

Objective ICT-2013.5.5

Collective awareness Platforms for
sustainability and Social Innovation

Fausto Giunchiglia, Pisa 19/09/2013

The key idea

The objective is to stimulate and support the emergence of innovative ICT based platforms for grassroots Social Innovation, providing *societally, environmentally and economically sustainable approaches and solutions to tackle societal challenges.*

Such collective intelligence platforms will include collective decision-making tools and innovation mechanisms allowing and encouraging individual and community creativity, participation and situational awareness.

The vision is that individuals and groups can more effectively and sustainably react to societal challenges by acting on the basis of a direct extended awareness of problems and possible solutions.

Collective Awareness

Collective awareness. By awareness, we refer to the ability to anticipate phenomena and predict the possible consequences.

Going beyond individual forms of awareness to develop a shared form of awareness across different social groupings and at different scales.

An important question to be addressed is how information generated with different goals, at different levels of abstraction and under different contextual factors can be combined to contribute to incremental creation of distributed awareness at global level.

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Social Innovation

[Matteo Bonifacio]

In a first and intuitive sense, **Social Innovation** could be seen as innovation inspired by the desire to meet pressing social needs which can be neglected by traditional forms of private market provision .

In this sense, **Innovation** refers to the generic capacity to create and implement novel ideas which deliver value. **Social** refers to the kind of value that innovation is expected to deliver: a value that is less concerned with profit and more with issues such as quality of life, social justice and well-being.

... sustainability

Three types of Social Innovation

[Matteo Bonifacio]

The Social Demand Perspective: Approach 1 (or the “Ghetto” View)

A narrow interpretation of ‘social outcome’ views the social dimension as something complementary if not separated from the economic or the business dimension.

The Societal Challenges Perspective: Approach 2

A broader view suggests that in a *sustainable* development perspective, the creation of well-being can be pursued achieving *Grand Challenges*, which are at the same time social and economic

The Systemic Change Perspective: Approach 3

A third view focuses more on the ultimate objective of Social Innovation : a sustainable systemic change to be reached through a process of organisational development and changes in relationships between institutions and stakeholders. The ... outcomes are improvements in the way people live and work. In a sense, the outcome of SI is reshaping society itself, or, said differently, the process dimension becomes also the main outcome.

Simple Societal challenge

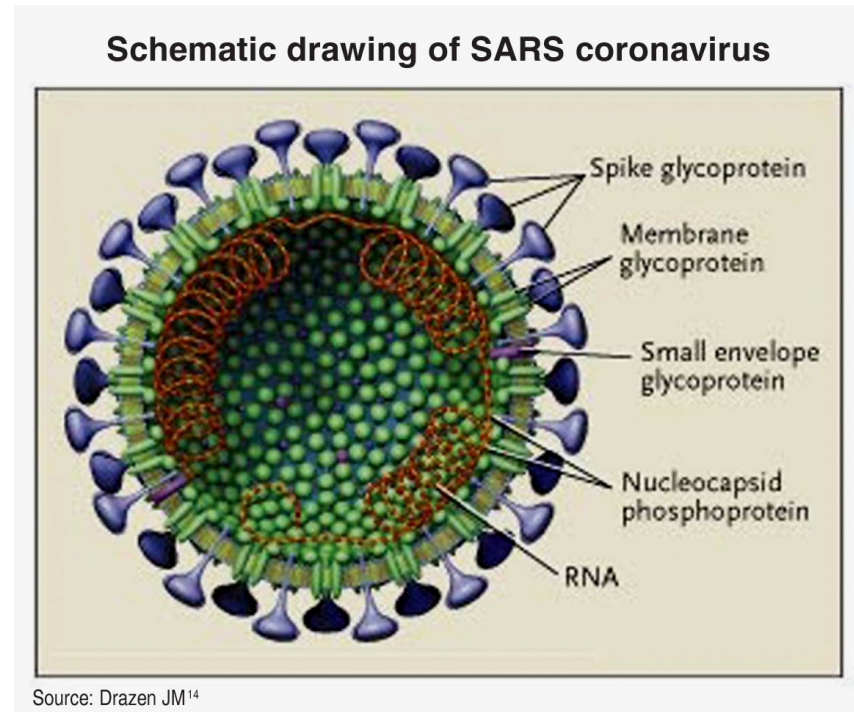
(Social computing, DARPA Balloon Challenge)

Problem specification: Ten red weather balloons will be launched at a specified time in different locations across the USA. Design a computation that finds them all in the shortest time. Prize for the winner \$40,000



A complex Societal challenge (Treating SARS)

- Severity varies by categories and locality
- Deciding when to refer to hospital is key – too late bad for the patient – too early the hospital is flooded.
- Collective awareness can assess different strategies, identify different classes of patient and adapt as the epidemic progresses
- More participants mean more reliable evidence for referral decisions



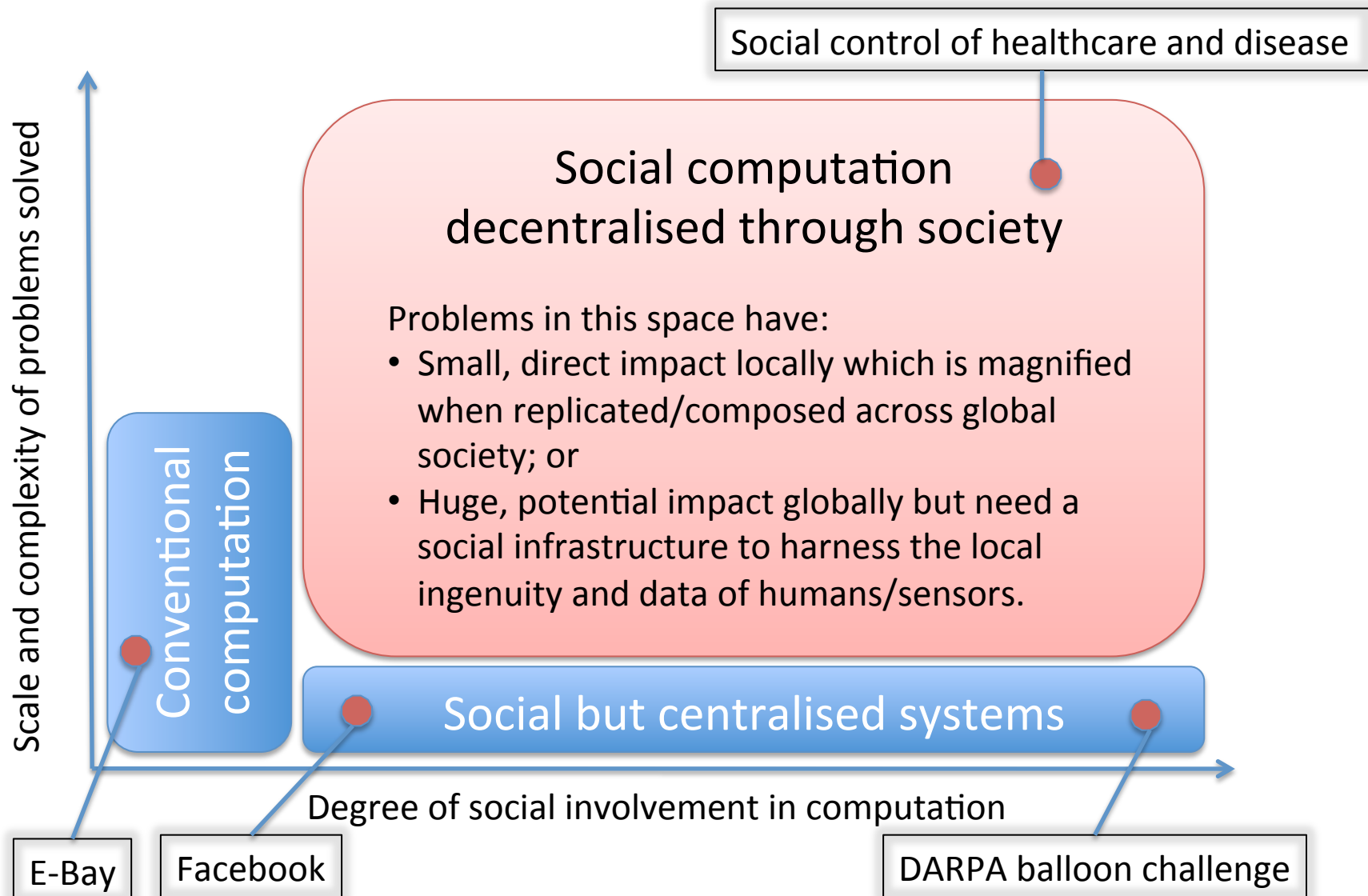
Another complex societal challenge

- 30 million people suffer from rare diseases in Europe.
- There are 8000 rare diseases.
- Only 1900 of these are diagnosable.
- No Member State Health Service offers diagnostic services in all 1900 conditions
- Classic “long tail” problem



Rare Disease Day

Issues of Scale and Decentralisation

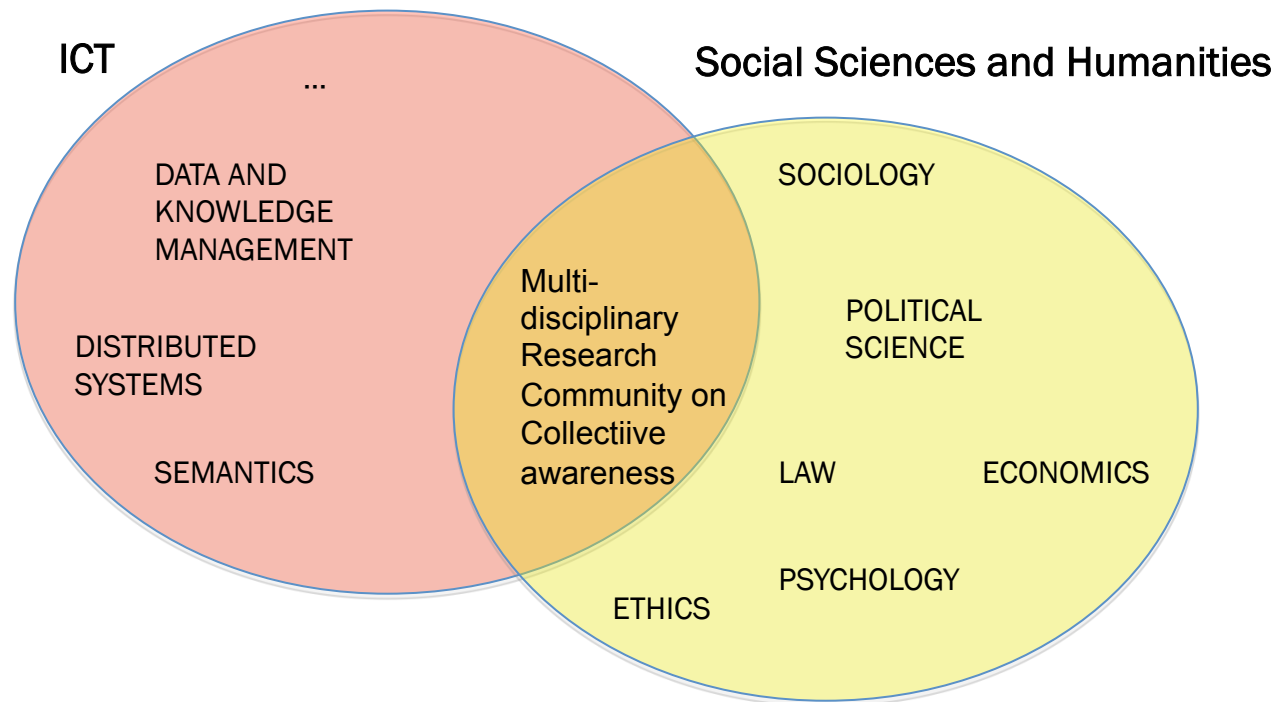


Global Societal Challenges

1. **Improving the quality of life (Health):** by bridging the gap and managing the continuum from well-being to health, aging and inclusion.
2. **Learning, design, innovation and creativity (Education):** Learning will be improved by the enhanced networking and design capabilities
3. **Reconstitution of the public sphere (Communication):** managing the continuum from private to increasingly public data
4. **Establishing more efficient and effective means for production for goods and services (Business):** thanks to integration of steps performed in part by humans, it will be possible to provide new means to create whole new products and markets.
5. **Sustainability:** at the individual and societal level, in terms of resourcing, environmental protection and energy consumption, as it applies to people and world logistics.

The key role of interdisciplinarity

Tackling Collective Awareness requires the contribution of different disciplines and research communities which currently interact weakly, if at all



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Thank you!

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