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Geographies of care work:

The commodification of care, digital care futures, and alternative caring visions.

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Abstract

This article explores the growing interest in care within geography. Focusing on care as waged work, we trace current transformations through commodification and digitalisation. We discuss how the private household is turning into a precarious and feminised workplace for a growing number of workers, and we show how this development is promoted by the rise of labour agencies that facilitate the transnational recruitment of care workers. The literature on global care chains illustrates how the recruitment of migrant workers fills care deficits in destination countries while opening up care gaps in sending countries. We review this literature from economic geography and beyond and reflect on the continuing feminisation and devaluation of care labour. Based on these critical insights, we examine how processes of digitalisation contribute to reshaping care work. We discuss the ambivalent effects of digital technologies on care and argue that there is an urgent need to intensify our engagement with the processes and effects of digital transformations. In our conclusions, we call for strengthening the budding debate on alternative visions of caring within geography and point to avenues for future engagement.

Keywords

Care Work, Labour, Gender, Social Reproduction, Commodification, Digitalisation, Economic Geography

1 Introduction

We are writing this text in spring 2020, at a time when the Covid-19 pandemic has brought questions of care to the forefront of public attention. In many places around the world, the public is praising the importance of care work. However, this recognition has so far remained mostly symbolic. Joining a collective effort to push responses to the crisis beyond mere applause for exhausted care workers, we see the current situation as a key moment in time to reflect and change how our societies organise care. Furthermore, the lockdown measures implemented to curtail mobility and thereby stop the spread of the virus have promoted the adoption of digital technologies to care at a distance. This fuels the urgent need to further explore how digital transformations impact on care.

In the discipline of geography, this pandemic induced preoccupation ties in with a renewed, keen interest in matters of care (cf. overviews by Atkinson, Lawson, & Wiles, 2011; Kofman & Raghuram, 2015; McEwan & Goodman, 2010; Milligan & Power, 2009; Milligan & Wiles, 2010; Skinner & Herron, 2020). In this paper, we start out by tracing and reflecting on the recent proliferation of the topic within geography. We then zoom in on debates about **care as waged work**, arguing that its transformation through commodification and digitalisation requires our renewed attention. Writing this paper as part of Geography Compass' economic geography section, we thereby want to contribute to the long standing and continuing struggle of feminist scholars to expand the focus of economic geography (most recently cf. e.g. MacLeavy, Roberts, & Strauss, 2016; Pugh, 2018; Rosenman, Loomis, & Kay, 2020). As this paper demonstrates once more, matters of care lie at the core of economic geography as a discipline.

In the following, we first review the debate on the commodification of care work and the emergence of new markets for care provision within the private home in the context of neoliberalisation. We introduce recent findings on emergent home care economies and discuss how private households are becoming a precarious and feminised workplace for a growing number of workers. We explore how this development is expedited by the rise of labour agencies which facilitate the transnational recruitment of care workers, and how domestic labour has come to have an increasingly global reach. In a second step, we examine in which ways digitalisation in this context is creating new opportunities and pitfalls. Digital communication tools foster novel forms of caring at a distance and of organising care workers. Geographers' engagement with care robots raises ethical questions and challenges dichotomous understandings of human versus non-human carers. Digital monitoring devices create more-than-human sensory experiences and nudge users to take responsibility for selfcare in new ways. And digital labour platforms transform the allocation of care labour. Reviewing these debates, we find that the present is still characterised by the continuing feminisation and devaluation of care

labour. Taking our critical insights a step further, we argue that there is a need within (economic) geography and beyond to intensify the budding debate on alternative visions of caring societies.¹

2 The proliferation of care as a topic in geography

Many conceptualisations of care in geography build on the work of Fisher and Tronto (1990, p. 40), who **defined care** as “a species activity that includes everything that we do to maintain, continue, and repair our ‘world’ so that we can live in it as well as possible. That world includes our bodies, our selves, and our environment, all of which we seek to interweave in a complete, life-sustaining web”. In this broad sense, the notion of care largely overlaps with the notion of social reproduction, which has an even longer history in the social sciences – especially in Marxist feminist writings. Although the two terms have distinct histories and place different emphases (cf. Kofman & Raghuram, 2015, p. 40ff.; Meehan & Strauss, 2014), they have a lot of overlap and are often used interchangeably (cf. Aulenbacher, 2020). In this paper, we opt for “care”, as this is the term favoured in the debates we are tracing.

Geographers have studied the complex and variegated spatialities of care for many years (Milligan & Wiles, 2010). Their work has furthered our understanding of the “meanings and experiences of care, both paid and unpaid, for the self and for human and non-human others and for those both physically close and distant” (Cox, 2013, p. 491). In recent years, geographers have challenged and expanded conventional notions of care in various directions. Among other things, they have questioned the **subjects of care**, that is, who has conventionally been imagined as providers of care and who as its recipients. Ewans (2010) and Abebe (2010), for example, foreground children and young people in caring roles and show the considerable amount of care work they provide. In addition, authors have broadened our understanding of what we usually perceive as **spaces of care**. Looking beyond the home and specialised care institutions such as day care facilities, drop-in centres, and nursing homes as fixed sites of care, Power and Williams (2019), for instance, suggest exploring the city through the lens of care and ask: What does it take to create a city that cares? In doing this, they and others further expand subjects of care to include more-than-human care agents. Drawing attention to the **materialities of care**, they imagine the material urban world as a caregiver and ask how buildings or public spaces must be constructed so that they can take over caring roles (E. R. Power & Williams, 2019). In a similar vein, Puig de la Bellacasa (2017) argues for a speculative move of reconceptualising natural entities, such as soil, as caring. Such an understanding of the environment as a caregiver, she argues, offers a way of preventing its reduction to a mere resource that exists to be used by humans.

¹ Our language skills limit this review to texts written in German and English. Further, given the scope of this journal, we focus on contributions by geographers. However, we do not believe in drawing sharp disciplinary boundaries and therefore look beyond geography wherever we feel this is warranted.

In addition, authors have called for a **spatial expansion of the notion of care**. They challenge the persisting imagination of care as a relationship that requires physical proximity. McEwan and Goodman (2010), for instance, propose an understanding of care that includes responsibility for distant others we have never met (e.g. through ethical consumption). Their argument reverberates Massey's (1994) call for a relational conceptualisation of space. A recent special issue of *Gender, Place and Culture* further stretches the boundaries of care by challenging its implicitly positive connotation. It explores the ways in which caring relationships can be unjust and cause harm (Bartos, 2019). Dowler's and Christian's (2019) accounts of two alleged "suicides" of black women who died while under US state care, for instance, demonstrate that **uncaring relations** cannot just be understood as individual acts of unkindness. They emphasise the fact that relationships of care are always immersed in structural power relations.

Following these burgeoning debates, we are inspired by the broad and keen interest in the notion of care over the past decade. With this paper, we aim to contribute to these investigations by picking up and further developing what we consider a key thread in the debate, namely **care as work**. In what follows, we thus zoom in on care as "the provision of practical or emotional support" (Milligan & Wiles, 2010, p. 737) for another human being in the form of wage labour. Our focus here lies on paid domestic care and on the emergence of a globalised home care economy in particular, as well as on the effects of digital transformations in this context.

Studies critically dealing with care as work build on, and are part of, a long-running project of feminist scholars to dissolve the work–production–public versus home–reproduction–private dichotomy (cf. England & Lawson, 2005). This rich vein of research has opened up new ways of theorising work within economic geography (and beyond), including (paid and unpaid) care provision, and has led to the investigation of diverse sites of work beyond formal workplaces. Today, processes of globalisation, neoliberalisation, digitalisation, and change in gender relations are fundamentally transforming the ways in which care work is done (cf. Atkinson, Lawson, & Wiles 2011; Cox, 2013; Gunaratnam, 2013; A. Power, 2014). Care is being "reorganised, respatialised and commodified through the changing welfare state ... and through migration" (Raghuram, 2016, p. 514). In view of this, we see an urgent need to ask anew the key question of **who cares for whom, and under what conditions** (cf. Tronto, 1993).

3 The commodification of care and the emergence of globalised home care markets

3.1 The commodification of care and shifting landscapes of care provision

Advancing a feminist agenda in economic geography, geographers have documented a large-scale change in the modes and places in which care is provided and received. Waged care work is growing rapidly in many economies, and personalised, privatised funding and organisation have become the principal mode of care provision in a majority of welfare states (A. Power & Hall, 2018, p. 308). Caring

activities are increasingly being transformed into a marketable good (cf. Atkinson, Lawson, & Wiles 2011; Cox, 2013; Hall, 2011; Hochschild, 2005; Lawson, 2007; McDowell, 2014; McEwan & Goodman, 2010). This process of **commodification** has been at the centre of economic geographers' debates about care in recent years. In order to capture the phenomenon, authors have worked with an array of concepts and definitions, such as commodification, marketisation, privatisation, and commercialisation (Pelzelmayer, 2018, p. 857).

Despite this concurrence of different terms and concepts (which has inspired the debate, but also drawn some criticism, cf. *ibid.*), studies of the topic fairly consistently identify a number of factors that drive the global increase in care-based employment and market-based care provision. In many countries – especially in the global North – the commodification of care has been driven by demographic shifts and changing gender relations. Ageing populations and increasing female employment rates (with no reduction in men's working hours) have resulted in reduced availability of intrafamilial, non-waged forms of care provision (McDowell, Ray, Perrons, Fagan, & Ward, 2005). This is reinforced by employer-driven changes towards more flexible and intensified working hours that have made working less predictable and have generally led to longer, more individualised and “unsocial” work schedules (James, 2018, p. 45f; cf. Lewis, Gambles, & Rapoport, 2007). Simultaneously, a broader move towards neoliberalism and continuing austerity politics have led to the withdrawal of public services in many countries (cf. England, 2010; Horton, 2019). The declining availability of publicly funded services and the introduction of market competition via new public management reforms have promoted a twofold privatisation of care: It has been reframed as families' private responsibility and subjected to a **market logic**.

The resulting economisation of welfare state policies transforms citizens into consumers who choose the most worthwhile offer on a growing care market. A rich vein of work within geography (cf. Green & Lawson, 2011; McDowell, 2014; A. Power & Hall, 2018) has investigated how these “shifting welfare regimes ... refigure the meanings and relationships involved in caring” (Cox, 2013, p. 491). In sum, “[t]asks of social reproduction have been privatized, contracted out, and devolved (back) to households, to faith-based, non-governmental to ‘shadow-state’ institutions, and to an array of for-profit organizations” (Peck, 2018, p. 477f). In the following sections, we take a closer look at some of the new actors that have come into play.

3.2 New geographies of care (work): the globalisation of domestic care

Commodified care work is, of course, not an entirely new phenomenon. In recent years, however, its reach has extended, turning it more and more into a phenomenon that spans the globe. Just like the recruitment of healthcare workers for hospitals and other care institutions, the provision of care in private homes has not only become increasingly privatised and marketised, but has also acquired an increasingly global reach. A growing number of middle- and upper-class households across the world delegate the provision of care for their children and elderly or sick relatives to migrant workers from countries with lower income levels. The demand for migrant domestic workers has surged since the

turn of the century. The International Labour Organization (ILO) estimates that between 53 and 100 million migrants worldwide work in private households, more than 80 per cent of them women (ILO, 2013, p. 19). Feminist scholars have investigated this development from various perspectives. The concept of **global care chains**, introduced by Hochschild (2000) and Parreñas (2001), is perhaps the most influential among them (Kofman & Raghuram, 2015, p. 3). Emphasising the fact that the international transfer of reproductive work links a series of persons across the globe, it focuses specifically on dimensions of inequality within this transfer (Lutz, 2002). The concept has enabled scholars to theorise migratory patterns of (domestic) care workers in a way that foregrounds the material and emotional consequences of these transnational care relationships. These include, for example, a so-called “care drain” in the carers’ countries of origin – meaning that left-behind family members pay the emotional and social price of care migration (Pratt & the Philippine Women Centre of BC, 2009), whereas more affluent families in the destination countries benefit from the emotional surplus brought in by the care workers (Hochschild uses the term “emotional imperialism” to describe this phenomenon).

Within geography, a number of studies have investigated how these global care relations are shaped by power relations that capitalise on class, ethnicity, and gender. They show, for instance, how the employment of female Filipino migrants in Canadian households (England & Dyck, 2012; Lee & Pratt, 2012) or Eastern European women in households in Germany (Palenga-Möllenbeck, 2013; Strüver, 2011), Austria (Aulenbacher, Leibfingler, & Prieler, 2020) and Switzerland (Chau, 2020; Pelzelmayer, 2018; Schwiter, Berndt, & Truong, 2018) is based on transnational inequalities and legitimised by gendered and ethnicised assumptions about their specific abilities to care. With a focus on Singapore, Huang, Yeoh, and Toyota (2012) point to the links between migrant women in domestic work and the transnational recruitment of healthcare workers in institutional settings. As both groups’ work is associated with bodies, dirt, and decay, they are similarly devalued and marginalised (cf. also Dyer, McDowell, & Batnitzky, 2008). Building on this literature, Raghuram (2016, p. 513) points out, importantly, that it is not only labour which moves and creates global entanglements: It is sometimes also those in need of care (Connell & Walton-Roberts, 2016; Schwiter, Brüttsch, & Pratt, 2020), as well as care policies and the capital used to provide care (cf. Peck & Theodore, 2012; Strauss & Xu, 2018). Overall, geographical investigations of this new spatial division of care have helped to point out the key role reproduction plays in global economics (Kofman & Raghuram, 2015; Strauss, 2020).

3.3 Facilitating the home care economy: the role of private sector providers and the state

Within this debate, geographers have identified further actors who play an important role in the formation of globalised (home) care economies. First, an increasing number of migration brokers or **labour intermediaries** facilitate the transnational recruitment of care workers into private households. They play a pivotal part in the reconfiguration of care according to market logic (Schwiter, Berndt, & Truong, 2018). Over the last two decades, temporary staffing agencies have been spreading their business across the globe and into new employment sectors (Leiber, Matuszczyk, & Rossow, 2019; Peck, Theodore, & Ward, 2005). They have been identified as a driving force behind neoliberal

deregulations of labour markets and the widespread precarisation of work (Coe & Ward, 2013). Countering this negative framing, Lindquist, Xiang, and Yeoh (2012) caution against a general demonisation of labour intermediaries. They emphasise that migration brokers also play an important role in facilitating mobility, and that some provide comprehensive support to workers in their new contexts. Notwithstanding this intervention, existing research demonstrates that the rise of labour intermediaries is frequently accompanied with eroding working conditions and high levels of precarity for migrant workers – especially in care and related sectors (Fudge & Strauss, 2013; McDowell, Batnitzky, & Dyer, 2008).

Second, the emergence of transnational care spaces is facilitated by **state policies** and regulations. While authors usually emphasise how a retreating welfare state opens up windows of opportunity for new markets, studies also demonstrate how these markets' formation is *actively* facilitated by state policies. As states set labour standards, regulate immigration, and also, for instance, provide direct payments to care recipients (Cox, 2013, p. 493), they facilitate and structure the care economy. In this context, geographers have shown how destination countries tackle their care-related market needs through specific immigration programmes and labour market regulations (cf. Fudge & Parrott, 2013; Steiner, 2020; Strauss & McGrath, 2016) or how sending states develop tailored labour export programmes to increase their GDP (cf. Rodriguez, 2010, and Silvey, 2004, on the Philippines and Indonesia as some of the most prominent examples). While care migration is used as a valuable strategy to tackle labour shortages or to produce remittances, the workers are generally labelled as “low-skilled” (England & Henry, 2013). As such, their citizenship rights often remain constrained. In contrast to migrants who are considered “high-skilled” and are eligible for permanent residency, family unification, or marriage, care workers are often excluded from these entitlements (cf. Strauss, 2015; Yeoh, 2013).

3.4 The private home as precarious and feminised workplace

The commodification and globalisation of care work has brought about substantial transformations in the labour market. It has led to a feminisation of waged labour, leaving a mostly female workforce to deal with the costs and risks involved in the privatisation of public services. In light of these developments, many feminist economic geographers have focused on the household (especially in the global North) and investigated how it has been (re-)framed as the naturalised location of care (Green & Lawson, 2011, p. 650) and has simultaneously become a precarious and feminised workplace for a growing number of waged workers.

Over two decades, a range of studies further developed the findings of Stiell and England (1997), who demonstrated how domestic workers' experiences are “mediated through an interlocking, relational system of difference, particularly gender, class, ‘race’/ethnicity, immigration/citizenship status and language” (ibid., 356). The resulting body of literature describes the **private household as a workplace** for mostly female migrant workers, showing that it represents a highly gendered and ethnicised space in which new transnational social differentiations and inequalities arise. The marketisation of domestic

care is interpreted to capitalise on social and spatial differences, which build the script of care migration. This in turn results in precariousness, low wages, and a general devaluation of caregivers' work (cf. Aulenbacher et al., 2020; Busch, 2013; McDowell, 2014; Pratt, 2012; Strauss, 2015).

The precariousness of domestic care workers' situation is heightened by the specific setting that emerges when the space of the private home is transformed into a workspace: Boundaries between private and public spheres blur, workers tend to be isolated, and the workplace eludes public control (England, 2010). The discursive deskilling of domestic care by portraying caring activities as love (rather than work) can additionally further the legitimisation of precarious working conditions and low wages (Bastia, 2015; Pelzelmayer, 2016; Schilliger, 2014; Yu, 2018). Accordingly, scholars widely agree that care enters the market as "historically gendered ... practices that are undervalued and underfunded because they 'should be' provided by households" (Green & Lawson, 2011, p. 650).

Simultaneously, as care becomes a product for sale, it is considered to enable "providers to care without caring" (ibid.). This brings us from the question of who *does* care work to the question of who *has access* to *what kind* of care. Can care that is commodified within a market logic still meet the needs of, and be accessible to, those who depend on it? As **people in need of care** become consumers in a growing (home) care economy, new geographies of inequality are produced which affect not only those who provide care but also those in need of it. In their critical piece, Green & Lawson (2011) point to the danger of marketised care in that it is available to some people while excluding others – because they cannot afford it or are not deemed eligible for care resources by the state. Furthermore, when care is seen as a transaction in a market logic of choice, this "obscures the fundamental interrelatedness of all humans" and thus the possibility of coming up with alternative, more inclusive forms of sociality (ibid., p. 646).

While critical and feminist research is generally in agreement with this argumentation, authors have also problematised an inadvertent framing of all care activities outside the market as less problematic or as pure (Cox, 2013, p. 495). Pelzelmayer (2018), for instance, cautions against reinscribing non-waged domestic work as the natural and ideal form of care. She challenges the assumption that paying for care in the private sphere necessarily corrupts the process of caregiving and has negative effects on the quality of care. Using the example of live-in elderly care in Switzerland, she illustrates how migrant care workers (discursively and through their everyday practices) resist the assumed corruption of their caregiving through its monetarisation. In a similar vein, authors challenge the framing of domestic workers as passive victims and demonstrate how they actively shape their life trajectories (Schwiter, Strauss, & England, 2018; Strüver, 2013) and organise and campaign for better working conditions (Ally, 2005; Chau, Pelzelmayer, & Schwiter, 2018; England, 2017; Pratt & Migrante BC, 2018; Schilliger & Schilling, 2017).

4) The digital transformation: new opportunities and pitfalls

While the commodification of care continues, care is also increasingly being transformed by digitalisation. The use of technology for caring practices is not new. Already in the first half of the 20th century, electric devices, such as telephones, vacuum cleaners, washing machines, and cooking stoves entered private homes. They were heralded with the promise to make work in the home more efficient and free women from much of the reproductive labour assigned to them at the time (Marquardt, 2018, p. 286). Thus, technological innovations have been (re-)shaping care and gender relations for a long time. The most recent digital devices mark but another milestone in this longer history. They bring about new modes of communicating, monitoring, and allocating care labour.

4.1 Caring via digital communication devices

First, care is reshaped by digital technologies **as communication devices**. Smartphones, Skype, Zoom and other real-time audiovisual communication tools enable new forms of caring from a distance (Skinner & Herron, 2020; Valentine, 2006). Especially in labour migration, they have become a key part of the migration infrastructure. In combination with communication platforms such as Facebook or Instagram, which are used to instantly share news and pictures, they enable migrants to maintain relationships with their loved ones (Chau, 2020; Francisco-Menchavez, 2018). In her analyses of mothering via Skype, Longhurst (2013), for instance, shows how Skyping reconfigures our perceptions of the visual and the material and blurs binaries like absent/present, close/distant, and public/private. It rescales intimate relationships and creates a globalised intimacy. Although the 2D visual representations of bodies on screens lack smell, touch, and taste, they create a novel form of co-presence. Additionally, observing oneself in the little box on-screen while Skyping also produces very specific (gendered) performances and impacts on how we understand ourselves (Longhurst, 2017).

Furthermore, the broad availability of these digital communication tools facilitates new modes of connecting workers and activists across distance. Carers who work in isolation in private homes have long been deemed “unorganisable” (Hobden, 2015, p. 4). Digital communication tools have bolstered their ability to build and maintain grassroots movements and raise public awareness for their concerns from local to global levels. For instance, transnational organising efforts of care workers have resulted in the adoption of the International Labour Organisation’s Convention No. 189 “Decent work for domestic workers”, which requires governments to grant full employment rights to people who work in private households (Fish, 2015).

In elder care, digital communication tools are supplemented by companion robots which serve to foster interaction of elderly people. Some are built to resemble humans. They are usually child-sized to appear cute and non-threatening and are able to move around in a room, chat, and play games. Others mimic animals such as seals, cats, or rabbits. They respond with movement and noises to being called or petted and are used especially in dementia care. Since their inception, companion robots have provoked heated debates. Authors criticise them as a neoliberal tool to further reduce staff cost. Based on a study in a Japanese aged care facility, Wright (2019) documents that carers’ workload

increased with the additional management of robots but that their work was further devalued as only assisting or overseeing the work of robots. Arguing that robots will not replace but transform the work of carers, Walton-Roberts (2018) calls for studies focusing not only on the interaction of robots with care recipients, but also on robot-worker interaction. As care workers are impacted massively, she argues, they need to have a say in the development of the robots already. Furthermore, scholars raise the ethical concern that robots may care *for* elderly people, but not *about* them. In mimicking social interactions among humans or with animals, they are seen to deceive care recipients and to further reduce their contact with actual human beings (Sparrow & Sparrow, 2006). Others have countered this critique by challenging its underlying categorical distinction between human and non-human. Drawing on feminist science and technology studies, Marquardt (2018) e. g. questions the dichotomy of “cold” technology versus “warm” care and emphasises the manifold affective relations between humans and technologies (cf. also Mol, Moser, & Pols, 2010).

4.2 Monitoring oneself and others

Secondly, digital technologies impact care **as devices for monitoring** in private homes, in care institutions, and even on the level of national health monitoring schemes. Already, a wide array of devices are used to measure care recipients’ life functions, register their movements, and assist them in everyday tasks (Rosenberg & Waldbrook, 2017). Such devices are often equipped to automatically notify relatives or health professionals if the collected data show a deviating pattern. Digital technology thus creates new forms of continuously assessing selected health-related parameters in real time and without physical co-presence. While this opens up new avenues for caring at a distance, it is important to consider which aspects of health are actually measurable and which remain hidden (e.g. with regard to physical vs. psychological well-being). As Eckmanns, Füller, and Roberts (2019) illustrate in the example of national disease surveillance, monitoring problematic occurrences is always based on an assumed normal state, which is in turn deemed unproblematic. In consequence, the exceptional is prioritised above everyday care needs which might be no less pressing.

Apart from this, digital monitoring raises critical questions regarding autonomy and privacy (Mortenson, Sixsmith, & Woolrych, 2015). When designed for individuals, digital monitoring devices often include empowerment motives for self-care. Their design nudges users to play an active role in self-monitoring in order to become autonomous managers of their own health. On the one hand, this holds an emancipatory potential. Having access to and evaluating one’s own data can strengthen the position of care recipients in interactions with health professionals. On the other hand, monitoring may turn into a problematic normative requirement to become responsible subjects who must care for themselves by constantly tracking their own bodies and adapting their own behaviour to the measured health parameters (Lindner, 2018; Strüver, 2018).

New materialist approaches emphasise that we need to conceptualise the tools themselves as active agents which continuously produce normative scripts. In the intra-action (cf. Barad, 2003) with their users, they form what Lupton and Maslen (2018, p. 200) call “complex human-device-data

assemblages” and a “more than human sensorium”. Taking the example of smart watches, Lupton and Maslen illustrate how this intra-action produces varied affective entanglements with the hybrid data – ranging from satisfaction or excitement over additional information or an increased sense of control over one’s body to frustration and anxiety over purportedly flawed sensory feedback or data indicating failing health. Notwithstanding the affects involved, studies demonstrate that the devices reconfigure bodily sensory perception and understandings of caring for oneself (cf. also Strüver, 2018).

Additionally, Winthereik and Langstrup (2010) foreground that the tools do not always have the effects they were designed for. The authors analyse the example of a pregnancy monitoring interface which was designed among other things to reduce health professionals’ workload and promote self-care. Instead, their analysis illustrates how the tool mainly led the pregnant women to challenge doctors’ written assessments of their health status and push them to rewrite and expand them. More generally, research shows that digital monitoring devices often intensify the workload of health personnel (cf. also Pols, 2010).

Especially in situations where devices are used to monitor care workers, research points to potentially detrimental effects of digital governance. A study by Hayes and Moore (2017), for instance, has shown that GPS-based electronic monitoring of home care workers in the UK brought about an intensification of labour and a loss of autonomy over work. Because travel time and all other tasks performed outside the patients’ households fell off the digital monitoring grid, nearly half of the time workers spent in uniform remained unpaid. Furthermore, Hayes and Moore found that digitally monitoring workers reduces the meaning of care to time consumption and brings about a problematic resignification of care as wasted time by needy customers and tardy workers.

4.3 Care work on digital platforms

Third, digital technologies reshape care **as devices for allocating** work. Digital labour intermediation platforms allow work to be offered as so-called gigs – flexible, short-term tasks people can apply for and often carry out remotely via apps and websites. This novel option holds the promise of flexibly adjusting work and caregiving schedules (Churchill & Craig, 2019; Slaughter, 2015). However, in a UK-based interview study with mothers doing gig work from their own homes, for example, James and Temple (2019) challenge this optimistic outlook with stories of overwork, wage precarity, negative impacts of rating systems, and harassment. Furthermore, care work itself is increasingly mediated by digital platforms (Hunt & Machingura, 2016). Platforms for care labour have expanded rapidly over the last decade. They have made cleaning and personal care more readily available at low cost, thereby mitigating some of the care dilemmas of time-poor households.

Most existing studies from a labour perspective argue that the gig economy produces highly precarious jobs with unpredictable working hours, enforced worklessness in between gigs, and insufficient remuneration. This applies to care work (Huws, 2019) as well as other employment sectors (Van Doorn, 2017). However, some authors also see the digital transformation as an avenue to

revaluing work (Graham & Anwar, 2019). With regard to care, Bor (2018), for instance, suggests founding alternative digital platforms that are organised as cooperatives, such as the ethical house cleaning platform “Up & Go” in New York. In a similar fashion, Huws, Spencer, and Coates (2017, p. 14f) advocate the use of digital platforms for public care provision. Under the control of municipalities or non-profit bodies, platforms might be harnessed as flexible systems for providing care services tailored to care recipients’ needs, while simultaneously ensuring decent working conditions.

In sum, research illustrates that the effects of algorithms, digital platforms, and technologies in general are not in themselves positive or negative, but depend on how these technologies are designed and used. Platforms might ease access to care, but they might have detrimental effects when they are used to control workers and make care more (cost-)efficient. Generally, reviewing the existing literature on digital platforms, we find that care remains marginalised. Geographers have produced considerable knowledge on gig work visible in public spaces, for example on delivery services and personal transport services (Attoh, Wells, & Cullen, 2019; Richardson, 2020; Zwick, 2018). By contrast, our knowledge on care-related gig work within households remains scarce (Huws, 2019; Otto, Hegedüs, Kaspar, Kofler, & Kunze, 2017). Accordingly, we must strengthen geographers’ engagement not only with digital (Ash, Kitchin, & Leszczynski, 2018), but especially with feminist, queer, and anti-racist perspectives that debate, reflect on, and shape the digital transformation (cf. Bauriedl & Strüver, 2018; Elwood & Leszczynski, 2018; Richardson, 2018). Importantly, such perspectives not only shed light on how existing inequalities are mitigated, inadvertently reinscribed and sometimes even exacerbated through digitalisation (cf. Noble, 2018). They also show how digital technologies are employed for dismantling them (cf. Elwood, 2020).

5) Developing alternative visions of caring

Reflecting on current transformations of care work through commodification and digitalisation, we find that both developments have the potential to mitigate some of the care dilemmas of time-poor but money-rich households that can afford to pay for care and for supporting digital technologies. However, these individual solutions still build on an underpaid, feminised workforce from economically poorer households whose own care dilemmas remain unresolved. Thus, our current moment in history is marked by a continuing feminisation and devaluation of care labour. What are the alternatives?

This question takes us back to the beginning of this paper, where we traced geographers’ renewed interest in analysing the world through the lens of care. The literature agrees that a few minor adjustments to the current organisation of care will not suffice to solve the problem (Fraser, 2016). Many authors argue that our societies need to focus on care on a much more fundamental level, as a key ethical concern – “one that incorporates such issues as difference, beneficence, citizenship, rights and responsibilities” (Milligan & Power, 2009, p. 567). Feminist, postcolonial, and anti-racist geographers especially have been engaged in developing our understanding of this ethical

responsibility to care (cf. Lawson, 2007; McEwan & Goodman, 2010; Raghuram, 2019). Based on the pioneering work of Tronto, who accentuated that “concerns about care permeate our daily lives, the institutions in the modern marketplace [and] the corridors of government” (Tronto, 2001, p. 62), they have contributed to developing an **ethics of care** that fundamentally questions the neoliberal image of the autonomous individual in constant competition with others. In contrast, an ethics of care regards human beings as always having been interdependent and in relation with others (Lawson, 2007). It conceptualises the acts of caring and receiving care as the core of our existence (Olson, Ortiz, & Reddy, 2020).

Looking beyond geography, Fraser (1994) suggested already in the 1990s that we reshape labour markets by replacing our model of a “universal breadwinner” with the notion of a “universal caregiver”. Employment would then be organised, she argued, on the assumption that all people are both caregivers and workers. In a similar fashion, Tronto (2017) coined the term *homines curans* (caring people) to provide an alternative conception of human beings. Seeing ourselves as *homines curans* means emphasising that we are all both givers and recipients of care. Consequently, she argues, organising the provision of care becomes a primary task of every society. Meanwhile, Winker (2015) calls for a “care revolution” that replaces the current capitalist order of competing individuals with a society that centres around care for others. These attempts at revising our understanding of the world through the lens of care tie in with the suggestions of Power and Williams and Puig de La Bellacasa which we discussed in Section 2. The latter offer a similar care-centred perspective and extend the notion of caring beyond humans to our relations with our non-human environment (cf. E. R. Power & Williams, 2019; Puig de La Bellacasa, 2017).

With this paper, we hope to encourage scholars in economic geography and beyond to put care centre stage and to continue and intensify their engagement with debates on ways of developing more caring societies. Following Lawson (2007, p. 9), we are convinced that these discussions are inspired and fuelled by close collaboration and exchange with social movements (cf. Montes & Paris Pombo, 2019). With the Covid-19 pandemic unsettling care, migration, and employment regimes in many countries around the world, we believe that this is a unique moment in history where the proliferation of **alternative visions of caring** can enable us to envision and realise a more caring future.

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