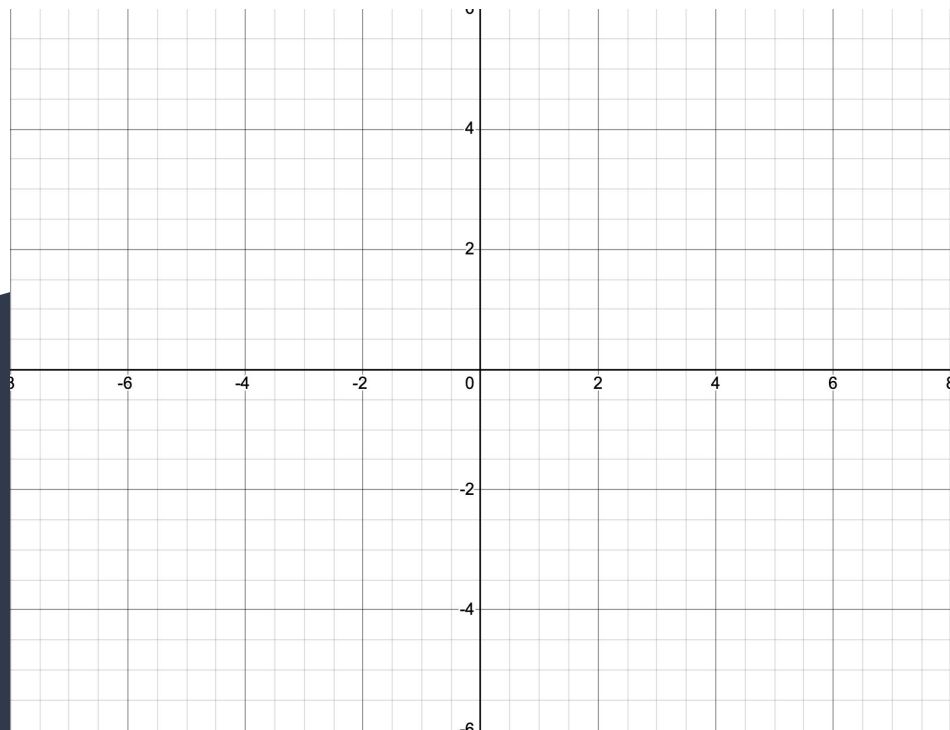


Coordinate Axes Model:

A Mathematical Visualization for the Historical Entanglement
between Humanism and Materialism Epistemes

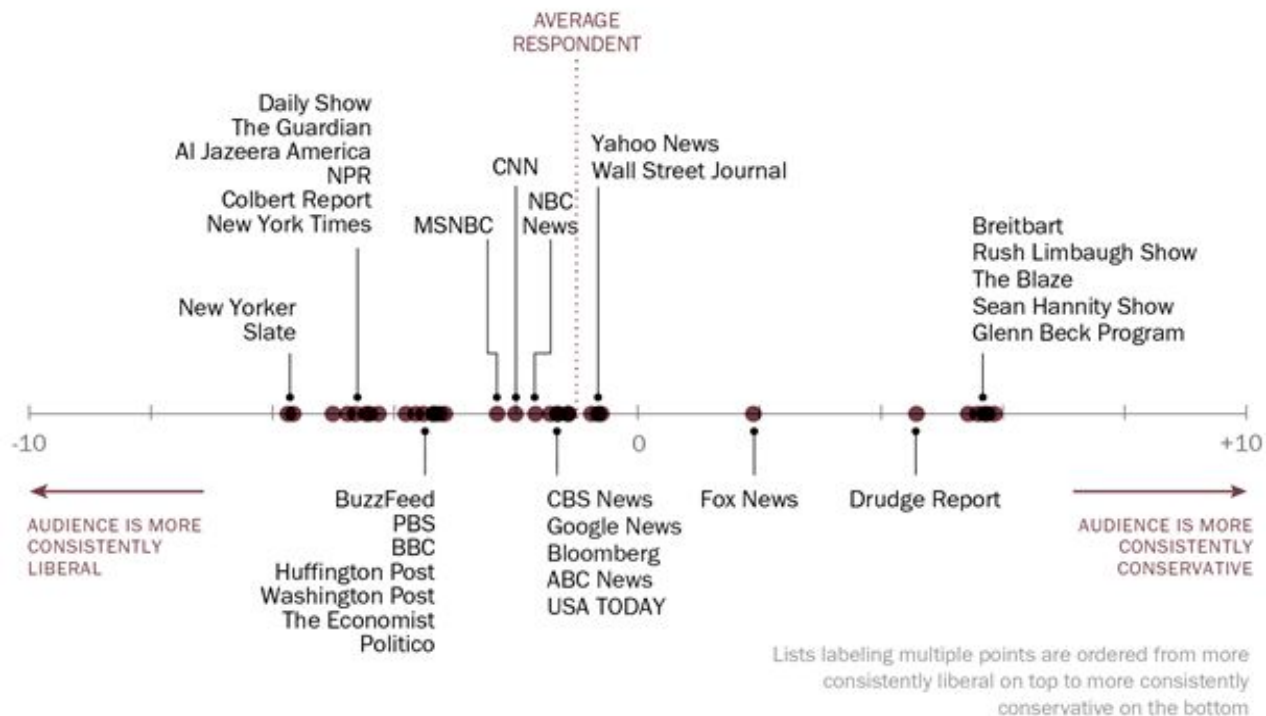
Jerry Zou (Duke University)

Noah Chang (University of Michigan, Ann Arbor)



Ideological Profile of Each Source's Audience

Average ideological placement of those who got news from each source in the past week



American Trends Panel (wave 1). Survey conducted March 19-April 29, 2014. Q22. Based on all web respondents. ThinkProgress, DailyKos, Mother Jones and The Ed Schultz Show are not included in this graphic because the sample size of each of these sources' audience is too small to analyze. Ideological consistency based on a scale of 10 political values questions (see About the Survey for more details).

PEW RESEARCH CENTER

Amy Mitchell et al. (2014, October 21) *Section 1: Media Sources: Distinct Favorites Emerge on the Left and Right*. Pew Research Center. pewresearch.org/journalism/2014/10/21/section-1-media-sources-distinct-favorites-emerge-on-the-left-and-right/

Building from the Foucauldian Syntax

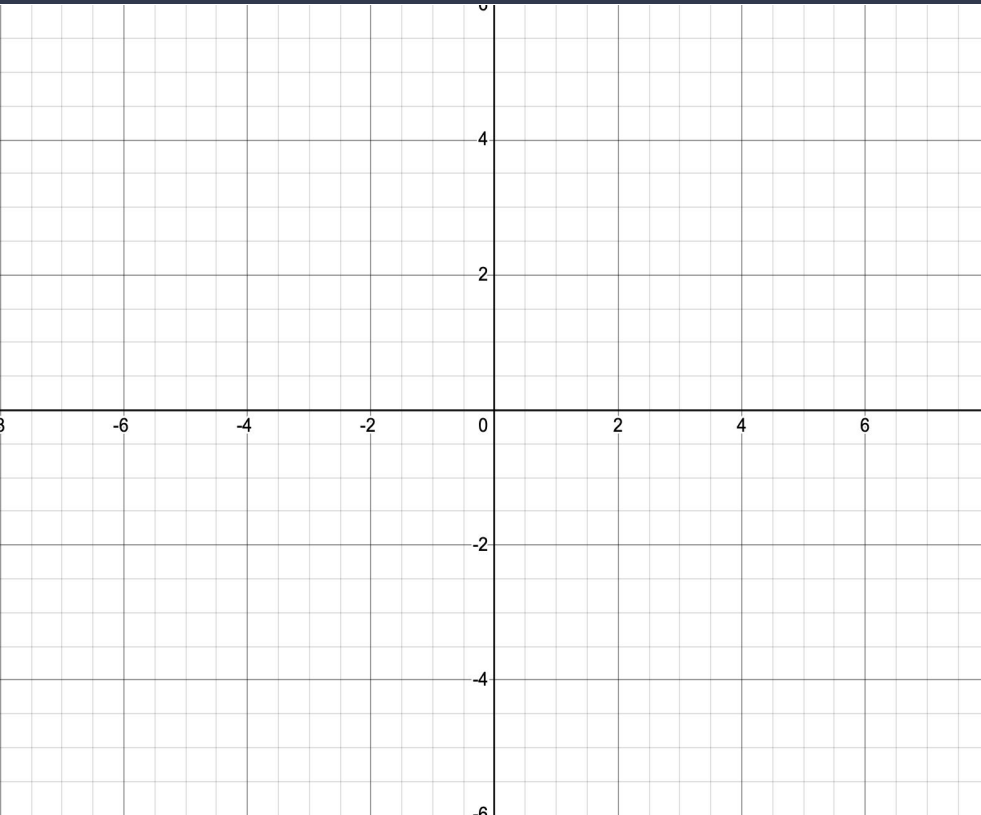
Archaeology \longleftrightarrow **Temporal**

Uncovers the chemistry between different components of knowledge.

Episteme \longleftrightarrow **Spacial**

An era's environment for knowledge production. The physics of knowledge.

Geometric Philosophy: Coordinate Axes Model



A coordinate plane with archaeology
(time) as the limit (Z-value)

e.g.: $y = 2x + 4$, $\{5 < x < 8\}$

With the X and Y axes representing the
components of episteme.

e.g.: $(3, 6)$, $z = 2$: The episteme
at 2 units of time consists of 3 units of
Knowledge Component X and 6 units of
Knowledge Component Y.

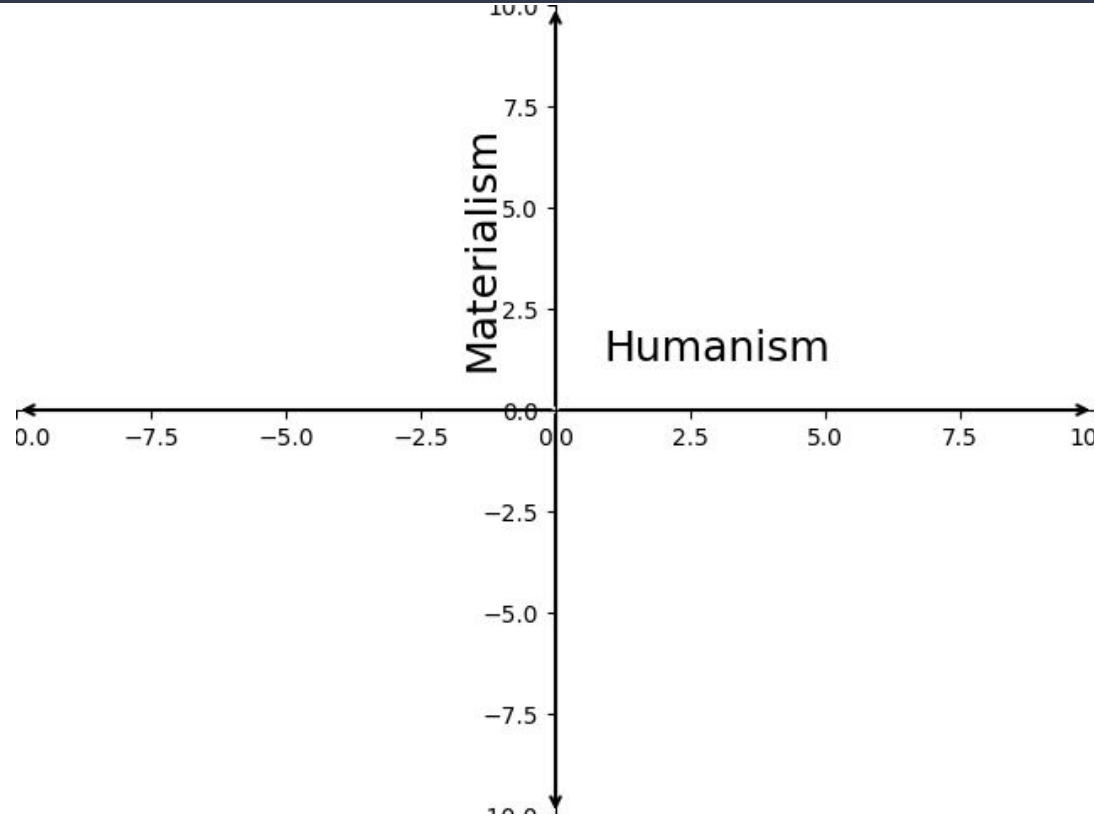
Labeling the Axes: Humanism–Materialism

X Axis: **Humanism**

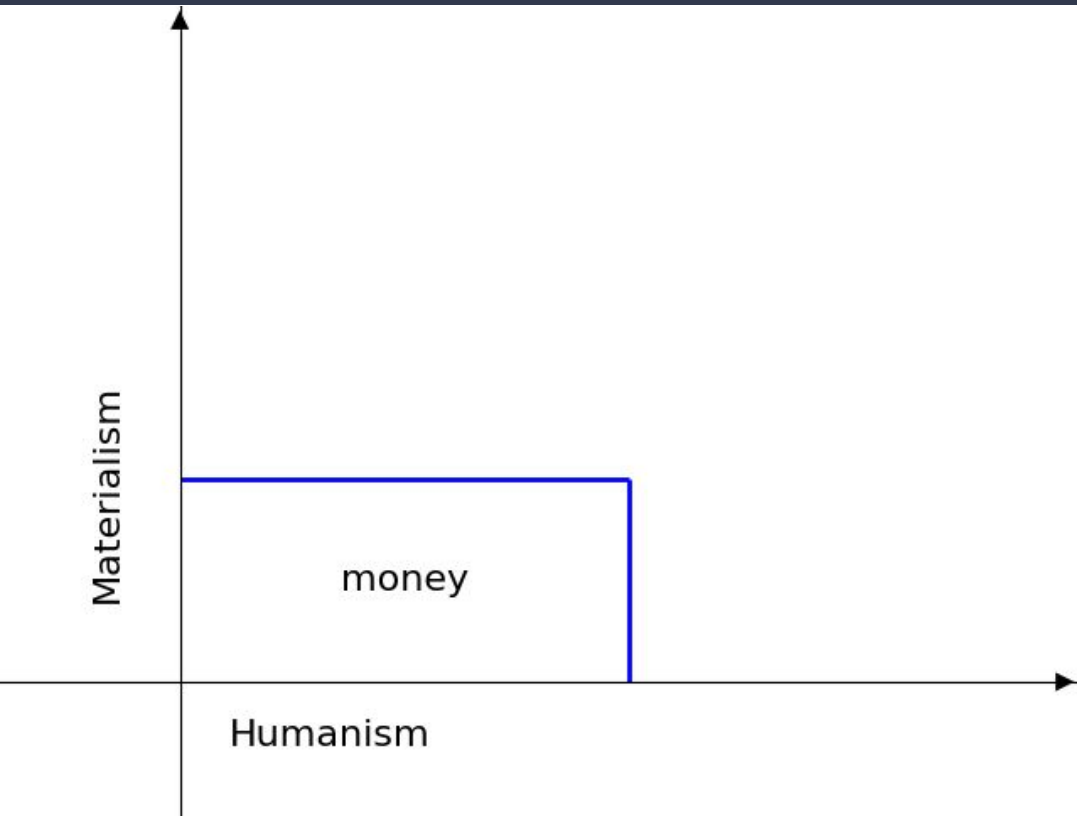
The combination of sociology, cultural studies, and cultural anthropology. The discourse over how humans interact.

Y Axis: **Materialism**

New Materialism - the autonomy of materials from human influences.

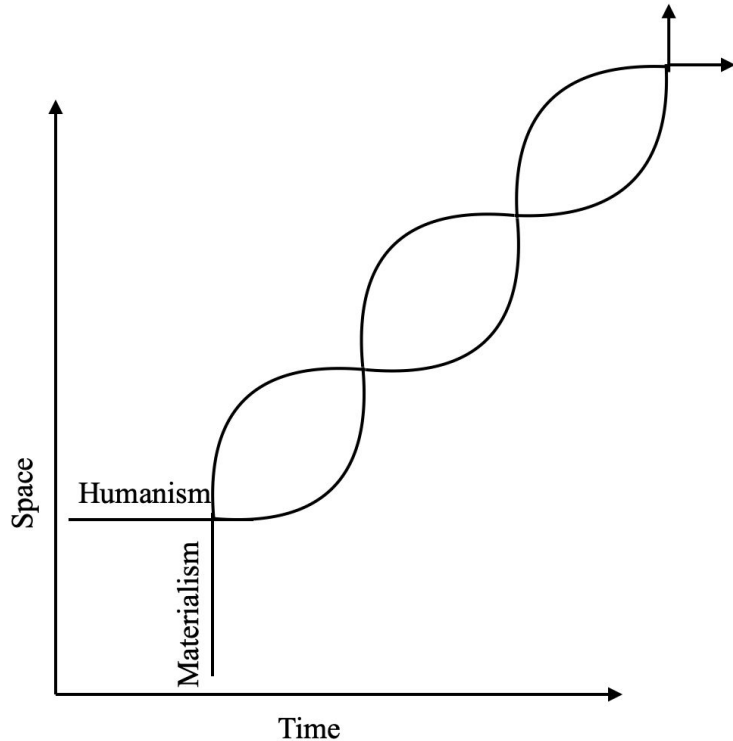


Example: Money



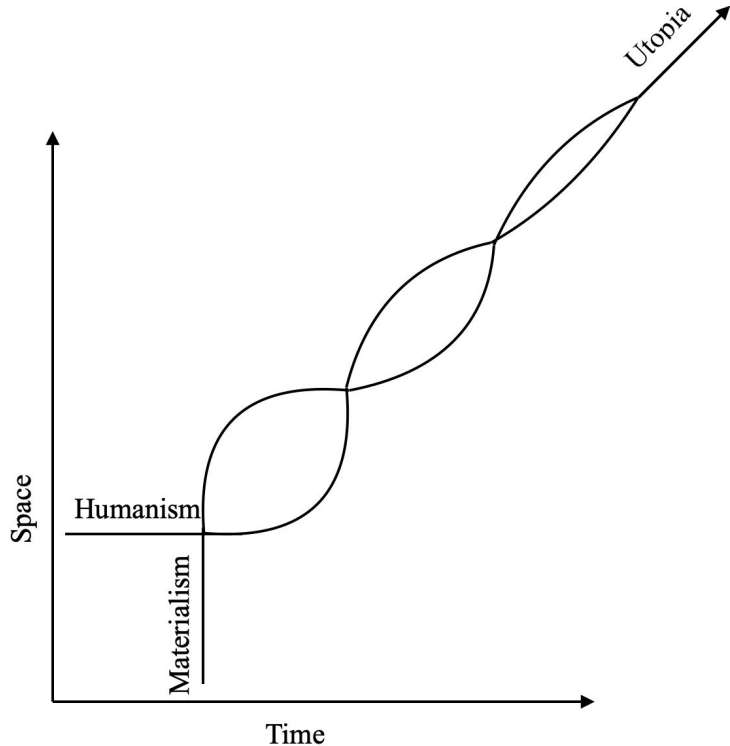
Good Faith v. Material Integrity

Coordinate Axes Model – Type 1 Constant Repeating Helix



- Knowledge tree view (that knowledge branches out from one source)
- Evolutionary perspective

Coordinate Axes Model – Type 2 Variable “Utopia” Helix



- Core-idea tree view (that knowledge leads back to its original source)
- New-materialistic view of humanism and materialism knowledge progression

Future Research

What is outside of the humanism-materialism pair?