#### Digital Echos The Future Integrity of Archival Stores

Andrei Rodin

#### Archives Henri-Poincaré

Université de Lorraine Maison des Sciences de l'Homme de Lorraine (Nancy, France)

October 27, 2023

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<u>Plan :</u>

Sense of History

Role of Writing in the History of Civilisation(s)

Electronic Writing and the Post-Truth

Progress versus Permanent Revolution / Ewige Wiederkunft

#### Sense of History

Role of Writing in the History of Civilisation(s) Electronic Writing and the Post-Truth Progress versus Permanent Revolution / Ewige Wiederkunft

### Lost Sense of History (an old man's grumbling)



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- "Only Babylonian Cuniforms on clay tablets have a chance to survive..."

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Role of Writing in the History of Civilisation(s) Electronic Writing and the Post-Truth Progress versus Permanent Revolution / Ewige Wiederkunft



"Nancy founded in 1050 is one of the youngest cities of our region."



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#### Language and Writing

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- First oral languages : circa 35-100K BCE (very speculatively);
- First written languages : circa 3,5K BCE; Example : a calculation of the quantity of beer for a community party (circa 2370 BCE) :





#### Mathematical Writing

Interestingly, the oldest form of human writing is *mathematical* (since circa 30K years BCE).

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#### Mathematical Writing : Example



 The setudiese antiles of Little Solt Spring, Florida, with a colleague's hand also. Photograph by the author.

Presumably this hatched bone (circa 10K years BCE) is a moon calendar (29 hatches grouped);

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Presumably this hatched bone (circa 10K years BCE) is a moon calendar (29 hatches grouped);

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The linkage of early (mathematical) writing with *calendars* and hence with astronomical time is remarkable!

#### Other social functions of early written documents

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- ► Law;
- Monetary Economy;
- Religion (sacred textes);
- Transmission of Knowledge via Generations;
- Notice that the technological progress so far had only a limited effect on the expected span of human life (by the factor 2 at best). So the basic traditional structure of teaching and learning persists. Perhaps for the better ?

#### The Long-Term Persevation

For all the above functions the long-term preservation of written documents (compared to the expected span of human life) is essential !

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Notice the archaic number systems still universally in use in calendars and time measurement.

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- Rapidly updating hardware;
- Rapidly updating software;
- The lack of strong commercial interest to address the durability issue (cf. the experience of banks and of the military).

## Oral (?) Instant Communication and the Post-Truth



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## Oral (?) Instant Communication and the Post-Truth

- The electronic writing in its existing form comes close to the oral communication (particularly with the mobile Internet);
- In that form, writing does not any longer fulfil its basic functions, which are fundamental for a sustainable development of today's societies;
- The so-called of Post-Truth is a way to give up (which may turn out to be costly like in the case of Communist Dreams. ) Notice that the possibility to state and communicate *falsities* and fictions is as old as the oral language itself.

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#### Language, Lie and Truth

A fundamental function of language is to lie. But another fundamental function of language is to tell truth. The two are complimentary.

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In that respect the new information and media technologies bring nothing essentially new. But they make unreliable some older (but still relatively recent) ways of telling truth from falsity (via photographs or audio recordings, for example).

#### Technical or Social Problem?

In view of Section 1 above, I don't think that the problem with electronic writing is *merely* technological. The short life of electronic writing goes along with the lost sense of history.

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I'm persuaded that the technological part of the problem is the easiest but the social is the hardest...

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The Novelty aka Innovation does not imply Progress. Progress requires the preservation of older knowledge (or forms of life) and its improvement via add-ons. Progress requires a systematic historical knowledge and historical consciousness.

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Novelty, Innovation and Eternal Youth are very well compatible with the Permanent Revolution, Eternal Return, and Mythological Consciousness.

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Progress is a laborious and indeed very *vulnerable* epistemic, social and political construction! It needs not only remembering the past but also a permanent reworking of the earlier acquired knowledge, and social and political institutions. For otherwise the task of their improvement rapidly becomes unbearable!

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Progress always sustains through the refreshing Ewige Wiederkunft of new young generations. So the mythological aspect does never go away!

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Every generation and in fact also every individual person in a sense "starts from the scratch" (as the cricket metaphor goes). But one may opt to do their best to use the available past and the present knowledge for making their new start (either at the generational or individual level) more creative, more productive and more *progressive*.

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A long-term writing technology (including the imagery etc.) seems to be absolutely indispensable for the task !

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#### Project DDS

https://philomatica.org/projects/ongoing/ durability-of-digital-storages-for-archival-purposes-2/



Image: A math a math

# vielen Dank!

Andrei Rodin Digital Echos

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