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Empathy in technologically mediated patient-provider communication: a phenomenological and postphenomenological exploration

Elisabeth Assing Hvidt[1*] and Finn Olesen[2]

Abstract

Background This theoretical paper aims to explore empathy in the context of technologically mediated patient-provider communication, specifically within the context of video- and telehealth consultations. Over the past few decades, empathy has been recognized as a vital component of high-quality patient care, often prioritizing the cognitive over the emotional dimensions of empathy. As healthcare increasingly embraces digital communication technologies, including video consultations, the dynamics of empathy in clinical encounters are altered. With this paper we explore the pertinent question: how do new digital communication modalities impact on empathy and its different dimensions?

Methods To address the above question, we move beyond clinical and applied empathy frameworks instead integrating insights from two related philosophical traditions. First, the classical phenomenological understanding of empathy (represented primarily by Edith Stein) as embodied intuition. Second, the postphenomenological philosophy of technology, represented by Don Ihde and not least inspired by Maurice Merleau-Ponty's phenomenology of embodiment. We apply these theoretical frameworks to empirical analyses of video consultations in general practice and telemedical encounters between chronic obstructive pulmonary disease (COPD) patients and specialist telenurses.

Results Our analysis demonstrates that even though video consultations do not allow for the same level of "fine-tuned" body-mediated sensory input, a whole-body empathetic experience can nevertheless be established through (1) the audio-visual sensory impressions that are being mediated by the technology, (2) our whole-body interpretations of this information and (3) our shared experiences of a lifeworld that we actively orient ourselves towards. These experiences may lead to empathetic communication and helping actions that draw on both emotional, intuitive and cognitive dimensions in a holistic manner.

Conclusion Combining theoretical insights from phenomenology and postphenomenology with empirical telehealth analyses, we demonstrate how empathy is both reconfigured through technological mediation and sustained as an embodied, intersubjective practice. We thus conclude that empathetic care practices can be established in technologically mediated encounters through bodily intentionality where our bodies and minds are unified in understanding and connecting with other persons, even though we are not in the same physical space.

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We propose a theoretical bridge, connecting classical phenomenology and postphenomenology in the context of empathy in technologically mediated patient-provider communication. This bridge is grounded in Merleau-Ponty's conception of whole-body perception and the lifeworld whether through physical proximity or digital interaction.

Keywords Empathy, Telehealth consultations, Phenomenology, Postphenomenology, Technological mediation

Introduction

In recent decades, empathy has been recognized as a vital component of high-quality patient care, contributing to better health outcomes through enhanced information exchange, more accurate diagnostics, the building of trust and improved treatment adherence [1, 2]. Clinical and applied conceptualizations of empathy conventionally emphasize its cognitive aspects, understanding empathy to involve the clinician's ability to understand (versus intuit) a patient's suffering and concerns, communicate this understanding and respond with sensitivity and care in a helpful manner [3, 4].

The integration of digital communication technologies, such as video consultations, is becoming increasingly prominent in healthcare with efforts to establish remote care as the "new normal" [5, 6]. This development raises the question of how new digital communication modalities, e.g., video consultations, impact on empathy and its different dimensions.

In the present paper, and to address the above question, we propose to transcend conventional clinical empathy frameworks that predominantly separate cognitive and emotional empathy dimensions, and instead integrate insights from two complementary theoretical traditions: classical phenomenological empathy tradition, rooted in the works of Edmund Husserl [7], Max Scheler [8] and Edith Stein [9] (further developed by contemporary phenomenologists), and the postphenomenological tradition, rooted in Don Ihde's [10, 11] philosophy of technology (inspired by Merleau-Ponty's [12] phenomenology of embodiment). In this context, we define phenomenology as a philosophical approach that seeks to explore and describe the structures of experience and consciousness as they are lived from a first-person perspective [13] and postphenomenology as a critical continuation of phenomenology with a particular focus on human-technology world relations [11].

While the classical phenomenologists did not explicitly examine empathy in technologically mediated contexts (their work predating rapid digital advancements), and postphenomenology has yet to fully address empathy in its analyses of human-technology relations, integrating insights from both traditions creates a robust framework for analyzing empathy in contemporary healthcare contexts shaped by technological mediation.

We aim to show that our proposed synthesis is grounded in real-world experiences, applying the phenomenological and postphenomenological frameworks to empirical findings from Danish studies on video consultations in general practice and telemedical encounters between chronic obstructive pulmonary disease (COPD) patients and specialist telenurses.

The article proceeds as follows: First, we introduce the classical phenomenological thinking on empathy as primarily developed by Edith Stein, followed by an examination of the context of video consultations in Danish general practice. Second, we outline the debate among contemporary phenomenological scholars about the (dis) embodied nature of online encounters. Third, postphenomenological insights regarding human-technology relations are examined, including the concept of technological mediation. Fourth, we draw on empirical cases of telemedicine consultations between COPD patients and hospital-based telecare nurses, bringing ethnographic examples into dialogue with theories about sensory experiences, embodied perception and proximity. Fifth, in a synthesizing section, we seek to bridge the gap between classical phenomenological and postphenomenological thinking about technological mediation and embodied experiencing, discussing Stein's influence on Merleau-Ponty's phenomenology of embodiment. We conclude that "technologically mediated empathy" is not necessarily hindered in technologically mediated encounters. However, for this type of empathy to arise, a certain awareness, techniques and skills need to be cultivated and learned that turn the technology into a hermeneutic mediator.

Empathy in classical phenomenology

Fernandez and Zahavi [14] outline a "basic" conceptualization of empathy preceding any differentiations between emotional and cognitive empathy components. This conceptualization, they explain, was developed by thinkers such as Edmund Husserl [7], Max Scheler [8] and Edith Stein [9], throughout the first half of the twentieth century. Their thoughts on empathy centered on a fundamental empathetic perception through which we obtain an acquaintance with the other's experiential life simply by perceiving bodily movements, gestures, mimics, posture, etc [15]. Scheler, for example, asserted that the mental states of the others are visible in their bodily expressions, particularly facial expressions and gestures. He writes:

> *"For we certainly believe ourselves to be directly acquainted with another person's joy in his laughter,*

> *with his sorrow and pain in his tears, with his shame in his blushing, with his entreaty in his outstretched hands, with his love in his look of affection, with his rage in the gnashing of his teeth, with his threats in the clenching of his fist, and with the tenor of his thoughts in the sound of his words" (cited in [16]).*

In other words, in a face-to-face encounter with another person, one can gain a direct and immediate acquaintance with the other person's experiential life, including the person's mental state, through the perception of this person's bodily expressions. This acquaintance does not involve analogical inference (drawing conclusions about one situation based on its similarity to another situation) or sharing the person's experience (identification) [16]. Moreover, it might even be fallible when, for example, misunderstanding what the other is really feeling. Nevertheless, this kind of basic empathy engages us in an immediate and intuitive way during daily face-to-face encounters, guiding our behavior towards others.

The central point to be noted in the above phenomenological account of empathy is the constitution of empathy through a bodily dimension. In Stein's writings about empathy, empathy is a bodily felt experience (German: *Erlebnis*) of another person's bodily felt experience, brought about via intuition [17]. Furthermore, Stein describes an empathic experience as processual: it follows some successive steps that move from a first perceptual (or emotional) level of empathy to some later imaginative (or cognitive) levels of empathy. The first step in the empathic process is initiated by a body sensing and observing another body's being in the world, for example a small child who falls and hits the asphalt. Via the observer's (and empathizer's) feelings, which are awakened instinctively in response to the child's observed experience, an empathic "drive", or motivation, arises in relation to continuing living oneself further into the young child's experience. After this stage, the feelings can be given a cognitive structure, where one begins to imagine what it is like to be the small child in the situation in question. What may arise next, namely a feeling of care for the child (e.g., feeling an impulse to aid the child by consoling it), is, according to Stein, not examples of empathy, but rather of compassion (described in German by Stein as "Sympathie" or "Mitfühlen"), which however has empathy, as experienced in the first stage of the empathic process, as its prerequisite [18, 19]. These later behavioral steps can thus be a natural consequence of the empathic feeling. The transition to these explicitly communicative and helping actions makes it clear that empathy has now been transformed into communication and helping actions. Stein thus points out that empathic feeling, as a bodily felt experience of other living bodies, and as unfolded in the first step of the empathic process, has bodily presuppositions.

Applying Stein's empathy theory to encounters within a clinical setting, it follows that empathy arises in the physical meeting between healthcare professionals and patients through the direct and immediate perception of bodily expressions that might develop towards communicative and helping actions, i.e. empathetic care. In a time where encounters are increasingly digitally mediated, and, consequently, our access to the other person's bodily expressivity is no longer as direct and immediate as in physical encounters, the central question arises: *what happens to this kind of fundamental and "basic" empathy?* In the following, we will examine the context of video consultations in Danish general practice, focusing on healthcare professionals' experiences with expressing empathy through this medium.

Experiences with video consultation in relation to empathetic care

Introduced in the context of the COVID-19 pandemic when in-person care was restricted, video consultations represent a relatively new way of delivering face-to-face consultation within many Western healthcare settings [5, 20]. Commonly, video consultation is defined as a synchronous communication between patient and healthcare professional using videoconferencing technology [21]. Defined thus, it can be characterized as a "screen face-to-screen face" consultation.

In a Danish general practice setting, video consultations were initially implemented and perceived by clinicians as a 'crisis tool' [22]. Politically, however, the message is clear: even though we are no longer in an acute health crisis, the digitization of the healthcare system must continue. Increased digital health communication is necessary to mitigate the high pressure on the healthcare system caused by demographic changes, the growing number of people with chronic diseases and medical staff shortage. In Denmark, the ambition, even before the pandemic, was for every third consultation in the healthcare system to be digital [23]. Today, approximately every fourth consultation is digital (with asynchronous e-consultations constituting (email exchanges) 24% and synchronous video consultations 1,4%) and Danish patients seem to have largely embraced digital consultations demanding even more digital interactions with healthcare providers [24]. Furthermore, in Denmark, digital contact to the healthcare system has been discursively introduced as a new "patient right" [25] and video consultations have since 2025 become mandatory for all general practitioners (GPs) to offer, anticipating benefits such as increased efficiency, resource optimization and patient flexibility and empowerment [26]. However, although patients generally appreciate the option

to consult their doctors digitally, mostly out of convenience reasons, very few want to completely replace physical meetings with digital ones. Several patients have expressed that they occasionally need to meet their doctor "properly" to renew the "personal connection" and that, if they were to receive serious news, they would prefer to be in the same room as their doctor [27].

Whilst recognizing the increased convenience for patients of consulting with their doctor digitally, a relatively large group of health professionals view the prospect of an ever-increasing use of video consultations in the healthcare system with concern. Results from our Danish empirical research regarding experiences with video consultations in general practice show that many GPs and other clinic staff members feel that interpersonal dynamics such as empathy, presence, and connection in their relationships with patients are challenged due to altered sensory impressions and sociality [22, 28–30]. Consequently, the non-verbal communication between patients and themselves, that they consider to be of crucial importance to the clinical encounter, medical safety and quality, and supporting relationship-building and understanding of the patient's overall well-being, are experienced as limited. For example, healthcare professionals mention that a lack of mutual eye contact makes it difficult for them to "sense" the patient, register fine nuances in the patients' facial expressions, such as a twinkle in the eye or twitching of the mouth or forehead that might indicate fear, tension or anxiety in need of helping action. Furthermore, even small sound delays mean that many empathetic response markers, typically used for adaptive and communicative purposes in physical encounters, arrive late or are interrupted by the other party. For example, affirming, empathetic listening sounds ('mmm', 'yes', 'aha'), which signify understanding and engagement, lose their timing and thus meaningfulness.

The above experiences that video consultations limit one's possibilities to perceive the other and to feel and show empathy might in part explain why adoption rates remain relatively low across Western countries [21]. In the following, we will shed further theoretical light on these experiences, drawing upon selected contemporary phenomenologists' discussion on the nature of online encounters.

The nature of online encounters

Contemporary phenomenological scholars have debated (not least stimulated by the development towards online socializing sparked by the pandemic), the conditions of empathy in online encounters, drawing on the above-mentioned "classical" phenomenological empathy theories. A key question in the debate is whether online encounters can be described as disembodied, embodied or something in between. Representing a radical stance, Tomas Fuchs argues that online communication is "non-sensous" [31] and, consequently disembodied. Since interaffectivity is lacking, by which we perceive one another empathetically through embodied cues and expressive gestures, the empathy that we might experience in online encounters, Fuchs argues, is only a "quasi-experience", resulting from our imaginations and projections onto others of our own feelings. This poses the risk of "the other becoming only an image, a frequently misunderstood projection – a *virtual other* [31].

Fredrik Sveneaus [17] taking a more moderate stance regarding online empathy, embodiment and interaffectivity, argues that embodiment is not totally missing in online encounters since they mediate bodily felt experiences of lived bodies. However, referring to Stein's theory about the different steps in the empathic process from perceptual to imaginative (see above), Sveneaus argues that the immediate perceptual dimension is weakened in online encounters, making the bodily felt experiences of empathy less "robust" or "fine-tuned" (p. 84) than the experiences set in motion via physical encounters. Sveneaus furthermore maintains that Stein's theory does not seem to rule out that empathy in more indirect and imaginative (or cognitive) forms can arise in technologically mediated encounters in the same way as, e.g., visual depictions of suffering persons in photos or narrative descriptions of people's lifeworlds may instantiate empathy in us.

Referring to the phenomenological distinction between object body (*Körper*) and lived body (*Leib*), Lucy Osler [32] claims that in online encounters, access to the expressivity of the other person's lived body (e.g., a change of tone or volume in the voice) is indeed possible although bodily co-existence in space is missing. This expressivity engages us empathetically.

Supporting this, Grīnfelde's (2023) findings from her research on teleconsultations in specialized care in Latvia shows that patients often perceive their doctor's expressivity in teleconsultations, concluding that physical proximity is not a necessary condition for establishing empathetic relationships in healthcare settings.

Turning to our own empirical research, it shows how perception of the other's expressivity, and thus experiences of empathy, appears harder to attain when people have not met each other beforehand in offline settings. Results from our research on patient satisfaction related to video consultations in general practice show that prior acquaintance between the GP and the patient is considered foundational for a satisfactory video consultation [27, 33]. Likewise, for GPs, knowing the patient was a prerequisite for attaining a good interpersonal contact in video consultations [28]. For telenurses, conducting video consultations, prior knowledge of the patient,

whether from hospital encounters or home visits, is also considered crucial for establishing empathy and a comprehensive understanding of the patient's illness condition. A compelling example comes from "oxygen nurses" who treat patients with chronic obstructive pulmonary disease (COPD). In a study, oxygen nurses initially visited patients' homes to deliver oxygen equipment, allowing them to become familiar with both the patients' embodied expressivity and their homes, including environmental factors like humidity, soot from wood-burning stoves, or pet dander that might affect their health. In subsequent video consultations, nurses would use this knowledge to understand the patients' present illness state. This indicates that in a healthcare context in which treatment initiatives are increasingly provided through a combination of offline and online consultation forms, a holistic perception of patients' embodied expressivity is built, drawing from both online and offline encounters. Ultimately, this integrated approach challenges traditional notions of care relationships and normative assumptions of embodied care.

In a similar vein, social science researchers have discussed the new social possibilities opened by technologies, arguing that the physical meeting is no more "real" or "authentic" than the digital, and that technologically mediated encounters first and foremost open new forms of proximity (see [34]), for example a more intense and intimate presence, termed "mediated presence" [35]. Inherent in these positionings vis à vis technology, is the belief that technology does not in and by itself create a specific reality; instead it enhances and reduces perceivable features of the already known lifeworld [36–38]. While these scholars use different theoretical frameworks to develop their arguments (many of them rooted within the postphenomenological and socio-material traditions), a common concept in their arguments is *technological mediation*.

Below, we will explore the concept of technological mediation, outlining the postphenomenological interpretation of the concept.

Technological mediation in postphenomenology

Postphenomenology was originally formulated by the American philosopher of technology Don Ihde (1934–2024) in a critical continuation of classical phenomenology's largely missing and skeptical stance towards technology [10, 39, 40]. The tradition has subsequently been further developed by other technology researchers, most significantly by the Dutch philosopher Peter-Paul Verbeek (1970-) [41, 42].

Postphenomenology offers a particular thematic focus on how technologies co-shape our experience of the world, asking the basic question: what does it mean for human beings to live in a world with various technologically shaped realities? Technologies, and human relationships with technologies, it is argued by postphenomenologists, require a particular empirical focus because they do not have a clear, theoretically defined role in people's consciousness, just like, for example, morality or will [43]. Postphenomenology preserves Husserl's concept of intentionality (the idea that consciousness is always directed towards objects in the world) and of lifeworld (the pre-scientific world of lived experience). It then extends these concepts, focusing on the constitutive role of technologies in shaping human embodied experience and meaning [40]. The postphenomenological position thus recognizes the importance of classical phenomenology, while proposing a non-classical interpretation of key phenomenological concepts, hence *post*phenomenology.

Postphenomenology has introduced a unique typology, based on the concept of technological mediation that is used to explore and characterize many basic human-technology relations [42]. One type of relationship, much inspired by Merleau-Ponty [12], is defined by Ihde as *embodied, technology-mediated relationships*. Take the example of the relationship between a man and his eyeglasses. If he is a myopic, the world appears slightly hazy to him when viewed without his glasses. With well-corrected glasses, the fog vanishes, and things are seen clearly. The placement of the glasses on the nose in front of the eyes is not a prominent theme in the consciousness of the adept wearer of glasses. Through a reflexive learning period, the glasses have become embodied: they are now a semi-transparent part of the man's embodied sensory experiences; they have withdrawn in the use situation, as Heidegger put it [44]. When it rains, for example, and visibility becomes opaque, the glasses will again step into the foreground of the experience. The doctor with the stethoscope, the pianist seated at his grand piano, the author typing on the keyboard, etc., are all characterized by embodied, technology-mediated relations to a domain of the world: the patient's chest cavity, Beethoven's piano sonatas, the text emerging on the screen. As hinted at above, Don Ihde was inspired by Heidegger's concept of *being-at-hand*, where the instrument, e.g., the hammer, moves almost seamlessly into the carpenter's practice of nailing boards to a wall. Only if, for instance, the hammer shaft breaks, does the hammer become *present-at-hand*, appearing as an object to the user [44] (§ 15). The transparency of the instrument is broken, and at once the embodied, technology-mediated relationship becomes clear for the carpenter.

Another type of relationship between subjects and their world is defined by Ihde as a *hermeneutic, technology-mediated relation*. The technology produces a "text" that must be interpreted and understood by a 'reader'. Understanding is an event and something that takes

shape and happens beyond my conscious awareness. In this case, hermeneutics is about what constitutes experience for a reader of the technologically mediated text. In Hans Georg Gadamer's words, hermeneutics is about what is unveiled to the reader [45].

Where the former type of relationship was characterized by close, bodily connections between the human, the technology and the world, technologies in hermeneutic technology-mediated relationships become the gatekeeper to sensing the world, e.g., an exercise watch or an ECG meter in a medical ward. The ECG meter tells the doctor how the patient's heart is doing, the text represents the world to the doctor. The prerequisite is that the doctor can interpret the printed "text" on the ECG strip, i.e., the dots showing rhythms and phases of the heartbeat, to assess the content in relation to the patient's heart. The ECG strip can be interpreted by several doctors over time without their physical presence being required in the original measurement situation. Similarly, a person's physical coach can evaluate the person's achievements of this week's running activities through an interpretation of the 'text' produced by the exercise watch. This hermeneutic type of technological mediation contributes to structuring and interpretating our experiences of the world and the practices we are engaged in.

The identification of the two types of human-technology relationship provides a starting point for analyzing how technology changes people and the world through mediating effects. Mediation means that something "works in the middle". This position is perceived in some contexts as a neutral effect, for example the peace broker who acts as a neutral mediator between two countries in conflict. In postphenomenology, mediation is not a neutral position or addition to a situation. Technology reinforces and reduces people's relationships with the world, for example the reading glasses, which makes the newspaper text legible, but at the same time weakens other parts of the field of vision. By the same token, video consultations reinforce the doctor's or nurse's auditory and visual impression of the upper, frontal part of the patient's body, while the rest of the body remains out of sight.

Turning to the above question of embodiment debated within the phenomenological tradition, postphenomenologists discard the disembodiment view put forward by some phenomenologists [11], arguing that technologically mediated perception does not eliminate embodiment; instead, it occurs in a way shaped by technology. It follows from this that the way perception, including empathetic perception, is being shaped depends on the human-technology relations at play in the situation. Grappling with changing perceptions requires adjustment to new ways of sensory use. Here we focus on how healthcare professionals adapt to the changed reality of mediated, embodied perception. We explore this issue by drawing upon insights from empirical research on telemedicine consultations between COPD patients and hospital-based telecare nurses, to strengthen our arguments about sensory and empathic experiences.

Distant and near senses & whole-body, multisensory experience

Just as body language and sensory experiences are considered essential for the clinical encounter in general practice, sensory experiences are seen as crucial for the quality of digital consultations between telenurses and COPD patients. Telenurses must be able to communicate both verbally and non-verbally with patients, exchange information by observing, listening, and asking questions about disease-specific and general topics. They observe the patient's body language via telecommunication equipment (video monitor, loudspeaker, and measuring equipment), noting the patients' general appearance, e.g., do they sit relaxed, is their speech comprehensible? Telenurses pay particular auditory attention to the patient's breathing to detect if it is labored, and on other sounds produced by the patient during measurement activities.

In therapeutic and healthcare terminology, a distinction is made between primary and secondary senses. After birth, the primary senses - vestibular (sense of balance), proprioceptive (muscle and joint sense), and tactile (sense of touch) - develop first, focusing on the body and its condition, such as pain and body position. The secondary senses develop after the primary ones and gradually strengthen as sensory means of orienting oneself away from the body, e.g., in communication, tasting food, and smelling smoke.

The Norwegian nursing researcher and phenomenologist Kari Martinsen distinguishes between "distant senses" and "near senses" [46]. The distant senses (sight and hearing) perceive things away from the body, while the near senses (taste, smell, and touch) require close, bodily proximity to be effective. Nurses use both distant and near senses in the hospital ward during in-person consultations. This means, in accordance with the above phenomenological account, that care is established through intercorporeality and physical proximity or, referring to Stein, through empathy as bodily felt experiences of another person's bodily felt experience [9].

When nurses attend to their patients through telehealth practices, the latters' near senses are not directly available. However, empirical research shows that telenurses, often unconsciously, will strengthen their abilities to enhance visual and auditory sensory experiences to obtain the types of information that cannot be retrieved via screen and loudspeakers [47]. Strengthening one particular sense may reduce the use of another,

for example the nurse can focus her hearing on certain sounds in the patient's breathing, while her other perception of the patient and the world is reduced [36, 41]. The shift towards an enhanced use of visual and auditory perception (possibly leading to empathetic perception and behavior) is not primarily learned in a course, but rather, we claim, it occurs through a combination of several things.

Drawing on the post-phenomenological line of thought, our whole-body sensory experiences are multistable and always seek to adapt to the current situation. In Don Ihde's words, technologically mediated sensation is a permanent *whole-body*, *multi-sensory experience* of the world and the sensory field [10]. A sensory experience is not isolated from the rest of the person's sensory field. This means that, for example, the nurse's experience in and of a teleconsultation is structured through all her senses, even though the experience of the patient is mediated through telemedicine equipment enabling just sight and hearing. In a similar fashion, the patient will experience and structure the consultation, including the health professional, through his or her whole-body presence in the situation. When the patient's and the doctor's near senses are obstructed by lack of physical proximity they will seek to fashion a holistic picture of the other based on the technologically mediated impression of that person. Hence, technologically mediated interactions constitute their sensory understanding of one another.

This postphenomenological argument about whole-body experiences and sensing through technological mediation can be strengthened through the classical phenomenological understanding of human existence as inherently embodied and situated in the world, we claim. Below we argue that embodiment is key to understanding why technological mediation does not hinder a doctor or nurse from feeling empathy toward a patient at a distance. We will combine Stein's reflections on the body as a precondition for empathic feelings with Maurice Merleau- Ponty's phenomenology of embodiment. The latter allows for bridging the gap between classical phenomenology and postphenomenological thinking about technological mediation and embodied experiencing.

The lived body, empathic experience and motor intentionality

According to the philosopher Timothy Mooney [48], Stein's accounts in *On the Problem of Empathy* [9] influenced Merleau-Ponty's phenomenology of embodiment, particularly her view of empathy as a felt, embodied, intersubjective experience, involving the whole body. According to Mooney, this influence has not been sufficiently recognized by Merleau-Ponty himself who mainly referred to Husserl's and Scheler's thinking in *Phenomenology of Perception* [12]. According to Merleau-Ponty, the body is not merely an object limited to its physical characteristics and boundaries. Instead, it is a lived body, actively oriented to the world and inviting us to engage through perception, movement, and action. Merleau-Ponty writes:

> *"What counts for the orientation of the spectacle is not my body as it in fact is, as a thing in objective space, but as a system of possible actions, a virtual body with its phenomenal 'place' defined by its task and situation. My body is wherever there is something to be done" [12].*

Clearly distancing himself from any Cartesian subject-object divide, Merleau-Ponty, like Stein, argues that the form of the body is inseparable from feeling and function, and that the decisions of the psyche are both motivated and coloured by the somatic form. Merleau-Ponty does more than Stein to bring out the body's projective character. The lived body is for the most part present *with me*, its kinaesthetic capacities and expectations being intrinsic aspects of its background empathic experience. Merleau-Ponty is thus inspired by Stein when he argues that we should not wonder why our being is orientated and situated. Our bodily "…co-existence with the world magnetizes experience and induces a direction in it." (Merleau-Ponty 1962, p. 293f).

Applying the above thoughts to our empirical situations of technologically mediated encounters, the doctors and nurses can feel empathy for their patients because their bodies are actively oriented towards the situation. They are situated with their lived body in relation to them – not in any abstract way but "for-me" through bodily intentionality. Merleau-Ponty characterizes this directional attitude towards phenomena in the world with the concept "motor intentionality" [49]. When engaged in the world through motor intentionality, there is no need for "a clear and articulate perception of his body" (Merleau-Ponty cited in [49]). Thus, even if the doctor and nurse are only able to perceive the patient via a screen and loudspeaker, the former are present in the meeting through their whole-body presence and engaged towards the patient through motor intentionality. In this presence, not just the mind, but all senses are active, albeit transformed by the mediation.

Distancing himself from dualistic paradigms, supporting instead a holistic environment model of human practices, Merleau-Ponty is in line with Don Ihde's thinking about how the body interacts with objects in the world, particularly Ihde's argument that what the subject is, and what the world is, is constituted in particular, and sometimes technologically mediated, situations [10]. Merleau-Ponty illustrates this through the example of the blind man's cane, a device the blind man, after a process

of familiarization, uses as though it were an extension of his own body [49]. The blind man interacts with his immediate environment through the cane, illustrating Ihde's point that the relation between subject and object will always precede subject and object themselves; they are both constituted in their situated interrelation. This notion of *mutual constitution* must be remembered when considering Ihde's discussion of the various relations between humans and artefacts. Mediation does not simply take place between a subject and an object, it rather co-shapes subjectivity and objectivity. Humans, and the world they experience, are the products of technical mediation and not just the poles between which the mediation plays itself out.

Based on the above, we wish to claim that both emotional and cognitive empathetic perception can be established between the professional and the patient in technologically mediated encounters. Even though technological mediation does not enable direct and immediate, multi-sensory perception of a physically co-present body, the technology will still mediate audio-visual sensory impressions to the doctor's or nurse's whole, multisensoric body. A patient's sick body, and its symptoms, are experienced by the nurse through his/her technologically mediated, but still embodied experience of the patient's situation which may be assisted and supplemented by cognitive, meaning-making processes.

To support our claim, we bring an empirical example from our own ethnographic research. - A COPD patient participates in a pre-arranged telemedicine consultation with a nurse who is geographically based at a hospital. The patient initially narrates how she has been doing since the last consultation. She talks about anxiety and poor sleep patterns because of her breathing difficulties. The patient's voice sounds clearly affected by the situation: a lowered tone of voice, shortness of breath, followed by crying. The nurse perceives the patient's situation through both audio and visual cues, allowing her to sense the patient's situation and to experience a form of embodied understanding of what it must be like to be in the patient's situation. The nurse feels compassion for the patient and an impulse to help. From previous experiences, she has learned how best to signal active listening, including an open-minded body language. She rolls her chair back a little to create more distance and thereby a privacy zone for the patient, tilts her head slightly and lets her arms rest in her lap. This body language signals that she is prepared to give the patient time to tell her story, and that she remains open towards the patient's own interpretations of her situation. When the patient has told the nurse how she feels and cried out, supported by some affirming nods and listening sounds from the nurse, the nurse moves close to the screen and camera again with the intent to communicate to the patient, that before ending the consultation, she wishes to talk with her about taking some necessary action steps to improve her situation. The patient is clearly relieved to have been met in this sensitive and compassionate way by the nurse and can now focus on how she, in collaboration with the nurse, can try to improve her own situation.

The above case shows how the video consultation between a COPD patient and a telenurse, offering technology-mediated hearing and sight, allowed for an embodied empathetic perception of the lived experiences of the patient, soliciting compassionate communication and helping action towards the patient. Furthermore, Merleau-Ponty's concept of motor intentionality is evident in the nurse's body language, movements and actions during the consultation that creates a supportive environment for the patient. In this way, she exemplifies a skillful and embodied understanding of how to frame the situation. Following Ihde [36], the video consultation technology functions as a "hermeneutic mediator", where the technology becomes a means of interpreting the patient's condition, establishing an embodiment relation between viewer (the nurse) and the viewed (the patient) that guides further communicative verbal and non-verbal action.

Overall, the above example demonstrates that embodied empathy and bodily intentionality are not hindered by the fact that the encounter is technologically mediated. However, they may be more limited and reduced compared to what can be established based on physical proximity relations [50].

The Dutch nursing researcher, Jeannette Pols [38], has explored nurses' concerns about, and experiences with telemedicine practice. Her research shows that telemedicine practice is neither as bad (or "cold") as technology critics fear, nor as great (or "warm") as some technology enthusiasts will have it. Care is *transformed* within the new fields of practice. It is thus not a given that telenursing is inferior to traditional nursing based on physical proximity regarding empathy and presence. Rather, the nature of the interpersonal contact depends largely on the capacity of the persons involved in the encounter to form bonds of interpersonal resonance – capacities, that might develop alongside growing familiarity with and creativity in digital encounters.

Conclusion

Based on the above empirical examples and theory, we conclude that even though video consultations imply weakened possibilities for body-mediated sensory input, it is still possible to establish emotional as well as cognitive empathetic care practices. This can be done based on the audio-visual sensory impressions that are being mediated by the technology, as well as the multi-sensory, full-body experience that draws on a shared life world.

Moreover, and in accordance with Stein's empathy theory, empathetic responses in situations without body-to-body relations can be established through cognitive follow-up processes with a focus on understanding the other person's situation. Whether or not video consultations challenge the possibilities for the delivery of empathetic care cannot be reduced to a clear formula. As we have attempted to show, variance exists among users of video consultation regarding their experience of the extent to which empathy can be achieved in video consultations. In some situations, technological mediation remains inadequate, disrupting feelings of empathy and presence, and in other cases, patients and health care professionals manage to successfully create a technologically mediated relationship characterized by proximity and care. It is meaningful to describe this bond as "technologically mediated empathy" building on "digital proximity", not least to differentiate this kind of empathy from a more direct and immediate perceptually based empathy instantiated through physical proximity. The extent of the involves parties' familiarity with technology, their adjustment to a changed field of perception brought about by the technology, their capacity to communicate vulnerability and emotions as well as action responses (e.g., the activity of "seeing and listening") play an important role in this context. Moreover, the extent to which they can draw on already established, bodily contact learned in physical spaces is also important for empathetic digital interaction. We propose a theoretical bridge, connecting classical phenomenology and postphenomenology in the context of empathy in technologically mediated patient-provider communication. This bridge is grounded in Merleau-Ponty's conception of whole-body perception and the lifeworld, whether through physical proximity or digital interaction, allowing for digitally mediated empathy.

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Author contributions
EAH wrote Introduction, Experiences with video consultations in relation to empathetic care, The nature of online encounters and FO commented and edited. EAH wrote Tehnological mediation in post-phenomenology, Distant and near senses & whole-body, multi-sensory experiences and EAH commented and edited. EAH and FO wrote, The lived body, empathetic experience and motor intentionality and Conclusion.

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The authors declare no competing interests.

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