

INTP JOURNAL CLUB:

AXIAL AGE

16/04/2022

- *A systematic assessment of “axial age” proposals using global comparative historical evidence.*

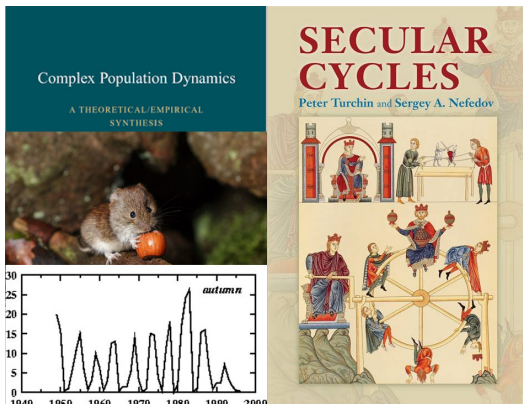
Mullins et al., American Sociological Review 83.3 (2018)

- A bit of context: Turchin, Seshat, etc.
- The article
- Back to Seshat & comparative history

1. Context



Not the only major author here, but interesting case of interdisciplinarity



- Population ecologist, expert on consumer-resource cycles (e.g. small northern rodents)
- Then switch to *historical* cycles: quantitative data & models for rise and fall of empires (claim of 300yr cycles in Rome, China...)
- Finally, more generally data-oriented historical dynamics


Since 2010, leads the construction of a big database



Seshat: Global History Databank

aims to build the most current and comprehensive body of knowledge about human history in one place. Our Databank systematically collects what is currently known about social and political organization of human societies and how civilizations have evolved over time. See our [website](#) for a full overview of the project. This Equinox-2020 website displays a subset of Seshat data that will be used in upcoming papers, allowing our collaborators and other domain experts to browse the data and provide suggestions for further improvement. If you notice any errors in the data or have any useful information on variables that have been left unrecorded, please let us know by filling out our [feedback form](#). You can also download this data as a [spreadsheet](#).

Seshat contents (used for the article) look like this:



Polities	
2700-1201BCE	Deccan - Neolithic
1200-301BCE	Deccan - Iron Age
300-206BCE	Mauriya Empire
205-101BCE	Post-Mauryan Kingdoms
100BCE-203CE	Satavahana Empire
286-400CE	Vakataka Kingdom
451-540CE	Kadamba Empire
541-756CE	Chalukyas of Badami

Religious levels ▲ 1 ▼

Would be at least one level.

Din-e ilahi, religion of the empire from 1582 CE to 1605 CE, had no priestly hierarchy or sacred scriptures. ^[22]

Islam (which both preceded and succeeded Din-e ilahi) similarly has no hierarchy, although there are Shaikh, Olama or Imam's who are seen as

Military levels ▲ 6 ▼

"Noteworthy was the decimal chain of command, the grouping of soldiers in tens, hundreds, and thousands, up to an army division of 10,000 men eastern Islamic powers, being adopted by, e.g., the Mughals in India." ^[24]

Decimal: 1, 10s, 100s, 1000s, 10000s, Emperor = 6

1. Emperor

2. Bakhshi (Adjutant-General). Bakhshi-titles were given to those with administrative duties, the Adjutant-General commanded the army in the

3. Mir Bakhshi

4. Other Bakhshi (such as Bakhshi-i-tan)

5. Officer.

Mansabdars were also chiefs and leaders, ranked based on the number of men they recruited, the mansab rank was further c

6. Soldier.

Professions

▲ Professional military officers ▲ present ▼ Mansabdar was the generic term for the military-type grading of all imperial officials who governed

▲ Professional soldiers ▲ present ▼ The Mughal Empire relied largely on the military force employed from the 'Indian military labor market'. Soldiers ranged from the part-time peasant to the professional warlord or jamadar. ^[28]

▲ Professional priesthood ▲ suspected unknown ▼

Bureaucracy characteristics

▲ Full-time bureaucrats ▲ present ▼ The army and revenue service to support it were run on bureaucratic lines. ^[29]

▲ Examination system ▲ present ▼ Persian was needed to enter the administrative service. Hindus learned Persian in school in order to qualify

▲ Merit promotion ▲ inferred present ▼ Persian was needed to enter the administrative service. Hindus learned Persian in school in order to

▲ Specialized government buildings ▲ present ▼ The mint in Delhi. ^[32]

Law

▲ Formal legal code ▲ inferred present ▼ In 1605 CE Jahangir issued 12 ordinances. It was not a comprehensive legal code but a well-meaning

▲ Judges ▲ present ▼ e.g. the Quazi-ul-Quazat [chief justice] ^[35]

▲ Courts ▲ present ▼ At local and informal level. ^[36]

▲ Professional Lawyers ▲ present ▼ "These men, who sometimes acted as lawyers, were known as wakils, but the term did not have the present authority to act for another, an ambassador, a representative, an agent, an attorney." It is in this very general sense that the word was current in court of law.

"A wakil was, then, a representative, although not necessarily a legal representative. In general, his job was to negotiate with equals or superior military alliance, or a favorable decision in a civil or criminal court of law. In many cases a wakil was also a gatherer of information. Thus, most of

2. The article

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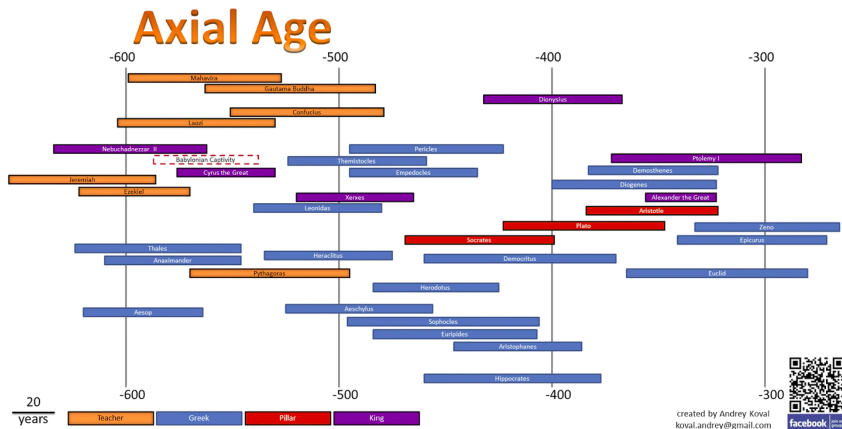
Popular idea: a bunch of Cool Dudes lived at roughly the same time



Source of the picture: Nature News on Mullins et al.
(<https://www.nature.com/articles/d41586-019-03785-w>)

AXIAL AGE

Random Cool Dude recension from the Internet



Old ideas of causal links: daoist legend that Buddha was a student of Laozi, suspicion of Indian influence on weird Presocratics...

BEYOND THE COOL DUDES



Jaspers proposed a theory of big social change around 500BC:

- Shift from local to universal/transcendent religions: Buddhism, Confucianism, Hinduism, Judaism, Platonism, and Zoroastrianism
- Social and moral revolution: modern ethics, institutions promoting more equity and rationality, no more god-kings

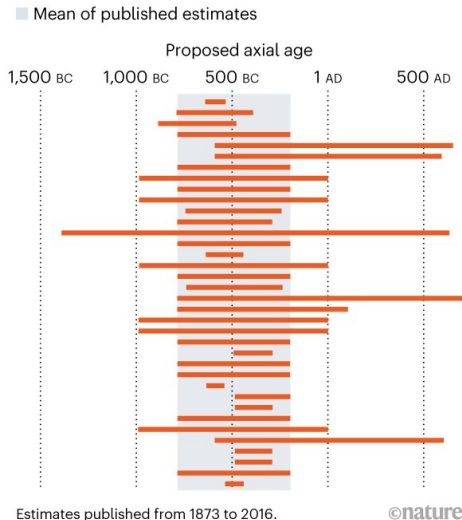
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- Social and moral revolution: modern ethics, institutions promoting more equity and rationality, no more god-kings
- Many questions if this synchrony is true: What exactly changed? Why then? Why not elsewhere?

Is there even really synchrony? Estimates of Axial Age boundaries from various historians span *2000* years:



(outliers usually try to include Muhammad or Zarathustra)

What exactly changed? Many different claims by many different people about core transformations.

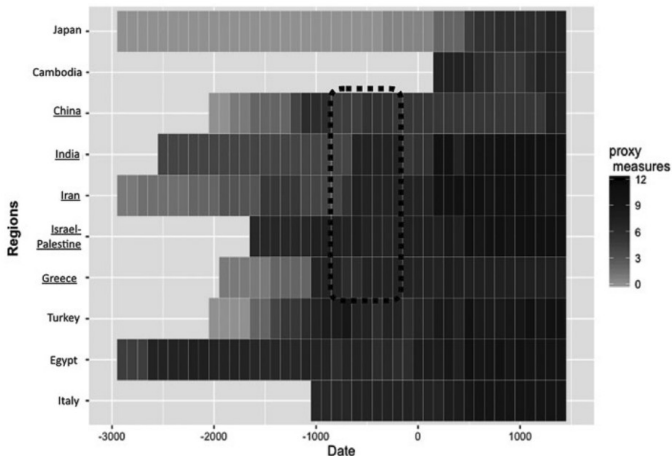
One of the most striking ideas: *cognitive* shift.

“ Mota and colleagues (2016), for example, liken the low degree of reflexive or introspective thought expressed in Bronze Age texts across Eurasia to adolescents in modern Western countries, and texts produced during or after the Axial Age are argued to mirror the level of introspection in contemporary adults.”

What the article does: propose binary criteria for “Axial characteristics”, using info present in the Seshat database

- | | |
|--|----------------------------------|
| 1. Moralistic Punishment | 7. Equating Rulers and Commoners |
| 2. Moralizing Norms | 8. Formal Legal Code |
| 3. Promotion of Prosociality | 9. General Applicability of Law |
| 4. Moralizing Omniscient Supernatural Beings | 10. Constraint on Executive |
| 5. Rulers Not Gods | 11. Full-Time Bureaucrats |
| 6. Equating Elites and Commoners | 12. Impeachment |

Results: number of criteria satisfied (in 5 axial regions, underlined, and other regions)



No discrete axial age, similar trajectories earlier or later in various places (even “non-axial” regions).

A few more thoughts on the article:

- Published in top sociology journal despite “non-standard” authors and methods
- Obvious question, no answer: how much does the conclusion depend on the 12 chosen criteria?

3. Challenges of comparative history & cultural databases



- More-or-less standardized info for 30 regions and lots of chronology
- The point: avoiding **cherry-picking examples** to support a thesis (most common accusation against global theories in social science)

*"If the database merely substitutes **cherry-picked variables***

Professions

- ▲ Professional military officers ▲ present ♥ Mansabdari
- ▲ Professional soldiers ▲ present ♥ The Mughal Empire soldiers ranged from the part-time peasant to the professional
- ▲ Professional priesthood ▲ suspected unknown ♥

Bureaucracy characteristics

- ▲ Full-time bureaucrats ▲ present ♥ The army and revenue
- ▲ Examination system ▲ present ♥ Persian was needed
- ▲ Merit promotion ▲ inferred present ♥ Persian was not
- ▲ Specialized government buildings ▲ present ♥ The

and gerrymandered categories for cherry-picked examples, I don't think we will come out much ahead. Does the database contain the variables relevant to [rival theories to those held by SESHAT authors]? "

– Brian Malley

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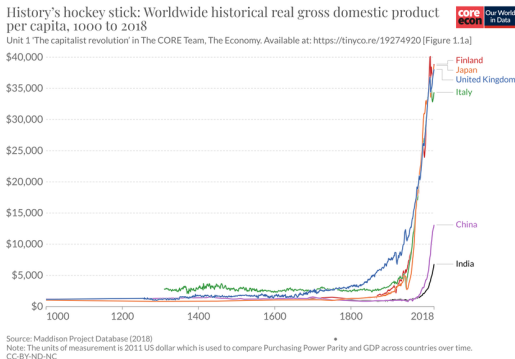
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NB: Seshat is filled almost like a questionnaire; many problems known to social scientists, e.g. insufficient or redundant categories, framing & interpretation... Usually dealt with by iterating *a lot* over questionnaire design, probably not here

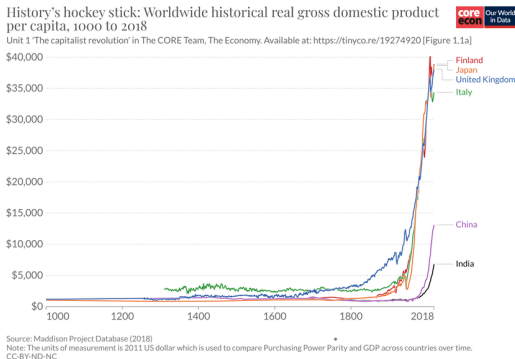
WHAT YOU MEASURE IS IMPORTANT: EXAMPLE

- Historical economics focuses on material production (farming & industry) and claims wealth has been multiplied by at least 40 over last millenium (frequent argument why [capitalism/modernity...] is good)



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- Material production is 25% of current GDP, everything else is *services*
⇒ Unless we can really claim that we are “better served” by other humans now, maybe wealth only multiplied by 1.3 at best (or even diminished for some)

OTHER ARTICLES AROUND SESHAT

A bit of sociology of science:

- Massive data-gathering project, still ongoing, with dozens of contributors...
- Various articles studying correlations in Seshat, e.g. “a Single Dimension of Complexity Structures Global Variation in Human Social Organization”

¹*Coding culture: challenges and recommendations for comparative cultural databases*, Evolutionary Human Sciences (2020)

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- Response to criticism and interactions with other cultural databases

“ Overall, Slingerland et al.’s critique¹ [...] does not call into question any of our main findings, but it does highlight various shortcomings of Slingerland et al.’s database project. ”

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A few discussion points:

- What is so attractive about the idea of an Axial Age?
(besides Cool Dudes hanging together)
- How convinced can we be by the choice of indicators, and how sensitive to that choice is the appearance of abrupt or continuous transition?