ICTs-and-Society research: what's it for?

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- ICTs-and-Society research approaches
- Technologies for cooperation?

The case for meaningful technologies

- Technologies
- Soci(et)al functions
- Information (and Communication) Technologies
- Meaningful technologies
- Global challenges

Technologies

Technology =def. instrument to serve a soci(et)al function:
– ideational method,
– realised procedure,
– reified tools.

Soci(et)al functions

Soci(et)al function =def. actions of members of social groups/ society carried out in order to

– reproduce or transform the organisation of the social groups/ society
– for the sake of ends set by the members of the social groups/ society individually or collectively

Information (and Communication) Technologies

Information (and Communication) Technologies (ICTs) =def. (computerised) technologies that serve

– a cognitive soci(et)al function as "tools for thought" (Licklider)
– a communicative soci(et)al function as "media"
– a cooperative soci(et)al function as "technologies for cooperation" (Rheingold)

Meaningful technologies

Meaningful technologies =def. technologies that gain their meaning in a process in which

– their design and their usage are reflected and
– those who are/will be affected participate

Global challenges

Global challenges =def. challenges that

– affect (the survival of) all humanity (objective factor) and
– can successfully be treated only by humanity as a whole (subjective factor).

They are owed to disparities in the relationships

– among humans (between humans and society),
– between humans and nature (environment) and
– between humans and technology.

ICTs-and-Society research approaches

- Aims, scope and tools of science

- Aims, scope and tools critical for ICTs-and-Society research

Aims, scope and tools of science

– Aims: purpose of scientific enquiry; soc(iet)al function of science: to improve the human condition (relationship theory-practice)

– Scope: domain; object of scientific enquiry (relationship theory-reality)

– Tools: methods of scientific enquiry (relationship theory-empirical studies)

Aims, scope and tools critical for ICTs-and-Society research

Two types of approaches:

– those which do not reflect upon the question of meaningfulness
– those which do

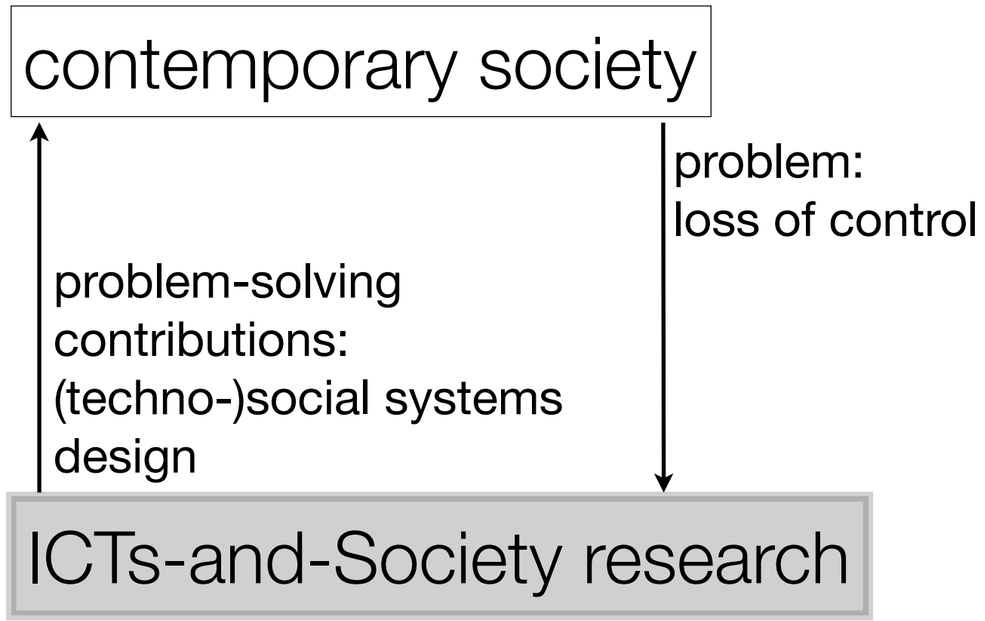
Aims, scope and tools critical for ICTs-and-Society research

	without self-reflection		**based upon self-reflection**
	applied research	**basic research**	**participatory, use-inspired basic research**
aims	any feasible ICT application	I'art pour l'art	ICT assessment and design for a Global Sustainable Information Society
scope	any ICT context		technological and social activators or inhibitors
tools	anything goes		an integrated combination of methods crossing disciplines

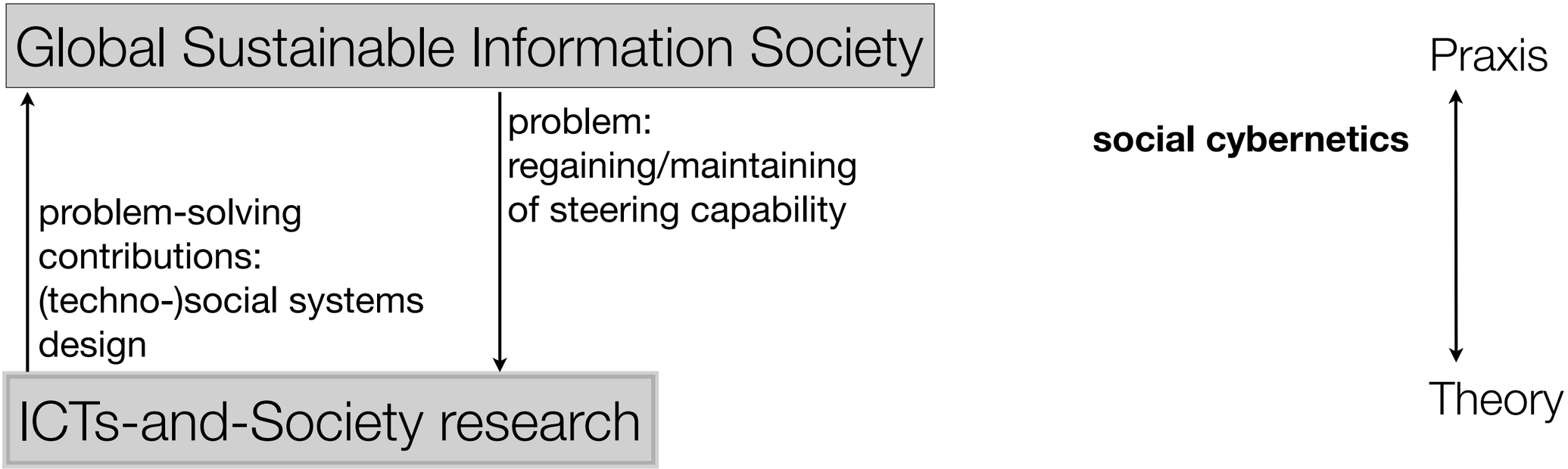
Critical aims

– The design of ICTs (and their soc(iet)al settings) to fit a Global Sustainable Information Society

Critical aims



Critical aims

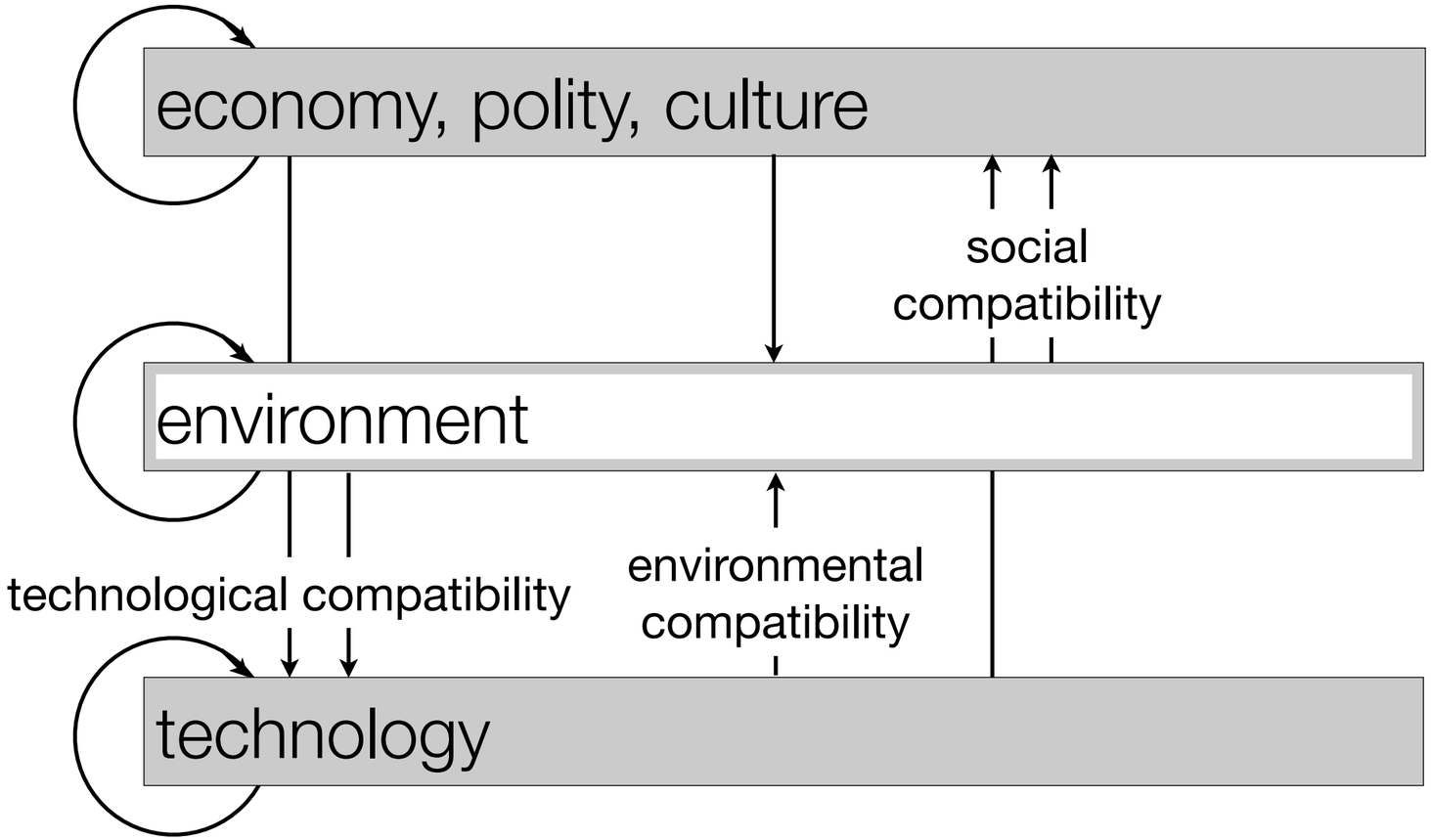


Critical scope

– Activators or inhibitors that condition

– the design of ICTs (and their soc(iet)al settings) to fit a Global Sustainable Information Society

Critical scope



Theory ⟷ Reality

complexity

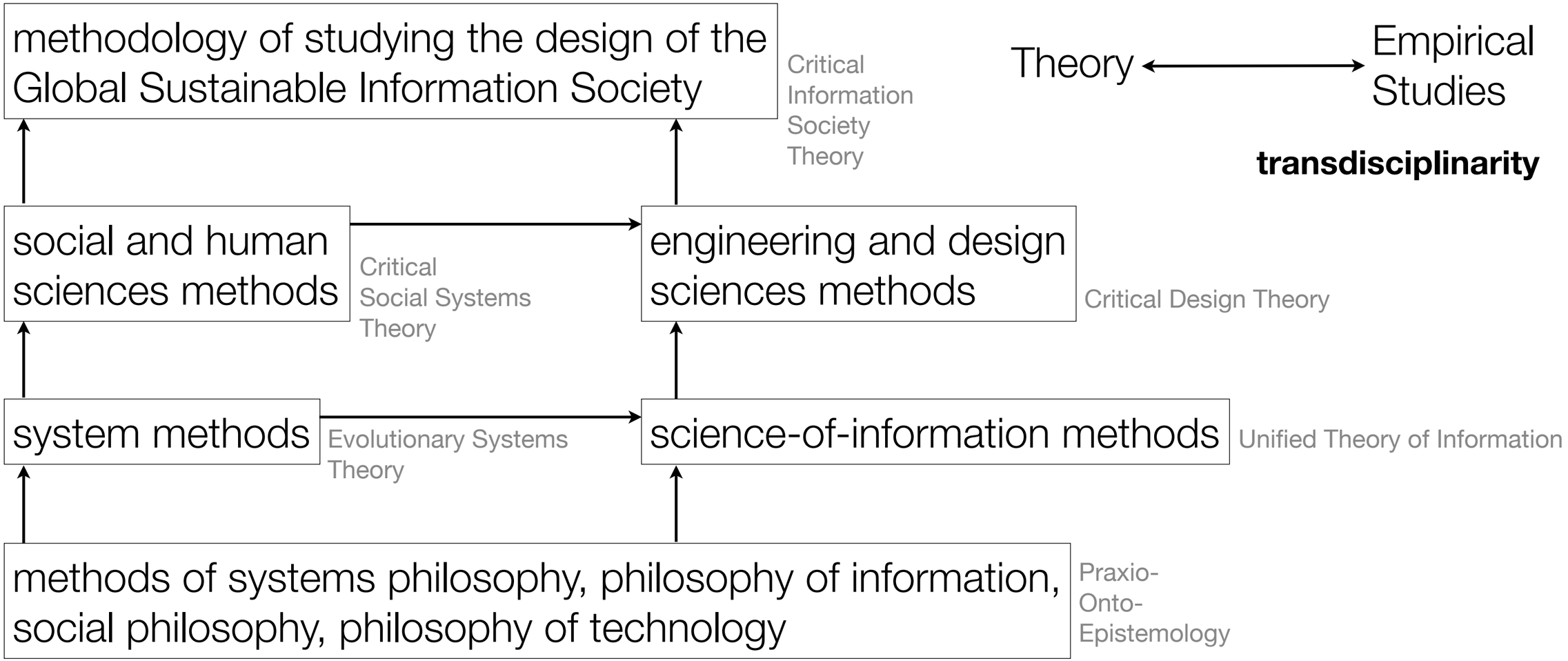
Critical tools

– A transdisciplinary system of philosophically grounded, complexity-science mediated methods of technological and social science methods that deal with, i.e. produce knowledge of, and inform acting upon,

– activators or inhibitors that condition

– the design of ICTs (and their soc(iet)al settings) to fit a Global Sustainable Information Society

Critical tools



Tools for cooperation?

- Community concepts. Community-building theory between eutopianism and dystopianism
- Empirical findings in community-building
- Conclusion

Community concepts

	membership	**communication**
"traditional communities"	no choice	face-to-face
"modern communities"	choice	traversing geo-graphical space
"postmodern communities"	extended choice	computer-mediated

after Willson 2006

Community-building theory according to determinants and values

	eutopianism	**dystopianism**
techno-determinism	networked individualism	fragmentation
social constructivism	virtual communities	instrumental rationality

Community-building theory according to determinants and values

	eutopianism	**dystopianism**	**pro-active vision**
techno-determinism	networked individualism	fragmentation	-
social constructivism	virtual communities	instrumental rationality	-
integrative view	-	-	"communities of action"

Empirical findings in community-building as to determinants

techno-determinism	community technology shapes social networks/social capital
social constructivism	social networks/social capital shape community technology
integrative view	social networks/social capital and community technology shape each other

after Williams/Durrance 2008

Empirical findings in community-building as to values

cognitive function	information management	Matthew principle as wisdom of the crowds?
communicative function	identity management	self-marketing in the attention economy?
cooperative function	relationship management	individual freedom instead of "radical" relationships?

after Schmidt 2008

Conclusion

– There is ambiguous empirical evidence of the role of ICTs in community-building.

– There seems to be a potential of ICTs for supporting cooperation beyond communication and cognition.

– ICTs-and-Society research needs to focus on this potential to help make ICTs meaningful.

– Meaningful ICTs are needed to cope with the global challenges.

¡Muchas gracias por vuestra atención!