NEW TECHNOLOGIES, MIGRATION AND THE FUTURE OF WORK

BIRDS OF PASSAGE 4.0

EDITORIAL

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Transforming work and our societies 4.0

These days, the newest generation of Artificial Intelligence fills the newcycle and recently launched bots such as ChatGPT have already begun to radically transform our world of work. There is no longer any doubt that technological change will be transforming many segments and functions of the labour market, just as it has altered the role of migration and mobility within new (and old) work arrangements with unprecedented speed. In the time it took to put together this special issue, completely new questions about the future of work came into light. We can take the special issue itself as a point of departure for our thinking. For example: was this editorial written by a machine, which just consolidated all of its findings from a Google search or made use of a predictive software? Or is this special issue and its editorial the fruit of an ongoing review process of existing research and the product of reflections together with dedicated colleagues on the topic – including all flaws of human intelligence? And if this editorial was written by a machine: would this mean that it is reproducible in endless random takes?

One is reminded of the work of Walter Benjamin on "the work of art in the age of mechanical reproducibility", which grasped the qualitative turn of authorship in the then upcoming age of mass-media in the early 20th century. Benjamin claimed



that artwork risked endless reproduction by mass-media, while no longer being viewed in its original or intended context. He speculated that its appeal of uniqueness would diminish and the perception of the artwork by an audience would change. Similar thoughts may arise about the changes approaching us with AI and the reproduction of work more generally, not only artwork. Will we be confronted with endless reflections of ourselves as in a hall of mirrors and get tangled over and over in the same thoughts within a "filter bubble"? If so, then what is the difference between a product that is created by a machine and by somebody sitting at their desk in a university or in homeoffice between succulents and undone dishes? Does it alter the intellectual value of the text? Can we replace a student assistant with a robot, or is he or she already replacing her own work for us by using research software? From the side of the recipient: is the reader of this special issue ready to be a consumer of a replicable standard special issue or is he or she willing to accept the flaws, the human nature with its ambivalences instead of binary interpretations? And apart from these more philosophical thoughts: what do we know about the transformation of the world of work by the way of new technologies when it comes to migration?

It is not only the "software" of technological change, but also the "hardware" of digitalisation, its logistical infrastructure, that is changing profoundly. As in times of industrialisation, the evolving machinery behind algorithms, computers, servers and platforms gives rise to new tensions – just like the Luddites in the Machine Age, we struggle with societal adaptation in our fields of work. The machineries of today's infrastructural change are no longer made of steel and iron, but of flows and networks – beyond the tactile experience. In the late 1980s Manuel Castells first spoke of the informational economy and the transformation of work and employment as a systemic transition. He predicted the coming "network society", consisting of networkers, jobless people and flexible workers, flextimers, which forms the backbone of the restructuring of enterprises in present day capitalism. Networks made out of nodes and flows would dictate the conditions of an interactive society in which "time discipline, biological time, and socially determined sequencing characterize places



around the world, materially structuring and destructuring our segmented societies" (Castells 1996: 465). He could not foresee the "filter bubbles" of today – the way in which we are fed a reinforcing loop of information by algorithms based on what we already know or like. But he pointed to the new industrial spaces in the informal economy and their implicit societal fragmentations (Castells 1996: 387). Another seminal book that alluded to the transforming social dimension of work early on is Boltanski and Chiapello's (2006) analysis of the shift from more stable and life-long working constellations towards a flexible capitalism characterised by project-tied work in globalised enterprises and a spirit of exploitation over social policies. In their analysis, the role of mobilities is considered: "the immobility of some is a requirement for the mobility of others" (Boltanski, Chiapello 2006: 400). Here, mobility becomes another variety of social capital. The individual must adapt to the rules of the game in liquid societies, must continuously be on the move (Bauman 2006; Urry 2007); a globalised capitalism produces fragmented and exclusionary worlds of work (Sassen 2014; Scholz 2022). We can conclude that the ability to control migration and mobility in a digitalised world is of an even more heightened importance for individuals, the economy, the social state and somewhat territorial units such as cities in defining the nature of work (Hillmann, Samers 2023).

But how do we identify the "north stars", the orientation points and guiding principles, in this rotating digital universe of work and society? Honneth (2023) in his recent work, states that in times of deindustrialisation and increasing digitalisation the remaining common denominator to create a sense of societal solidarity among citizens is either in school or in the work sphere. This implies that the way in which we organise work with the help of new technologies connects immediately to the values of our democracies. The author identifies five main features of the changing world of work: *a*) more isolated working conditions for the individual; *b*) the emergence of nested hierarchical structures in enterprises that go along with more short-term and project-tied work; *c*) an increase in analytical skills and less manual/physical work; *d*) the commodification of social and domestic work; and *e*) more precarious working conditions



and less jobs which are covered by high standards of social security (sick leave, paternal leave, rents, health insurance, social insurance, trade unions, etc.). It is easy to agree with these observations on a conceptual level, but how do we grasp the ongoing changes when we add migrant work and the role of mobile workers to this general picture? This special issue is dedicated to this question.

There exists a rich body of migration literature on the role of AI and ADT (Advanced Digital Technologies) in border control and the management of migration, also its nexus with international governance and surveillance (see Nalbandian, Dreher 2022; McAuliffe 2021; Bither, Ziebarth 2020), but little on its relationship to the world of (migrant + mobile) work. However, it is clear that the precarisation of work and other dimensions outlined by Honneth will have massive impacts on migrant labor. Relevant literature reveals that the proportion of migrant workers in the gig-economy in Canada, an established immigration country, is much higher than that of the Canadianborn workforce (Lam, Triandafyllidou 2022). In a study of Berlin, Germany, Van Doorn (2020) found that 24 out of 25 cleaners were migrants as were 24 out of 30 food delivery riders. Even though we have no holistic overview on the quantitative dimension of the topic, Lam and Triandafyllidou (2022) assert that "platform work emerges as a symptom of a segmented labour market" and that "migrant's choice to enter platform work comes as a result of labour market barriers they face, manifested within a system of a hierarchical organisation and ordering within the national state". The increasing link between the world of migrant labor and the platform economy is established vet remains under-examined.

It might be helpful here to return to the classic theorisation of segmented labor markets by Michael Piore (1979), who used the term "birds of passage" to describe migrant workers in the industrial age who took on positions in less privileged segments of the labour market (Piore 1979). The modern day "digital nomads" (discussed in further detail below) might live in beautiful surroundings, but they form by default a marginal work force within the hierarchies of the enterprises for which they work.



When reflecting upon the segmentation literature, our attention naturally shifts to the role of remote and mobile working constellations for our still nationally organised tax systems, rent, health and unemployment insurances, educational systems - in sum, our welfare policies. It becomes clear that we need to connect our conceptualisation of welfare policies more explicitly with visa policies – and understand the side effects, that can develop. Countries such as Estonia and Croatia, for example, already give strong incentives for digital nomads or remote workers to make work more attractive. At the same time, we must take into account that "many of those currently working in the expanding bottom of the platform economy hierarchy are migrants, whose socio-economic marginalisation renders them more platform dependent – despite being an internally heterogenous group" (van Doorn 2023: 162). Webster and Zhang (2022: 11) conclude that platform-mediated work exposes the "weaknesses in the normative construction in the larger welfare system and [...] highlights the contradiction of prioritizing equality and competition".

This editorial offers food for thought by briefly highlighting three dimensions of technology-based change, each of which is further explored by the contributions to this special issue. The special issue itself presents work that has evolved over the course of the year 2022 within the Networking Unit Paradigm Shift at the Technical University of Berlin and in the larger FIS-Network, a network on social policies funded by the German Ministry of Labour and Social Affairs (BMAS, see Hillmann et al. 2022). The collection of papers presented here touches upon those dimensions of change that are central for migrant work/the work that is done by migrants. Those are *a*) place-boundness and spatial readjustments; b) the impact of technological change on communities and communication styles; and c) the emergence of new working environments and the role of narrative on future social policies. Needless to say, all three dimensions are deeply interrelated and all categorisations maintain fluid boundaries. At this point, although we hear a great deal of buzz about new technologies, migration and the future of work, more profound empirical research about these brand-new dynamics has yet to come. To begin, this editorial



briefly frames some numbers and highlights the risks and chances emerging from policy-oriented publications. It then excavates briefly the three dimensions of change named before and relates them to the contributions for this special issue.

Numbers, risks and chances as repeated in policy-oriented publications

In contrast to what had been estimated earlier on, in recent publications job losses are foreseen especially in low-qualified jobs while new job profiles will be created and lead to more jobs in certain sectors. The recent Eurofund report speaks of an increase in atypical employment and calls for more education to allow for transition towards the digital society¹. The biggest risk is seen as coming from automatisation. In this area, the European Center for the Development of Vocational Training (CEDEFOP) estimates that 14 percent of jobs in the EU "face a risk of displacement by computer algorithms" - especially manual and "low-skilled" jobs² (further data by CEDEFOP found that the "highest shares of employees in the EU27 with high automation risk [is] among subsistence farm workers, machine and plant operators, assemblers, handicraft and printing workers, construction workers and other manufacturing workers (all > 15 per cent). In contrast, the lowest shares (< 5 per cent) are among street services workers, managers and care workers"3.

The platform economy represents a different angle of the impact of technology on work. Rather than emergent technology replacing workers, in this case it gives access to or creates new jobs – albeit often with a high level of precarity and a separation from the traditional social system. According to a report from the Mercator Stiftung, some 28.3 million people in Europe worked in the platform economy, a number which is expected to rise to 43 million in the next 3 years. This already represents between approximately 4 and 11 per cent of the workforce – although only roughly 1 percent claim platform work as their main employment. The motives for platform working varies, but can largely be attributed to financial advantages (30.0 per cent) or flexibility (28.5 per cent), according



to a study conducted in Germany. In countries with a weak social security net, the motive for joining the platform economy may be due to flexibility and higher pay. In countries with a stronger social welfare system, platform jobs may also simply represent an easier part of the job market to access for certain groups such as migrant workers (Hampel, Krause 2023).

Place-boundness and spatial readjustments

Historically, work could be differentiated between being movable vs. non-movable work. Within this dichotomy, it was possible to identify the implications for mobility patterns rather clearly – such as in the emergence of transnational labour markets or the existence of diasporas and their respective economic activities. We were accustomed to thinking of certain jobs as work that is place-bound and can't be shifted (i.e., you must be in the restaurant to wash the dishes, you must do the gardening where the garden is, you must sit with the client when doing physiotherapy). Manual work was mostly perceived as placebound, while intellectual work was seen as not place-bound. With the emergence of new technologies, manual work still must be done in its place, but is in danger of being replaced by new machines or optimised by support mechanisms that help to "do a better job" at the required physical task. This substitution of manual work, very often migrant work, is prominent in the agricultural sector (a sector in which, simultaneously, workers are desperately needed). The work itself remains in place, but automation alters the environment in which the work is done and the product delivered. Mechanical work requires standardised environments. A vacuum cleaner robot needs a flat surface, drones need support systems to evade barriers in the air. In most cases, if a human individual is involved at all in initiating and managing the manual work, they need only to direct a joystick – he or she must not be physically present.

Until very recently, there was little understanding that more abstract work, such as writing, consulting, to a certain extent teaching, designing, translation work, IT-work and also diagnostic work – often seen as placeless work – would also bear



an acute risk of getting substituted. However, it is becoming increasingly clear that soon there will be no more need, for example, for radiologists to scrutinise x-rays. Students' thesis are already being reviewed electronically, translations are done by DeepL and journalists must no longer write repetitive reviews of books, plays or movies. People in search of work are matched by alghorithms and recruitment is done via platform solutions. Software such as ChatGPT, Elicit and the like herald a full shift for our world of work: yesterday's digital nomads could easily become tomorrow's unemployed. Some jobs for human workers may remain in auditing the processes of the AIs, but much of the content of today's work could be gone. In addition, in the case of more intellectual or abstract work we are seeing a sort of landclearing, a standardisation, in many fields of production. Content that best fits into a search engine is brought forward more readily, while hidden and more specialised products risk being overseen. Similarly to fruits harvested by a machine, the most accessible ideas and thoughts are more likely to be processed. The product itself does not show traces of how it has been produced; it is consumed because it is cheap and easy. It is a certain that new content in an increasing number of fields will also be created in this way – for example, shorter songs are written to fit TikTok and Spotify.

When speaking about the place-boundedness of work for some years now the figure of the "digital nomad" was presented as being at the forefront of "placeless" work. These euphemistically labelled "life-style" workers could be spotted in the most attractive places all across the world. The fact that the digital nomad is no longer physically present in the place from which they stems and where their work is organised does not mean they are not in need of a place. The consequence is that they can be spotted in all places that offer a reliable and fast internet in attractive settings around the world. Few authors have understood this cast of workers not so much as self-empowered individuals, but as part of the systematic restructuring of global labour markets (Thompson 2021). Mancinelli (2020) points to the consequences that these workers have for the places in which they have decided to live: forms of displacement and gen-



trification, increased fragmentation. Also, in most cases the digital nomads (if we take up this romantic self-description of the community) settle in places that allow them to benefit from differences in the cost of living – the digital nomad hardly lives in a remote beach shelter. He or she is well aware of being in need of a functioning network of services. Not by chance it is places in Thailand (Chiang Mai), Bali or Sri Lanka that have become hotspots of the communities of digital nomads – places with endlessly reproduced images of beauty and wellbeing along with (imagined) safety, internet infrastructure, coworking cafes and wellness retreats. In this way, the physical environment influences and is influenced by these "placeless" workers.

This new spatial organisation of work is not only about the individuals and the more nomadic type of work, but is also tied to larger spatially organised units such as cities and regions. We see cities in Europe that very concretely offer services to attract newcomers (including digital nomads) while the native population emigrates due to poor prospectives from this country. Recently, Caroline Hornstein-Tomić and Maja Kurilić observed how Croatian cities are competing to host and organize networking events to build connections between digital nomads. They underline that local companies, and public institutions aim to become digital nomad hubs. The City of Zagreb, so they state, introduced a "Digital Nomad Ambassador" project which ran for over half a year in 2021. Not by chance, cities have become pro-active units when it comes to the governance of migratory flows (Hillmann, Samers, forthcoming).

Communication and communities

Emerging technologies will alter the way we communicate and the way we live together. The above described digital nomad depends on much more than a functioning wifi-connection: he or she is in need of an adequate human environment to do the work – there is the necessity to be surrounded by a community of like-minded people (Müller 2020). S/he is in need of a bubble that allows them to be productive. Thompson (forth-coming) points to the flip side of the digital nomad system as it



gives rise to the need to bring newcomers and train them in order to sustain the whole community. A system also known as snowball system has been set up. It might go along with much higher risks for those who enter the cirle in a later stage of the running system.

Moving away from the digital nomads, we turn to the use of digital skills in other forms of migration. Chen and Pang (this issue) draw our attention to a mobile workforce that has evolved under the framework of China-Africa cooperation in the twenty-first century. The higher education sector in China has seen a steep increase in students from countries of the Global South. Here the focus lies on the example of African students in China and the difficulties that the present "Great Internet Firewall" (the closing-off of China from the Western messenger services) poses to the students. They give rare insights into the coping strategies of the students to deal with the odds of contrasting infrastructures, the digital divide and the apparatus they have to bridge it. By speaking to 18 students originating from African countries they present cases of digital entrepreneurs and the role that connectivity plays for their businesses. They speak of "multi-layered digital ecosystems" that have come into life. Reading through this highly original work causes us to reflect on our highly westernised knowledge and knowledge production on the world of work, and our high degree of concentration on our own national communities.

The emergence of new working environments and the role of narratives for future social policies

There are more "birds of passage" of the digital age to look at – and they exist in a variety of positions within the segmented labor market. Floros and Bak Jørgensen concentrate on the case of the digital platforms that provide Danish households with cleaners. Even if there are few official numbers, they can demonstrate that a large share of the workers employed by the gig economy in Denmark (and likely in most Western countries) is made of migrant workers. The paper sheds light on the control mechanisms such as rating systems and logistics that



dictate the working conditions of these workers, which often are staying on student visas in Denmark. Differently to the findings of Lam and Triandafyllidou, namely that students see their work for platforms as a means of control and freedom, they depict a darker picture. The authors link the situation of these workers to the positioning of the Danish state – which seems to turn a blind-eye on differentiated types of exclusion from welfare benefits for the migrant workers. Following on the work of Van Doorn (2020) they highlight the "selective formalisation" of labour, for example by the way of visa-regulation and tax regulation and contrast them with the attempts of the workers to circumvent restrictions. Theoretically, the authors rely on the migration literature on borders to illustrate "mundane practises independent of sovereign control among people on the move". They locate the potential for resistance of the workers within the system in the refusal of accepting the logistification, but admit also, that the migrant students (that depend on this type of work) have only limited possibilities in doing so. Similiary, in the context of care services Strüver (2013) spoke of a formalisation of informality.

Implicitly, deportability is a major concern when it comes to migrant work. Making reference to Honneth's feature Nr. 4, the commodification of social and domestic work, the contribution of Blackman, Tyler and Walton-Roberts (this issue) considers the linkages between the discourses on care work for the future of work. What is the relevance of human workers to the provision of care services and how does technological change impact the organisation of care work? The authors point to the long tradition of care work as being either unpaid, often feminised, undervalued and done by migrant workers. Their contribution is a plea to take into consideration more firmly the nexus between new technologies, logistical organisation such as global care chains and migrant work. Recent literature indicates that digitalisation itself in the world of work is not gender neutral, but rather reproducing existing inequalities (Lott 2023).

The contribution by de Miguel, Bazzani and Arasanz (this issue) steps away from the implications of the new technologies for migrant work. Still, these authors also investigate how new



technologies, namely platform work, put a strain on the decommodification of work (that feature which has been the essence of institutionalised standard employment schemes). They show how different forms of crowdwork have altered the content of tasks, the qualifications required, the selection and hiring process, the payment system and the matching of supply and demand. A major issue, the misclassification of workers as self-employed – that has been portrayed also in the contribution of Floros and Jørgensen – brings us back to Honneth's Nr. 1. Topic: an increasing isolation of the workers. The authors confront us with a net legal analysis of national and EU-law and present case law to frame their argumentation. They see the risk of commodification going along with multiple crisis in a post-pandemic context.

All four contributions presented in this special issue portray in one way or the other the five features identified by Honneth. With the exception of Chen and Pang they all remind us of migrants as still being "birds of passage" in our nationally organised welfare systems. Segmentation theory seems to be valuable again to better understand some of the digital transformation in the world of work, while fundamental questions about societal organisation arise (see Honneth 2023). And, coming back to Benjamins thoughts: what do those new technologies mean for the value we attribute to our work (be it the production process or the product)? What does the positioning of migrant work tell us about the restructuring of our societies more in general?

With technological advance causing rapid change in nature of work for people everywhere in the world, and in every segment of the economy, this special issue begins to sketch a picture of what this means for the migrant worker/the role of migrant work. Within the dynamics of glocalism we witness with the introduction of new technologies, we must shed light on the role of mobile work and workers – who are often already on the forefront of both the marginalisation as well as coming up with coping strategies and resistance in processes of societal transformation.



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NOTES

- $^{1}\ https://www.eurofound.europa.eu/data/digitalisation/research-digests/employment-impact-of-digitalisation.$
- ² https://www.cedefop.europa.eu/en/projects/digitalisation-and-future-work/automation-work-and-skills.
- 3 https://www.eurofound.europa.eu/data/digitalisation/research-digests/employment-impact-of-digitalisation.

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