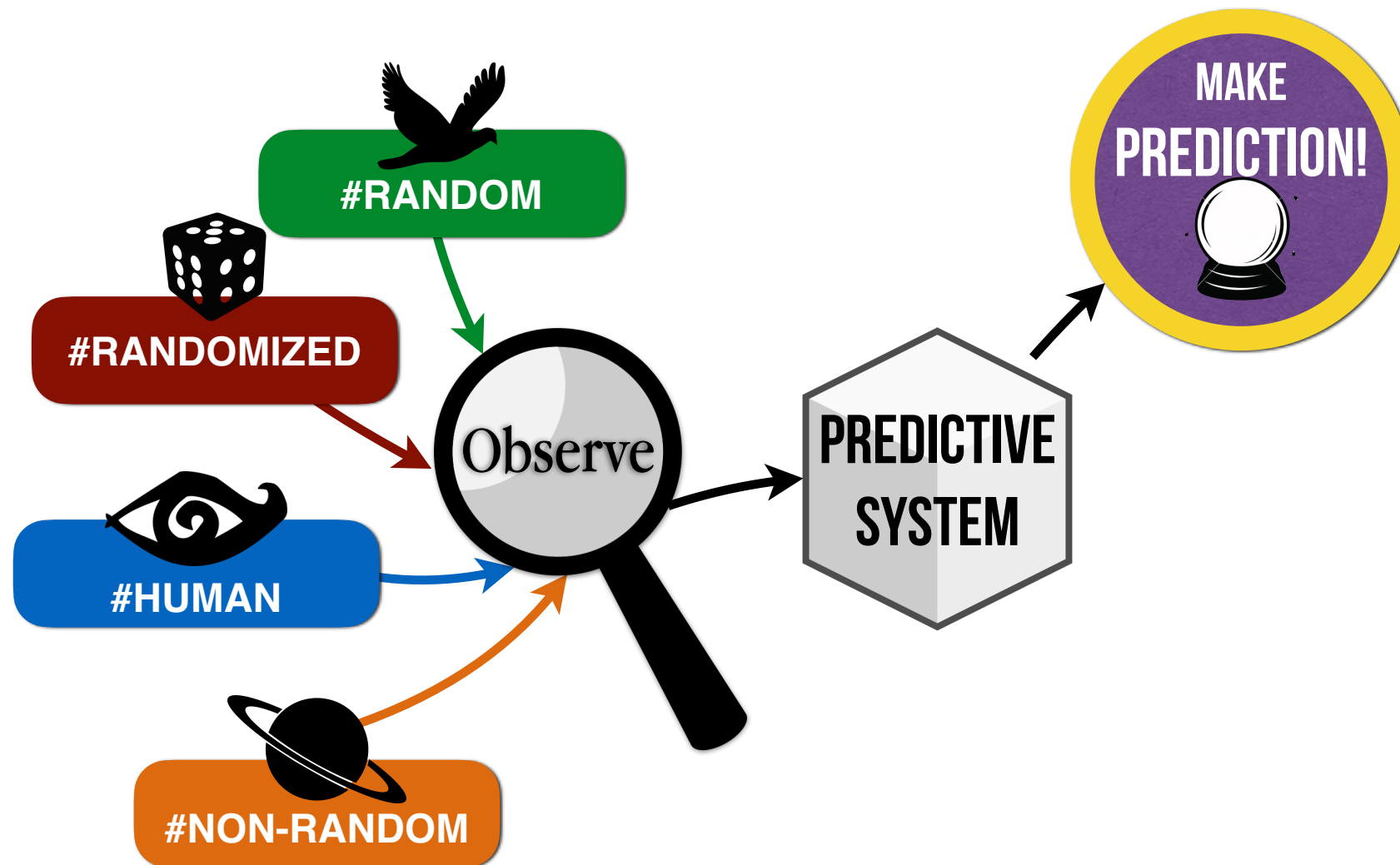
**full class
discussion**



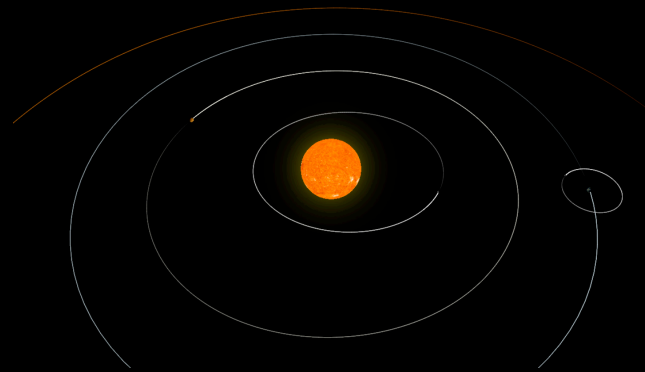
Why predict?

Framework
for Predictive Systems

Padua Rainbow



#NON-RANDOM



Celestial Motion

#RANDOMIZED



Ifa

#HUMAN



Egyptian "Bobble Head"

#RANDOM

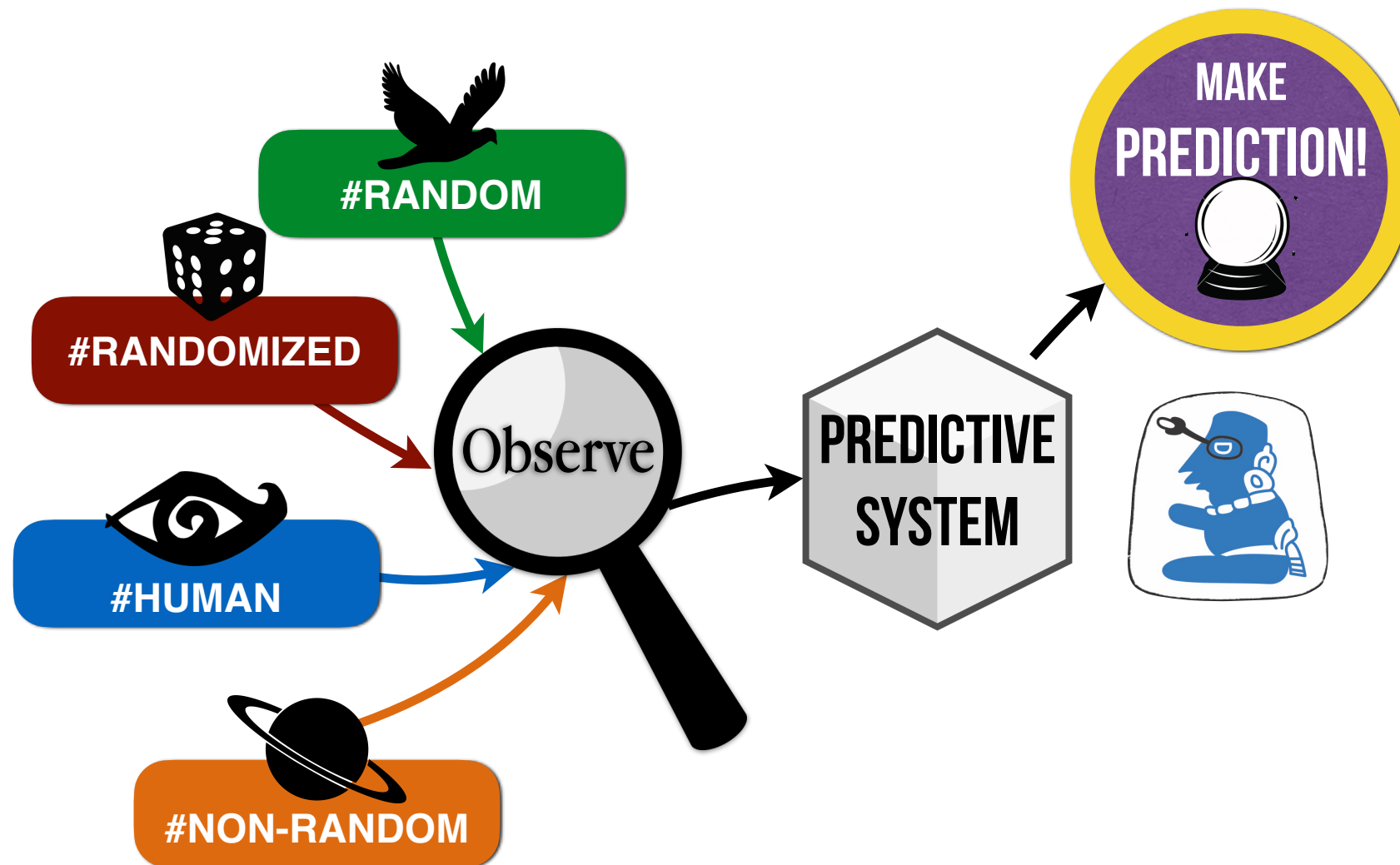


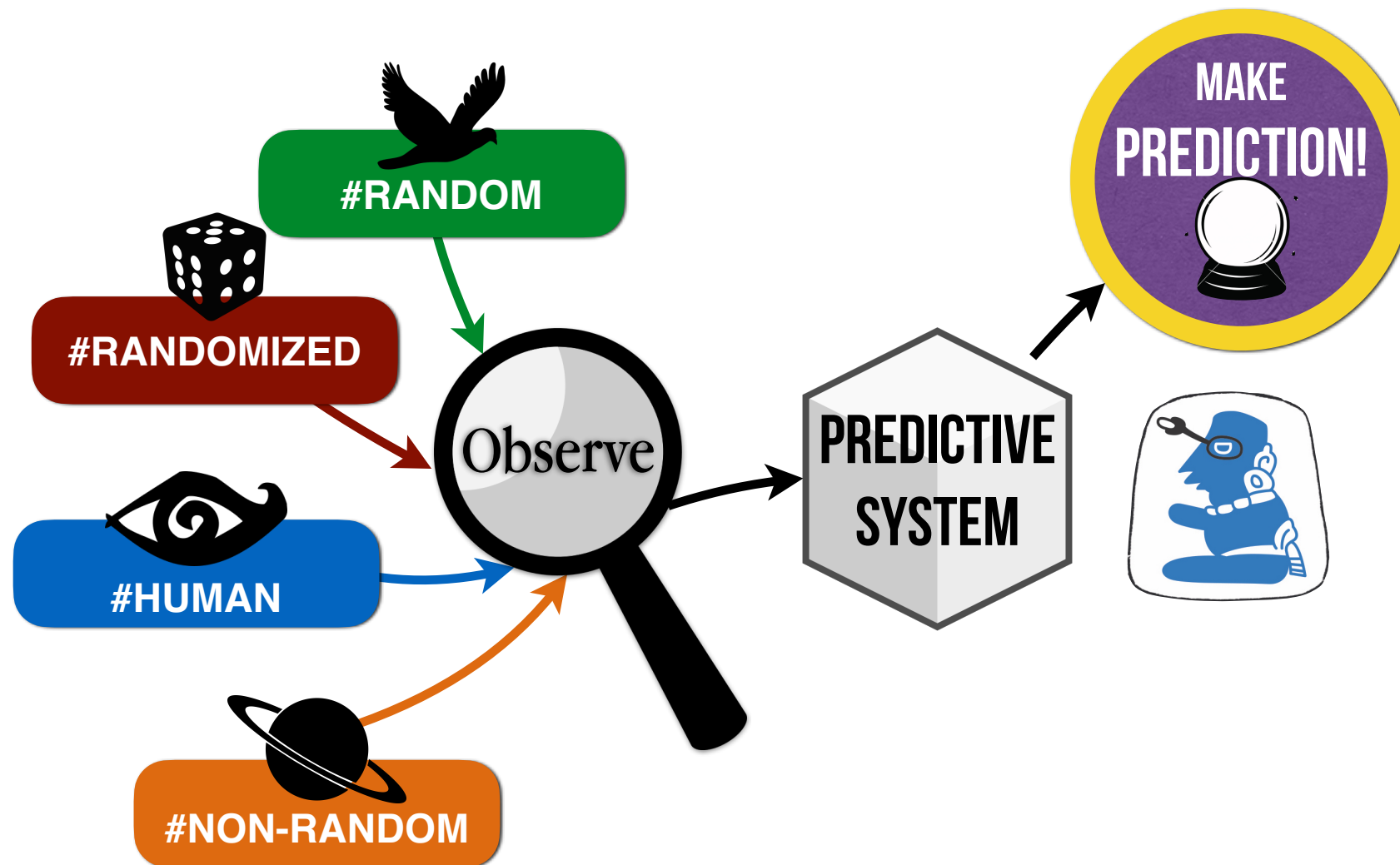
Comets of Doom

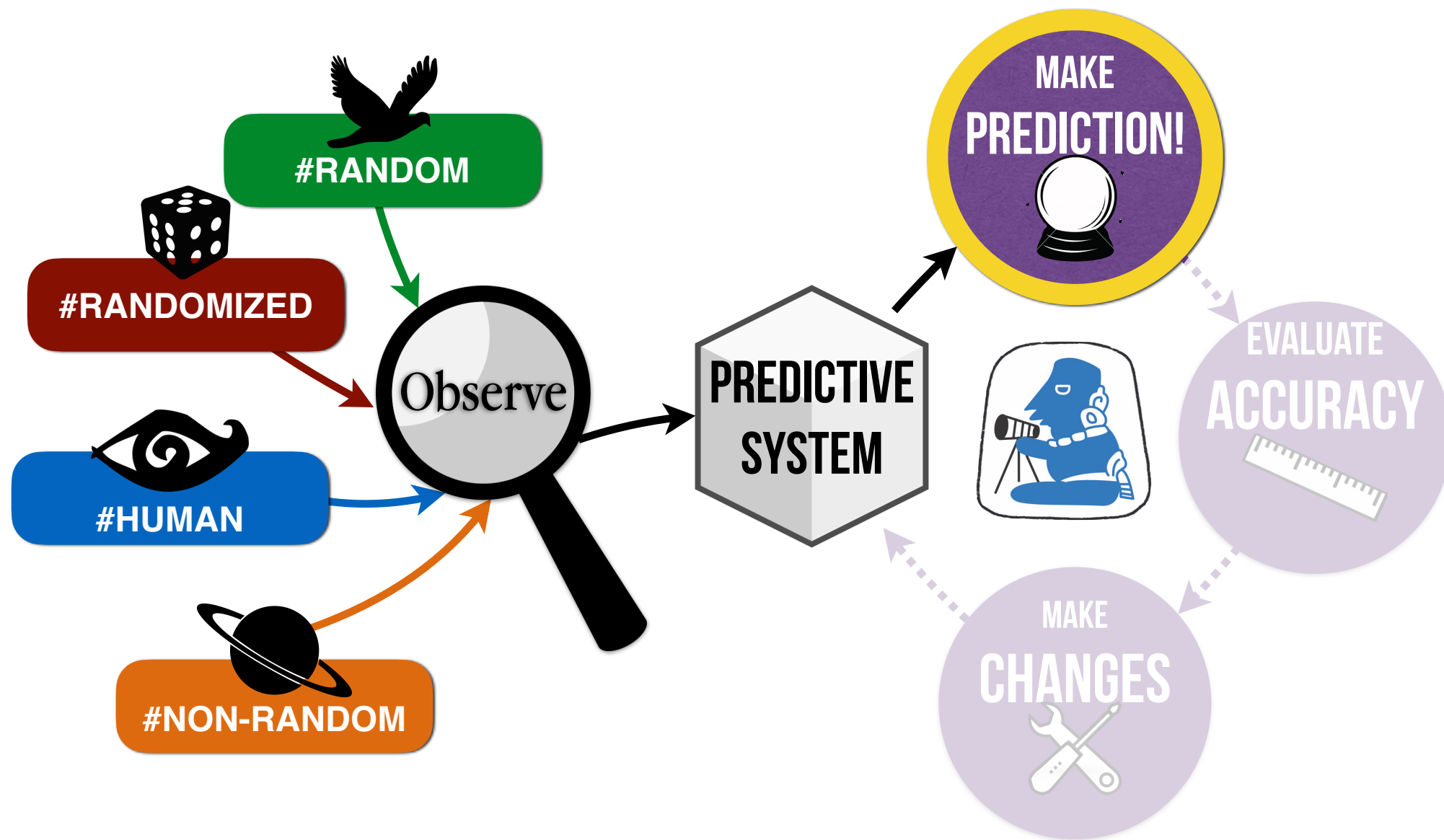


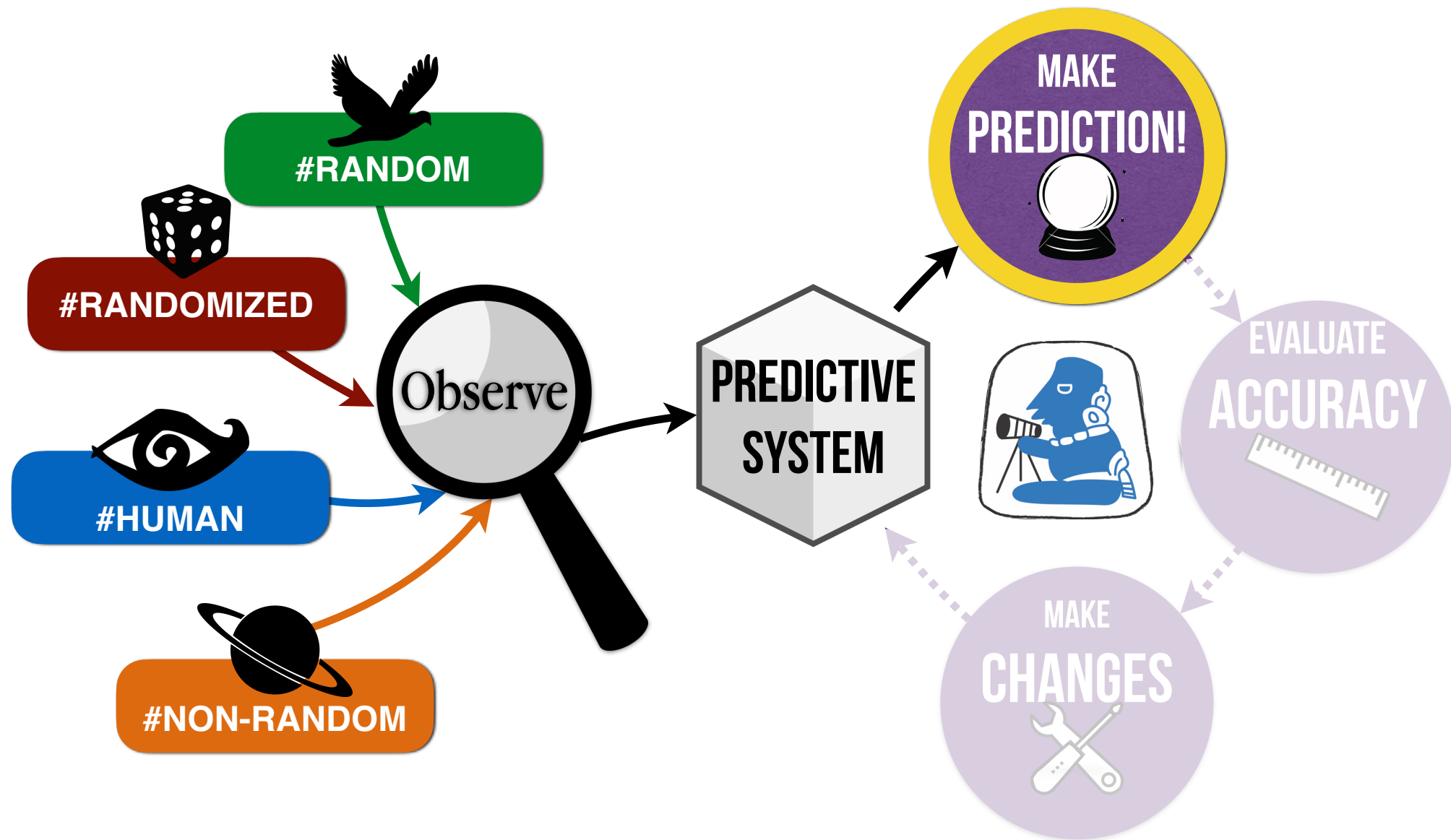
#HUMAN

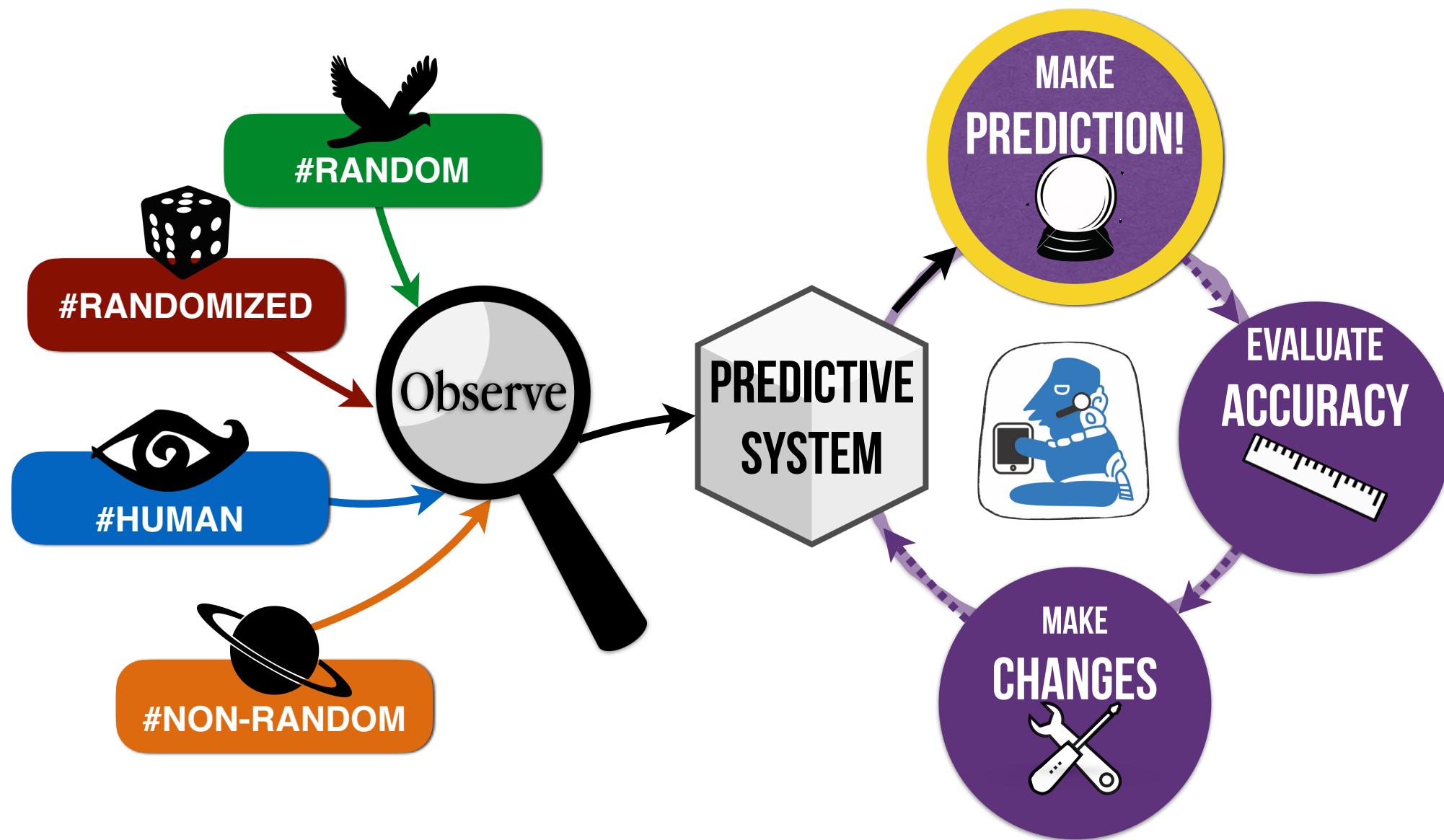
Ancient Egyptian Divination, featuring Prof. Peter der Manuelian (Director of Harvard's Semitic Museum)

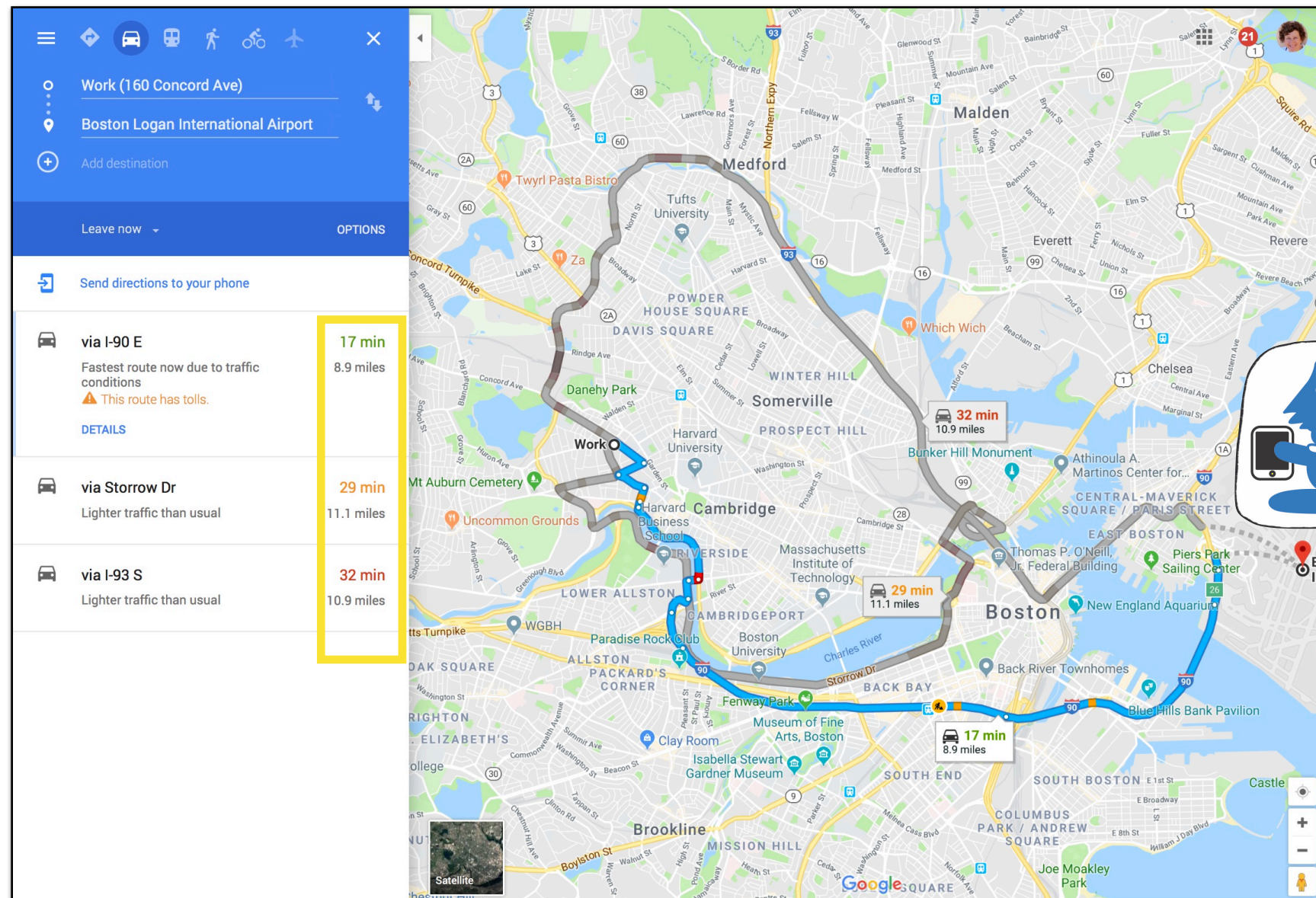












“Most companies who do live traffic **compare** their predictions against actual time in traffic to tune their algorithms and data sources. The likely result of this is that the companies who have access to the best usage data ... are likely to end up with the best predictions in the medium to long term.”

What's a "Prediction"? (v1)

1. Weather

2. Good/Bad "Omens"



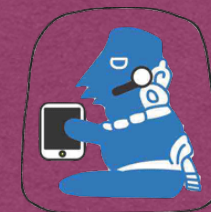
3. Numerical
Simulation

4. Politics

5. Unusual
situations

What's a "Prediction"? (V2)

GenEd 1112 Week 1, “Part II”



With your camera on or off, please feel free to warm up for class by dancing to this great song. Please also listen to the words...

Prediction: Week 1

Who is Alyssa?

Where did this course
come from?

Who are you?
Poll

What's the course about?
(overview diagram)

What do you think/know about Prediction?
Poll

predictionx.org
demo

Syllabus/Canvas
demo

edX
demo

LabXchange
demo

Why predict?

Framework
for Predictive Systems

Padua Rainbow

How do weather forecasts work?
survey

Breakout Room
discussions

full class
discussion

take-a-sweater
demo

uncertainty
(tables)

uncertainty
(full group)

Your future in GenEd1112

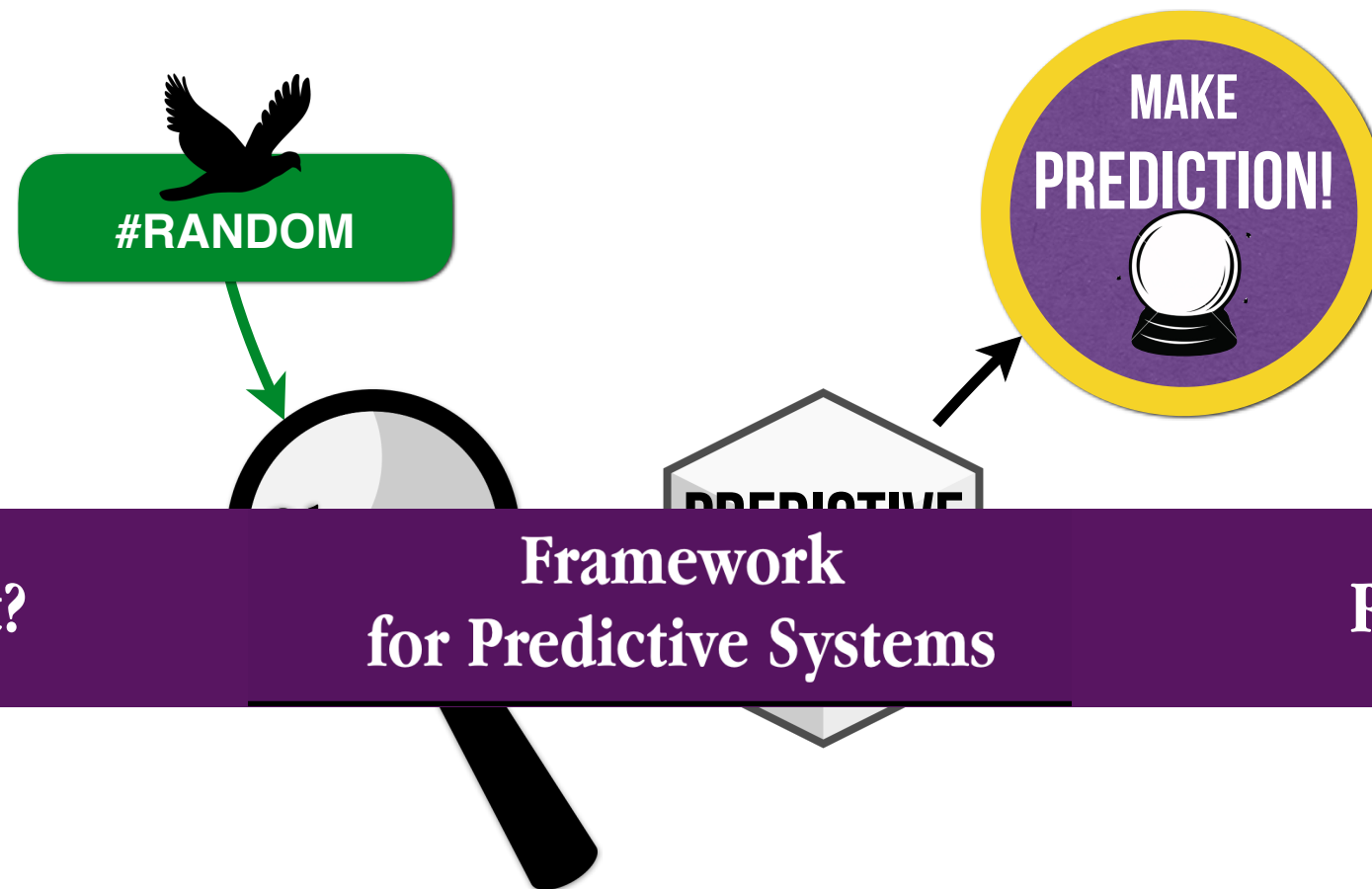
Prediction Journals

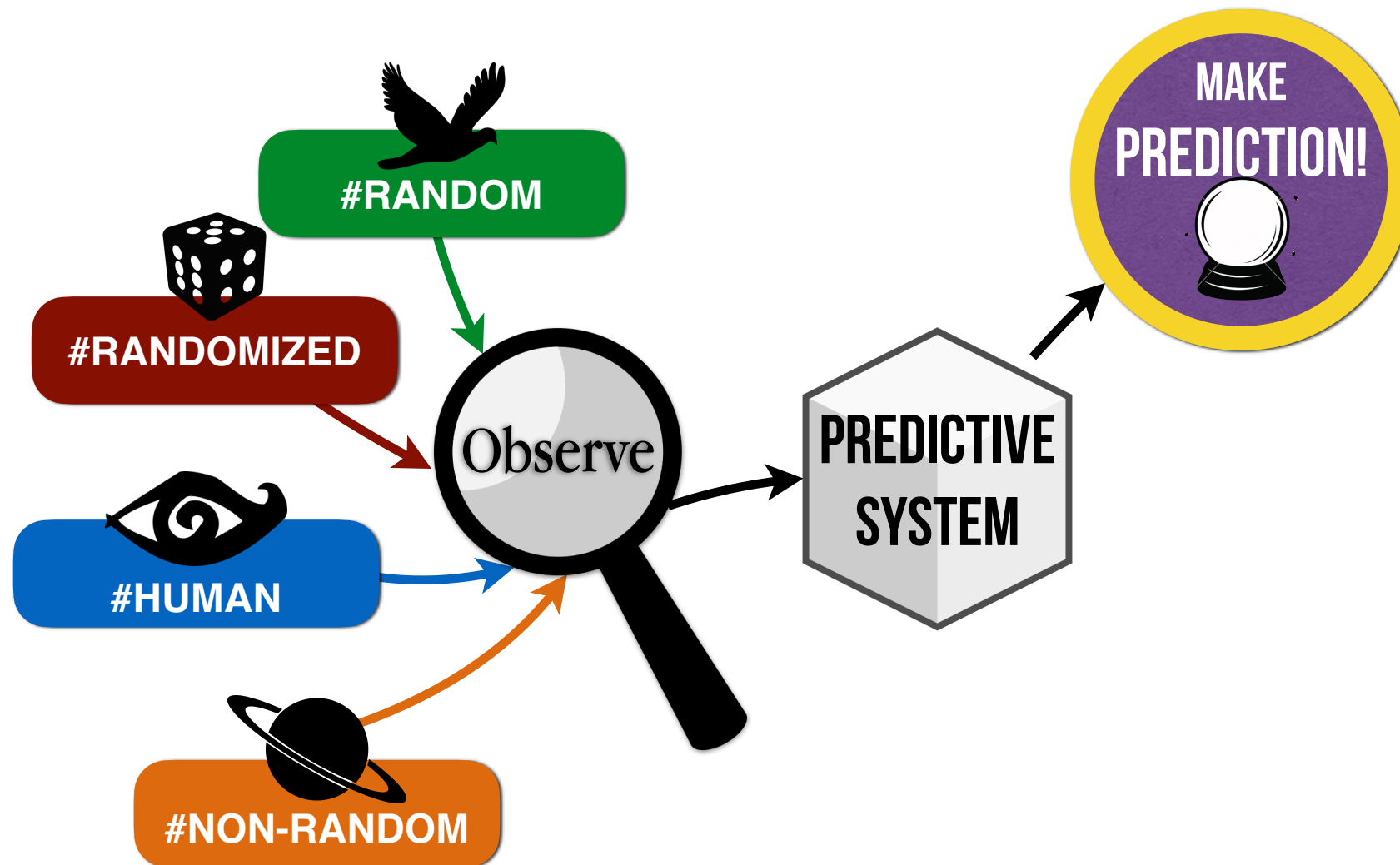
YOUR Predictive System

What's a *prediction*?
survey

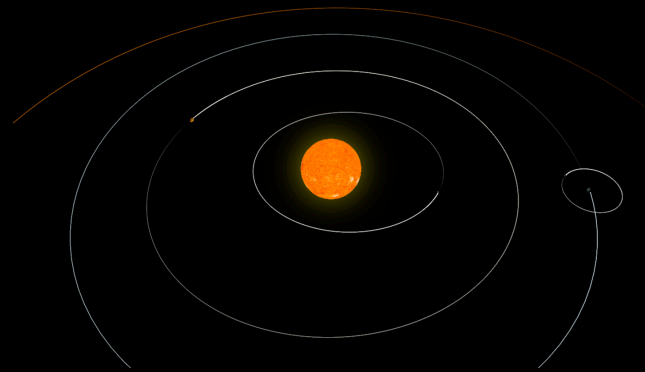
Breakout Room
discussions

full class
discussion





#NON-RANDOM



Celestial Motion

#RANDOMIZED



Ifa

#HUMAN



Egyptian "Bobble Head"

#RANDOM

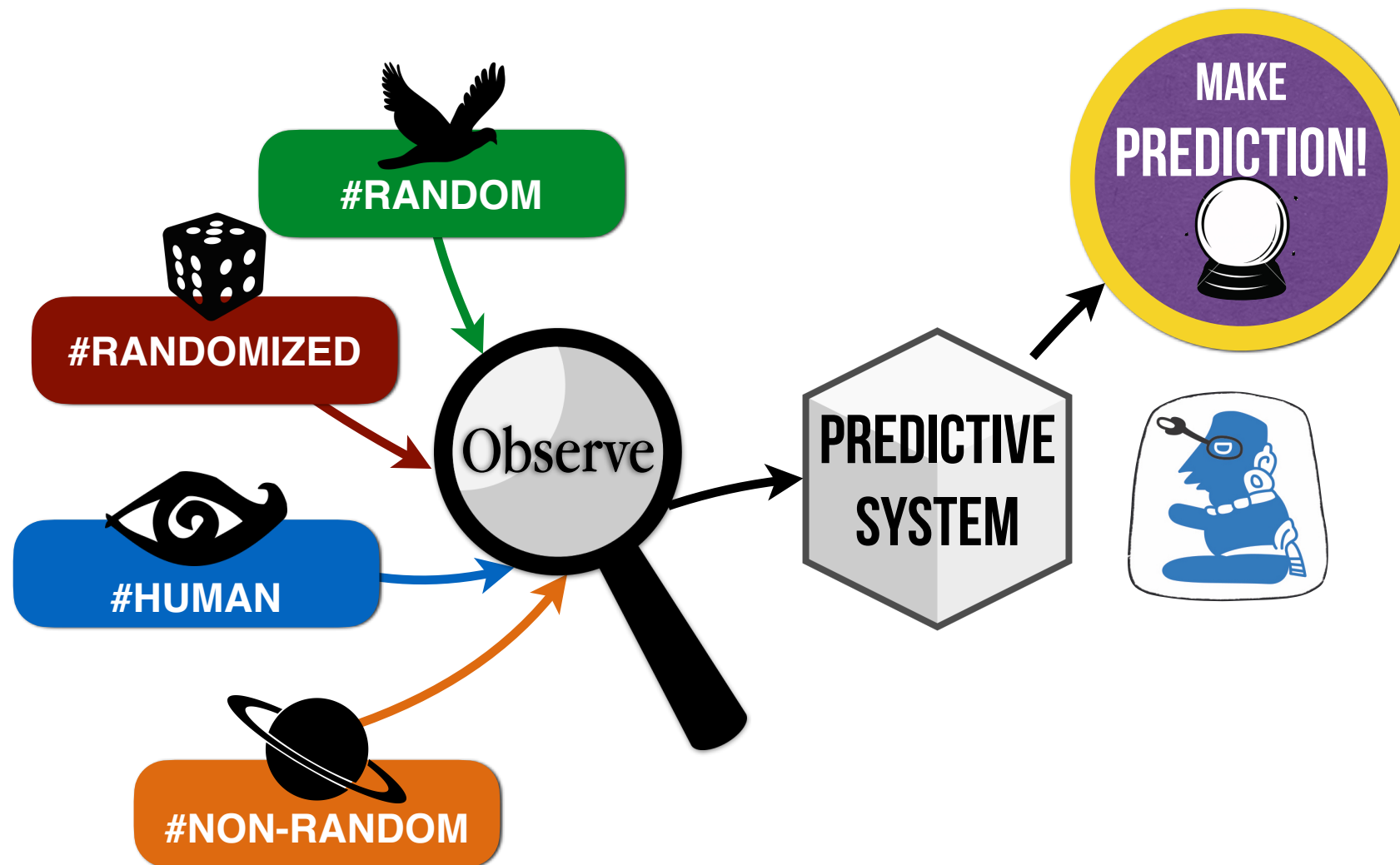


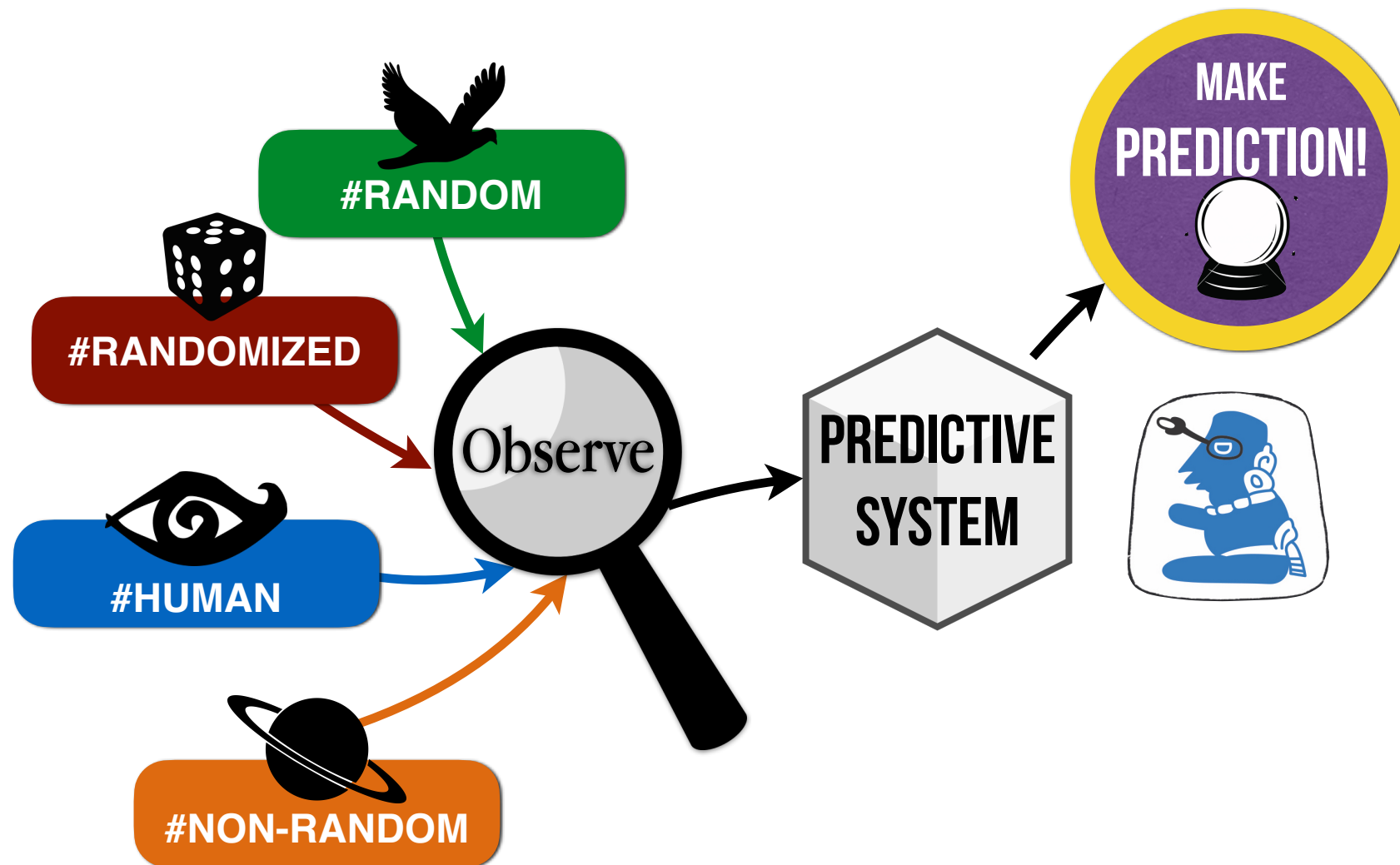
Comets of Doom

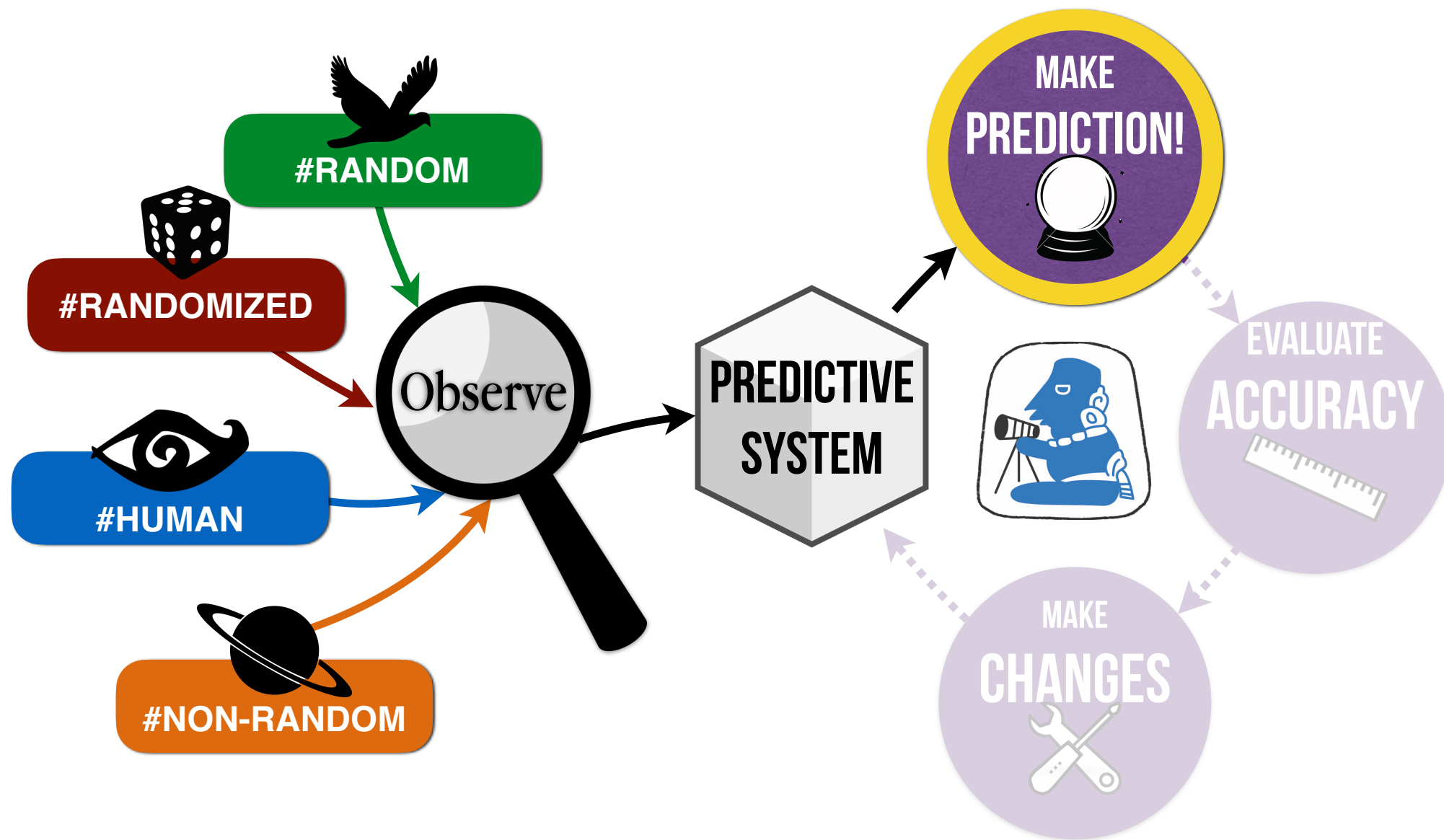


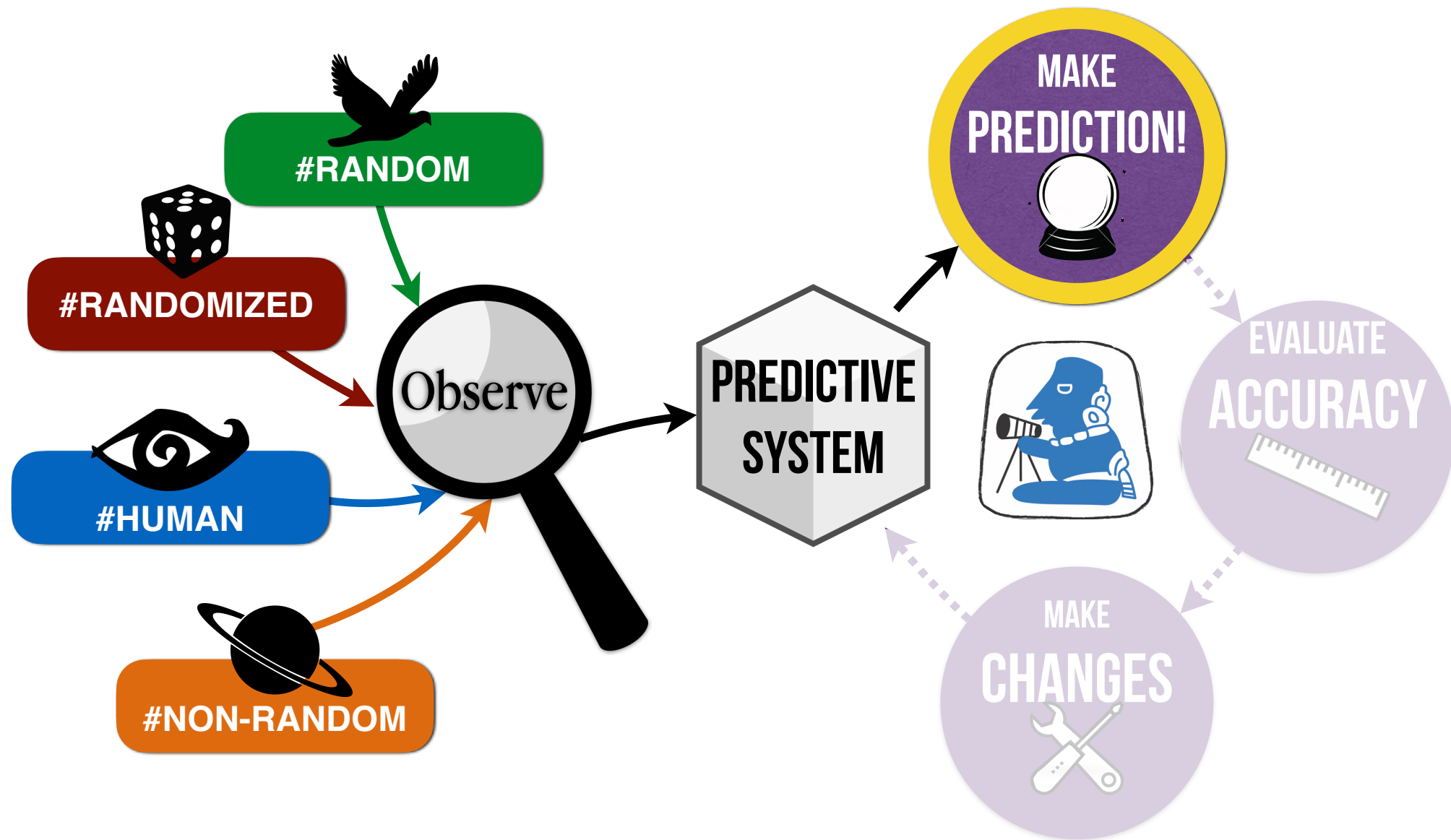
#HUMAN

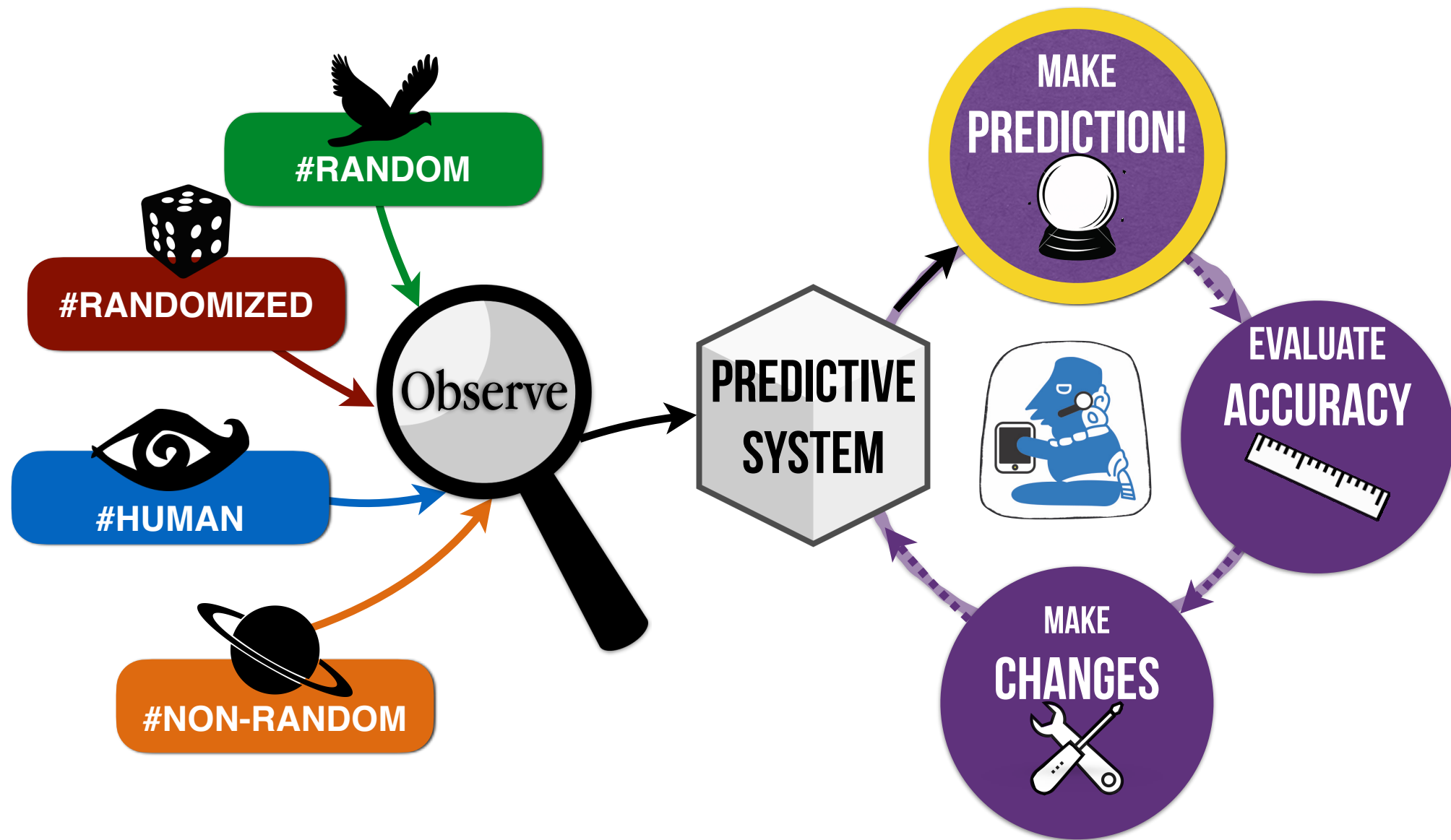
Ancient Egyptian Divination, featuring Prof. Peter der Manuelian (Director of Harvard's Semitic Museum)

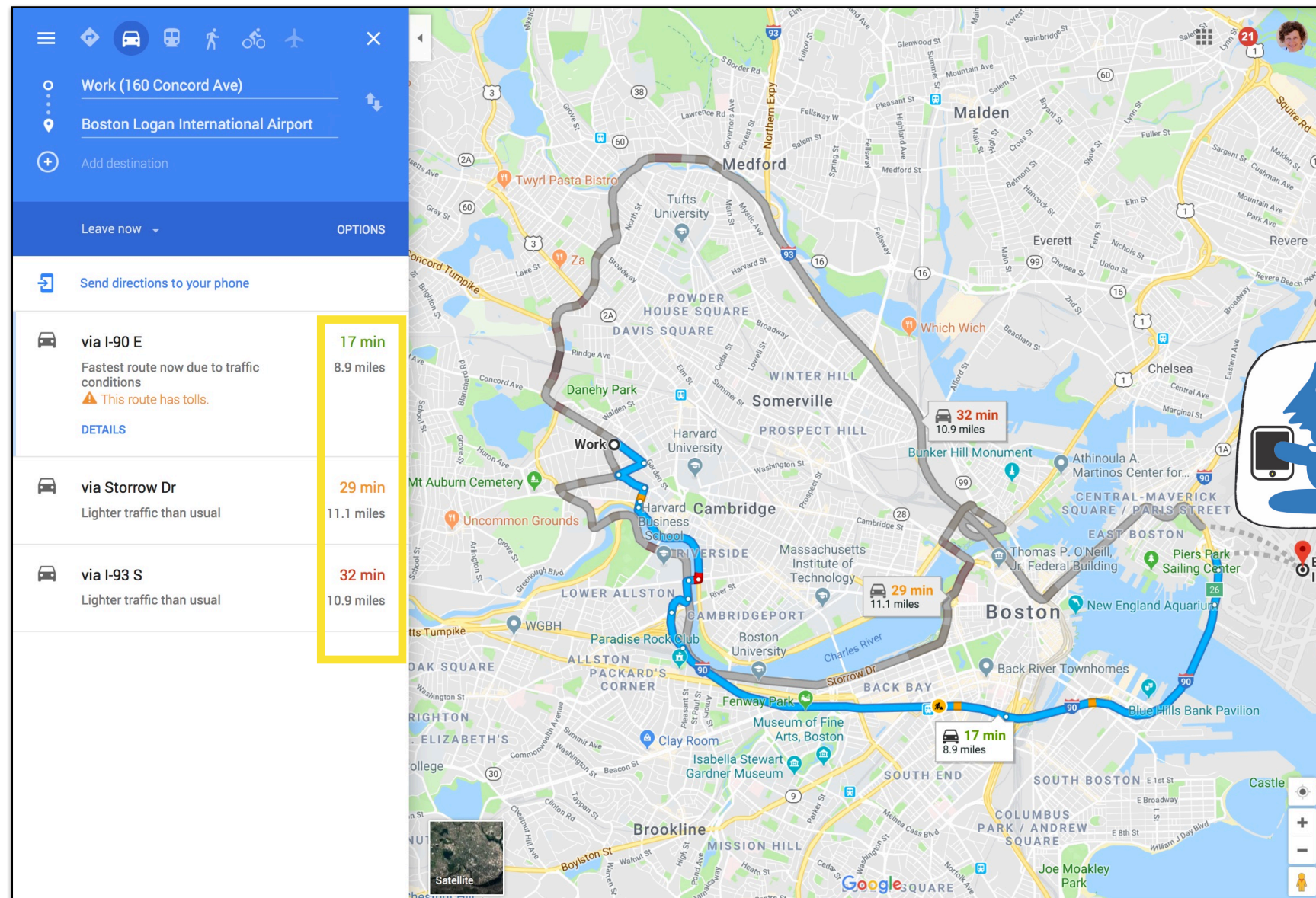






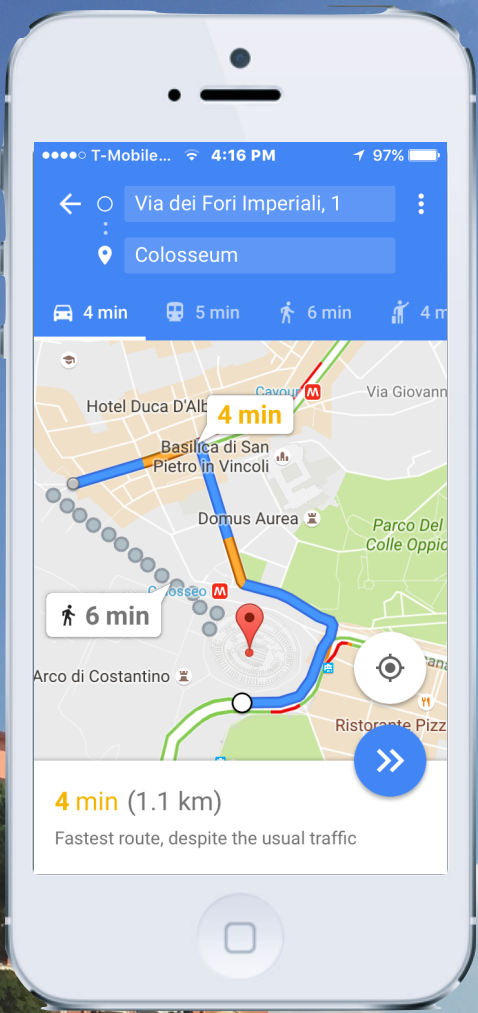






“Most companies who do live traffic **compare** their predictions against actual time in traffic to tune their algorithms and data sources. The likely result of this is that the companies who have access to the best usage data ... are likely to end up with the best predictions in the medium to long term.”





T-Mobile... 4:16 PM 97%

← ○ Via dei Fori Imperiali, 1

Colosseum

4 min 5 min 6 min 4 min

Hotel Duca D'Al... 4 min

Basilica di San Pietro in Vincoli

Domus Aurea

Parco Del Colle Oppid...

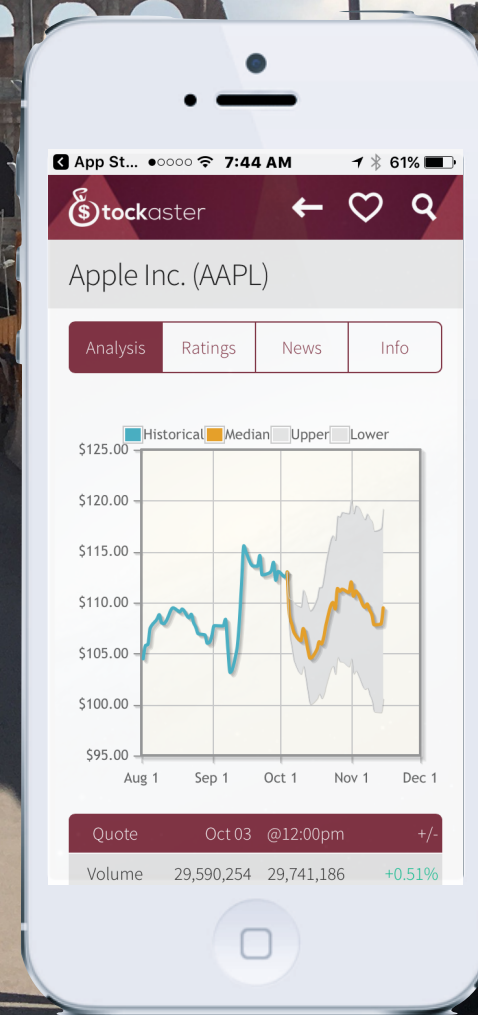
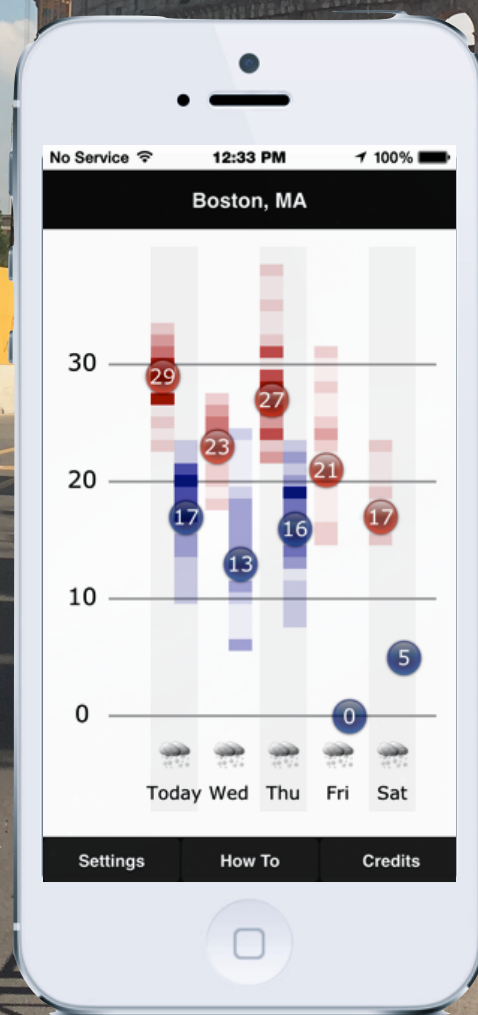
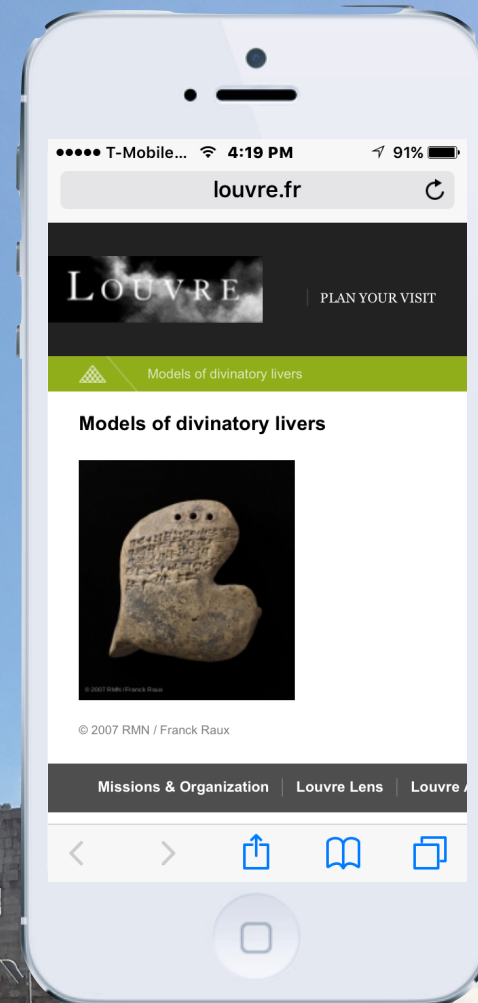
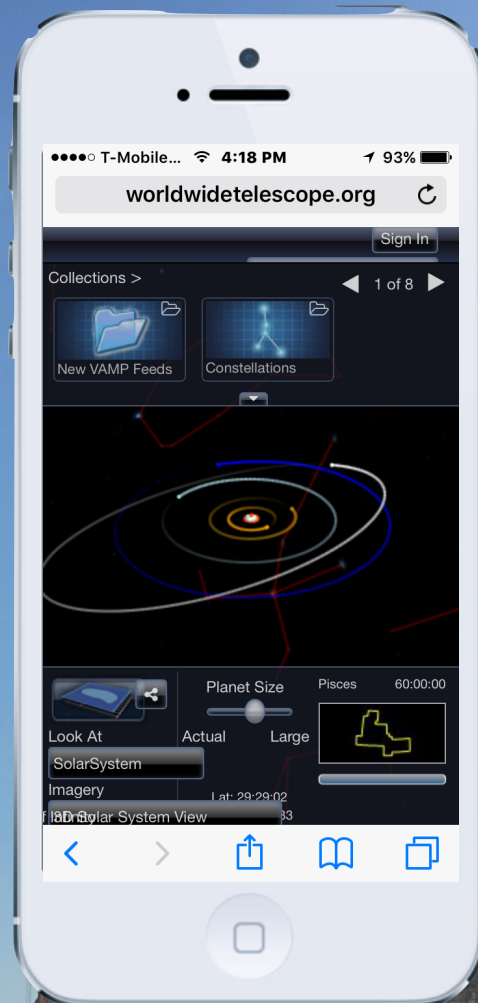
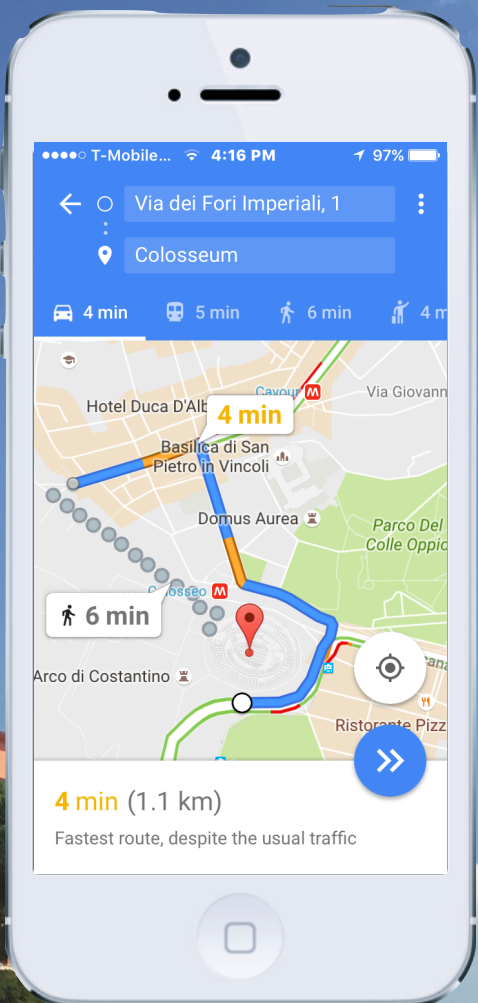
Arco di Costantino

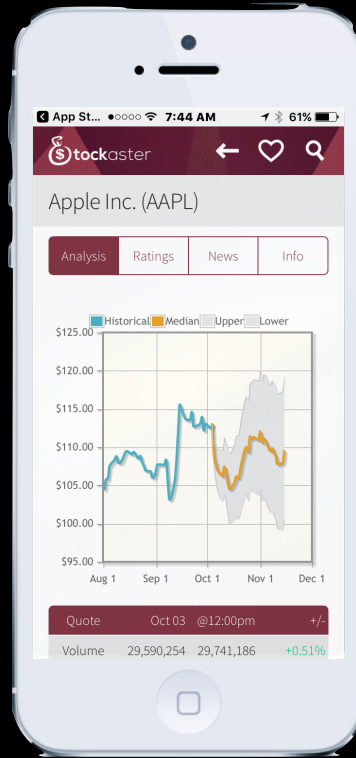
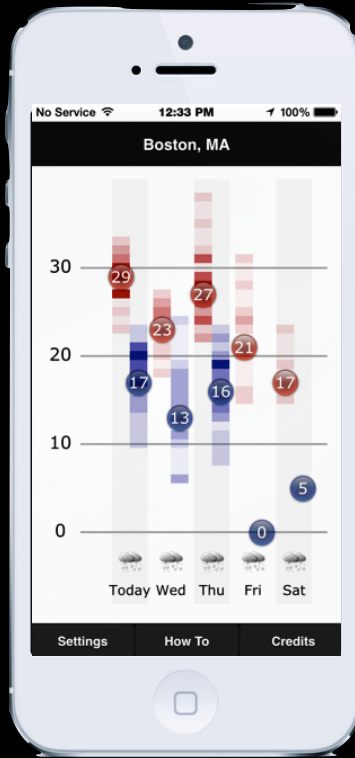
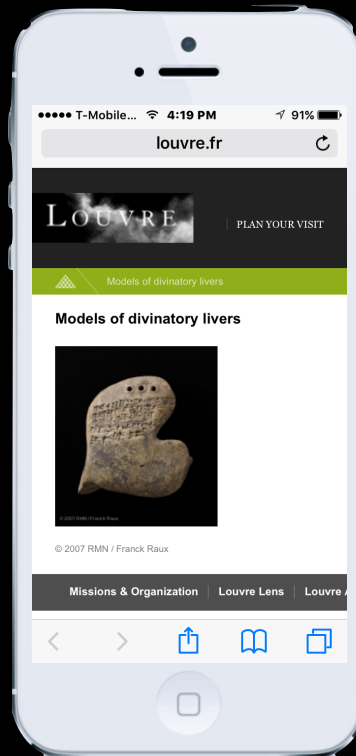
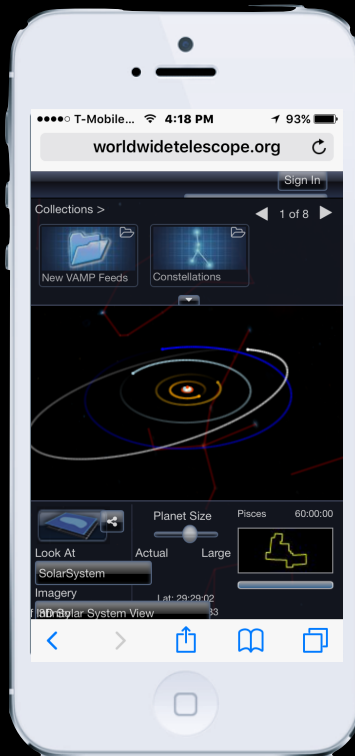
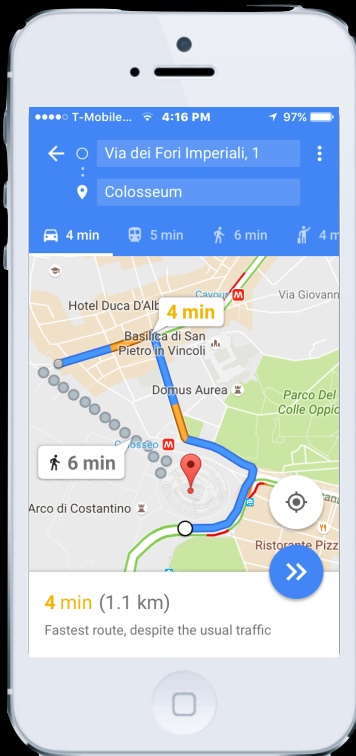
Ristorante Pizz...

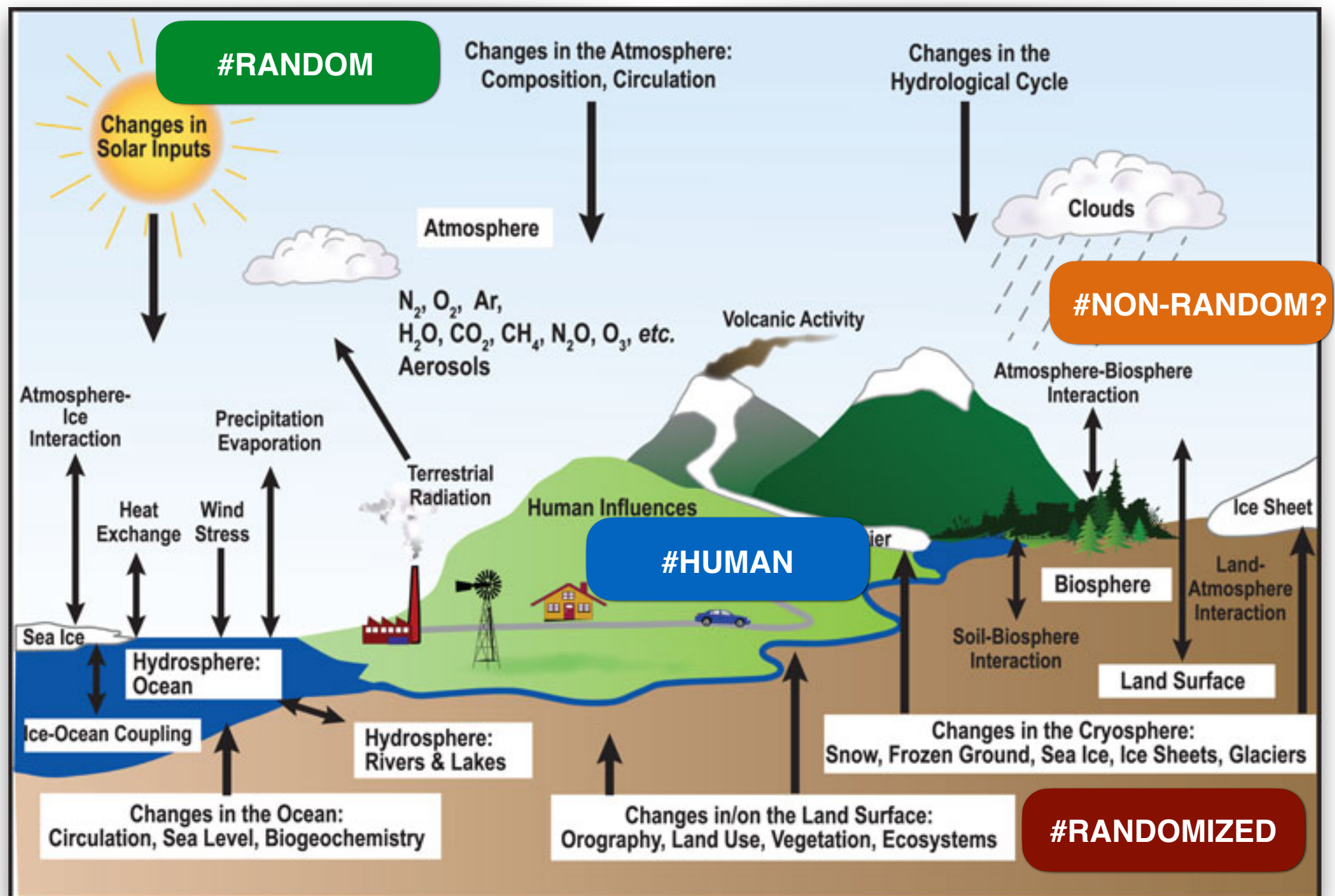
6 min

4 min (1.1 km)

Fastest route, despite the usual traffic



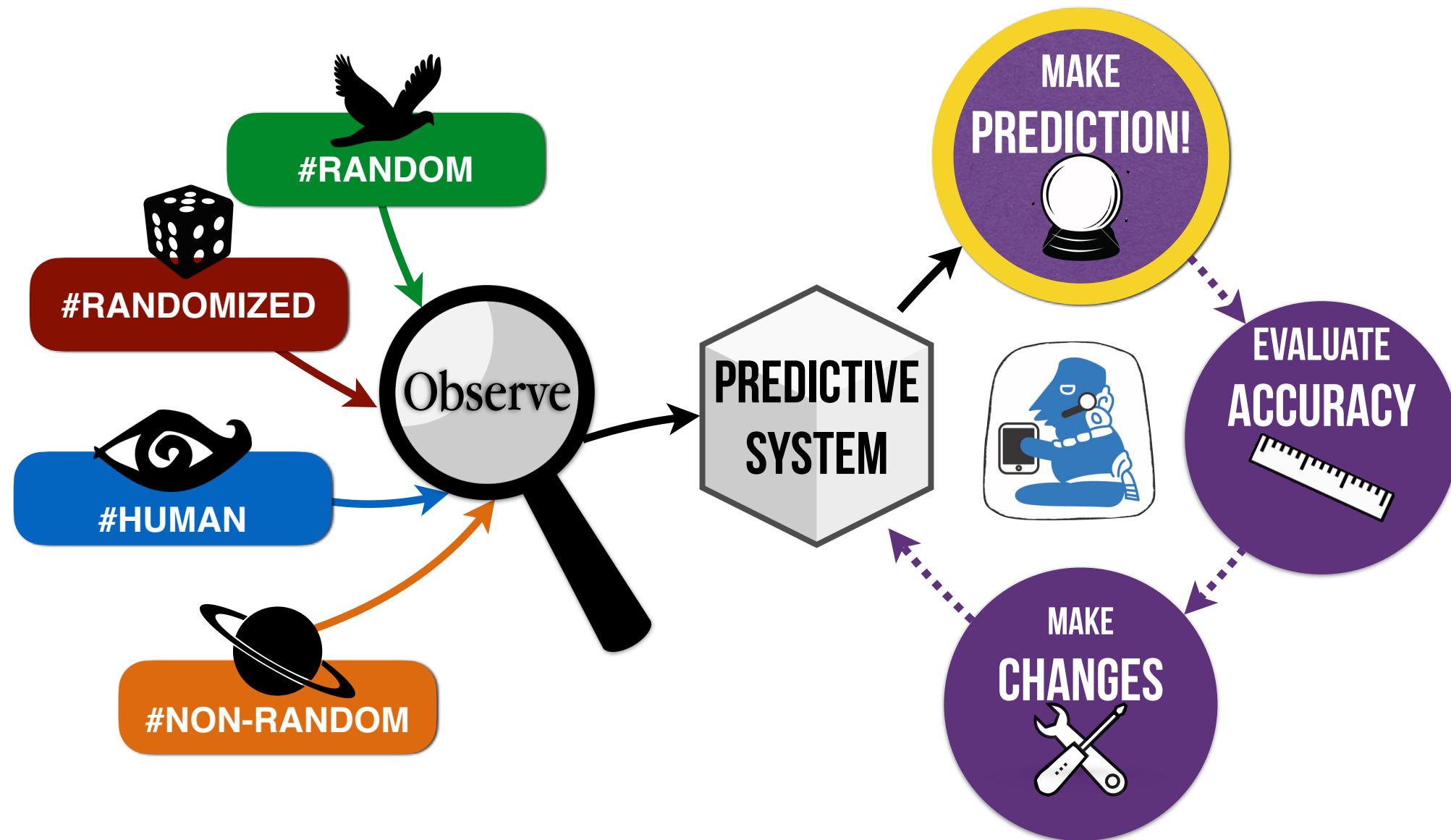




blogs.scientificamerican.com/the-curious-wavefunction/are-more-accurate-climate-change-models-worse

Why predict?

Framework for Predictive Systems



Why predict?

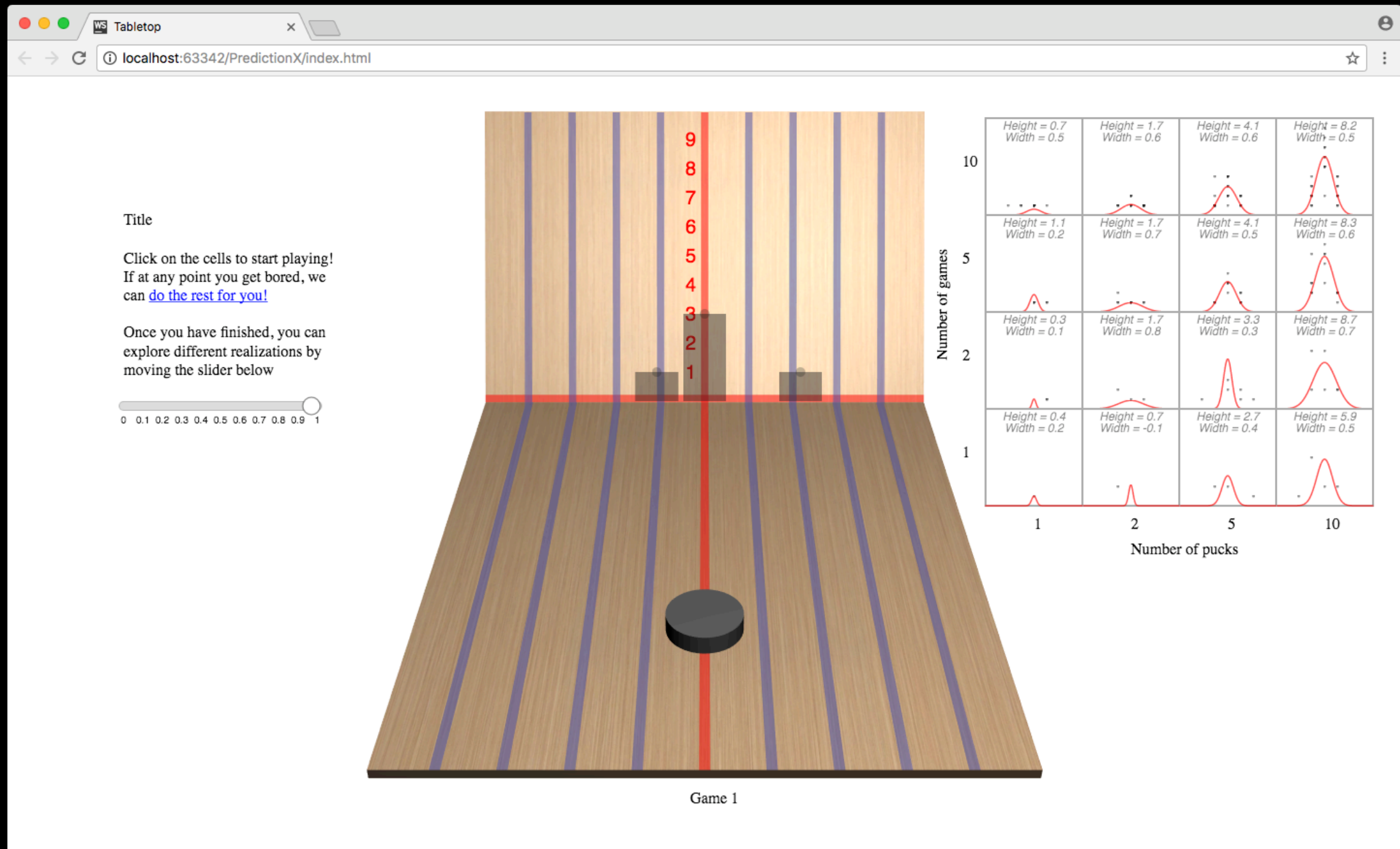


How well *can* we know?

Do we really *want* to know?

Do we *already* know?

How well *can* we know?



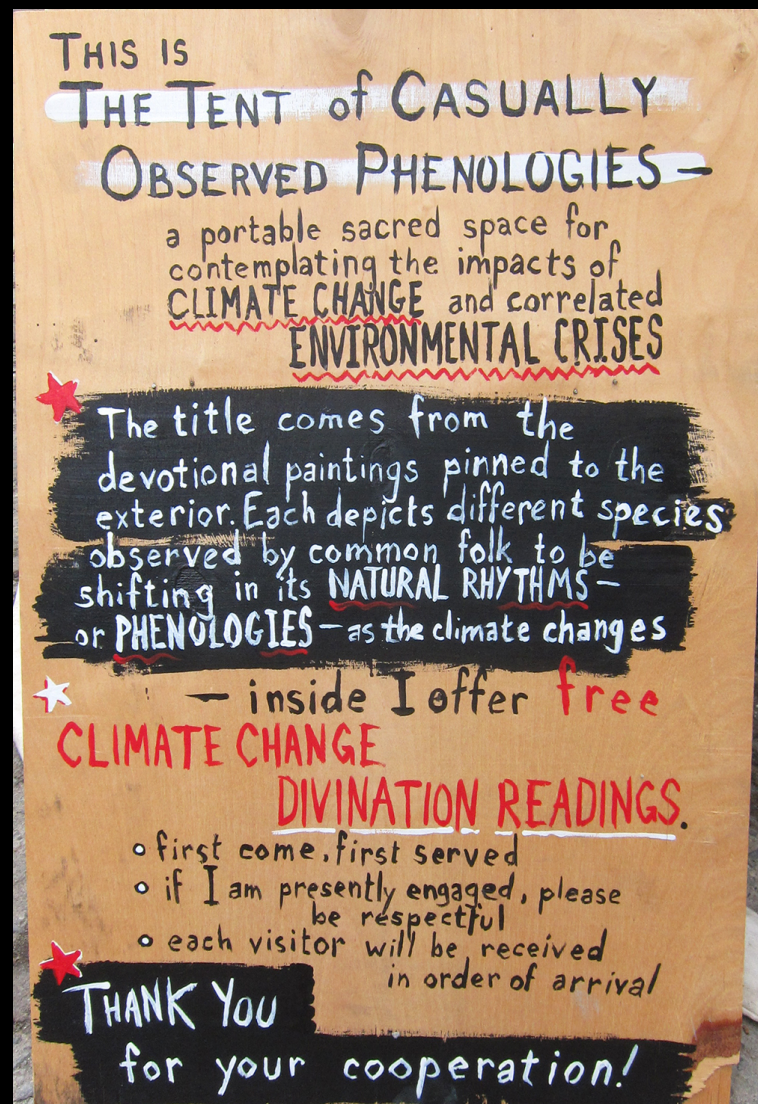
Do we really *want* to know?



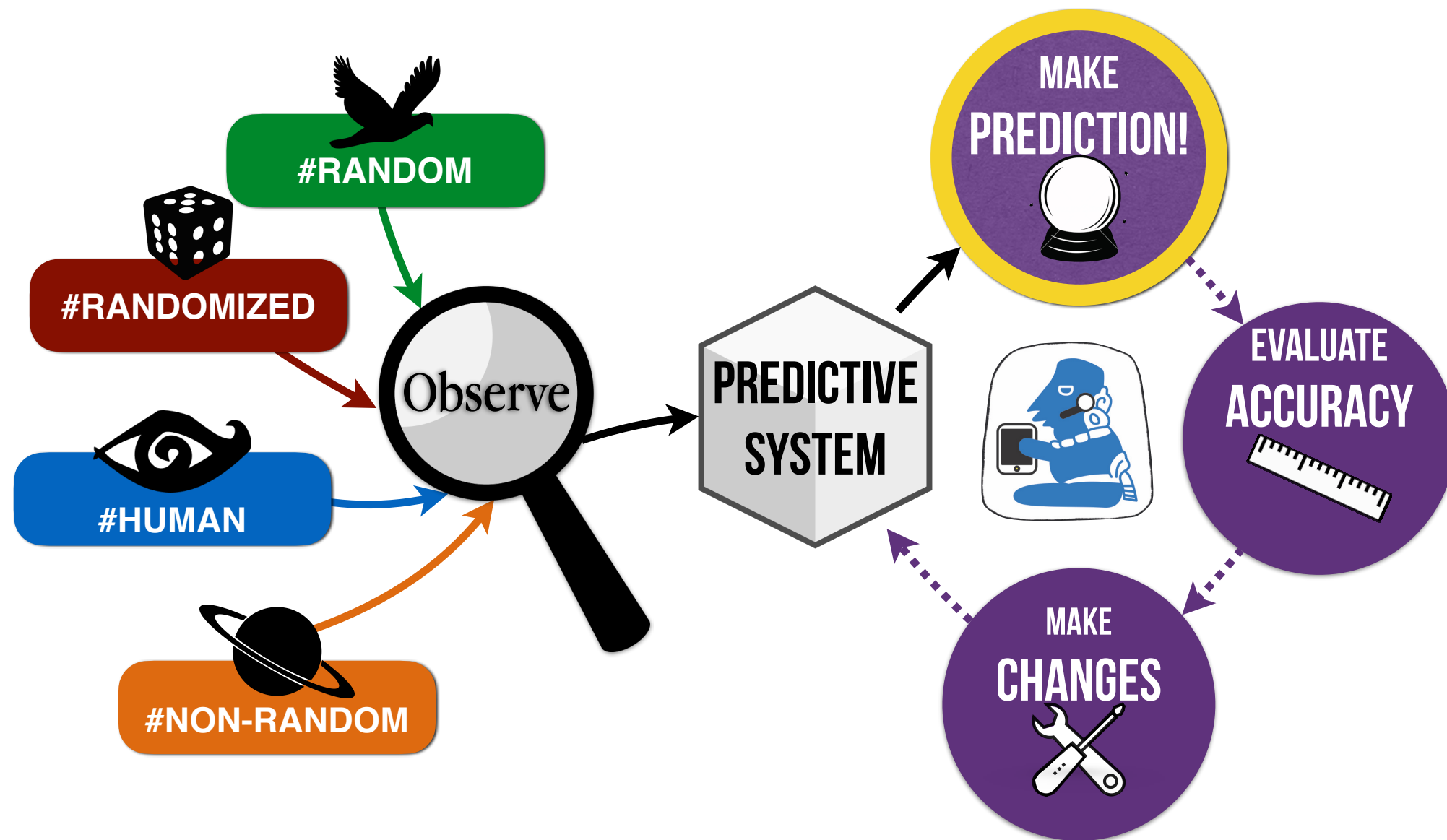
Cengiz Cemaloglu, Turkish Coffee Ground Divination, Radcliffe 2016



Do we *already* know?



*The Tent of Casually Observed Phenologies
Climate Change Divination by James Leonard, Harvard 2015*



PREDICTIVE SYSTEMS

Padua Rainbow

Phenomenon

Observation*

Data

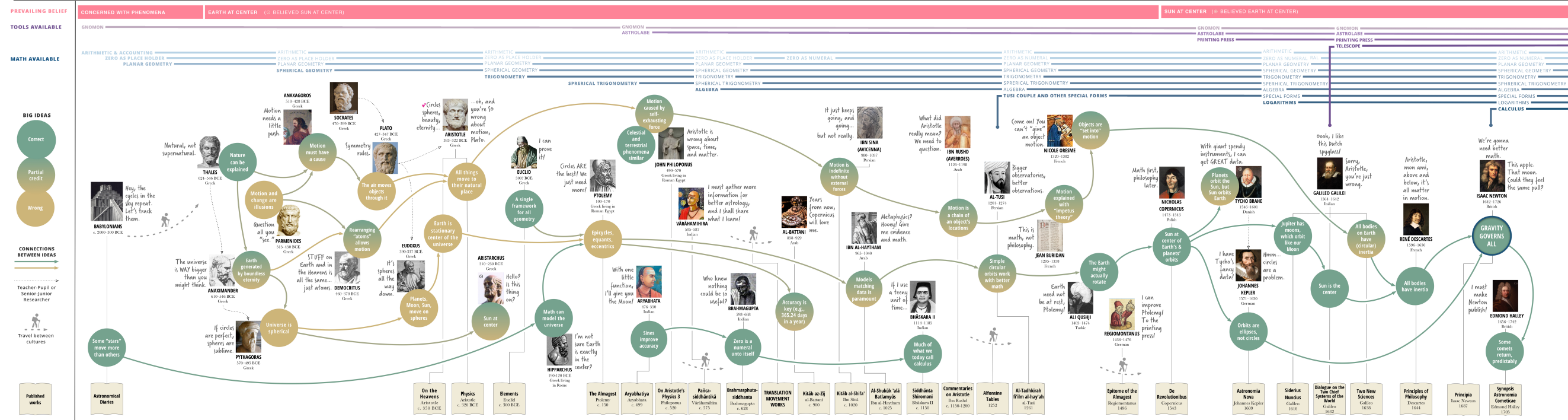
Rule

Theory

Explanation

Prediction

The Path to Newton



© Harvard University, created by Alyssa Goodman, Jais Brohinsky, Drew Lichtenstein & Katie Peek, re-use is allowed, with attribution, version 1, 2019

or, Experiment

The FUTURE of the Future

20th century



Prediction: Week 1

Who is Alyssa?

Where did this course
come from?

Who are you?
Poll

What's the course about?
(overview diagram)

What do you think/know about Prediction?
Poll

predictionx.org
demo

Syllabus/Canvas
demo

edX
demo

LabXchange
demo

Why predict?

Framework
for Predictive Systems

Padua Rainbow

How do weather forecasts work?
survey

**Breakout Room
discussions**

**full class
discussion**

take-a-sweater
demo

**uncertainty
(tables)**

**uncertainty
(full group)**

Your future in GenEd1112

Prediction Journals

YOUR Predictive System

What's a *prediction*?
survey

**Breakout Room
discussions**

**full class
discussion**

Describe elements of how weather
prediction works... (vote others' ideas
up/down)

Top

“The Correct Answer”

Weather forecasting

Weather forecasting is the application of current technology and science to predict the state of the atmosphere for a future time and a given location.

Weather forecasts are made by collecting as much data as possible about the current state of the atmosphere (particularly the temperature, humidity and wind) and using understanding of atmospheric processes (through meteorology) to determine how the atmosphere evolves in the future.

However, the chaotic nature of the atmosphere and incomplete understanding of the processes mean that forecasts become less accurate as the range of the forecast increases.

Traditional observations made at the surface of atmospheric pressure, temperature, wind speed, wind direction, humidity, precipitation are collected routinely from trained observers, automatic weather stations or buoys.

During the data assimilation process, information gained from the observations is used in conjunction with a numerical model's most recent forecast for the time that observations were made to produce the meteorological analysis.

Numerical weather prediction models are computer simulations of the atmosphere.

They take the analysis as the starting point and evolve the state of the atmosphere forward in time using understanding of physics and fluid dynamics.

The complicated equations which govern how the state of a fluid changes with time require super-computers to solve them.

The output from the model provides the basis of the weather forecast.

Note: The above text is excerpted from the Wikipedia article "[Weather forecasting](#)", which has been released under the [GNU Free Documentation License](#).

https://www.sciencedaily.com/terms/weather_forecasting.htm

Prediction: Week 1

Who is Alyssa?

Where did this course
come from?

Who are you?
Poll

What's the course about?
(overview diagram)

What do you think/know about Prediction?
Poll

predictionx.org
demo

Syllabus/Canvas
demo

edX
demo

LabXchange
demo

Why predict?

Framework
for Predictive Systems

Padua Rainbow

How do weather forecasts work?
survey

Breakout Room
discussions

full class
discussion

take-a-sweater
demo

uncertainty
(Breakouts)

uncertainty
(full group)

Your future in GenEd1112

Prediction Journals

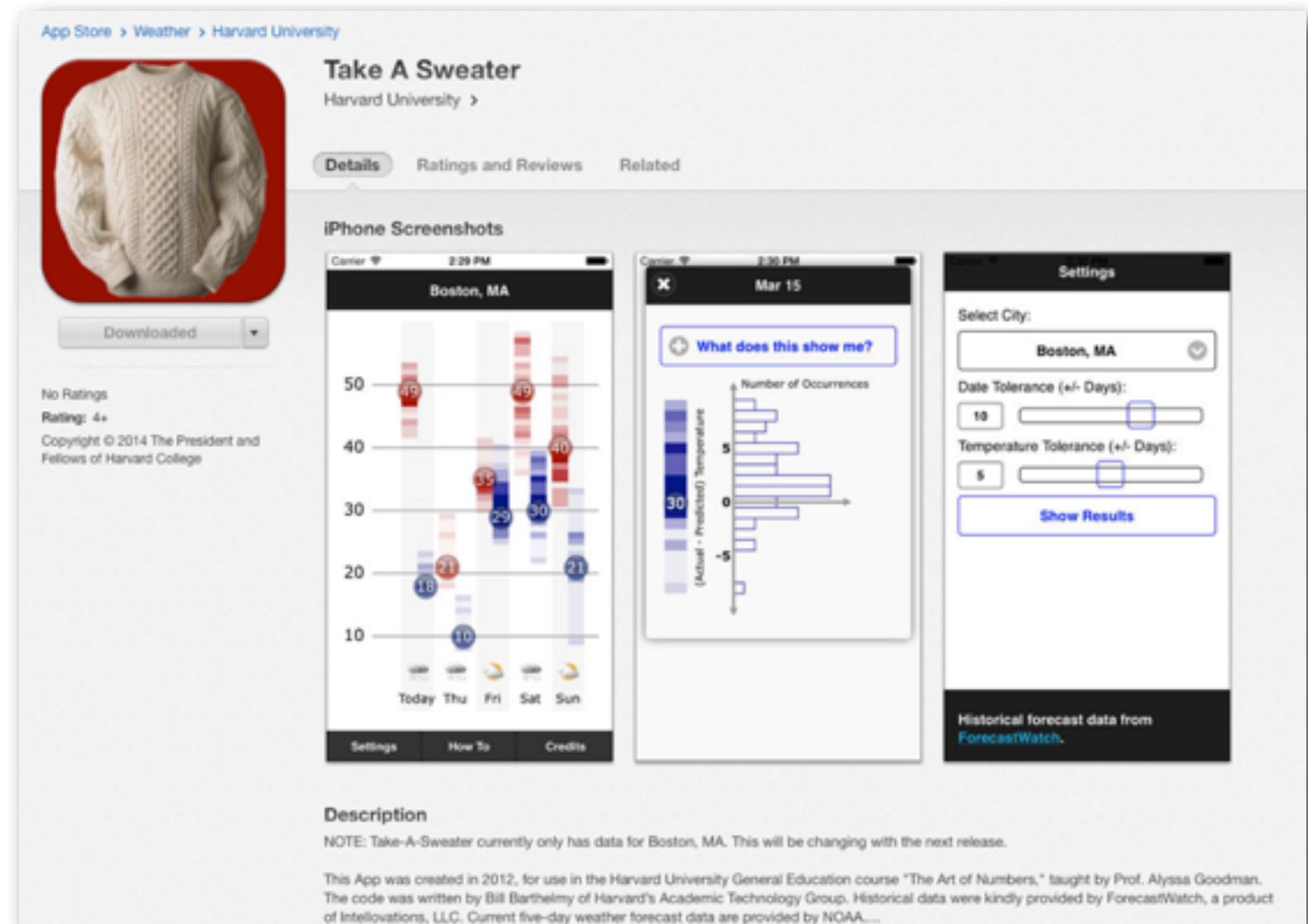
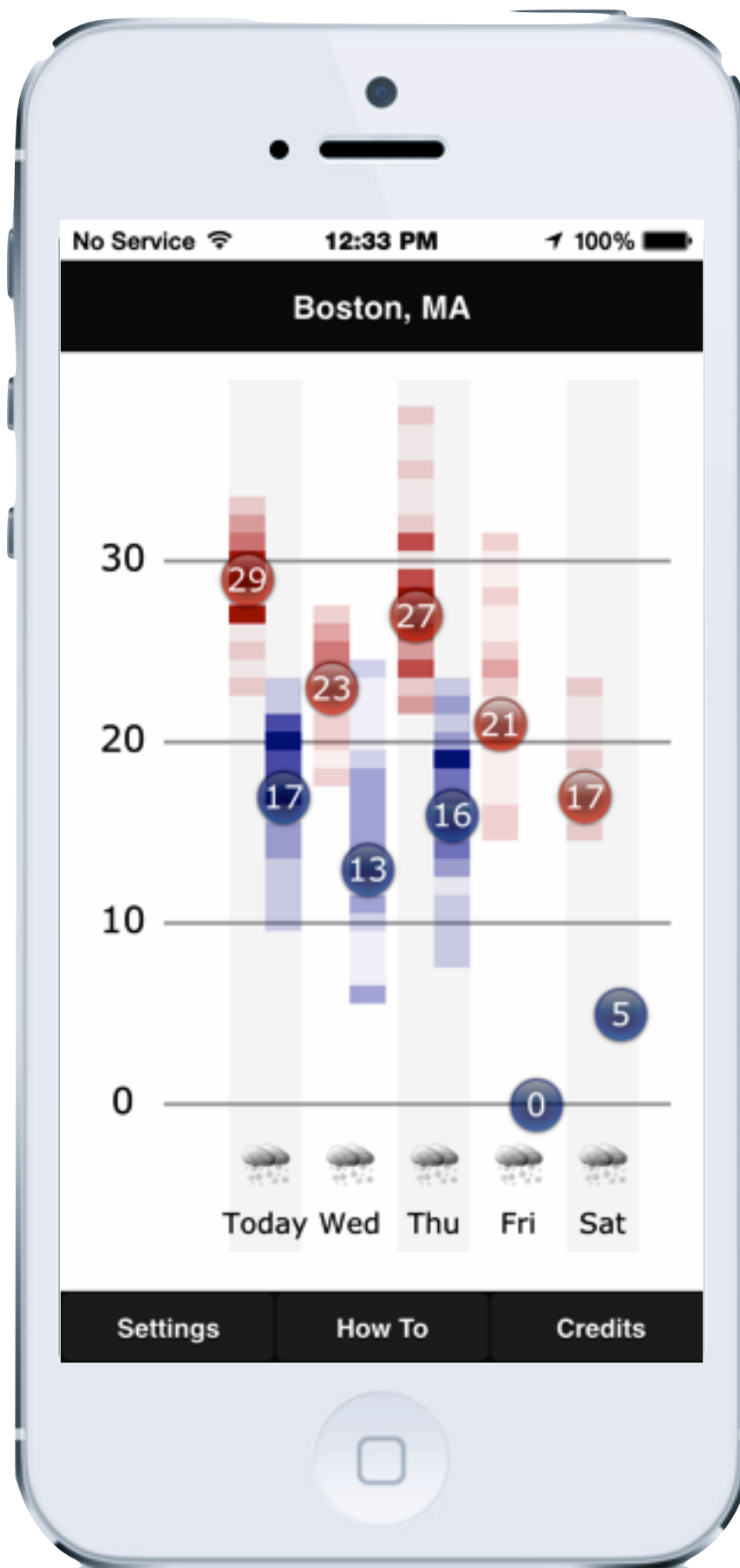
YOUR Predictive System

What's a *prediction*?
survey

Breakout Room
discussions

full class
discussion

"Take A Sweater"



takeasweater.com, and "TakeASweater" in the Apple App Store

with thanks to Eric **Floehr** of Forecast Watch and Bill **Barthelmy** of HUIT Academic Technology at FAS

Prediction: Week 1

Who is Alyssa?

Where did this course
come from?

Who are you?
Poll

What's the course about?

What do you think/know about Prediction?



Uncertainty

Alyssa Goodman

[All Sections](#)

Jan 28 at 12:45pm



How does uncertainty manifest in predictions in your own experience?

Weather is a fine example. (Feel free to look again at takeasweater.com)

COVID is another.

Your long-term future, and the Earth's are also good. Detailed topics are totally up to you.

In your discussions, please consider how, and how well, uncertainty is measured in the particular kind of system(s) you discuss, and note those ideas down here when your group session is nearly over.

take-a-sweater
demo

uncertainty
(Breakouts)

uncertainty
(full group)

Your future in GenEd1112

Prediction Journals

YOUR Predictive System

What's a *prediction*?
survey

Breakout Room
discussions

full class
discussion

Prediction: Week 1

Who is Alyssa?

Where did this course
come from?

Who are you?
Poll

What's the course about?
(overview diagram)

What do you think/know about Prediction?
Poll

predictionx.org
demo

Syllabus/Canvas
demo

edX
demo

LabXchange
demo

Why predict?

Framework
for Predictive Systems

Padua Rainbow

How do weather forecasts work?
survey

Breakout Room
discussions

full class
discussion

take-a-sweater
demo

uncertainty
(tables)

uncertainty
(full group)

Your future in GenEd1112

Prediction Journals

YOUR Predictive System

What's a *prediction*?
survey

Breakout Room
discussions

full class
discussion

MATERIALS AND ACCESS

Books for GenEd 1112

Amazon links are below, but all books should also be at the [Harvard Coop, using this convenient link.](#)

Required




- 1--[The Signal and the Noise: Why So Many Predictions Fail-but Some Don't](#), by Nate Silver
[[read online](#)]


⋮

▼ Week 2

+

⋮

⋮	 Reading for Week 2 Due Feb 2 at 1pm	<i>Read Chapter 1 of "The Pursuit of Destiny" by Tuesday's class</i>	✓	⋮
⋮	 edX Omens, Oracles & Prophecies Due Feb 4 at 1:30pm 40 pts		✓	⋮
⋮	 Starting your Prediction Journal Due Feb 7, 2020 at 3pm 60 pts		✓	⋮



Also, copie
this Scribd

- 4--' 50 units/movie (2 movies for credit max). Thus, credit awarded is proportional to the difficulty of assignments.
- 5--' Please take note that a grade such as "140 out 150," while 87%, is not an "87" or a B+, it's just 140 points toward your total in the class when you could have had 150. Your grade for the full course will be calculated "on a curve" using point totals. Students who do very well will receive a flavor of A, and if the class does very well overall, there will (should!) be many As. If you put full effort into the class and complete all assignments effectively, you can expect a B or better. So, in summary, *all students who attend class, participate fully, make good use of section time and office hours, and create a meaningful Prediction Journal and Final Predictive System Project should be able to receive a good grade.*

My Prediction Journal

(Being made for you by the teaching staff under the “Collaboration” Tab on Canvas)

1st post is requested in “Assignments,” for Next Week



“YOUR” Predictive System
(Read about the final project on Canvas/Syllabus for now, or ask if you have questions—we’ll ask you to start thinking about that in a few weeks.)

Prediction: Week 1

Who is Alyssa?

Where did this course
come from?

Who are you?
Poll

What's the course about?
(overview diagram)

What do you think/know about Prediction?
Poll

predictionx.org
demo

Syllabus/Canvas
demo

edX
demo

LabXchange
demo

Why predict?

Framework
for Predictive Systems

Padua Rainbow

How do weather forecasts work?
survey

**Breakout Room
discussions**

**full class
discussion**

take-a-sweater
demo

**uncertainty
(tables)**

**uncertainty
(full group)**

Your future in GenEd1112

Prediction Journals

YOUR Predictive System

What's a *prediction*?
survey

**Breakout Room
discussions**

**full class
discussion**

What's a Prediction?

(motivational discussion questions from the GenEd 1112 syllabus)



What's a Prediction? (Discussion)

Alyssa Goodman

1 Section



Most people will say “prediction” has something to do with the future—but questions linger.

1. How far is this “future”?
2. Is testability required?
3. Is a prediction always part of a decision?
4. How is a decision different from a prediction?
5. Who really knows and doesn't know the future?
6. Why do we want to know?
7. How can we know?
8. How does prediction manifest in your everyday life? In society? Today? In the past? In the future?

Prediction: Week 1

Who is Alyssa?

Where did this course
come from?

Who are you?
Poll

What's the course about?
(overview diagram)

What do you think/know about Prediction?
Poll

predictionx.org
demo

Syllabus/Canvas
demo

edX
demo

LabXchange
demo

Why predict?

Framework
for Predictive Systems

Padua Rainbow

How do weather forecasts work?
survey

Breakout Room
discussions

full class
discussion

take-a-sweater
demo

uncertainty
(tables)

uncertainty
(full group)

Your future in GenEd1112

Prediction Journals

YOUR Predictive System

What's a *prediction*?
survey

Breakout Room
discussions

full class
discussion



What questions do you have about GenEd 1112? (note that you can upvote others' too)

Top

The SHEEP of DESTINY



He SMILES because he sees
your future.

And Oh, how HAPPY shall
that future be!