

“Are we building a better world with ICTs?: Empirically examining this question in the domain of public health in developing countries”

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Point of departure

**A question posed by Professor Geoff Walsham,
Cambridge University to IS researchers:**

**Are we building a better world with ICTs?:
Empirically examining this question in the
domain of public health in developing
countries?**

Key Inspiration

Brian Easlea

Theoretical physicist, social studies of sciences,
turned bird watcher

Died in 2012

*Liberation and the aims of Science: An essay on
the obstacles to the building of a beautiful
world, 1973*

Who is the “we” in the question?

- We are not value free social scientists...
- Engaged in understanding social implications of computers in developing countries
- Working towards steering development efforts in the way we see what is better...based on our values and norms

The impossibility of value free social sciences

Values and goals inform all significant social activity. Without values and without goals, human enterprises, if they can be conceived of starting at all, must inevitably peter out into a wasteland of trivialities. Champions of “value free” enterprises are deceiving themselves. Nowhere, of course, is self-deception greater than in the social sciences. Value free social sciences does not and cannot exist (Easlea)

Shaping societies

For the social scientist, the choice between competing social paradigms is not merely one between different images of the existing social reality but, very explicitly, a choice between mutually exclusively future societies.

...The fundamental choice confronting social scientists is essentially that between commitment to programmes of “social engineering” within the established structures of power and control or commitment to programmes of revolutionary political action with the intention of building societies significantly less exploitative and manipulative than existing ones

Two influential social scientists

Marx and Keynes...very different research-action programmes around capitalism. Marx loathed capitalist society, and Keynes attacked Marx. On Marx's Capital, Keynes said:

How can I accept the doctrine which sets up as its bible, above and beyond criticism, an obsolete textbook which I know not only to be scientifically erroneous but without interest or application to the modern world? It is hard for an educated, decent, intelligent son of Western Europe to find his ideals here, unless he has first suffered some strange and horrid conversion which has changed all his values. (page 155)

Contemporary social scientists

- Amartya Sen who has shaped the manner in which we view development...
- In IS field, Geoff Walsham has made interpretivism possible within an orthodoxy of positivism

Reformulating the question

- Does it assume that the world can only get better?
- Does it draw attention away from the fact that the world cannot become worse?
- Does it not involve a sense of technological determinism?

Easlea: The context of world affairs

How can it be that after more than three hundred years of scientific progress, while over one half of the human race still lacks the basic necessities of life, the advanced industrial nations continue to destroy the environment while consuming so wastefully the earth's finite natural resources?....Why is that of all people, scientists, those people supposedly committed to *rational* thought and action, who pride themselves on being members of an international community of scholars, either stand by powerless or even participate in actions that are – to say the least, the very least – in no way conducive to the building of a world in which people can cooperate together to ensure that each individual is able to live a full and creative human life? (Introduction page xiv)

What are the obstacles that arise?

- Historical, institutional, material conditions
- Parallel to “the distortions to the Habermasian ideal speech situation”
- Not enough to hide the distortions with statements of:
 - “the socio-technical context”
 - “the context is complex”
- Crucial to analyze the material basis

The reformulation

- “What distortions and obstacles are created by the historical, material and institutional conditions, and how these shape our efforts of ICTs creating a better world?”

I believe such a reformulation can:

- Allows possibility of “none” and “adverse” implications
- Allows to think of a “better world” as a form of a normative ideal to strive for
- Important to contextualize the material basis of the question

Multiplicity of meanings around “better”

- Physics and a better world.. Easlea:

“...and of Physics it may well be said that the way to Truth lies through the realm of the beautiful....If indeed the aim of human beings is to build a beautiful world, one giving pleasure and creative joy to its inhabitants, then science must be an integral component of such a quest.....(quoting Schrodinger) the chief and lofty aim of science today, as in every age lies in the fact that it enhances the joy of living” (page 86).

Emphasis on insights and simplicity

Einstein: How can you really have so much faith in your theory, when so many crucial problems remain unsolved?

Heisenberg: If nature leads us to mathematical forms of great simplicity & beauty..that no one has previously encountered, we cannot help thinking that they are true, that they reveal a genuine feature of nature...You may object that by speaking of simplicity and beauty I am introducing aesthetic criteria of truth, and I am strongly attracted by the simplicity and beauty of mathematical schemes which nature presents us.

Dirac:

- It is more important to have beauty in one's equations than to have them fit the experiment...It seems that if one is working from the point of view of getting beauty in one's equations, and one really has a sound insight, one is on a sure line of progress. If there is not complete agreement between the results of one's work and experiment, one should not allow oneself to too discouraged, because the discrepancy may well be due to minor features that are not properly taken into account and that will get cleared up with further developments of theory (page 85).

Social sciences and a better world

John Stuart Mill: disagreed that industrial society had improved the lot of mankind

“the greater part of population remained confined to the same life of drudgery and imprisonment.”

Alternative future built on two conditions of “just institutions” and population growth “under the deliberate guidance of judicious foresight”

Urged socialists to experiment on a moderate scale.

Another view of the better world

Marx and Engels believed capitalism would lead to a universal crisis, which should be welcomed as it would make possible the cultivation of a qualitatively different society, where people could enjoy the benefits of the industrial society based on their needs, but also achieve the intellectual and spiritual diversity which Mill desired.

Mill saw communist society as endangering human freedom, Marx and Engels saw the same as the only means to guarantee human dignity and freedom to all.

They argued better payment for the slave would not either better for the worker their human status and their dignity.

Political action of scientists for a better world

- Galbraith:

“the future of modern society depends on how willingly and effectively the intellectual community in general, and the educational and scientific estate in particular, assume responsibilities for political action and leadership.”

Heilbroner

Capitalist society is producing their own grave diggers, and these were the scientists. While scientists create inexhaustible sources of invention and innovation to ensure economic growth, these conceal long term conflicts between science and capitalism.

Changing nature of political action

- During the cold war, and around the time, huge political statements and actions by scientists, intellectuals, artists
- Flash forward 4 decades, more fierce wars, next to no voice of disagreement from scientists
- A sign of acceptance or lack of care?

What means better for social scientists in ICT for development?

- The capacity to engage with and respect responsible dissent.
- A recognition of the alternative paths that exist towards harmony.
- The importance of simplicity, aesthetics and beauty.
- Engaging in political action around possible misuse of science and technology by politicians.

An empirical example

- ICTs and Public Health
 - Mother and Child Tracking System – State of Himachal Pradesh in Himachal

Some features of the initiative

- Driving motive is of surveillance and control of the health worker.
- The public health programme logic largely lacking.
- India still continues to have the most depressing public health indicators for maternal and child health.
- A huge expensive technological paraphernalia is applied to automate a process, which largely runs effectively based on a paper based reporting system of registers.
- The working condition of the health workers, on the cutting edge of providing care, is largely ignored in these reform efforts.
- Limited benefits achieved, and to the contrary it undermines the other ongoing efforts to strengthen the HMIS.

In this case, my conceptualization of a better world

- Improvement in working condition of the ANM, reducing her work burden.
- Giving her better, more reliable and timely information to be able to identify early high risk pregnancies, malnourished children, and other such conditions, so she could refer them to higher facility for treatment.
- For the ANM to see how her actions helped to bring improvements in the health of individuals
- A more cost-effective and sustainable technological solution

What are the distortions to this better world?

- A vision from the top of a control and surveillance logic.
- The increasing dominance of the mobile phone, being seen as the panacea for solving all kinds of public health problems.
- Global alliances promote the emphasis on the mobile phone.
- A technology provider who sees “more sophisticated solutions” to be better solutions.
- Very limited focus placed on understanding the world of work of the health worker.
- Many commercial interests behind the technological choices made.
- The absence of data protection laws for ordinary citizens, which allows government to store personal information

What are the choices open to me?

- Wait and watch – the initiative may collapse under its own weight.
- Engage in creating more “subversive” and “under the radar” solutions, building alliances with some states who are willing to challenge the centre diktat. For example, creating other local solutions, that can interact and interoperate with the national systems.
- Write about the experience, talk about it, like in this public forum, and publish in relevant outlets.

Summarizing...

- We have a vision for ourselves of a better world.
- While engaged in understanding through research and action the relation between ICT and development efforts, we are consciously aware of distortions, coming from the material basis of the relationships, to the creation of this better world.
- Through our publications and other forms of engagement, we try to engage with trying to address these distortions, given our capacities and constraints.

On the question of whose criteria of a better world - Fanon

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“So, my brothers, how is it that we do not understand that we have better things to do than to follow that same Europe?.. Come, then, comrades, the European game has finally ended; we must find something different. We today can do everything, so long as we do not imitate Europe, so long as we are not obsessed by the desire to catch up with Europe.Yet it is very true that we need a model, and that we want blueprints and examples. For many among us the European model is the most inspiring. We have therefore seen in the preceding pages to what mortifying set-backs such an imitation has led us. European achievements, European techniques and the European style ought no longer to tempt us and to throw us off our balance....Let us decide not to imitate Europe; let us combine our muscles and our brains in a new direction. Let us try to create the whole man, whom Europe has been incapable of bringing to triumphant birth.” (from Conclusions, Wretched of the Earth)

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