The COVID-19 pandemic has changed the world of work in many ways. One of the most substantial changes to work, redundancy and furlough aside, during the COVID-19 crisis has been the shift of work into the home. As lockdowns have been imposed across the world, we have become to witness the largest homeworking experiment in history. Homeworking was used primarily to arrest the spread of the virus but also quickly became a means of minimising disruptions to firms and labour markets. This was unprecedented not only compared to ‘normal’ economic recessions but also to previous epidemics. During the first wave of the pandemic across Europe and the USA in April 2020, ca. 37% of the
working population reported working at home because of the pandemic (Eurofound, 2020; Bryanjolfsson et al., 2020).

Research on homeworking – like the phenomenon itself – has surged. This new emerging strand of research has focussed on estimating the scope of homeworking and the potential numbers and proportions of doing work at home in regional and national economies. Within regional and urban studies, scholars have drawn attention to the future of cities (Florida et al., 2020) and to the question whether big cities will experience an ‘exodus’ of people (Nathan and Overman, 2020). We are still unsure about answers to these questions while experiencing new waves of the Coronavirus outbreak in Europe and other continents. What seems important for regional studies is to pay attention to the regional and social inequalities associated with homeworking and to the differentiation of the homeworking phenomenon itself.

**Regional and occupational disparities in homeworking**

Homeworking rates have varied substantially across regions. Within the United Kingdom (UK), for example, the rise in homeworking during the pandemic has been most striking in London – the financial service centre – with a homeworking rate above 50% in June 2020 up from 7% at the beginning of 2020 before the Coronavirus outbreak. In comparison, the rise has been more modest in Wales – a more rural region with greater reliance on distribution, hotels and restaurant industries. Here the homeworking rate was 32% in June 2020, up from 4% in January/February 2020 (Felstead and Reuschke, 2020). This regional variation in the prevalence of homeworking is related to occupational and industrial disparities. Since working at home is facilitated by technological connectivity, its take-up varies by occupational characteristics (Burchell et al., 2020). Jobs in financial, professional, and technical services are more likely to be performed at home in contrast to high service and labour-intensive work (Felstead and Henseke, 2017). Homeworking therefore tends to be more prevalent among higher-skilled and professional occupations and those with higher qualifications (Office for National Statistics, 2020). The pandemic has not changed the stark occupational and industrial inequalities in jobs that can be done from home – but has rather amplified existing inequalities.

**Locational choices and COVID-19**
When we consider then residential choices and potential changes in residential mobilities, we are first and foremost concerned with the most privileged workers. For the UK, we can illustrate new issues of regional studies that homeworking has brought about using the Understanding Society COVID-19 Study. This survey uses a pre-existing household panel survey that started in 2009/10. The additional COVID-19 longitudinal study was rapidly developed and initiated to understand the social and economic impact of the coronavirus outbreak (Institute for Social and Economic Research, 2020). It contains valuable information on homeworking frequency before and during the pandemic and information on people’s residential location and housing situation. Population weights are provided to derive nationally representative results. I am referring below to published findings based on this dataset or newly generated findings prepared for this article.

According to the Understanding Society COVID-19 Study, ca. 26% of workers worked always from home in July 2020, that was at a time when strict mitigation measures in place during the first national lockdown (Brown, 2020) had been relaxed. Another 8% of workers worked ‘often’ from home, 10% worked ‘sometimes’ from home whereas the majority of workers (55%) did not work at home at all. Women and men who did not work from home are more likely than those who started working from home during the pandemic — the new home-centred workers — to have no qualification, to work in elementary jobs and to work in distribution, hotels and restaurants (Felstead and Reuschke, 2020). This translates into distinct housing profiles of those who work from home during the pandemic and those who do not. According to the Understanding Society COVID-19 Study, those who never worked from home in July 2020 were most likely social tenants while homeowners were more likely than private or social renters to have worked exclusively from home. A change in residential/housing patterns in cities and regions may therefore been driven by a minority of professional homeowners. The majority of workers, including ‘essential’ workers, are less likely to move out of cities as they cannot work from home and hence need to live close to their workplaces.

Any residential choice, however, will dependent on the willingness of employers to accommodate homeworking. Employers were reluctant to allow homeworking pre-COVID-19 beyond their most privileged workers. This was even if working at home was feasible largely because of concerns that employees might not be as
diligent and hardworking. Digital communication and networking tools have become more prevalent during the pandemic to support a higher level of homeworking in the future. Some governments and large employers indicated that they will be supportive of an increased level of homeworking post-COVID-19. However, concerns about productivity and the future development of office-dominated city centres may work counter a more widespread implementation of homeworking within firms and public organisations/administrations. We have seen this in August 2020, when the Central UK Government ran a campaign to encourage workers to return to their office (BBC News, 2020) which was mainly driven by fears of a ‘hollowing out‘ of the City of London which was particularly affected by the surge in homeworking due to the high concentration of jobs in finance and insurance as well as services that cater for finance and related industries.

If homeworking will be embedded in employer practices, changes in business location and demand for office space may be expected. This may affect in particular central city locations with high rents. Firms may consider relocation closer to where their employees live and office rents are lower or to stay in the city centre but with reduced square meterage.

**Homeworking intensity and city-regions**

Current debates about homeworking often seem to assume that the work style of homeworkers is rather homogeneous with workers spending all of their working time at home. However, working exclusively from home was a rare sport before the pandemic. In the UK, below 6% of all workers and only ca. 3% of employees are estimated to have worked exclusively from home pre-COVID-19 (Reuschke and Felstead, 2020). This proportion was lower still in urban areas where people rather worked sometimes but not all of their time from home (Burchell et al., 2020).

During the pandemic when strict mitigation measures were in place that required people to work from home if they can and not to leave their homes for non-essential purposes, working exclusively at home was highest but declined when these measures were relaxed. The proportion of homeworkers who worked often or sometimes but not always from home instead remained relatively stable in the UK since the pandemic started (Felstead and Reuschke, 2020). For example, in July 2020, 59% of homeworkers in the UK worked exclusively from home while
the remaining homeworkers worked often or sometimes from home and hence also worked in places other than their homes (including fixed workplaces and non-fixed workplaces, e.g. customers'/clients’ premises, mobile work and sites of construction/production).

The intensity of homeworking is relevant for considering the impact homeworking may have on cities and regions — an aspect that has received surprisingly little attention in current debates about homeworking. Working always or often from home means that workers have a home-centred live. They only need to commute infrequently to an external workplace, if at all. This means that they can live further away from the organisation they are working for, in case of employees. To contrast, those who only sometimes work from home are still bound in their residential choice by the location of the organisation they are working for, in the case of employees, or the clients they are serving, in case of a more mobile work style.

The Understanding Society COVID-19 Study allows us to further explore homeworking preferences. Notably, those who currently work always or less often from home but do not want to continue working this way once they are allowed back in their offices, may not change the fabric of cities or regional residential patterns at all. In the June survey of the Understanding Society COVID-19 Study, respondents who reported working at home in any capacity were asked: ‘Once social distancing measures are relaxed and workplaces go back to normal, how often would you like to work from home?’ The response options were: ‘always’, ‘often’, ‘sometimes’ or ‘never’.

The largest share of respondents answered that they want to work ‘sometimes’ at home (41%). Just above one-third wants to continue working ‘often’ at home. The proportion of those who wishes to work exclusively from home is considerably smaller with 13% compared to those who want to work sometimes or often at home. However, the preference for working exclusively at home it is still substantially higher than the pre-COVID-19 level where just below 6% of workers worked always from home. In total then, those who worked at home during the pandemic overwhelmingly wish to continue working from home (nine out of ten) (Felstead and Reuschke, 2020). This would mean a substantial change to pre-COVID-19 level of homeworking that stood at around 30% of the workforce including sometimes, often and always working at home (ibid.) - but only if employers are supportive of homeworking. These figures also suggest, assuming
that workers are able to enact choice over their workplace location, that we will see an increase in what is coined ‘telecommuting’ – that is the phenomenon of people splitting their working time between their offices and their homes. Since people still have to commute, we may therefore not experience an exodus from cities but rather a reduction of number of commuting trips and spreading of commuting trips across city-regions.

To get an estimate of people who might consider moving out of cities, we can compare the residential location of ‘established’ homeworkers, who worked often or always from home even before the pandemic, with those who are new to homeworking due to the pandemic and who also want to continue working at home once distancing measures are relaxed on an ‘always’ or ‘often’ basis. This distinction between established and new homeworkers in the Understanding Society COVID-19 data indeed shows that established homeworkers are more likely than those new to always or often working from home to live in rural areas as compared to urban areas (70% of established homeworkers versus 80% of new homeworkers live in urban areas respectively). This supports the view that intensive homeworking enables a freer choice of residential location and contributes to household relocating from urban to rural areas. However, further exploration of the homeworking preferences shows that only half of those new to homeworking on an always or often basis also want to continue working in this way. Taken together, the potential of those who may consider relocation due to the new residential choice enabled by high-intensity homeworking lies approximately between 10-15% of workers. This is a substantial proportion of workers and their households. However, it is unlikely to be the big game changer as workers may not be able to enact on their homeworking preference due to employer demands for presence at a fixed workplace or household constraints (e.g. school-aged children).

**Conclusion**

Back in 1980, Toffler (1980) predicted the ‘electronic cottage’ where the majority of work would be carried out and which would form the centre of society. While homeworking has surged due to the coronavirus pandemic to an unprecedented level in Europe and the USA, the electronic cottage has still not become reality. This said, those who worked from home during the pandemic have a strong preference for homeworking. However, regional and urban studies need to be mindful of the frequency of homeworking people would prefer if they could enact
on their preferences. This is likely to mean that some people and their households would like to leave dense urban areas. However, it is unlikely to be an exodus. We are much more likely to see an increase in telecommuting post-COVID-19. This will lead to a spatial and temporal reorganisation of commuting in city-regions. Instead of daily commutes, we are likely to see that people will commute more flexibly (e.g. not on a Friday or not during peak times) and possibly over longer distances. Some exurban and/or suburban locations will receive in-migration of telecommuters with consequences on local housing markets and public service delivery and transport networks.

An increase in the frequency of homeworking will also shift daytime population from city centres to residential areas, with associated shifts in demand for services used by workers on the way to/from work and during trips out of the office/home during the working day. This is likely to lead to a shift in the location of demand from city centres to residential areas for food and other retail, and leisure and other personal services. At the scale of the city-region, however, an overall reduction in demand could be anticipated as consumption of food and leisure on working days shifts into the home.

New issues for regional studies arising from the above predictions relate to the relevance of established urban economic models that are based on people’s commuting and residential preferences. Homeworking preferences and opportunities are likely to contribute to residential segregation and divide in metropolitan areas between professionals and non-professional workers. In this sense, some of the members of the ‘creative class’ who have sought large cities for their creativity, openness and diversity pre-COVID-19 may also have the greatest choice to leave cities which may significantly change some urban economic debates and theories.

A key issue for regional planning arising from the surge in homeworking will be to address the unevenly distributed opportunity to work at home by occupational status and associated socio-economic characteristics such as education. Other socio-demographic characteristics such as gender and age may also play a significant role in how homeworking is changing economies, societies and places in the future. City and regional planners need to recognise and facilitate multi-use neighbourhoods, with residential areas seeing an increase in daytime population and associated demand for goods and services.
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References


