

**Nelly Oudshoorn: *Telecare Technology and the Transformation of Healthcare*. Basingstoke, UK: Palgrave Macmillan. 2011. 256 pages. ISBN 978-1-4039-9131-7.** <sup>1</sup>

**Jeannette Pols: *Care at a Distance: On the Closeness of Technology*. Amsterdam: Amsterdam University Press. 2012. 204 pages. ISBN 978-9-0896-4397-1.**

### **Engaging with Transformations of Care**

A patient + body weight + webcam + home + computer + health professional + standard + policy: most social science scholars involved in analysis of technology will recognize that this adds up to a socio-technical assemblage of some kind. Those interested in technomedicine might guess that this is the breakdown of the elements of some kind of telemedical arrangement. Telemedicine or telecare – devices and arrangements increasingly used in healthcare for managing patients ‘at a distance’ through information technology – has been a focus of interest for many STS researchers for a number of years. Such STS interest might relate to the way in which these particular assemblages insert the ‘plus signs’ between otherwise distinct phenomena thus introducing a number of interesting hybrids: computers as caring-devices; patients as medical experts; homes as clinics. Hybridity, transgression of physical and epistemic boundaries, and mutability of roles and identities seem to be at the heart of these emerging technological arrangements – something recognized and even promoted by the technologists and biomedical actors engaged in these practices.

The two excellent books on telecare that we review here are written by STS-scholars with longstanding engagements with questions raised in relation to technological and epistemological transformations in healthcare. Nelly Oudshoorn has published extensively on issues around medical technologies and their users, and Jeannette Pols has explored interrelations between practices, ethics, and technologies in care practices. In their present works both have the Netherlands as the primary setting of their ethnographic inquiries into transformations brought about by the introduction of telecare arrangements of various kinds. This shared geographical affiliation may not be coincidental as medical practices in the Netherlands have long striven to incorporate ICTs in medical practice and are a rich source of well-regarded STS-scholarship on medicine, technology, and innovation more broadly.

In this review we first evaluate these books on their own terms, that is, according to the criteria provided by the authors’ ambitions of creating situated, relevant, robust accounts of telecare that intervene by providing “food for thought”. We then take the opportunity to, tentatively, discuss how STS researchers might tackle more deeply embedded roles in innovation processes while they attend to analyzing the broader,

societal changes that telecare is a symptom, product, and vehicle of.

### **Situated Accounts of Telecare**

From the position of engaged spectators, Oudshoorn and Pols both set their minds to sorting things out in a field characterized by on one hand hype and a persistent knowledge deficit on the other. Telecare is central to many contemporary healthcare policies and promises. Projects and prototypes are conceived (and laid to rest) in large numbers, and in the midst of it all, engaged researchers (themselves divided by disparate epistemic commitments) try to find a way to produce knowledge about these emerging technologies and practices and their effects; knowledge that will work as a substantiated, alternative narrative to the hype. Providing an alternative narrative is for both Oudshoorn and Pols a matter of bringing STS into dialogue with deterministic and instrumentalist myths and tales circulating in innovation and healthcare policy circles; to produce “useful” knowledge about a phenomenon that has proven hard to make stable, and with effects that seem to escape the grip of the evaluative methods most commonly applied.

Although sharing this common ambition, Oudshoorn and Pols also have diverging motivations and orientations. Pols frames her engagement as a quest to counter the dichotomous tales of promises and nightmares related to telecare. She does so by questioning the distinction between cold and warm care so often dominating public as well as scholarly discourses on telecare technologies. Care – in variable forms – is accomplished with telecare. By showing how various arrangements achieve different versions of care, Pols seeks to help solve the “knowledge paradox” in telecare by replacing evaluation studies with an ethnographically based “fitting

research.” Where the core object of study for Pols is the slippery concept of ‘care’, Oudshoorn places the technologies, and the transformations in healthcare practices that these afford, at the core of her analysis. Hers is in a sense both a modest and a comprehensive quest to *understand* these transformations, but also more ambitiously, through the unfolding of telecare technologies’ transformative nature, to counter a predominant reductionist view of healthcare and instrumentalist stories of telecare technologies.

### **So How Do the Two Authors Carry Out Their Projects?**

Nelly Oudshoorn tells the story of how telecare technologies transform healthcare through three cases of telecare for heart failure patients. The story moves in a very straightforward manner from an initial text analysis of the expectations – and resistances – attached to the specific technologies articulated on websites and in press releases, brochures, and interviews to an ethnographically based analysis of the practices and viewpoints of the users. Through her firm theoretical grip based on material-semiotics, human geography and a feminist approach to work, we learn how a new profession of telecare workers is established, enacted, and negotiated – shaped by and shaping the physical context and boundaries of care for heart failure patients. With the addition of a phenomenological orientation towards the embodied experience of coping with illness, the readers are further invited into the homes and lives of the patients who have to learn how to be patients and users in a landscape where technology facilitates new tasks, responsibilities and ways of relating to one’s own body. Oudshoorn terms her approach a “technogeography of care” as it actively seeks to take into account the spatial dimensions of the realities and indeed

changes of care practices. This we find to be an important contribution, as much STS research has made extensively use of spatial metaphors, but nevertheless given limited empirical and conceptual attention to what role places and spaces play and how they might change (for exceptions see Schillmeier & Domènech, 2010).

Jeannette Pols takes the reader through a both more nitty-gritty empirical examination and tentative philosophical conceptualization of the (micro-) interactions between users and various telecare technologies. With a focus on the values and epistemologies shaped and enacted through the practices of using monitoring and communication technologies in chronic care, Pols plays her way through situations and “close-ups” in which notions of good care are both transformed and showcased by the entrance of technology. We learn about how terminally ill cancer patients are cared for - and care for themselves and their care workers - through a little white box, and how COPD patients care for each other and learn how to care for themselves through webcams which facilitates the production of collective, practical knowledge on how to live with their disease (“know-now” as Pols terms it). And we (try to) follow Pols on a zig-zag tour through sites and practices where nurses in the face of new means of delivering care for their patients tinker with technologies and values. Along the way Pols explores the relationship between values, facts, and practices - convincingly questioning the dichotomy between cold and warm care and proposing the concept of “fitting care” as a tool to overcome such distinctions and emphasize the situated, relational, and contingent nature of “good care”.

### Fitting Research for Innovation?

Where Oudshoorn and Pols set out with resonating motivations and move through stylistically different analyses with mutually echoing insights, they arrive at their conclusions and leave their readers with very different parting shots. And this is where we (as reviewers) find, in a backwards manner, our point of departure for a comparative critique centered on the questions “what kind of knowledge is this?” and “what can it do?”

Pols ends by promoting her “uncontrolled field studies” as “fitting research” - research “that actually delivers useful knowledge on novel telecare practices, that engages the parties concerned and their practical knowledge” and thus may work as “a policy developing method for innovation in care” (Pols, s.136). Demonstrating the shortcomings of conventional evaluative research, she argues for an engaged, yet unobstructive, approach in which researchers recognize the normativity of their own work and seeks to deploy this to provide “food for thought”. We find this an honest, daring ambition, yet also somewhat unclear, if not paradoxical, in its insistence on both intervention and “minimum disruption”. The tension between closeness and distance leaves us with the feeling that something still does not quite fit.

The conclusions of Oudshoorn *fit* to her ambition - precisely summing up the points made in the analysis, she convinces us that she has delivered a blow to reductionist and deterministic accounts of healthcare and telecare technologies. Let the message travel on. But how? While Oudshoorn argues that her technogeographical approach is relevant to designers and policy makers “because it makes us sensitive to some crucial issues concerning the future development of telecare technologies” (p. 204-205), it remains unclear how exactly ‘technogeography’ can be used “not only as

heuristic tool but also to intervene critically” if the researcher remain somewhat detached.

Can we trust that ethnographic knowledge, however rich, provoking, and relevant, will find its own way into the repertoires of designers and decision makers? Neither Pols nor Oudshoorn tackle these questions head on. To finish up our review of these two otherwise exemplary, inspiring and highly important contributions we wish to briefly discuss this challenge of fitting or not fitting STS research for the ubiquitous innovation agenda. The discussion of how STS researchers can or should engage in the practices of science and technology that they study has been around for a while (Zuiderent-Jerak & Jensen, 2007) but it seems that we are still struggling with finding an adequate vocabulary for modes of engaging and for our contributions. In the “get real” discussions on the normative responsibility of STS research, positions have ranged from one saying that we always already are engaged and intervene in the practices and technologies we study merely by ‘doing STS,’ to one arguing that we should engage very actively in co-design experiments in which STS is practiced as a hands-on innovation business with ‘solutions’ as deliverables. Both authors discussed here stay distanced in the sense that they do not seem to have engaged directly in questions of how the devices of telecare should or could be (re)designed, or how the work with or around them should be organized. Encouraging users to tinker with care technology is proposed by Pols as a task for the ethnographer, but no concrete examples of such engagement between ethnographer and informant is shown in the stories told, and to the extent that interactions between informants, ethnographers and designers or policy makers might have taken place, accounts of these are likewise largely absent in the

texts. Though this may not be the intention, both Oudshoorn and Pols seem in line with the position that textual contributions, accounts of “thinking differently about telecare” intervenes plenty.

Those STS-researchers who study telecare “by invitation” and as part of the increasing number of research collaborations funded under innovation headings are expected to fill in a more directly intervening and facilitating role will find little advice on how to manage such a role. For that they will have to look to other parts of STS – primarily identified with fields such as Participatory Design, Design Anthropology and Action Research – where partnering in design or implementation is done and debated. Maybe Pols’ notion of ‘unleashing’ should also go for the STS researchers themselves – not just for users and devices. Finding the enmeshing in the politics and practices of telecare innovation challenging and inspiring ourselves, we would welcome more contributions that could stand on the firm basis of the work of these two insightful scholars and from here continue the development of a vocabulary fitted for engaging assertively, critically and for the betterment of society and healthcare.

## References

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## Note

- 1 The book was awarded with the BSA Foundation for the Sociology of Health & Illness Book Prize 2012.

Karen Dam Nielsen  
Centre for Medical Science and Technology  
Studies  
Department of Public Health  
University of Copenhagen  
kadn@sund.ku.dk

Henriette Langstrup  
Centre for Medical Science and Technology  
Studies  
Department of Public Health  
University of Copenhagen  
helan@sund.ku.dk