People, technologies and trust – Scripts and theories

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Abstract

The role of technologies in the context of care and health is changing rapidly. Challenges relate to (a) the way that people access and use technologies; and (b) the way that care and health service providers employ or deploy technologies for those who may have support needs. This paper takes steps towards identifying theoretical perspectives that help us with the development of a framework for socio-technology theory to underpin our approach to telehealth. Each perspective, albeit different, has relevance at the intersection of technologies, people and services. Six theorists are pointed to, and their work is briefly noted. Six parameters, that will be detailed further in a book, are then listed.

The Search for Theories

Many theories are concerned with people's usage of and relationships with technologies, but very few of them relate to care and health. This author has searched, therefore, for relevant theories at the intersection of (a) technologies; (b) people; and (c) care and health services. Further outcomes of this work will be published (through Palgrave Macmillan) in 2025.

It is argued that, given the pace and nature of technological developments in the health and care sector, a theoretical framework is necessary to anchor our thinking. Such an anchorage will help to ensure the correctness and appropriateness of our understandings and will position us in relation to the users of such technologies.

A Selection of Theorists

The focus is on six theorists (some other 'thinkers' are mentioned), each of whom help point to matters that might be part of a socio-technical theoretical framework for 'telehealth' (i.e. technologies and services accessed by people in relation to their care and health needs). A useful chronological marker in the search is the Second World War - with its demonstration of technology's awful power.

First is Martin Heidegger (German philosopher and Nazi) who asked the question about how technologies 'enframe' us (does things to us). He was concerned with the instrumental role of technologies and their use in the exercise of power. He signalled our need to consider these in the context of governments and politics (Heidegger, 1977).

We can note, around this time, the work of philosophers (mostly Jewish) in the Frankfurt School who moved to the United States when Hitler came to power. Their work carries the umbrella title of 'critical theory' - drawing on the work of Marx to critique people's oppression in the context of the often-authoritarian impact of capitalism. The philosophers, it can be noted, were offended by the brash and vulgar culture of commercialism that was evident in the United States and saw a challenge arising from the expanding bureaucratisation of society (Bottomore, 1984).

In the ensuing period we can point to the contribution of our second and third theorists, Michel Foucault (French philosopher) and Stanley Joel Reiser (American academic). The context for them was one of postwar optimism. Hence some of their attention being given to societal change (including health reforms). Foucault was focused on clinical health (especially clinical settings). He gave us the notion of the 'medical gaze' as testimony to the increasingly intrusive nature of medicine, the treatments invoked, and the power exercised over people's bodies (Foucault, 2003).

Reiser was more rooted in the kind of healthcare systems that we now recognise. He was prescient in seeing technology as both a 'savior and a threat'. In the 1970s, he heralded the computer as an 'eventual replacement for the physician … and (as) an instrument which would soon eliminate the human element in data acquisition, processing and interpretation'. Importantly, he called for policy frameworks (for 'technological medicine') that would 'effectively govern its empire of machines' (Reiser, 1978).

Towards the millennium, we can note the work of Madeleine Akrich on 'scripts'. She saw these as integral to the thinking of technology designers and embodying different belief systems, biases, and practices - and potentially contributing to technological determinism (Akrich, 1994).

Our fourth and fifth theorists are Joan Tronto (American academic) and Deborah Lupton (Australian academic). Tronto has not addressed technologies, but she has provided a backdrop, with her 'moral values' of attentiveness and responsiveness, that can legitimise technology use (Tronto, 2013). Lupton, for the broader context of 'digital health' (rather than telehealth) explored different theoretical approaches – from Foucault to Marx. In so doing she drew our attention to issues of power. But she also pointed to how power is now being increasingly exercised not by physical force but through the gathering, analysis and usage of personal data (Lupton, 2018). Finally, the 'sixth' among our theorists, viz Alexander Peine and Louis Neven (Dutch academics) who have promoted the notion of socio-gerontechnology. They, in part, argued similarly to Lupton (and drawing on Akrich's scripts) by pointing to the 'very deliberate acts' of designers. In focusing on older people, they have highlighted the importance of many issues around design (for technologies and services) in the context of people who are vulnerable (Peine et al, 2021).

Six Parameters

The exploration has drawn on the six theorists above, and careful cognisance has been taken of other contemporary agendas. This has enabled six parameters to be set out that will underpin the socio-technical framework for telehealth to be detailed in the coming book. These are as follows (though liable to some adjustment):

- Human rights – regarding people's equal rights when using telehealth services regardless of personal and systemic factors.
- Power and responsibility – regarding the control of practices to ensure professional and organisational power is appropriately managed.
- Data and measurement – regarding understandings of the relevance and use of networks and how people's personal data are impacted.
- Care and relationships – regarding the meanings and importance of care and relationships in the context of technology or service use.
- Design (technology and services) – regarding care and health technology service designs and how these relate to role and function.
- Environmental sustainability – regarding the sustainability imperative, in common (for all technologies and services) to minimise adverse impact.

Each carries importance. Consideration of them will, it is considered, support responsibility in the future design of technologies and related services.

References

Akrich M (1994) 'The De-scription of Technical Objects' in Bijker W and Law J (Eds) 'Shaping Technology/Building Society', MIT Press, Cambridge pp205-224.

Bottomore T (1984) 'The Frankfurt School' Ellis Horwood Ltd and Tavistock Publications, London.

Foucault M (2003) 'The Birth of the Clinic', Routledge Classics, Abingdon. First published in 1963.

Heidegger M (1977) 'The Question Concerning Technology', Garland Publishing, New York.

Lupton D (2018) 'Digital Health: Critical and Cross-Disciplinary Perspectives', Routledge, London.

Peine A, Marshall BL, Martin W and Neven L (2021) 'Socio-Gerontechnology: Key Themes, Future Agendas' in Peine A, Marshall BL, Martin W and Neven L (Eds) 'Socio-Gerontology: Interdisciplinary Critical Studies of Ageing and Technology', Routledge, Amsterdam. pp1-23.

Reiser SJ (1978) 'Medicine and the Reign of Technology', Cambridge University Press.

Tronto J (2013) 'Caring Democracy: Markets, Equality and Justice', New York University Press.