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POSITION PIECE

The Role of Affective Labour in Expertise

Bringing Emotions Back into Expert Practices

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Abstract

In recent years, a lot of scholarly attention has been devoted to how practices of digitalisation and datafication require medical professionals to work together with different stakeholders, and to how such collaborations shape expertise (Stevens, Wehrens, and de Bont 2020; Carboni et al. 2024). STS scholars have generally approached expertise as an epistemic and social endeavor, but they have tended to neglect the role affects and emotions play in its development and performance. In this paper, we provide a theoretical reflection on the relation between affective labour and expertise building upon Egher's (2023) conceptualisation of expertise as a practical achievement realised through coordination and affective labour. Based on ethnographic fieldwork conducted in various medical settings, including digital pathology, psychiatry, and datafication in intensive care, we explore what types of affective labour are conducted in digital healthcare, by whom, and with what consequences. We show how affective labour mediates both epistemic and relational practices. We argue that different affects and emotions are mobilised in these practices, which impacts the development and effective performance of expertise.

Keywords:

Expertise, Affective Labour, Mental Health, Ethnography, Artificial Intelligence.

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Introduction

The introduction of digital and artificial intelligence (AI)-based technologies in healthcare has been accompanied by growing attention to how they shape the distribution and (re-)configuration of medical expertise (Tyskbo and Sergeeva 2022; Lupton 2018). The hope is that these technologies will contribute to better and more uniform quality of care, more efficient and personalised services, and reliable decision support for healthcare professionals (Stevens, Wehrens, and de Bont 2020; Cornelissen et al. 2022). Even though many critical studies have become available, to the best of our knowledge, they have focused mainly on the epistemic and social practices underlying the performance of expertise when mediated by digital technologies, overlooking its affective dimensions.

In this position paper, we argue that the relation between affective labour and expertise deserves more consideration. As scholars with a background in Science and Technology Studies (STS), sharing conceptual affinities with critical theory and feminism, we suggest that affective labour plays an important role in how healthcare professionals both acquire and act upon new knowledge to perform expertise. In so doing, we build on insights from STS and critical data studies scholars, who argue for the acknowledgement of emotions in scientific research and data science (Puig de la Bellacasa 2011; Pinel, Prainsack, and McKevitt 2020; Choroszewicz 2022). Particularly relevant is D'Ignazio and Klein's (2020) suggestion that emotions should be approached as a form of knowledge necessary to understand how data practices are situated in particular contexts.

Our position is rooted in recent work by Egher where she conceptually develops the notion of expertise in the context of digital healthcare, which includes a recognition of affective dimensions. After presenting her work at the faculty of Carboni and Wehrens, these affective dimensions were further explored between the authors based on the empirical projects in digital health and AI that Carboni and Wehrens were involved in. These discussions led to the development of this position paper. To support our position, we draw on an ethnographic vignette from fieldwork conducted by Carboni and co-supervised by Wehrens on how an algorithm for the prediction of inpatient violence was piloted in two acute psychiatric clinics. We use this vignette as a heuristic to showcase the relevance of affects for digitally mediated epistemic practices and to inspire future scholarly work on this topic. Emotions are political (Ahmed [2004] 2010). Their type and the frequency with which they need to be expressed and/or managed in different professional settings is indicative of important inequalities (Hochschild [1983] 2012; Grandey, Diefendorff, and Rupp 2019; Illouz 2018). With this paper, we invite other scholars to diversify and further problematise the affective labour

performed in relation to epistemic practices in diverse healthcare settings and through engagements with different digital tools.

We first briefly engage with relevant theoretical approaches to expertise, shaped by our STS backgrounds. Using an empirical vignette, we then distinguish various forms of affective labour and indicate how they relate to the performance of expertise. We end with suggestions for a wider research agenda into the role of affect and affective labour in the development and performance of expertise.

Theoretical approaches to expertise and affective labour

Our theoretical starting point is the re-conceptualisation of expertise Egher (2023) put forward, where expertise is conceived as a practical achievement realised through coordination and affective labour among stakeholders occupying multiple and shifting positions in a dynamic ecosystem. This understanding is indebted to Eyal's conceptualisation of expertise as 'a network linking together agents, devices, concepts, and institutional and spatial arrangements' (Eyal 2013, 863). Thus, expertise is not the attribute of an individual, but emerges through exchanges between 'agents' endowed with various abilities and insights, yet committed to solving a common issue.

The focus on affective labour in the performance of expertise is informed by psychological studies on expertise. Noteworthy is the five-stage model of expertise Dreyfus and Dreyfus (1986) developed, which traces one's cognitive and affective trajectory from novice to expert and indicates that one's relation to the world is transformed when one becomes more knowledgeable about a topic. The experienced transformations are not only epistemic, but also emotional and affective, as the feelings of anxiety and hesitation that mark one's initial forays into a field are replaced by joy and exhilaration as one becomes an expert. Furthermore, whereas initially the field may feel alien, over time, the experts may find it difficult to distinguish between themselves and their practices. Thus, highly competent people not only come to know things differently, but also *feel* differently about them (Selinger and Crease 2006; Dreyfus and Dreyfus 1986). This means that the development of expertise is guided by the affects and emotions people experience (and manage) about the topics they become very knowledgeable about.

We understand affective labour as 'labor that produces or manipulates affects such as feelings of ease, well-being, satisfaction, excitement, or passion' (Hardt and Negri 2004, 108), that take place at a pre-visceral stage of experience. When exploring the relation between affective labour and expertise among the nurses working with or 'around' the prediction algorithm described in our vignette, we were inspired by Hoeyer's (2023) insights that people can be differently physically and

emotionally affected by data. Thus, different types of data and the different data work that various professionals perform can generate diverse emotions, which may inform manifold organisational and clinical actions. The notion of 'caring for numbers' that Wallenburg, Essen, and Bal (2021) advance to reflect on the meticulous work put into validating and contextualising performance metrics in healthcare further encouraged us to focus on affect in relation to data analytics. Particularly relevant were Choroszewicz's (2022) findings that engagement with new data technologies can make professionals experience a lack of expertise and make specific forms of emotional labour necessary.[1] Through her ethnographic work, Choroszewicz identifies three forms of emotional labour related to different phases of healthcare data journeys: (a) caring for data production and preparing data for travel; (b) managing excitement and frustration in data processing; and (c) reassuring users in making sense of obtained data analytics. Additionally, Petersen's (2023) distinction between 'frontstage' and 'backstage' labour on digital platforms prompted us to reflect on the different types of affective labour (and their varying visibility and recognition) that healthcare professionals perform, to make their expertise manifest.

Re-drawing the links between expertise and affective labour

Whereas the insights sketched above are very important, we maintain that more empirical and theoretical studies need to be conducted to better understand the full spectrum of relations between affective labour and expertise, especially in relation to how these are mediated by different types of digital technologies. To support this position, we provide the vignette below, in which we tease out forms of affective labour relevant for expertise.

Vignette[2]

Between July and October 2022, Carboni conducted ethnographic research into a pilot testing the implementation of an algorithm for the prediction of inpatient violence. The pilot took place in two acute care clinics in a general psychiatric hospital in the Netherlands. Despite being organised in slightly different ways, both

[1] Emotional labour denotes the display and management of feelings and emotions undertaken by individuals to help an organisation profit (see Hochschild 2012; Grandey, Diefendorff, and Rupp 2019). Even though there are differences between emotional and affective labour, the similarities between the two concepts are overwhelming in the studies discussed here, which is why we have found engaging with them necessary.

[2] This vignette builds on the empirical data collected by Chiara Carboni and the analysis she is conducting as part of her PhD. For a more detailed treatment of the case, as well as for more details on the analysis, we refer to the paper by Carboni et al. 2024.

clinics received voluntary and involuntary (i.e., committed by police) admissions and hosted patients considered at high risk of violence to themselves or others.

The predictive algorithm was developed internally, and while the pilot was a top-down initiative, initially the nursing staff in both clinics were not opposed to it. The algorithm was meant to replace in time the risk assessment instruments in use, which the nurses experienced as a considerable administrative burden.

The algorithm was trained on a historical dataset comprising clinical notes and violence incidence reports for patients admitted between 2017 and 2019, to identify words associated with and, thus, 'predictive of' incidents. The algorithm produced a daily risk score for each patient by identifying such words in current clinical notes.

The algorithm was differently introduced in the two clinics. In clinic 1, the risk scores were only sent out to the psychiatrist and the clinic's coordinator, to avoid the scores becoming a 'self-fulfilling prophecy'. By contrast, in clinic 2 all staff received their patients' daily risk scores on an Excel sheet where all patients were ranked from highest to lowest risk on a 0 to 1 scale.

Through our ethnographic work, we found out that the prediction model comes with major caveats in relation to the nurses' professional expertise, who deploy a wider variety of epistemic and affective practices to 'know' aggression. First, as picking up on aggressivity signs is at the core of their profession (with the risk of violence being a pervasive reality), the nurses invariably complicate all-too-straightforward definitions of aggressivity. Rather than thinking of aggressivity as a universal object, with unvaried characteristics across patients, they acknowledge that warning signs have to be contextualised within each patient's clinical trajectory. Raising one's voice might qualify as aggressivity in one patient, but indicate low blood sugar in another. A 'normal' range of behaviour needs to be established by getting to know patients on an individual level, to understand what deviations from such norm might mean. Second, the nursing staff do not approach aggressivity as an individual characteristic, but as emerging within specific relations. As such, they find it important to understand *why* someone is displaying what could be seen as signs of aggressivity. Third, both the nursing staff and the psychiatrists acknowledge warning signs to be subtle and escape verbalisation. Carboni noticed how they shared contextual and non-verbal information about the behaviours of patients through non-verbal communication, e.g., by mimicking facial expressions, sounds, or movements.

It is through such complex approaches that the nurses decide how to best manage their patients' behaviours, which, in acute psychiatry, can involve isolation cells, or forced sedation.

This vignette highlights that the nurses' expertise consists of contextualising instances of aggressive behaviour to understand its (emotional and relational) causes and of making decisions about which episodes need to be intervened upon, and which can be ignored to allow the patients to resolve them. As STS scholars, we are inclined to examine the aspects of the nurses' work that risk being overlooked and to pay close analytic attention to how knowledge practices are reshaped through the introduction of new instruments such as the prediction model. We mobilise this vignette to support our central argument that it is important to address the affective dimensions in expert practices and tease out their analytical significance. We argue that next to epistemic evaluations, the approaches and decisions of the nurses in our vignette are also informed by the affective labour they perform in relation to the patients, other nurses and healthcare professionals, and the prediction model.

To identify the patients at risk of becoming aggressive, the nurses have to carefully manage their own emotions, remaining open, curious, and sympathetic, yet also 'sensing' when they need to be stricter. Importantly, they must not allow patients 'to get under their skin', but maintain the calm required for accurate assessments and decisions. Affective labour thus informs the nurses' interpretive work to understand subtle causes or contextual details that can explain why certain (aggressive) behaviours occur, and helps manage interactions with patients. The nurses come to correctly identify the emotions and affective states patients express in highly diverse ways not only through epistemic practices, but also by reflecting on their own emotions, by activating memories of past work experiences, by making quick links between present and past displays of emotions, and by developing affective ties to the patients.

To perform expertise, the nurses might manage their patients' emotions in two ways: first, by reducing the amalgam of patient states and behaviours and turning it into emotions intelligible in particular contexts and in regard to individual trajectories and, second, by seeking to alter these emotions or their expression and by guiding patients towards the experience of other emotions, such as calm, or relief. Their affective labour is therefore both *subtracting* and *contextualising*. The management of the patients' emotions can be particularly challenging, as these may be triggered or intensified by aspects pertaining to the patients' history and by numerous contextual factors, such as changes in staff or visits. The nurses must therefore also be able to recognise the emotions that they, other nurses, and other people trigger in their patients and to integrate them in their assessment of the patients' state. They also require the capacity to correctly identify changes in such emotions that may occur over time, or as a result of other developments.

To make their expertise manifest, the nurses also need to perform affective labour in relation to their colleagues and other healthcare professionals. Thus, they need to be collegial and friendly in their work updates, even when it concerns colleagues who may have different approaches. In addition, some of them seem to take into account their colleagues' level of experience and any incidents they might have recently been involved in, to determine what emotions to display and to consider the type and intensity of emotions the latter may be experiencing. Affective work in relation to colleagues can also consist of joint reflection on situations that proved to be worrying, uncomfortable, or irritating, and often includes humor as a way to mitigate some of these negative emotions.

To perform expertise, the nurses also need to perform affective labour in relation to the prediction algorithm. This technology first affected the nurses by arousing their curiosity about it. Sometimes, this curiosity lasted longer and informed more engagements, as some nurses tried to guess and/or understand the assessment of the algorithm and how it was affected by the descriptions they provided in the clinical notes. These affective reactions are far from the emotions more often associated with the deployment of AI-based technologies in work settings in the mass media, where fear, anxiety, concern, and rejection are frequent tropes. The nurses' reactions might be considered surprising, given that such an algorithm has the potential to reduce their discretionary space by presenting them with ready-made risk assessments. Arguably, this would make it harder for them to ignore warning signs of aggression that they see as contextually justified, thus also limiting the space for empathic action that is part of their affective labour. However, it is important to consider that this algorithm was introduced in a context characterised by workforce shortages, where relatively inexperienced flex workers are brought in daily in an attempt to make up for a lack of structurally hired nurses. In such circumstances, nurses may feel that they do not have sufficient time and resources to perform proper assessments of patients, which might inform their relatively unproblematic initial attitudes towards the algorithm.

Importantly, the algorithm's potential to affect the nurses was kept largely under check. In ways that echo the nurses' efforts to prevent patients from 'getting under their skin', the algorithm was kept at a safe distance, as it was not made part of discussions about treatment or handovers. Its capacity to affect the nurses by challenging how they performed expertise was thus minimised and its potential to function as an extension of their senses, a capacity often ascribed to digital technologies, did not materialise. The algorithm thus gave rise to curiosity, amusement, and even surprise, but did not contribute to feelings of envy, or anxiety (although such feelings *were* expressed in a focus group where Carboni and Wehrens presented a hypothetical future scenario based on their analysis of this pilot). Reflecting upon this type of affective labour, we believe that it is important

to understand how the different affordances of various digital technologies contribute to specific emotions and affects among different professionals and in different work settings. In our view, these elements inform how these nurses form or reject alliances with digital technologies in ways that shape the epistemic practices they engage in and/or display.

Concluding remarks

We have argued that affective labour shapes the performance of expertise while being itself the result of skillful practices and careful considerations. Using an empirical vignette, we have reflected on *how* affective labour shapes the expertise of nurses in relation to patients, colleagues, and the prediction algorithm. The nurses we described strategically suppressed, moulded, or engendered specific emotions within themselves and others to adequately manage their patients' aggressivity—a core element of their expertise.

We use these insights to urge scholars of expertise to take seriously the role of emotions and affective labour. In healthcare, the inclusion of affective dimensions in expertise may inform scholarly forays into how digital technologies and algorithms introduced in work settings open up or foreclose opportunities for interpretive work and contextualisation. For instance, the epistemic disruptions of digital technologies and digitisation processes may have affective consequences, such as increased feelings of uncertainty and difficulties in taking responsibility for the knowledge produced through such technologies (Carboni et al. 2023).

Another line of research could focus on the affective labour healthcare professionals perform in relation to colleagues of different ages and with varying levels of experience and emotional capital, as they may be differently impacted by their engagement with digital technologies. This suggestion is supported by studies showing that age remains an understudied factor that importantly influences the emotions that nurses experience and whether and how they successfully manage them (Cottingham and Dill 2019). Cottingham and Dill have shown that through their questions, young nurses require their experienced colleagues to articulate approaches fine-tuned through years of experience, which they take for granted. This can cause a variety of emotions, ranging from irritation to excitement, which can shape the young professionals' development of expertise and the transfer of relevant knowledge.

Overall, studying the relation between affective labour and expertise is likely to enable us all to better reflect on how we affect and are affected by digital technologies in our professional practices (Ruppert 2016). It may also function as a much-needed reminder about the wisdom of (some) emotions (Nussbaum 2001)

and of the numerous affective adjustments we perform to make sense of and engage with the world around us as embodied beings.

Authorship statement

Claudia Egher contributed to the conceptualisation, theoretical approach, analysis, writing, reviewing, and editing of this paper. Chiara Carboni conducted the data collection for the vignette and contributed to the analysis, writing, reviewing, and editing of this paper. Rik Wehrens contributed to the conceptualisation, analysis, writing, reviewing, and editing of this paper.

Ethics statement

Ethical approval for Carboni's PhD project, which included the collection of data used in the vignette discussed in this paper, was obtained from Erasmus University Research Ethics Monitor.

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Claudia Egher is postdoctoral researcher at the Copernicus Institute of Sustainable Development, Utrecht University. In her work, Claudia brings together insights from STS, medical sociology, innovation studies and philosophy to explore the social, cultural and ethical dimensions of digital innovations and novel participatory practices in healthcare settings.

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Rik Wehrens is associate professor in sociology of digital health at Erasmus University. His research work focuses on the various implications of the

transformation to digital health for healthcare practitioners and patients, including normative and epistemic consequences. He uses qualitative and ethnographic research methods to study technological developments 'up close'.

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