



MY THROAT "TICKLES" BODIES IN AFFECTIVE DISCOURSE IN PATIENT-DOCTOR EMAIL CONSULTATIONS

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ABSTRACT

THIS ARTICLE INVESTIGATES THE MULTIPLE WAYS IN WHICH BODIES PRESENT THEMSELVES IN EMAIL CONSULTATIONS (ECONS) BETWEEN PATIENTS AND GENERAL PRACTITIONERS (GPs). THE DATA STEM FROM A LARGER QUALITATIVE RESEARCH PROJECT ON DIGITAL CONSULTATION IN DENMARK, FOCUSING ON THE 65+ AGE GROUP. OUR ANALYSIS DEPARTS FROM A SOCIOTECHNICAL PERSPECTIVE BY CONSIDERING THE INTRODUCTION OF THE TECHNOLOGY IN QUESTION – THE ECON BETWEEN THE PATIENT AND GP – AS CREATING NEW CHALLENGES AND OPPORTUNITIES FOR PARTICIPATION IN AND THE EXCHANGE OF COMMUNICATION WITHIN THIS RELATIONSHIP. OUR ANALYSIS LEADS TO A SIX-CATEGORY TYPOLOGY OF BODIES IN AFFECTIVE DISCOURSE IN ECONS: SENSATIONS, EMOTIONS, COUNTINGS, MEDICATION, VISUALS AND MOVEMENTS. THE ANALYSIS BRINGS TOGETHER A THEORETICAL PERSPECTIVE, THE MUTUAL SHAPINGS OF THE SOCIAL AND TECHNOLOGICAL, WITH AN AFFECTIVE PRACTICE-BASED APPROACH. THE ECON PRODUCES WHAT WE CALL AN “UNRULY DATA VITALITY”, AS THE DATA ARE ACCESSED AND RECOMBINED IN THE LARGER DIGITAL ECOSYSTEM OF THE DANISH PRIMARY CARE SECTOR.

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Introduction

In the primary care sector, conventional and well-known types of consultation (face-to-face in the clinic, telephone and home visit) are being expanded with a new kind of digital consultation, namely the e-consultation. The e-consultation, also named email consultation or econ, was introduced in Denmark at the beginning of the 1990s, when general practitioners (GPs) first started emailing their patients. In 2009, it became mandatory for GPs to provide e-consultations to their patients in order to "support efficiency and quality through the digitisation of health care" (PLO, 2010), primarily for prescriptions renewal, communication of test results and short questions. The Danish Medical Association defines e-consultation as "simple, concrete non-urgent queries" (PLO, 2016). Thus, the association's expectations regarding the content of e-consultations involve short, simple questions that the GP should be able to answer with "yes" or "no". Likewise, non-urgent queries or those not characterised by acute situations should be presented by econs. The patient is promised an answer to all queries within five working days at the latest, and GPs can refer the patient for a physical consultation if they find the subject matter overly complicated to be addressed by way of an econ.

This new type of consultation means that, for the first time, it is possible for patients to initiate and consult GPs asynchronously (without both parties being simultaneously present) and untriaged (without having to go through a gatekeeping function in the shape of a medical secretary by phone call or in a waiting room). The patient has access to the digital consultation and can write 24/7 to the GP from the GP's webpage or through the "My doctor" app. The number of econs has grown immensely during the last ten years. In 2019, econs constituted 21 percent of all general practice consultations, corresponding to approximately seven million consultations (PLO, 2020). This situation raises new theoretical and analytical questions about both the content and form of the econ. We are situated within the developing field of human health or "health humanities" (Crawford et al., 2015; Stage, 2017, p. 28), which differs from the "medical humanities" tradition (Shapiro et al., 2009). Health humanities does not take medicine and medical education as its point of departure and includes and extrapolates media and cultural studies. Using a health humanities perspective, we explore some of the overlapping fields between health and humanistic research agendas.

In their integrative literature review on the advantages and disadvantages of econs, Fage-Butler and Jensen (2015) point to the potential for more detailed information exchange between patients and GPs. We depart from this study and go on to explore how the opportunity for more detailed information might take shape in econs when we focus on descriptions and traces of bodies and emotions. Econs are private communications between patients and GPs, contrary to public narratives about illness on social media, such as online fora and Facebook groups (see Hansson & Wihlborg, 2015; Lagerkvist, 2016; Mol, 2008; Stage & Hougaard, 2018; Ytre-Arne, 2016). Our analysis investigates bodies and bodily traces in econs. We explore the multiple ways through which bodies present themselves in the econ and consider how we can relate to this through the lens of participation and in relation to the broader datafication of the patient. Focusing on participation, we discuss how econs transform some of the properties of patienthood. Combining these insights with a discussion of econs as the datafication of patienthood, this article contributes to the growing field of health humanities.

The article is structured as follows: After this introduction, we frame our sociotechnical theoretical position and account for the central concepts applied in our affective practice approach to the written language in the econ. Subsequently, we present our analysis based on data material from econs, including a proposal of a six-category typology of bodies in affective discourse. This is then followed by a discussion of our findings, after which the conclusion summarises the most important analytical points.

Theoretical framework

The econ as a digital archive for bodies

Our analysis draws on sociotechnical perspectives (Latour, 1999; Lupton, 2013; Mol, 2008), and we consider the introduction of the technology in question – the patient–GP econ – not as a deterministic factor shaping the patient–doctor relationship but as having specific affordances (Hutchby, 2001, p. 26) that create new challenges and opportunities for the exchange of communication within this relationship. In this article, we focus on the econ as an intimate technology. Medical technologies

are, according to Waldby (1997, p. 228), particularly intimate, in that, "(...) our own bodies, are the material on which they operate". We suggest viewing the econ as an intimate medical technology, as it assists in the envisioning and treatment of patient bodies. Screens and software are ever-present frames through which bodies are presented and understood in medical practice today, as patients' bodies are digitised (Lupton, 2013) and datafied (Petersen et al., 2019; Smith & Vonthehoff, 2017).

Employing the idea of the intimate technology frames the body not as a closed biological system but in the context of its openness and connectedness to technology. In the works of Clough (2008, p. 2) and Stage (2017, pp. 19-20), the concept of the "biomediated body," a post-biological body, is defined by its openness and changeability, whereby (bodily) changes and transgressions can be located not only in the individual body but also in its attachments to non-biological entities, e.g. digital technologies and pharmaceuticals. The notion of the post-biological body is productive, as it enables us to grasp the body as an "assemblage" (Delanda, 2006), configured via the encounters of human bodies, knowledges, discourses, and materialities (Marcus & Saka, 2006), and explore how patient and GP bodies become "attuned" (Massumi, 2009; Reestorff & Stage, 2018) to one another through written consultation. The econ attunes bodies and, thus, the relations between the bodies in different ways. One way to try to understand the affective potentials of digital technologies is to investigate the ways in which the medium and its content attune bodies and the relational experience – the "we-experience" (Stern, 2002/1977) – between the patient and GP.

In the process of what has been coined "the mediatization of health" (Christensen, 2016; see also Hjarvard, 2008), digitisation and digital technologies have become what Bolter (1989), in his discussions about the computer, called a "defining technology" for medical models of the patient body. As such, digital technology provides both the tool through which the medical body is envisaged and the "primary metaphor" through which the organisation of the patient body is conceived: The patient's body is the object of the technology at the same time as being materially and conceptually assimilated to the technology (Waldby, 1997, p. 232). In our specific case, we zoom in on the patient-GP econ. Here, the patient's body becomes that which is worked over in the image of the econ, including its entire range of capacities and limitations. As an intimate medical technology, we understand the econ not simply as a tool but also as a "technology of power" (Foucault, 1979), working towards a (re)organisation of the materiality of the body as a digital archive – which becomes manageable for social organisation. In our empirical material, we investigate bodies and traces of bodies in the written language in econs. We use the term "trace" in a Latourian sense, where it designates the scientific abstraction that acts as a "surrogate" summing up a material phenomenon in a recognisable way (1990, p. 41).

Locating econ bodies in affective discourses

In exploring econs as digital archives for bodies, we point to how sensations such as pain and discomfort, emotions such as worry and relief, colours of substances, bodily noises and movements are being made present and communicated. Describing the sensations felt involves a process of the patient putting into words what they are sensing and then typing this into the econ. This written meaning making (Wetherell, 2012) of sensations affords an opportunity for the patients to reflect on what words are better suited to describe the sensations(s) experienced, an opportunity which may create more insight into the patient's condition (as argued by a narrative medicine approach, see Charon, 2006). However, the process of producing a written account will be a challenge for some patients, presented by having to sufficiently master the technology (Norman & Skinner, 2006), being forced to spell and, finally, for some, having to articulate how one feels. For some patients, the obstacles connected to gaining and using vocabulary relating to pain and the like will mean a preference for the face-to-face consultation at the clinic. We employ Stage and Hougaard's (2018, p. 21) understanding of language as "abstract representations of physical and cognitive processes". Placing themselves within the affect studies tradition, Stage and Hougaard question the productivity of maintaining the language vs. affect dichotomy (or the discourse/intensity or cognition/body dichotomies), pertinent in much thinking within the "first wave" of affect theory (see Knudsen & Stage 2012, 2015). This first wave involved "a return to bodily matter" (Clough, 2008, p. 1) and was aimed at moving beyond poststructuralist analyses of the representational category, e.g. narrative and discourse analyses. Affect was approached by influential thinkers, such as Clough (2008) and Massumi (2002), as non-representational, pre-individual and precognitive. In the "second wave" of affect studies, scholars, such as Ahmed (2004), Butler (2009), Blackman (2012) and Wetherell (2012), have approached affect as (also) being part of and expressed

in our everyday language and discourses. Inspired by this line of thinking and Stage and Hougaard's (2018) approach to affective language, we work towards applying what Wetherell (2012) deems an "affective practice" approach (2012, p. 52), where we are less interested in specifying the relations between affect and discourse and more curious about investigating "the range and entire patterning of affective assemblages operating in important scenes in everyday life along with their social consequences and entailments" (p. 52). In the Danish context, we see the econ as exactly that – part of the scene in patients' everyday lives.

Methods and ethical concern

Our data stem from a larger qualitative research project on digital consultation, including five subprojects focusing on a range of issues, such as technology, content and relations. The project focuses on the 65+ age group, as statistics show that they participate in econs with the highest frequency compared to other patient age groups (Statistics Denmark). The econs were collected over a period of one year 2018-2019 through an open call, passed on orally, in our professional network, grounded in the area of human health. Two medical centres responded positively and asked their patients, born in 1954 or earlier, whether they would like to participate, resulting in a first round of 37 email consultations consisting of one or several exchanges. A second round of data collection was agreed, and altogether, 29 additional econs were collected. In addition, our data include interviews with the involved patients and GPs. This material serves as useful background knowledge, especially about the reasoning behind the content. The patients and GPs all signed informed consent agreements, and the content has been pseudonymised. In the Danish health system, the econ is part of the patient's health record and is classified as person-related sensitive data. Moreover, the project is registered with the Danish Data Protection Agency and approved by the Institutional Review Board of the University of Southern Denmark, the Research and Innovation Organization (RIO). All the examples used in this article have been translated from Danish to English, including typos/misspellings, extra spaces between words, punctuation use, etc. For more information on the methodological approaches of the project, see Laursen et al. (forthcoming).

For the analysis, the second author inductively read through all the data in order to list relevant examples of bodily representations (Charmaz, 2014). Thereafter, we both went through this list to see if certain patterns emerged around bodily representations. We discussed our first close reading and brainstormed about the concrete formulations in the econs. We then classified the findings according to the patterns and discussed the way the categories potentially overlapped.

A typology of bodies in affective discourse in econs

In the following paragraphs, we present and discuss the different bodies we encountered in our data, which consisted of econs written mostly by patients to their GP (except Examples 11-12, which were from GP to patient). The typology approaches the econ in the messy grey zone between sensation and cognition and calls for sensitivity towards the multiple ways through which bodies manifest themselves through different forms of affective language. As with any other technology, the econ is "never quite tamed" (Mol, 2009, p. 1757), and we explore its unruliness through a combination of benefits and barriers to patient participation. This typology illustrates some of the ways in which the econ functions as a *vital* digital archive. As an archive, the econ is vital (Lupton, 2016b) in the way in which it affects the life of the patient, as it becomes part of the patient's larger data ecology. With this concept, Lupton draws attention to data, e.g. self-trackings, as stemming directly from bodies and potentially affecting our life opportunities (a point we return to later). Thus, data are as vital as the bodies generating them. Data vitality concerns issues of "how we are living with and by our data" (p. 709), and we suggest that the data in the econ – which take the shape of written, cognitively processed communication, *not* as measurements *directly* from the body – be viewed as lively data.

Based on our findings, we produced a six-category typology of "bodies in affective discourse" (see Table A):

Category	Description	Example
Sensations	Descriptions of bodily sensations	It hurts
Emotions	Explicit descriptions of emotions and the emotive use of interjections	I am worried no signs of cancer "pheww"
Countings	Use of measurements	PSA gone up from <0.01 to <0.03
Medication	The mentioning of medication and/or pharmaceuticals	The "Kanzoprasol" is not working
Visuals	Descriptions of what can be seen: colour, size, structure, location	The mucus is clear
Movements	Traces of the typing body's movements	Hello Merete. need a ew prescription

Table A Typology of bodies in affective discourse in econs.

The categories are not mutually exclusive, and a single econ will more often than not mobilise more than one category and, thus, present a patient body as being, e.g. counted, sensed and medicated. Therefore, the examples are to be thought of as "ideal types" in a Weberian sense, serving as clear illustrations of the category in question. With the typology, we do not claim to have located all the ways in which the econ embodies the patient. We have no doubt that a variety of other embodiments exists.

Sensations

In this category, we found patients' descriptions of bodily sensations and intensities: pain, discomfort, irritation, etc. These descriptions varied, of course, and could be lengthier and more explicit or fuzzier and more open. In our empirical material, however, many of the articulations of pain were not elaborate and lengthy. They were brief, and sentences such as "it hurts a lot" were commonplace. The different descriptions and presentations of pain outlined different scenarios for the GP to interpret and act upon.

In Example 1, the patient describes his discomfort with a specific type of medication. He first reminds the GP about his situation (also take Ramipril 1/2 tablet daily) and then presents his discomfort (it irritates my throat "tickles"), before presenting a possible solution (Can I have a different type or can I try to do without it?). We argue that the use of words such as "tickles" to describe the feeling of discomfort by the patient represents a pattern of sensitive description of bodily intensity: sensations. Sometimes, these descriptions border on purely phonetic or sound-imitative words, such as "tickles" in Example 1 (or as we later show "pheww", Example 4). Articulating phonetic description of bodily sensations is a strategy known from other kinds of digital communication exchange, such as chat and text messaging (Grønning, 2016; Hougaard, 2014).

Example 1

Also take Ramipril 1/2 tablet daily - I have some minor problems with this - it irritates my throat "tickles". Can I have a different type or can I try to do without it?

In the following example, we suggest that pain can also be articulated indexically, in this case, through a richness of information and detail.

Example 2

mWas a bit worried after painful Friday night and pain Saturday. Not in bladder but diaphragm pulling towards the side. A visit to the medical emergency service was the ongoing treatment recommended continued. Aspirin should fix the pain - which it also did. My worry is here Sunday that it is day 4 without stools and with lost appetite.

Example 2 involves a description of pain like a "pulling" sensation towards the side and located in the diaphragm (not in the bladder) and the worry this causes. It describes a complex scenario entailing loss of appetite, constipation, visit to the medical emergency service, pain – as well as treatment hereof (with aspirin) – over several days and, finally, the articulation of the worry engendered by these symptoms. We are not being told in detail how it hurts or how badly, just that the patient is experiencing a "pulling" sensation. Regarding the articulation of pain, Biro (2011) writes: "Despite its overwhelming presence, pain has the elusive quality of an absence, an absence not only of words to describe it (that is, a linguistic absence) but also of ways to think about it (a conceptual one)" (p. 15). In Example 2, we suggest that the richness of the detail is key, as it can be grasped as an index of the pain felt, a sign pointing back to the affected body. Elaborating on the indexical connection between the sign and the one creating the sign (the affected body), Stage and Hougaard (2018) draw on Massumi's concept of "resonation": "The signs are produced by an affectively involved body trying to convert or translate the affects into language, and, since the body is battling to understand what is happening, the language is battling too" (p. 67). In this case, the listing of events, medication and effects thereof, bodily states and sensations pile together to compose an econ wherein pain and worry leak indexically from the sheer detail therein. This leaking, like the verbalisation of pain and symptoms, affords attunement between the patient and GP.

Emotions

This category covered *explicit* descriptions of emotions and the emotive use of interjections – verbal expressions in writing – in the econ. Emotions were also expressed in a variety of implicit or less implicit ways in the econ (e.g. indexically through detail richness, as in Example 2, or through movements, as in Examples 9–11); therefore, in this category, we focused on explicit emotional explication and interjections.

Example 3

Dear Hanne. I have a headache and am exceptionally tired. I am experiencing a little weight on the chest. It worries me. It has been going on for some time. I would like to book an appointment.

We could not tell whether the patient was worried about the feeling of weight on the chest alone or in combination with tiredness and headache. What is evident is that this female patient expressed anxiety because of bodily discomfort/pain and wanted to book an appointment. In this econ, therefore, we encounter both bodily pain and the mental distress hereto. Boddice (2014) states that any dualistic notion of pain as being either bodily or emotional is a myth and that pain as a physical and mental phenomenon interweaves the cultural as well as the biological.

Example 4

No signs of cancer "pheww"

In some cases, test results and information about one's health situation evoke a feeling of relief, as shown in Example 4. The patient is worried about a process of cancer diagnosis. Once it becomes clear that the response is negative, he expresses relief by means of an interjection (pheww). Variations of the same word – such as "Phew. That's good, Dagmar" and "phewwww I am afraid" – appear in other examples to mean relief.

Interjections can be either "primary"/*emotional* and take the shape of more spontaneous outbursts or "secondary"/*emotive* and perform a more intentional act directed strategically at the other in order to, e.g. persuade (Stange, 2016). Example 4 demonstrates the emotional outburst of relief, an outpouring of emotion. The "pheww" relates in an indexical way to the body,

a "(...) connection between the bodily felt experience that triggered the sign (the interjection) and the physical production of the sign" (Stage & Hougaard, 2018, p. 65).

Though econs are often restricted to 4–500 characters and come with the label "should be used for short, simple questions only", as stated in the introductory paragraph, our empirical material bears witness that this is not always the case. Econs are also used for communicating affective registers connected to illness. Mentions and descriptions of feelings, such as sadness, worry or stress, are not easily accommodated within the econ's ideal of the use of "simple" questions only. Moreover, Assing Hvidt et al. (2020) point out that GPs generally experience the econ as unfit for communication about socio-emotional and sensitive matters. As such, we can point to a divergence between patients' uses of the econ and GPs' wishes and visions for the econ in general. The econ presents an opportunity for the patient to engage the GP in sensitive or difficult issues without being face-to-face (see also McGeedy et al., 2008). The asynchronicity of place afforded by the econ potentially reduces the social constraints of the patient's role (Assing Hvidt et al., 2020; Grønning et al., 2020; White et al., 2004).

Countings

In this category, the patient body unfolds through concrete measurements of, e.g. blood pressure and trackings and in relation to numbers, e.g. the number of trips to the toilet during the night or the number of days/months a condition has lasted. The measured patient body thus yields a response from the GP on the grounds of the measurements and countings being communicated in the econ.

Example 5

Hi Annel'm sitting with my Laboratory results of my latest blood samples and have som questions: PSA¹ has gone up from <0,01 til <0,03, it is still low with %wise big increase, should something be done about this? Creatinine² is on 106 gone up from 91, should something be done about this, I read it is in scope for medical examination. eGFR³ = 64 gone down from 76. bestre-gads Bent Sørensen

The measurements (PSA, creatinine and eGFR) are all results from a blood sample analysis. The GP's expertise is being requested here, with the aim of interpreting these measurements. This patient body lends itself to medical examinations and biomedical discourse. In this way, we can see it as a disciplined body, understanding discipline in the Foucauldian (1979) sense as a technique for the arranging and biopolitical governing of bodies in need of control (p. 54). The disciplined, measured body exhibits a will to be managed by the technologies, discourses and techniques offered within new forms of biopolitics and governmentalisation, which, according to Rose (2006), favour active, effective self-monitoring and a spirit of entrepreneurialism and is championed by ideals of the "digitally engaged patient" (Lupton, 2013) or the "participatory citizen-patient" (Mol, 2008). The measured body – conceived through the rationality connected to technoscientific knowledge and "neutral" numeric values – is seemingly in control, acting rationally like a citizen (not like a patient) (Mol, 2008). The assembling of the measured body and the econ affords the opportunity for the patient to rationalise an otherwise unruly body and communicate to the GP the precise numbers stipulated in, e.g. the sample results. The econ – assembled with other (digital) technologies used to measure the patient body – can thus be seen as providing the patient with a sense of agency through numbers, thereby creating a space for patient agenda-setting in the medical encounter (see also Fage-Butler & Jensen, 2015, p. 125).

Medication

This category of econ bodies is characterised by the fusion of the patient body with medicine and/or pharmaceuticals. In this category, we found descriptions and questions relating to the sometimes absent effects or side effects of medicine on the body and/or psyche. The medical advice being sought was the GP's expert knowledge about medicine intake and its potential side effects.

Example 6

Suspect that the new medication "amlopidine Sandoz 5mg" for blood pressure causes joint pain have experienced a lot of pain in one knee - tried with the Voltaren but it doesn't help.

Have taken two tablets of Centyl every day "duretic" for a period but it does not help still have swollen feet and also have a feeling that my legs are swelling up. Should I perhaps try something else?

In this case, there is "a lot of pain" in the knee. The patient suspects that this might be a side effect of the medicine "amlopidin Sandoz 5mg", which she recently started taking because of high blood pressure. Because of the pain in the knee, Voltaren (spelled with a typo as "Voltaren") has been tested, albeit without effect. Moreover, the patient expresses that she has, over a period, taken two Centyl tablets everyday "duretic" (typo for "diuretic"), which also had no effect and left her with swollen feet and legs. The body in this econ is medicated, swollen, in pain and has high blood pressure. The question posed at the end of the econ is one seeking advice to better the situation, e.g. a change of dosage, medicine or perhaps other (non-medical) solutions. The medicated body also points to the patient as a consumer who is choosing between drugs and manufacturers. We know from the interview with this female patient that the word "duretic" was used after she had read it on the packaging. We note that this medical language as well as the names of the drugs, Amlopidin Sandoz and Centyl, are part of the constitution of this patient body. The econ enables a body to introduce itself to the GP through a listing of the medicine used or perhaps that which will be used – the product names, names of manufacturers (Sandoz), the reference to dosage (mg) and through quotations from, e.g. the patient information leaflet ("duretic"/diuretic).

Visuals

In this category, the body is being made present through descriptions of colours, textures or surfaces and substances. Adjectives describing bodies and the issues requiring consultation are used to invoke an image of the bodily condition. A smaller number of clinics offers patients the opportunity to attach pictures to the written econ, which, to a large extent, renders detailed descriptions superfluous. At the moment, however, even though attaching pictures was an option in the systems used, in most cases, the GPs chose not to make it available to patients. The patient basically communicated what they could see ("clear" mucus or "brown" spots) and what they assumed to be of importance (e.g. amount, substance, location). In relation to this category, we find the question of data vitality or, as Lupton (2016) frames it "lively data", fruitful. The concept of lively data refers to data stemming directly from bodies (e.g. tracked data) to the social life of the data, which are circulated and recombined in the digital data ecology, as well as how (our own) data can affect our life opportunities.

Example 7

Hi Jytte.

After my pneumonia I have formes good deal of mucus, (clear), it needs to be coughed up. It is during daytime only. Should we wait and see how this develops? Best regards - Peter

Example 8

I would now like to have the brown spots/warts, which I have between and under my breasts scraped/cut off, as well as those on my throat. Would you like to see the extent before we make an appointment for removal or can I make an appointment and how much time will you need.

In Example 7, the mucus is described as being "(clear)" in appearance, that there is some struggle in coughing it up ("needs to be coughed up") and that this is an issue only during daytime. This description calls on the GP not only to envision the type of mucus (and, thus, the condition) in question, but also invites imaginings of the sensation of having this mucus in the throat. The feeling of having mucus that needs to be "coughed up" is a common bodily experience. For some, simply reading about it will channel the need to clear the throat.

In Example 8, no verb has been used in relation to the description of the brown spots/warts. The patient is seeking to have these spots/warts either cut or scraped, which provides the GP with the knowledge that they are textured. In both examples above, we see how adjectives ("clear" and "brown") play a role in painting a picture of the issues in question. The traces of bodily matter are stored in the digital archive of the econ as "lively data" (Lupton, 2016b). Descriptions of mucus and the brown spots/warts are communicated by the patient, acted on/assessed by the GP and archived by the system, where they are circulated and recombined in the digital data ecology that comes to make up the digital health record of the patient, a point elaborated on in the discussion section.

Movements

Speed has an impact on the way in which the digital medical encounter is perceived, primarily the response time between the turns and the speed and rhythm of the econ itself. An econ can be spontaneously produced, or it can be more carefully planned by the participant bodies. The speed and rhythm in the production process are influenced by concrete bodily representation, such as hesitation, reviewing and supplementation, something the final product (the econ) does not necessarily tell us anything about. Nevertheless, what we can see in the econ are *explicit* signs of speed and rhythm or what we have called *movements*. Movements can be explicitly represented by economisation and compensation. Economisation is rooted in the technological limitations of the digital message format, leading to the elliptical and abbreviated use of language. In digital interaction, economisation is a central language strategy where writing as short as possible is central, without becoming misleading in the specific context (Grønning, 2016; Hougaard, 2004). Compensation is defined as "verbalising of the bodily and phonetic components in the interaction" (Hougaard, 2014, p. 48, our translation) and includes emphasis, phonetic spelling, iconic signs, phonetic words, stage remarks and hashtags (Grønning, 2016).

In our data material, we found that this kind of bodily movement was explicitly represented through typos and spelling mistakes, as in Example 9 below, where "new" was written as "ew":

Example 9

Hello Merete need a ew prescription for Hydrochlorothiaz + losartan 1 tablet daily.

Furthermore, clipping was frequently used (elliptical sentences, subject ellipsis, omission of sentence verb and self), as in this Example 10, where a patient presented a hasty econ about his back problems, and besides the omission of a sentence or verb, he typed "may" instead of "many", "fro" instead of "from" and aspirinn instead of "aspirin":

Example 10

*have suffered with back problems for may years - persistent pains. Can I get a prescription fro aspirinn on - I take three pcs. every morning - and it helps until I get warmed up.
 But perhaps I should be examined properly at a back centre - I never have.
 I also go to a physiotherapist approx. every 14th day - don't know how long my referral will last for as yet.*

When reading the messages, the explicit body movements become present for both participants, and the GP becomes more aware of the patient's process of producing the econ. These explicit movement traces leave an impression of bodies presented rapidly and with less bodily control compared to an econ that is carefully planned and proofread.

Facial traces and expressions were also present in our econ data, represented by means of graphicons (Grønning, 2018; Herring & Dainas, 2017), sometimes sub-categorised as iconic signs (Hougaard, 2014), emoticons (a construction of the words "emotion" and "icon") or simply "smileys", as shown in Examples 11 and 12 (written separately by two GPs). None of the patients in our data had sent smileys to their GP. Therefore, we chose to include the GPs' examples as well as drawing on our knowledge from the interviews with them.

In Example 11, the GP closes her econ to the patient with a comment followed by a facial trace (a smiley): "A young strong woman like you :-)". Here, the GP tries to cheer up the patient, who is afraid of going under anaesthesia.

Example 11

*Good luck with everything.
 It is going to go very well.
 You are at absolutely no risk by going under anaesthesia.
 A young strong woman like you. :-)
 Best regards, Kirsten*

In Example 12, the GP writes to her patient, Peter, to inform him about a prescription that the GP has written for him. At the same time, the GP asks about a referral to a specialist. Between these two informal and questioning elements, the GP writes: "If you wish to see your X-rays in [name of town], you should expect that they will want to see you too :-)", meaning that if you want to get more information, you have to go there yourself.

Example 12

*Hello Peter.
 I havewritten a prescription for you for kinin, you can see if this helps you. If you wish to see your X-rays in [Town], you should expect that they will want to see you too :-) Should I refer you to there? Have a good weekend.
 Best regards,
 Lene Larsen*

Discussion

The analysis presented above brings together a theoretical perspective – the mutual shapings of the social and technological – with an affective approach to the biomediated bodies of the patients depicted in the econ. We explored the encounters between human and non-human entities – body, technology, affect and language – as sociomaterial assemblages. These assemblages come together in different ways (hence the six categories), whereby different capacities, potentials and barriers can be ascribed to the assemblage. At this point, we wish to depart from the analysis above in order to ask how these capacities shape the econ's participatory potentials. In which ways does the opportunity to engage in asynchronous communication attune (Massumi, 2009; Reestorff & Stage, 2018) the communicating bodies? How does the econ create participatory moments or intensities, understood as relational, collective and potentially transformative forces that flow between and are sensed by bodies (Carpentier, 2011; Paasonen et al., 2015)?

In answering these questions, we first need to clarify our concept of participation. Broadly speaking, we see participation as a collective process through which participants/citizens become empowered in various ways. We employ what Carpentier (2011) calls a maximalist approach to participation, whereby participation is not only characterised by moments of direct citizen influence and power redistribution (e.g. by electing delegates). Through a maximalist approach, participation is viewed more broadly, and the analysis of participatory processes involves exploring the various agencies and elements, e.g. in the everydayness of patienthood. This approach also implies that participatory outputs can take the shape of the social, material and/or personal benefits (Cohen & Uphoff, 2011) experienced by the individual.

As shown in the analysis, the econ as a digital archive affords a multitude of ways through which the body can present itself through affective written language. However, understanding the econ as an intimate technology applied on a macro scale in the Danish primary care sector also calls for considerations of how it functions as a biopolitical tool with the capacity to govern bodies. On one hand, the digital archiving of patients' bodies, illnesses and worries affords participatory intensities

that transform patienthood and give patients another means (besides telephone and physical consultation) to communicate with their GP. On the other hand, this very archiving of bodies serves as the systematic logging of life, and the lively data being circulated within the healthcare system can affect people's lives by enhancing or limiting life chances and opportunities for individual patients. The econ, as an affective archive of lively data, provides a basis on which patients can be deemed fit or unfit for surgeries and treatments or for obtaining loans or getting accepted as a client in an insurance company. The cross-sectional circulation of patient data points towards the biopolitical affinities of the econ as being part of a larger ecosystem and data economy. Econs and other personal data, including, e.g. information from the patient's record and sample results, can be exchanged in the Danish primary care sector by GPs, hospitals and specialists, providing that the patient consents. These multiple points of entry give the data a life of their own; they are combined and recombined, a process that involves both the data being presented and connected to a range (human and non-human) of actors and second opinions and the data disappearing into the data ecosystem, out of sight, at least momentarily, for the patient. Thus, we think of an unruly data vitality encompassing both participatory intensities and economic and managerial value through opportunities for the biopolitical reorganisation of the materiality of patient bodies (and lives).

Tied to the potentials/barriers of the patient-econ assemblage from the perspective of the patient is also a consideration of the emotions that patients, especially if they are in pain and desperate for help, invest in the medical encounter. "When the medical encounter is mediated via digital devices, emotion may be invested in the devices themselves as well as the social relationships that are established via the devices between users and their healthcare providers or with other patients" (Lupton, 2013, pp. 267-268). This implies an analytical sensitivity towards the ways in which people appropriate technologies and which affects are tied to this appropriation and use. For some patients, logging into the GP's online econ system and writing the econ will be effortless or even joyous, providing a sense of control and efficiency. For others, even the thought of technology or being online generates feelings of unease. Therefore, the econ is not only a digital communication tool; it is also a collection of affective structures shaping its uses, barriers and potentials for the individual patient. From a GP's perspective, the econ allows for other ways of feeling or attuning to the patient. The medium and content attune bodies, and the relational experience between the patient and GP brings more nuances to the analysis of the medical encounter. We believe that future research in the field of digital health communication needs to investigate these issues.

Conclusion

With the prevalence of the e-consultation in the primary care sector in Denmark, a new type of consultation has given patients the possibility to initiate and participate in digital messages (econs) with their GPs as a supplement for the conventional and well-known types of consultation (face-to-face in the clinic, telephone and home visit). Our analysis departed from a socio-technical perspective, and we considered the introduction of the technology in question – the econ between the patient and GP – as creating new challenges and opportunities for the exchange of communication within this relationship. The empirical data stem from a larger qualitative research project on digital consultation in Denmark. We asked the following question: How are the patients' and GPs' bodies assembled and represented through and in the econ, and how can we relate to this assembling through the lenses of participation and datafication?

Our analysis led us to a six-category typology of bodies in affective discourse in econs: sensations, emotions, countings, medication, visuals and movements. The analysis brought together a theoretical perspective: the mutual shapings of the social and technological with an affective practice approach to the biomediated bodies in the econ. We explored the encounters between human and non-human entities – body, technology, affect and language – as sociomaterial assemblages and discussed the different ways (the six categories) in which these assemblages come together, exploring which range of capacities, potentials and barriers could be ascribed to the patient-econ assemblage. Framing our discussion of potentials and barriers was an approach to participation as a collective process through which participants/patients become empowered in various ways. This maximalist approach to participation (Carpentier, 2011) opens up the concept of participation to include not only moments of direct citizen influence and power redistribution but also acknowledges the participatory intensities that can be found in more mundane practices as well as in feelings of empowerment. As such, we first identify in the econ the patient's potential for

self-reflection through the processes of putting sensations and emotions into words (which, for some, will be more of an obstacle than an opportunity). Second, we point to the econ as an opportunity for patient agenda-setting in the medical encounter.

As shown in the analysis, the econ as a digital archive affords a variety of ways through which the body can present itself in writing and affective discourse. Understanding the econ as an intimate technology applied on a macro scale in the Danish primary care sector, we combined the discussion of its participatory potentials to considerations of how the archiving and circulation of the lively data (Lupton, 2016a, 2016b) also have economic and managerial value through the opportunities for the biopolitical reorganisation of the materiality of patient bodies and lives. The econ produces what we call an unruly data vitality in how the data circulate and recombine in the larger digital ecosystem of the Danish primary care sector. Finally, our analyses prompted us to call for future research into the affective structures shaping and shaped by the uses, barriers and potentials experienced by both patients and healthcare providers who communicate through intimate health technologies.

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Endnotes

- 1 PSA: Prostate-specific antigen. High levels of PSA may be a sign of prostate cancer.
- 2 Creatinine is a waste product produced by muscles from the breakdown of a compound called creatine. Creatinine is removed from the body by the kidneys. High levels of creatinine warn of possible kidney malfunction.
- 3 The eGFR (estimated glomerular filtration rate) is a number based on a blood test for creatinine, a waste product in the blood. The eGFR tells how well the kidneys are functioning.