



LOTS OF COPIES KEEP STUFF SAFE



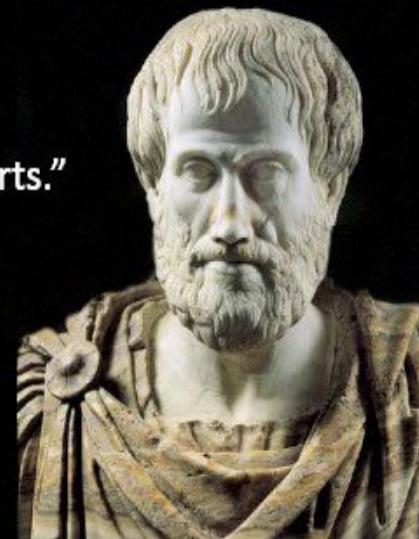
Community-driven Models for Distributed Digital Preservation Using LOCKSS

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ILIDE Conference
April 15-16, 2018

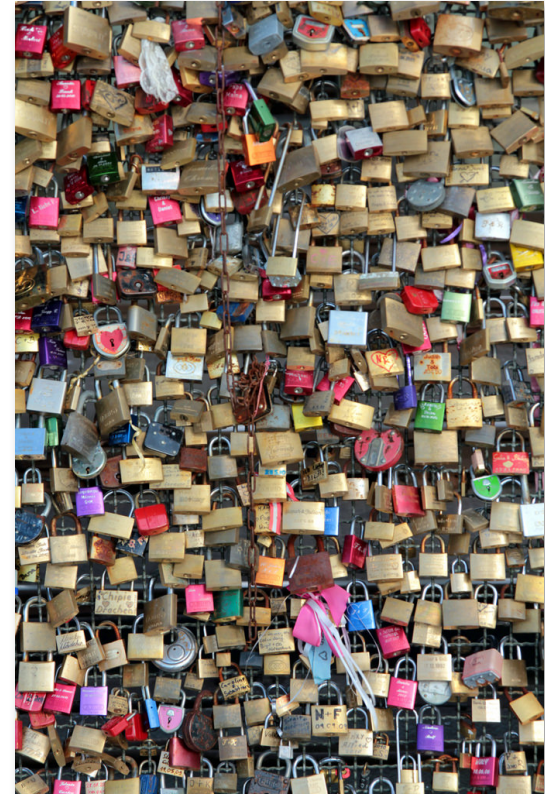
"The whole is greater
than the sum of its parts."

-Aristotle



what is LOCKSS?

- a proven and widely accepted **principle** for distributed digital preservation
- peer-to-peer **software**; infrastructure agnostic
- an international **community** of institutions and networks
- a **program** of Stanford Libraries



["Cologne Love Padlocks"](#) by [orkomedix](#)
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community-centric

- preservation is an **active** community effort
- enable preservation of the **content your community cares about**
- you set the **levels** of preservation you want
- you own your community's **governance**
- lots of **communities** keep stuff safe



more than lots of copies

- lots of copies is **necessary but not sufficient**
- central points of failure **can undermine all copies at once**
- don't underestimate:
 - people making **mistakes**
 - data and media **migrations**
 - **attacks** on information
 - organizational **failure**
- LOCKSS provides a framework of mutually-distrusting, **independent peers**



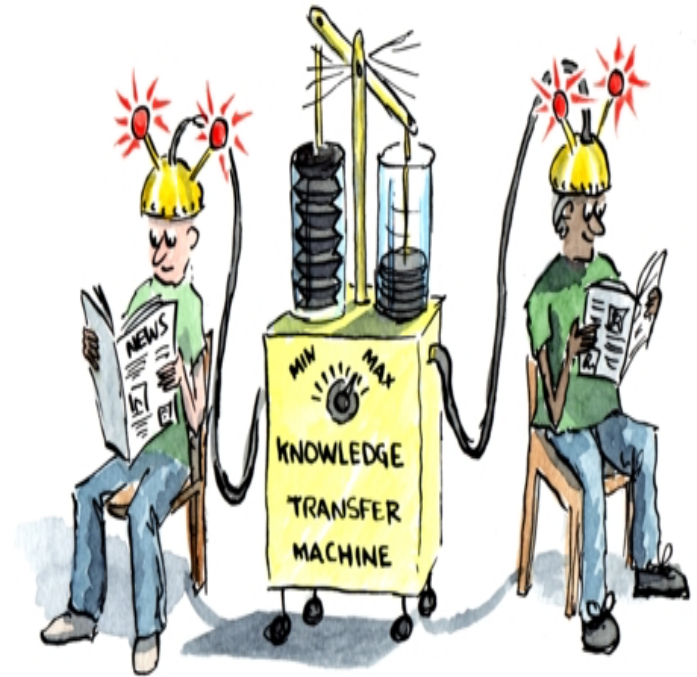
lots of LOCKSS networks

- growing number of **networks**
- hundreds of **institutions**
- **all types** of content
- **national** network discussions
- preservation via **diversity** of:
 - technologies
 - institutions
 - networks
 - use cases



technical re-architecture

- **conserve + extend** existing functionality
- re-architect major components as documented **web services**
- incorporate LOCKSS **community innovations**
 - monitoring dashboard
 - LOCKSS-O-Matic
- enhance **sharing and integrations** to other groups



[“New York Reflection”](#) by [Reto Fetz](#) under [CC BY-NC-SA 2.0](#)

immediate goals

- **share** innovation between LOCKSS Networks
- raise LOCKSS **mindshare** with global preservation and repository communities
- initiate global **collaborations** and integrations
- publicize LOCKSS' **flexibility**



Bits Decay: Do Something Today
30th November 2017



SAFE Archiving FEderation

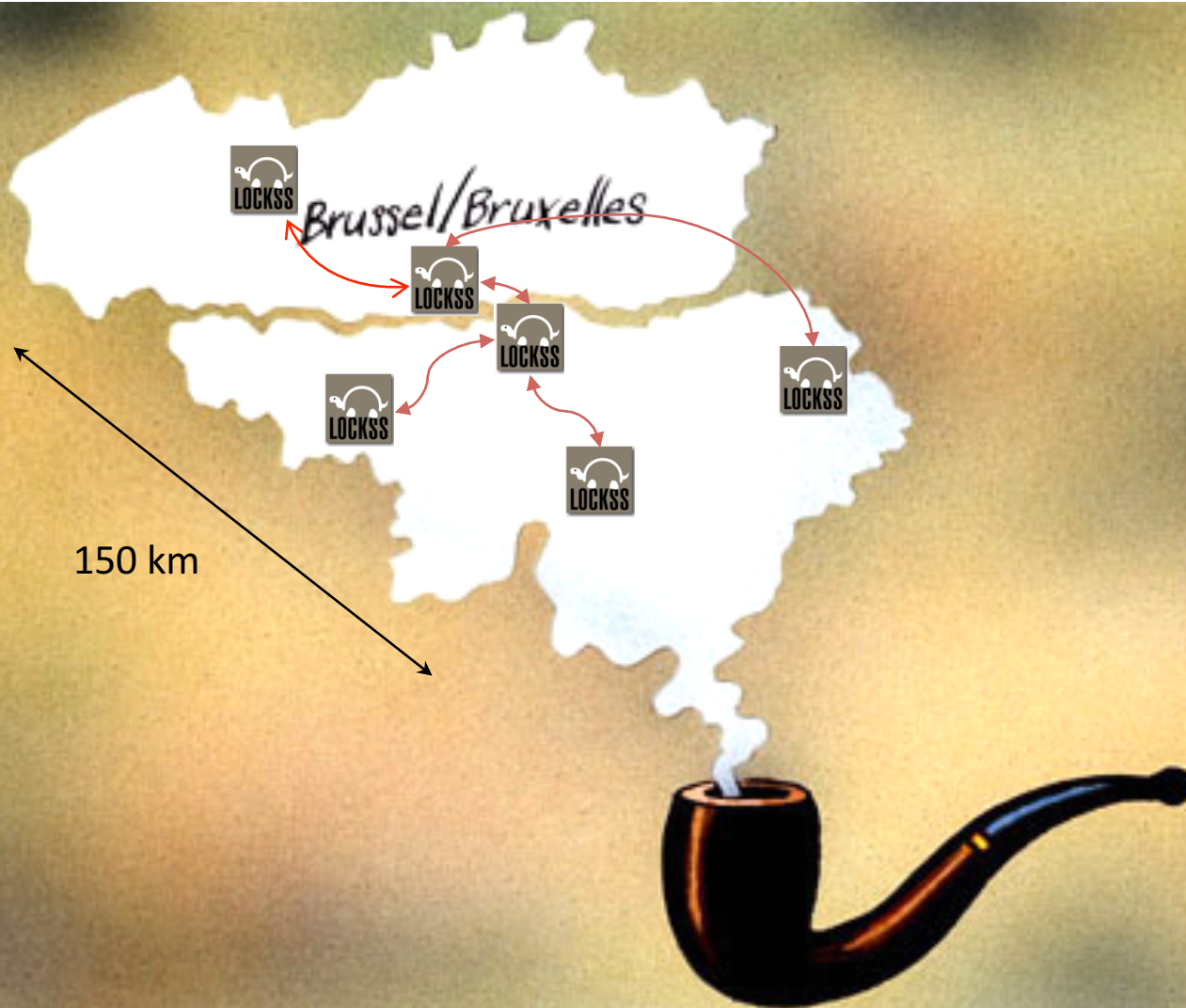




Our project started 6 years ago in Belgium...



Ceci n'est pas un PLN !

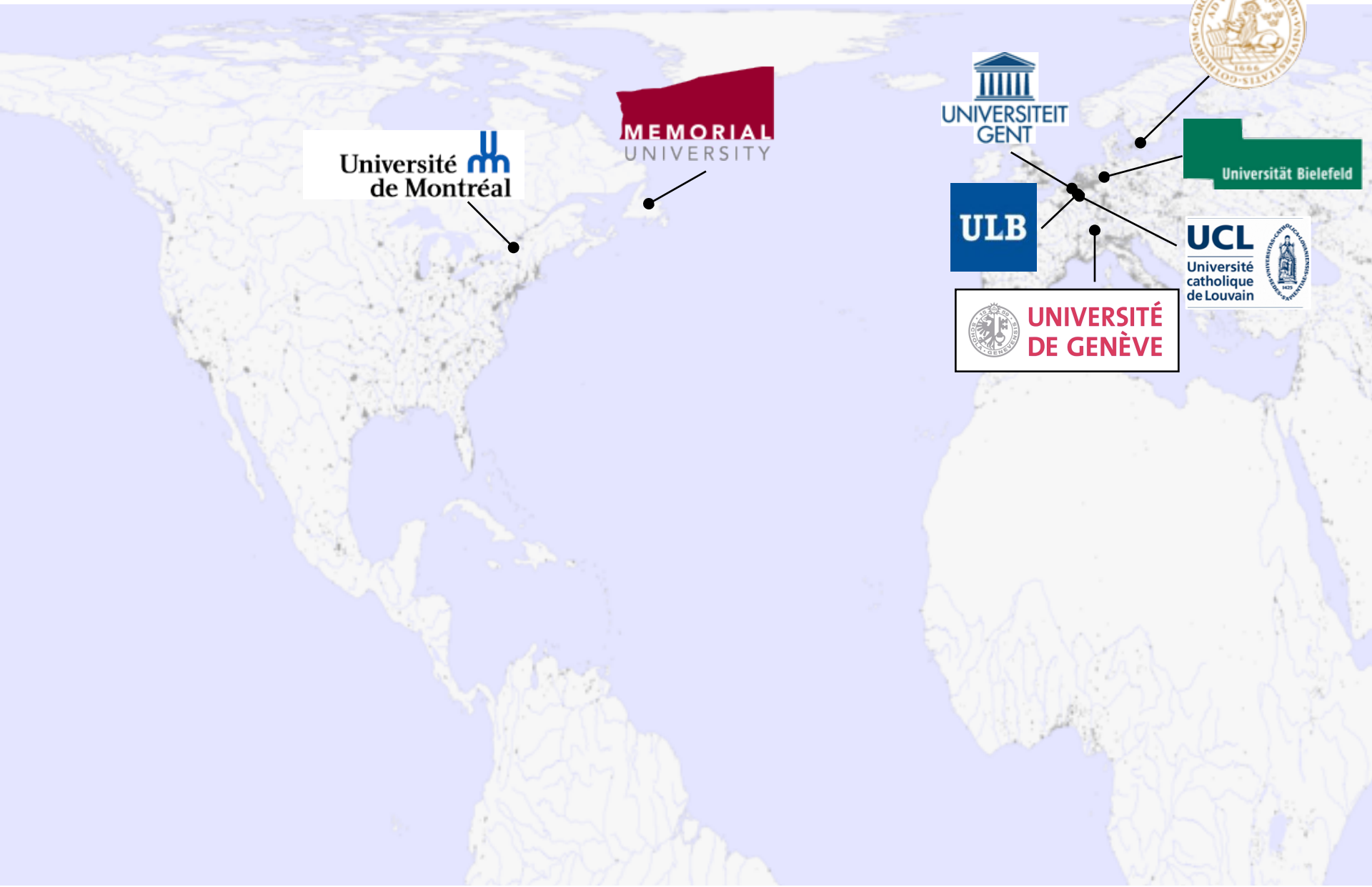


Peter Schrank

A person is sitting on a rocky ledge, looking down at a laptop. The background is a vast, dry, crater-like landscape under a cloudy sky. A speech bubble is overlaid on the right side of the image.

Oh, come on!
Tell me you
have a backup
of Belgium!

SAFE currently has 8 members



**SAFE**

: WHAT ?



Digitized books
Maps
Pictures



**Theses and
publications
(IR)**



Academic content
Research data



Key LOCKSS aspects for our network



“poll/repair” is the key component for us



share resources, not money, light organization



distributed technical administration