

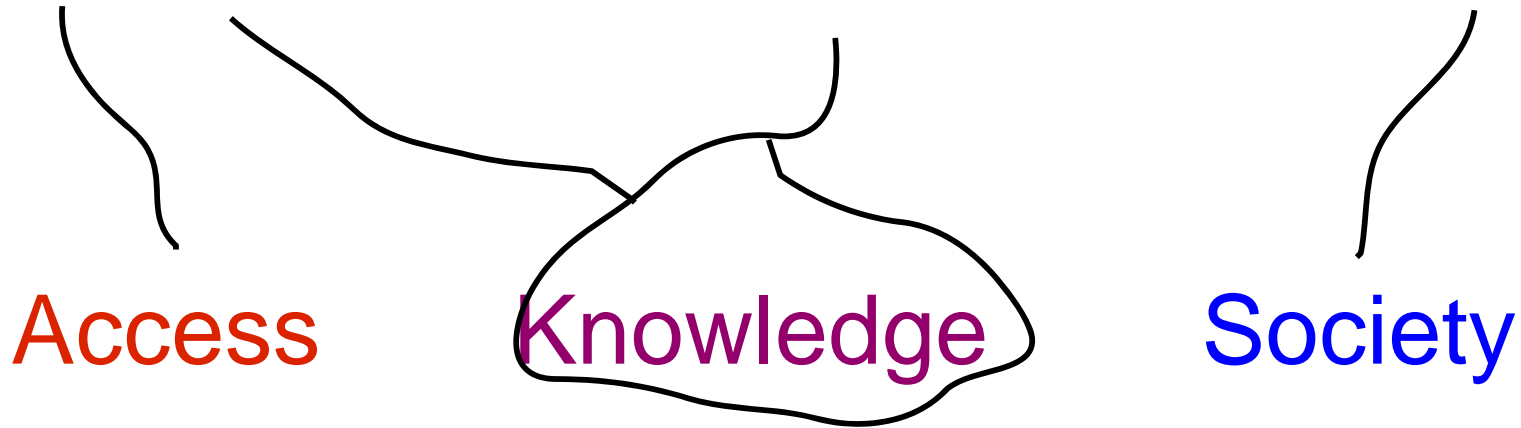


A2K

A critical reflection on
access to knowledge
and
the growth of a knowledge society

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A2K → Knowledge Society



A2K → Knowledge Society

Access

Knowledge

Society

1: Knowledge Society

Society

Knowledge

Knowledge: constructivist theory

2: Access to knowledge

Last Mile

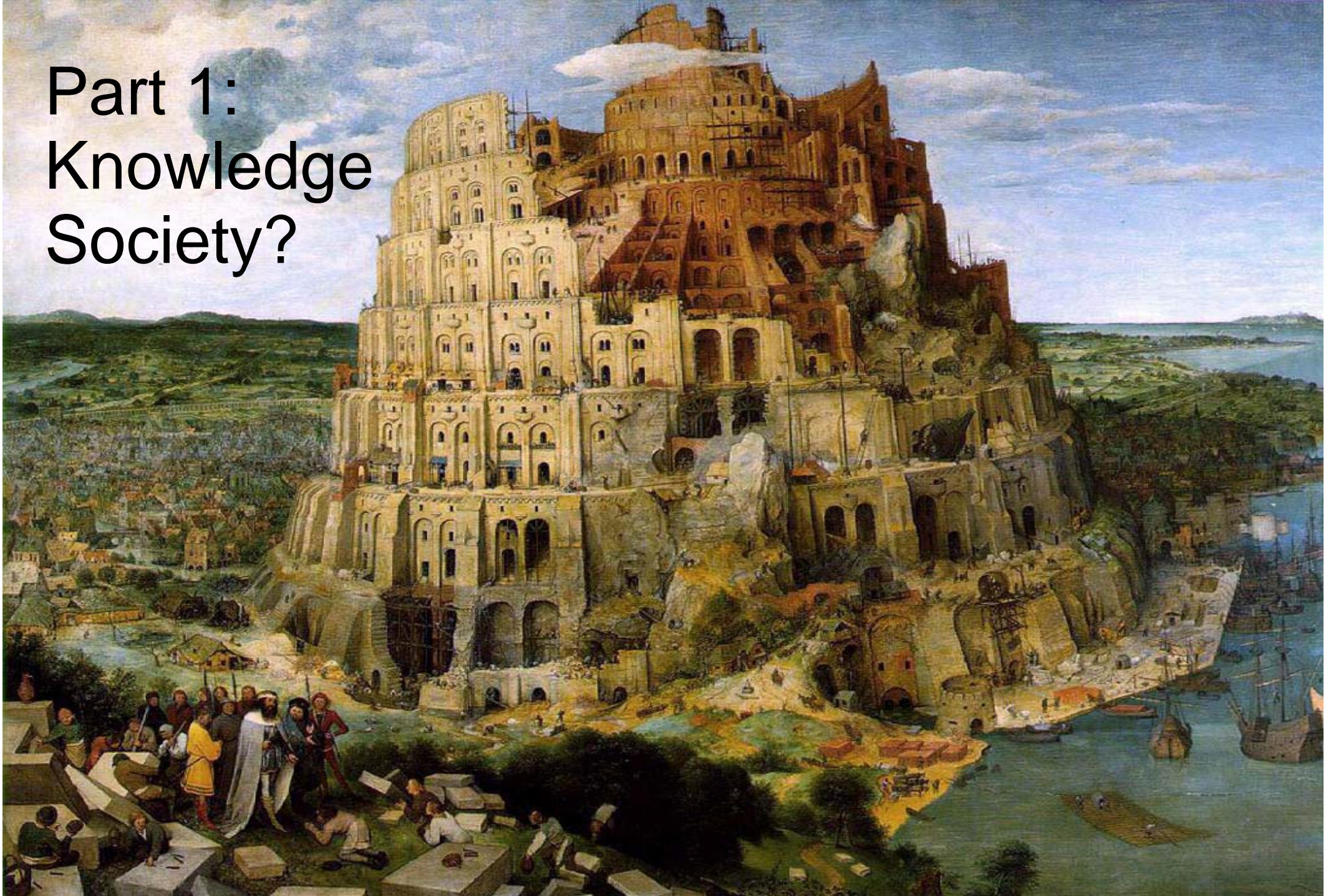
Last Million

Last Micron

3: Implications for libraries

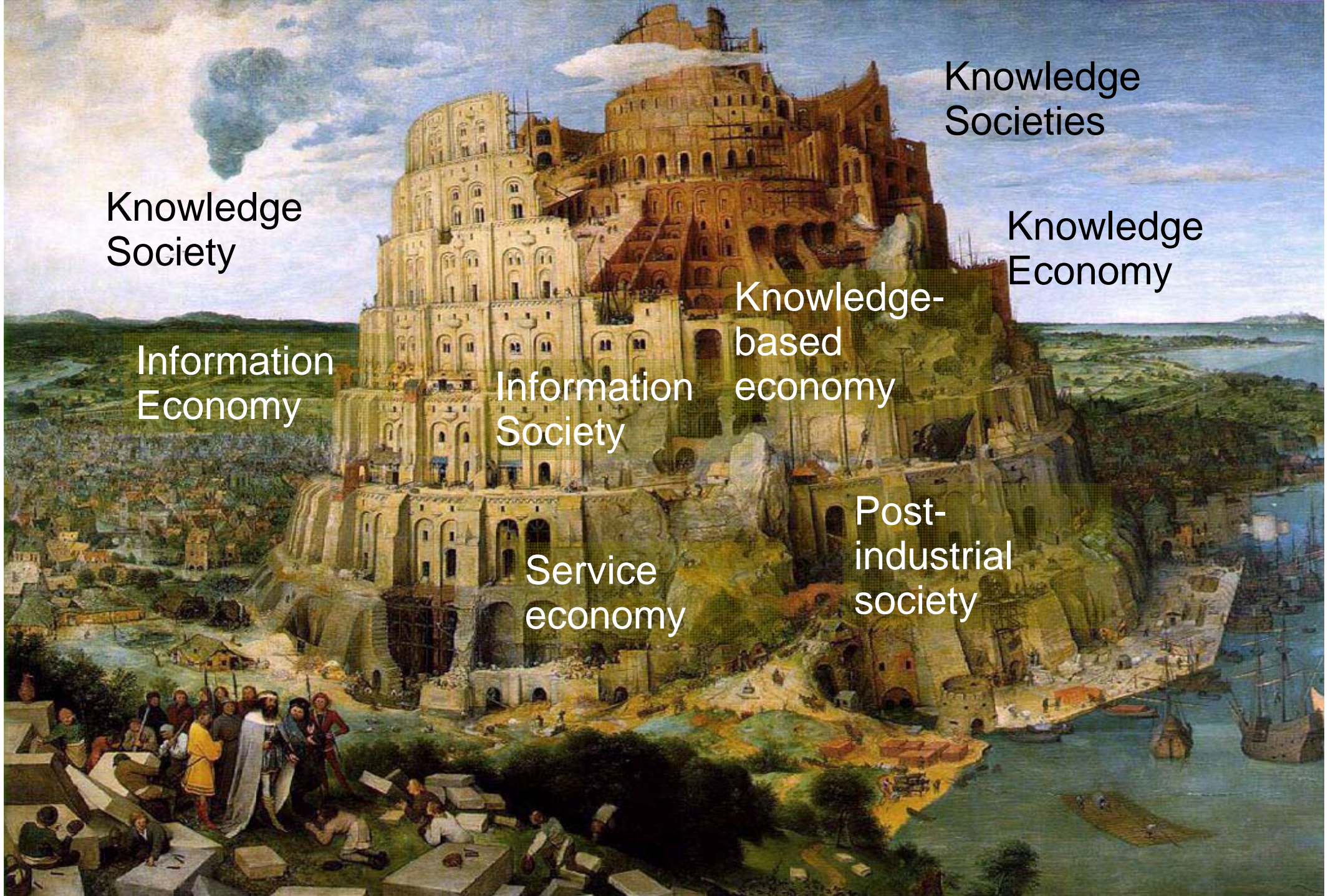
Exploratory

Part 1: Knowledge Society?



Tower of Babel by Pieter Bruegel the Elder.

Image: Artcess, <http://artcess.wordpress.com/2008/07/10/art-in-the-last-588-years/>



Knowledge
Societies

Knowledge
Society

Knowledge
Economy

Information
Economy

Information
Society

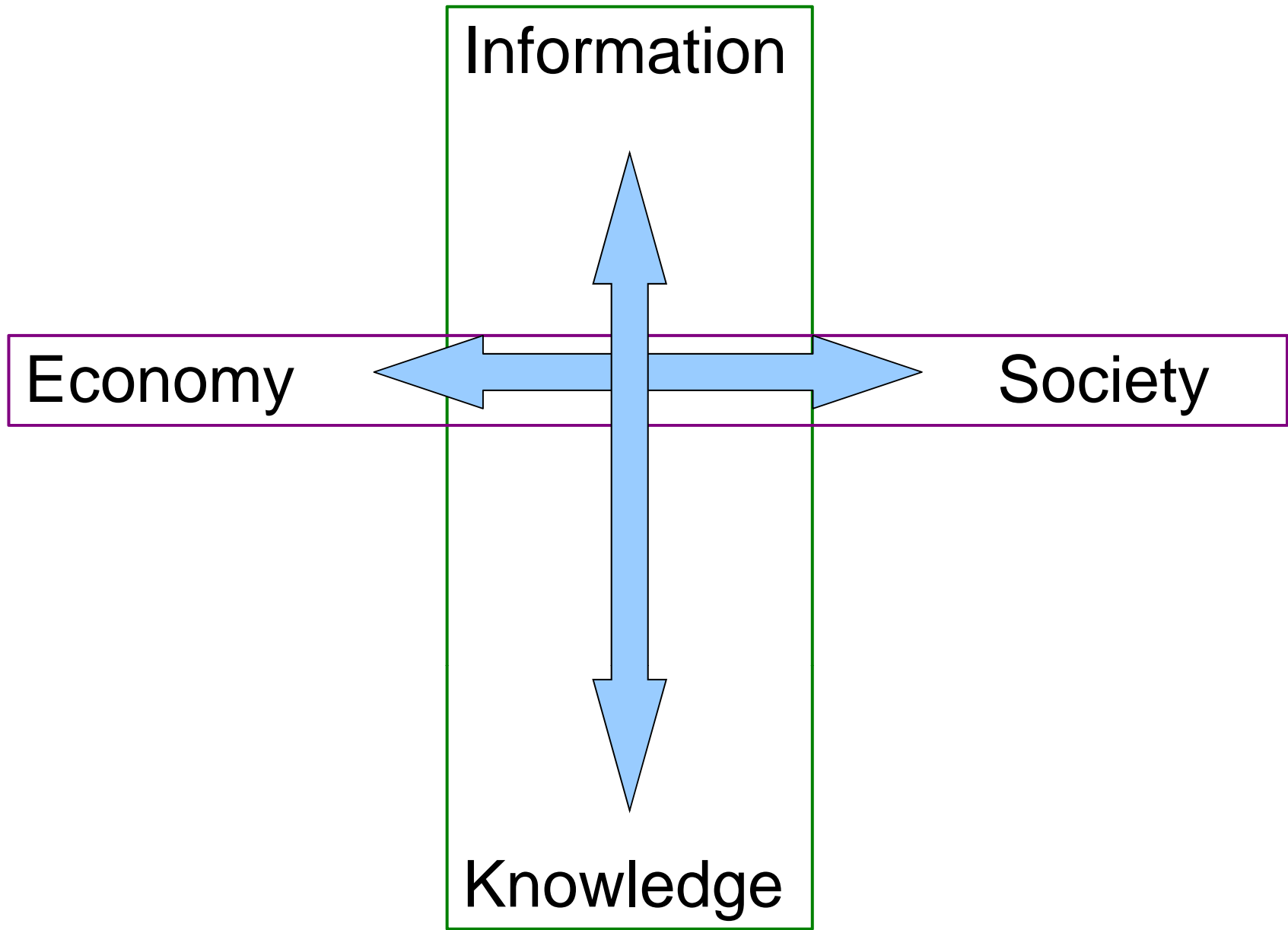
Knowledge-
based
economy

Service
economy

Post-
industrial
society

Tower of Babel by Pieter Bruegel the Elder.

Image: Artcess, <http://artcess.wordpress.com/2008/07/10/art-in-the-last-588-years/>



Knowledge
Economy

Knowledge


**Knowledge
Society/
Societies**

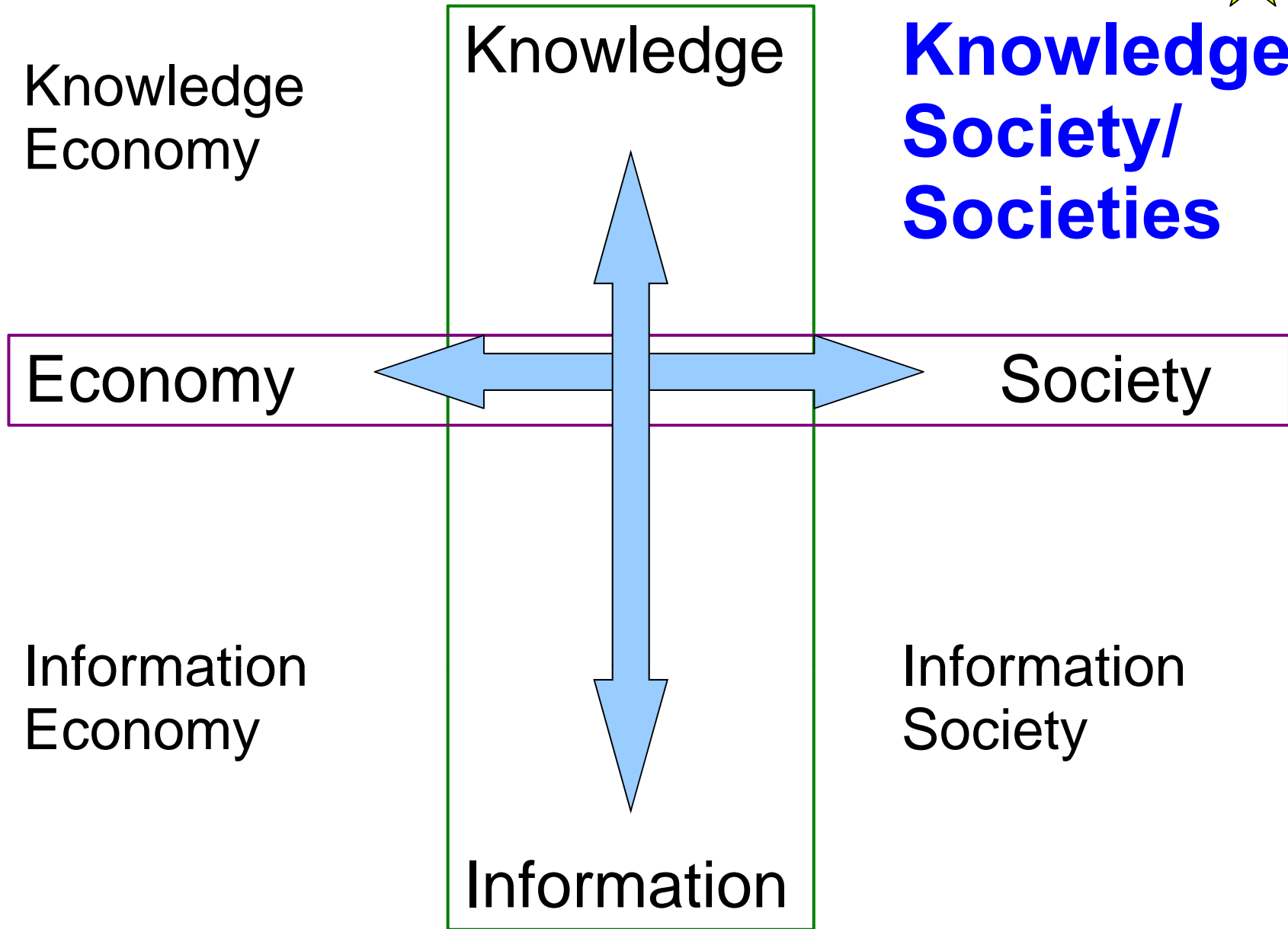
Economy

Society

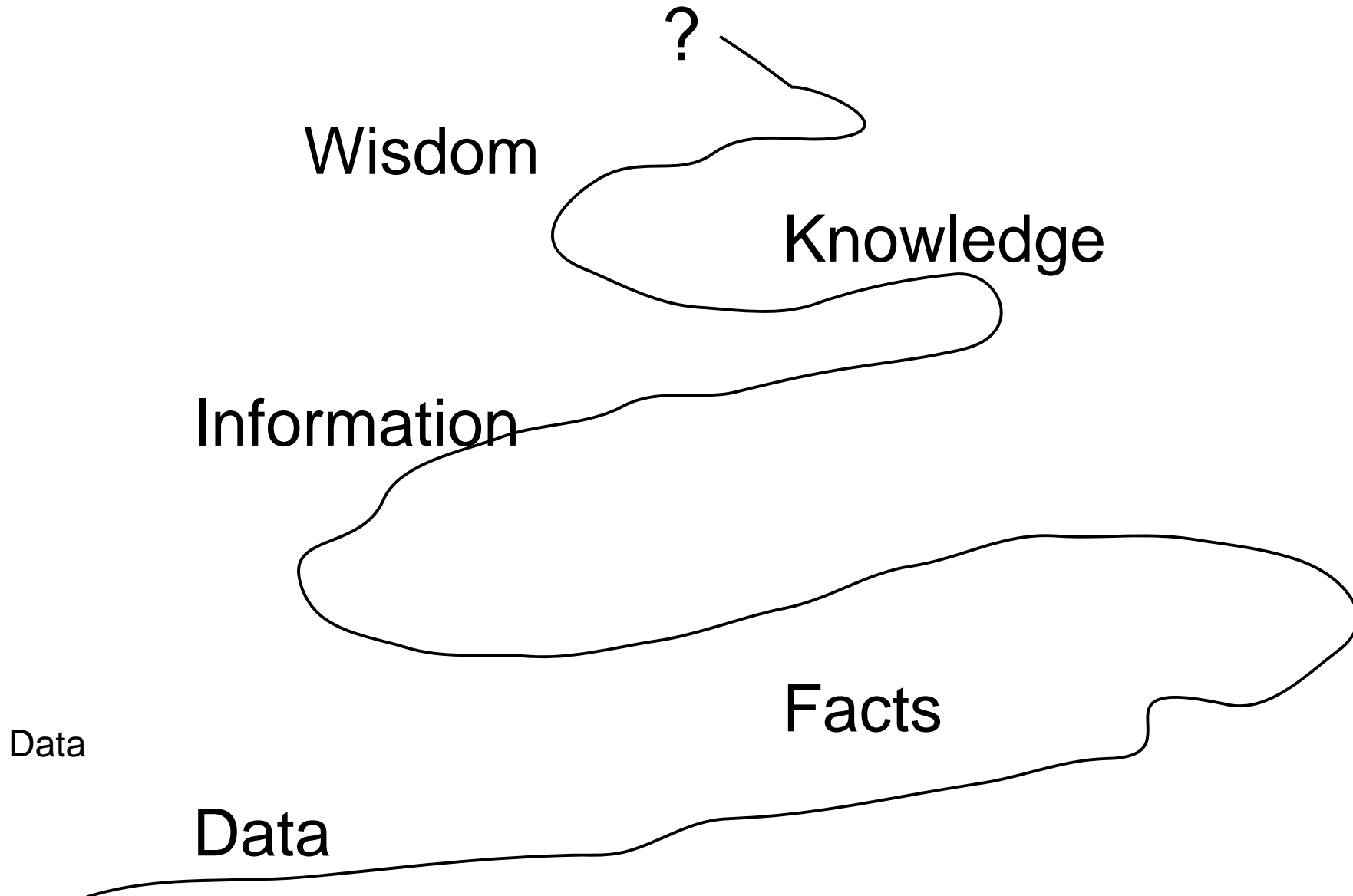
Information
Economy

Information

Information
Society



Knowledge: (1) Hierarchical concept



Knowledge: (2) "What's in people's heads"



Information: Knowledge exteriorized, being transmitted

Knowledge (3)



Theory of
learning,
Stellenbosch
1960s

Knowledge 4:
Constructivist
theory of
learning



Constructivist theory of learning



Constructivism

Multiple strands

Piaget, Vygotsky

Psychological constructivism

Social constructivism

Moderate

Radical (“science wars”)

Constructivist theory of learning



Constructivism in education
(Mahoney 2004)

1. Knowledge is created actively & continuously by learners.
2. We organize & reorganize patterns of experiences in our heads in tacit, emotional, meaning-making processes.
3. The processes are self-referent, linked to our sense of self.

Constructivist theory of learning



Constructivism in education
(Mahoney 2004) cntd.

4. Individuals are embedded
in social & symbolic systems.

5. This organizing activity
reflects an on-going
developmental flow with
dynamic, dialectical tensions.

Constructivism in Education 101

1. Knowledge is continuously being constructed in the mind of the individual to whom information is imparted.
2. In this process information is integrated in the individual's conceptual structures.
3. This is a developmental and dialectic process that is never completed.
4. Knowledge is socially constructed through interaction between the individual and his/her community/ies.
5. There are concomitant changes in the conceptual structures shared by members of a community.



Application to LIS/A2K

Assumptions:

1. The acquisition of knowledge in the LIS context is analogous to learning in educational setting

1. Constructivist learning theory can be applied in LIS



For purposes of A2K

Knowledge is information that is being integrated in conceptual structures that people are continuously constructing within their heads in interaction with multiple communities to which they belong.

These can be local or virtual communities, communities of practice, scientific communities etc. This implies that knowledge is not merely information that has reached a human receiver. Knowledge implies creative activity on the part of the individual, and it implies interaction between that individual and other individuals. We see knowledge as *process*, rather than as an outcome.



In our interpretation, for the purpose of this paper, knowledge encompasses not merely the cognitive domain but also the domain of values, attitudes and emotions, as well as knowing how, or "know-how".

For purposes of LIS, A2K

Emphasis on knowledge as *process*, rather than as an outcome.

Multiple communities: local & virtual, classrooms, indabas, kgotlas, communities of practice, scholarly communities...

Not merely cognitive (knowing that, knowing how), also affective (values, attitudes, emotions etc.)



Part 2: Access

What do we mean by
“access”?



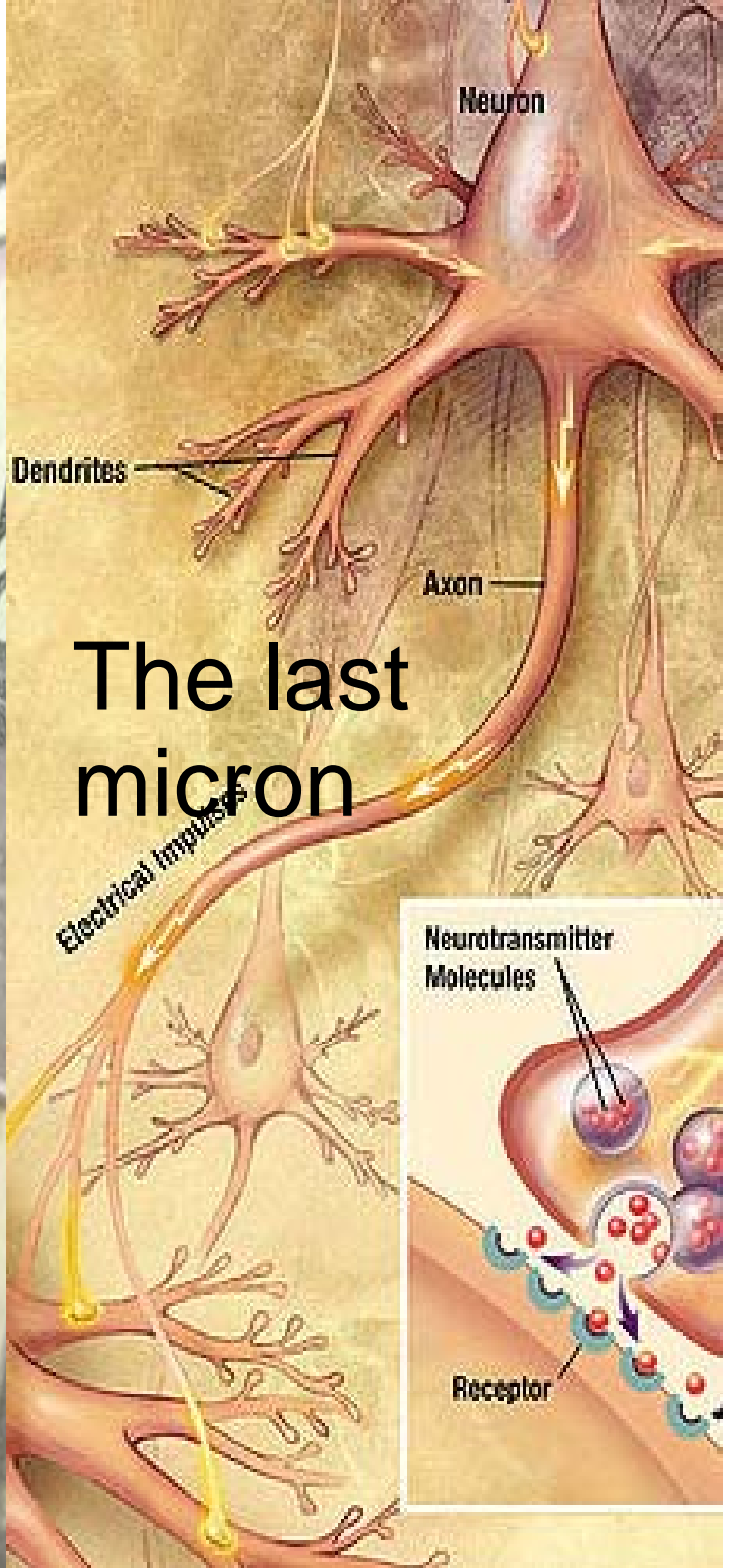
Image: Doggies.com,
<http://doggies.com/blog/2008/06/07/rules-and-regulations-dog-style/>



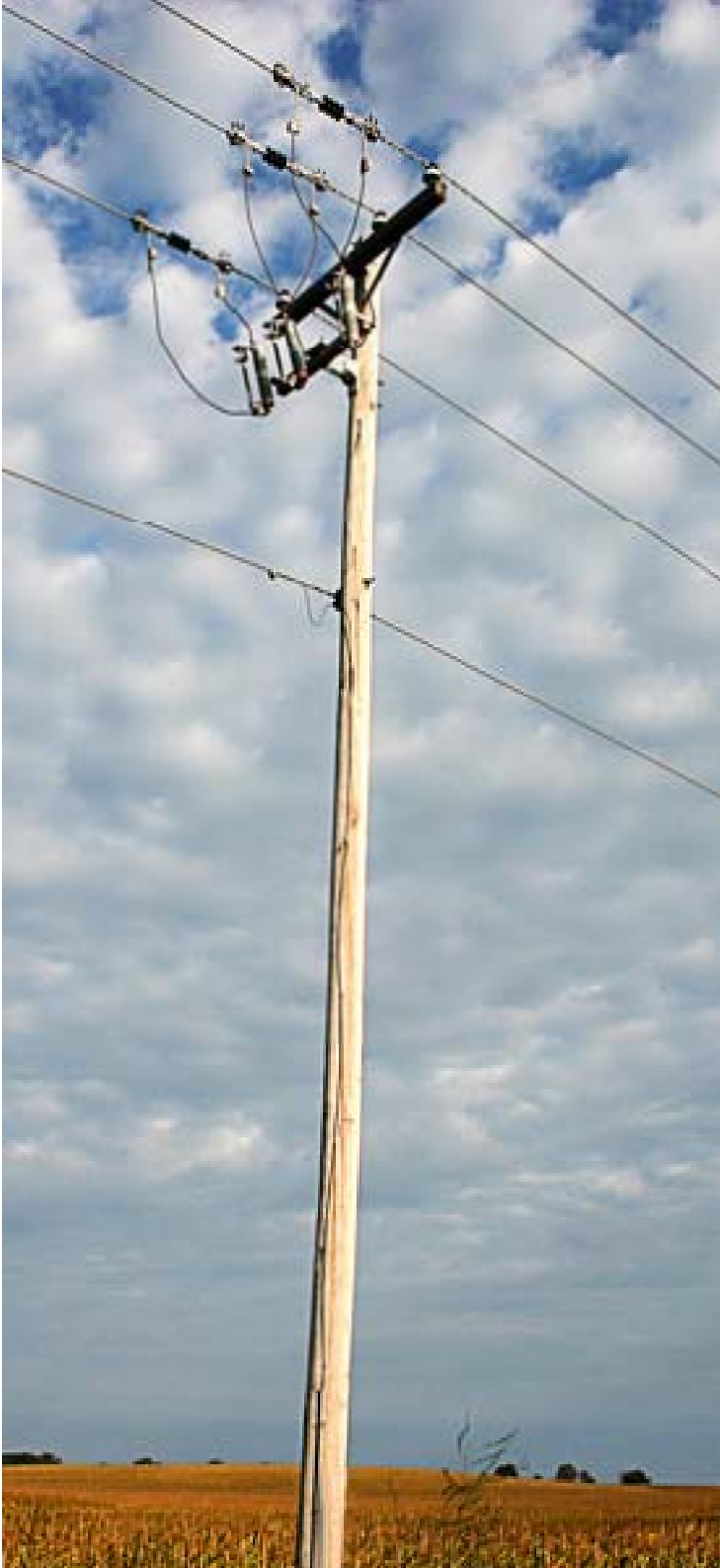
The last
mile



The last
million

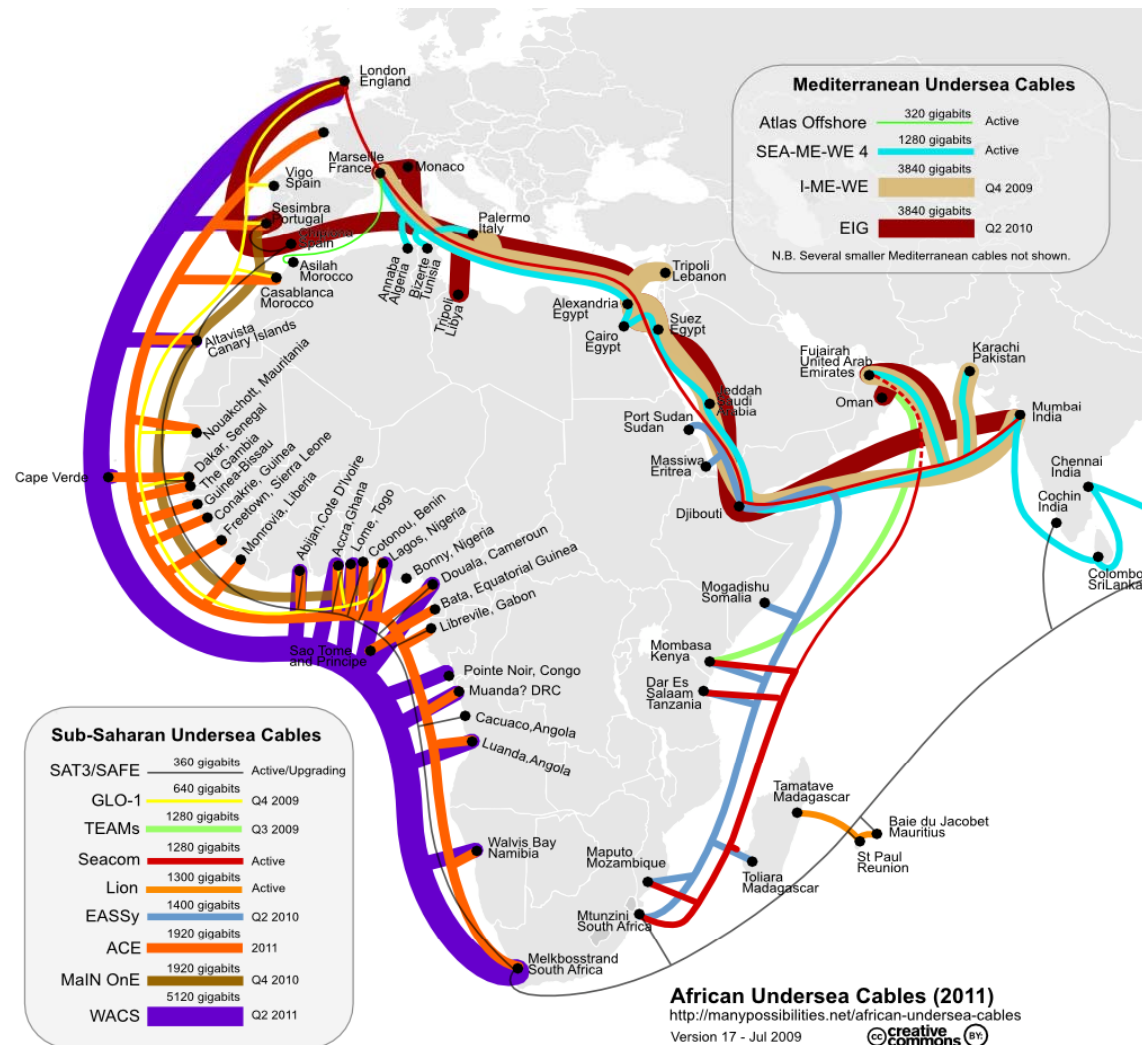


The last
micron



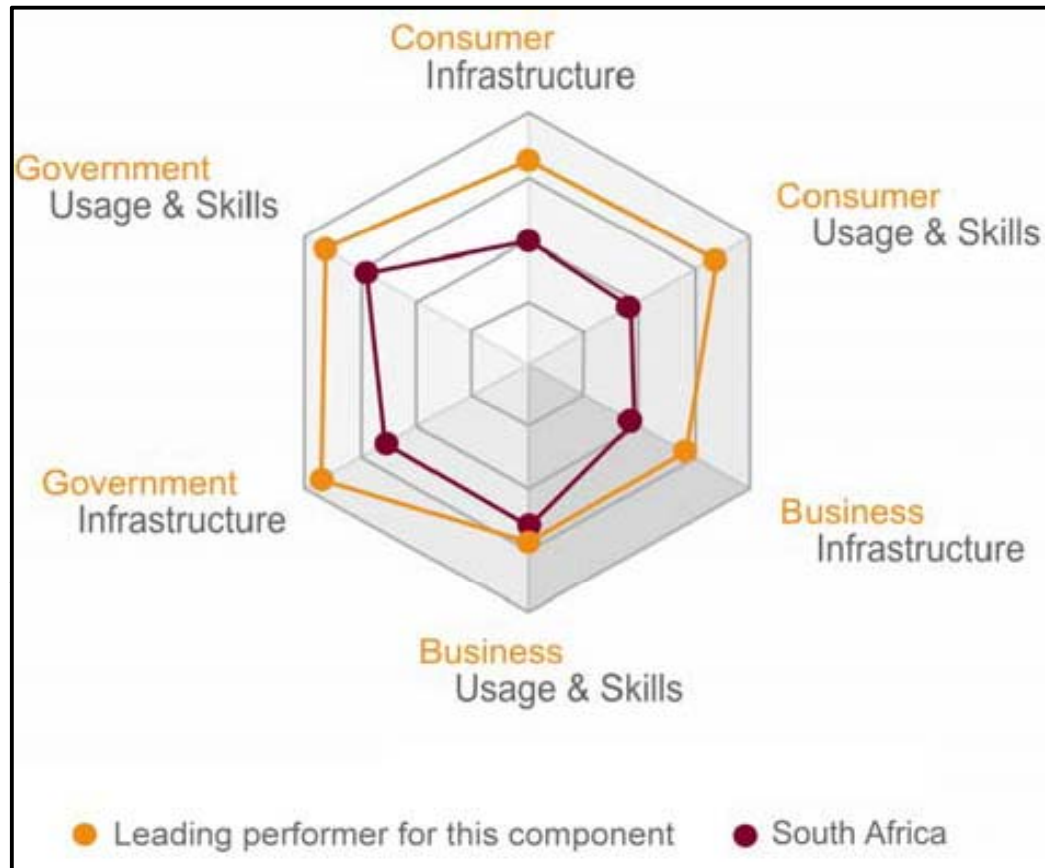
The last **mile**

Physical infrastructure
Internet, connectivity, bandwidth...



South Africa

Connectivity Score 6.18



Comparison:	
#1: Sweden	7.95
#27: South Africa	6.18
#36: Botswana	4.30
#43: Egypt	2.97
#47: Kenya	1.80
#48: Nigeria	1.78

Image: Waverman & Dasgupta (2010) *Connectivity scorecard 2010*. Nokia Siemens Networks.
<http://www.connectivityscorecard.org/images/uploads/media/TheConnectivityReport2010.pdf>, accessed 2010-02-13



The last **million**: Political-economic, legal, ethical dimensions

Intellectual property

Copyright, digitization, orphan works

Barriers for developing countries

A2K movement

A2KTreaty

Declaration on Future of WIPO

WIPO Development Agenda

“Knowledge Ecology”

ACA2K: African Copyright and Access to Knowledge project

(1) The battle of Jericho

(Jean Fouquet, 1452)

http://freechristimages.org/images_Joshua/BattleOfJericho_Jean_Fouquet.jpg

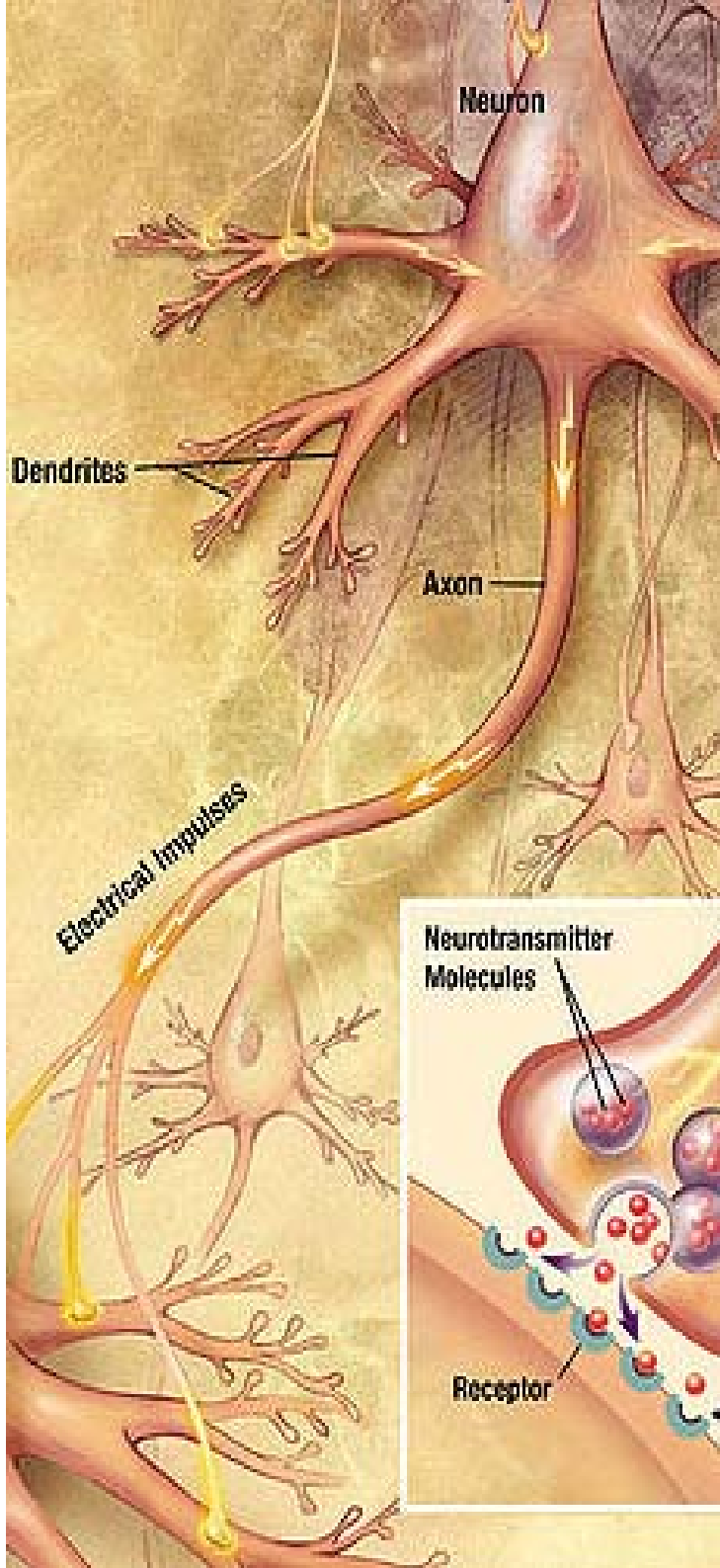


(2) WIPO Headquarters, Geneva

Image:
en.wikipedia.org/wiki/Beck_v._Eiland-Hall

Battle won?





The last **micron**: epistemological dimension

Micron = 1 millionth of a metre
Synapse: gap between neurons
(much smaller)

Most difficult gap to cross
Because recipients of information are
(1) not passive, (2) embedded in
communities

Problem with slogan (metaphor) of
“access to knowledge”:
Knowledge: abstract
Access: more concrete (access
control, accessing databases...)

“Bringing democracy to Afghanistan”



How do we ensure that information actually makes a difference?

“Knowledge is not a package, but a process”

Factors:

What the recipient knows already

Recipient's thinking habits, strategies for constructing knowledge

Receptiveness: values, attitudes, emotions

Language, level, discourse

Relations between provider & recipient: power, influence, dependence

Individual recipient within community (status, role, etc.)

Receptiveness of community

3. Implications for libraries

LIBRARIAN LIBRARY HOURS

TUES	3	-	4 30pm
WED	11	-	12 NOON
THUR	7	-	8PM
FRID	3	-	4 30AM

LIBRARY RATE

Future of libraries: disintermediation?



Impact of ebooks:
CD shops, video shops, libraries...

What value do we add?

Response: whistling in the dark?

Example: Hope for libraries?

In libraries of all kinds there is a need for professionals who provide awareness and alerting services, assist users by providing motivation, counselling and guidance in the use of resource discovery tools, who can help evaluate and interpret resources, and above all, who can educate users. Informediaries are needed to provide lifelong education for information literacy at all levels, from illiterate villagers to research scientists. Librarians are ideally placed to provide this information literacy education, which empowers users to determine their information needs, to identify, locate and access resources, and to evaluate and utilise these in the production of new knowledge. (Lor 2006)

Hope for libraries?

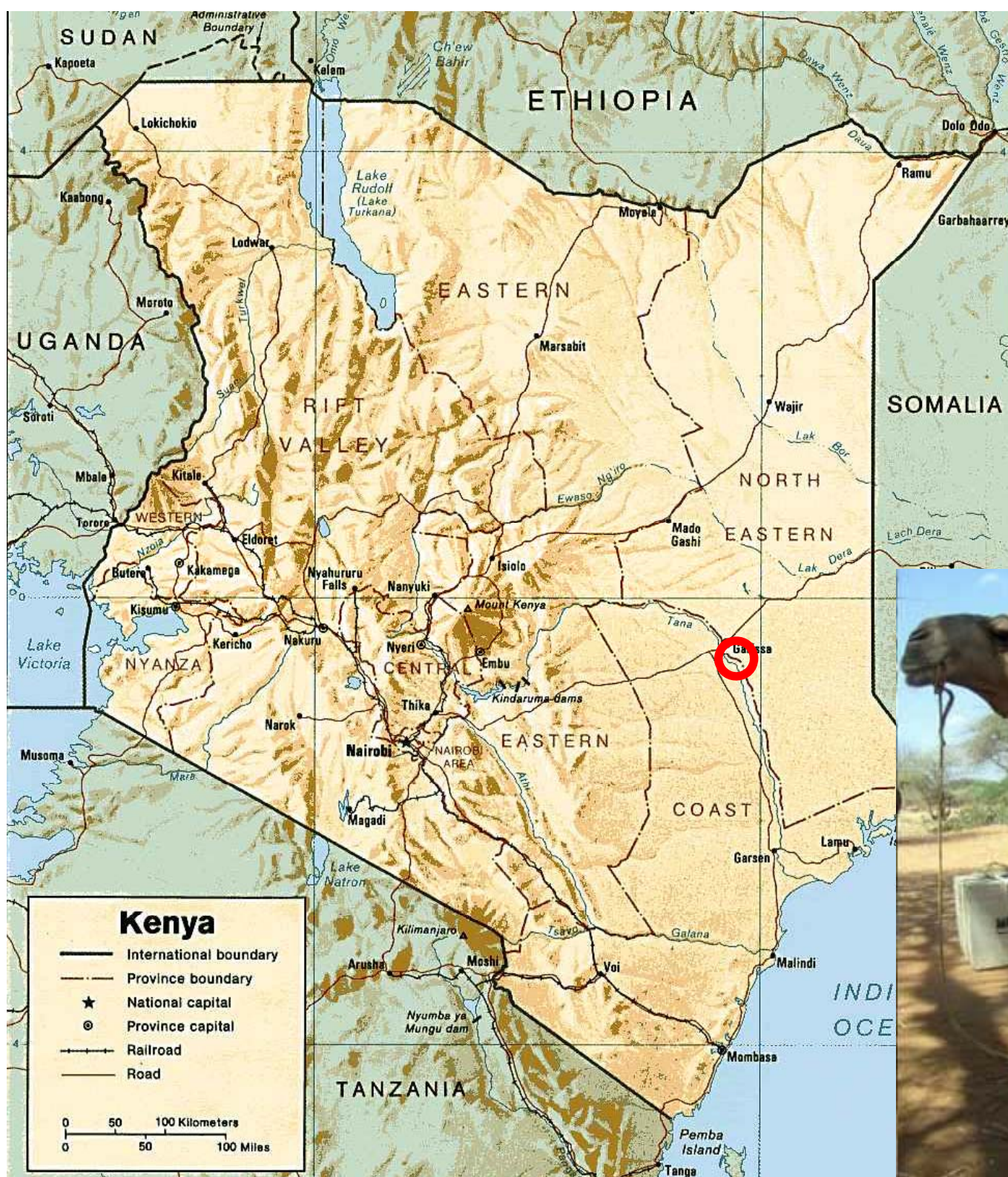
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Yeah... Blah, blah, blah!

Heartwarming?



<http://www.mediabistro.com/galleycat/original/camel-library.jpg>



Let's not
fool
ourselves





1. Avoid facile analyses

2. Examine assumptions, e.g.
Libraries as “neutral agencies”
Technology as “solution”
All people have “information needs”
Needs diverse but limited number of categories

People come to libraries

People seek our help

Each library user is a unique individual

Provide packages of information

3. Look at some examples

Example

The aim of building the understanding of ... staff with regard to participatory development and associated tools was to enable them ***to work with communities and specific community groups to respect and elicit indigenous knowledge, values, beliefs, perceptions, concepts and practices, and to enable community members to articulate their experiences and recount their stories.*** The tools were also to enable community members to identify and prioritize their [natural resource management] issues, facilitate discussion among community members of the resources identified, and articulate ways they believe those resources should be managed, as well as to work with communities to identify key stakeholders, make transparent the power relations that influence community initiatives, assist communities to develop consensus on action points, and assist communities to assess their plans and performance.(McKay 2009)

Example

The aim of building the understanding of ... staff with regard to participatory development and associated tools was to enable them **to work with communities and specific community groups to respect and elicit indigenous knowledge, values, beliefs, perceptions, concepts and practices, and to enable community members to articulate their experiences and recount their stories.** The tools were also to enable community members to identify and prioritize their [natural resource management issues facilitate discussion among identified, and articulate should be managed to identify key stakeholders to identify key influences that influence activities to develop consensus on action points, and assist communities to assess their plans and performance.(McKay 2009)

Wow! Which enlightened library service?



Sorry. No library. A community radio initiative.

With apology to Eleane Keamue, Radio Kergheamahn, Liberia

Image: <http://www.bonnieallenreports.com/posts/text/5894154>

4. Conclusion: Relevance of constructivist learning theory

To contribute effectively to development LIS workers need greater understanding of the processes that underlie the acquisition (=construction) of knowledge by individuals and their communities.

Oral tradition, traditional culture, and beliefs are not “...interesting side issues to the actual business of librarianship” but may be “...a vital starting point for services that people will perceive as relevant to their lives.” (Paul Sturges, 2004)

Conclusion: relevance of constructivist learning theory

To contribute effectively to greater understanding of knowledge acquisition (=constructivist learning theory) in their communities.

Not only of rural communities in far-away countries but also of organization cultures, beliefs, values etc. of factories, offices and schools, community bodies and governance, boardrooms, party caucuses... Not to forget individuals.

Oral tradition, traditional culture, and beliefs are not “...interesting side issues to the actual business of librarianship” but may be “...a vital starting point for services that people will perceive as relevant to their lives.” (Paul Sturges, 2004)



To contribute to the development of knowledge societies we need to go beyond the issues of

Infrastructure (the last **mile**)

Intellectual property & political-economic issues
(the last **million**)

to

Knowledge construction issues (the last **micron**)



Thank you!

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