

The future of work: scaffolds and agencies

Script for a game developed in dance scores

Johanna Bruckner

Johanna Bruckner is an artist whose work explores, through film installations, performative scripts, and writings, the tensions at the heart of urban and socio-political constructions within the framework of late capitalism. She uses performance and collaborative performative design as an organising principle for social practice, reflection, and new propositions. She has been producing a series of work in the HafenCity in Hamburg, Germany, in an urban area that was once a thriving commercial harbour zone, became abandoned when the container age took over, and is now being redeveloped as a flagship urban district mixing heritage with flexible economic models. The following reflection, which runs parallel to her performative scripts and films, investigates abstract and virtual micro-agencies engulfing the bodies of workers and inhabitants alike in the redeveloped district of the harbour city. In particular, Bruckner unveils the circumstances linking manual labour to macro-data and technological progress from the perspective of automation and the floating fluxes of algorithmic finance at the core of the twenty-first-century port city.

In my recent work, I discuss the transformation of former warehouse areas as vehicles for a new infrastructure and scope for social agencies. In the following text, I look at the HafenCity in Hamburg, a large-scale urban and waterfront redevelopment project characterised by a finance-driven deregulation of space. During the last decade, the area has emerged as a form of governance, in which liberal democratic structures are mimicked in the organisation of residential and public areas. For example, the emerging civic life of the former wasteland is increasingly dominated by data governance and smart homes: electronic money and virtual services in the form of invis-

ible cables and algorithmic instructions remodel the city into a dematerialised stream of desires, labour and play.

Let me here briefly analyse these transformations from a labour perspective. During the final third of the twentieth century, work moved away from the Fordist ethos of production and toward global networks of information and finance, and the realms of desire. The subsequent economic reorganisation of work valued the intellectual, cognitive worker through the semiotic production of meaning, and the workplace became flexible, no longer confined to the factory. Stimulated by the dissolution of labour, life, and leisure, neoliberal victories over aesthetic value led to the valorisation of desire as semiotics.

Going hand in hand with this transformation, the work on construction sites is increasingly regulated by computational technologies, such as software applications, electronic devices that are worn on workers bodies, real-time tracking systems, as well as robotic machines, which increasingly control and automate the working processes. The partial automation of the work also applies to construction processes in Hamburg's HafenCity. In responding to the area's urban renewal one must not only consider the reorganisation of work in the areas of cognitive value production. One must also consider that the workforce is mainly composed of temporary workers from Eastern and Southeastern Europe, and thus, the implications of the automation of labour are played out on a geopolitical level, which will be briefly discussed later in the script below.

So, what are the possible agencies, on both a micro- and macro scale, inherent in the agonisms that the partial automation brings about? What can we learn from the confrontations among the ubiquitous processes of dematerialisation, the digital fabrication of civic and urban life, and the deregulation of dwellings and built space? What are the methods that reveal dematerialisation to be a bodily, material, organisational practice?

In my work, I usually work with a few performers over several weeks in temporary social settings within which the group develops dance scores that aim to impact the deregulated working structures. These performances take the form of possible collective agencies in dialogue with non-governmental organisations and other representative stakeholders, both on-site and in an international context. Methodologically, the research for my practical work is discussed and dance scores are developed, with the participating performers in the temporary performative settings on-site, which, in turn, feed back into my writing, continuously accompanying my practical work. To be more

specific, the dance scores are developed by the performers on-site, inspired by the experiences and aesthetics of the urban transformations and this research. This interaction between the dancers, the environment and myself is to be conceived as a living, mutating organism, as an ecology of multiple perspectives, which give the emerging choreography its form and aesthetics. The movement emerges not into the proposed setting but out of the dynamic specificity of *the situation*. The bodies in my performances (that later make up my video installations and exhibition settings) act as allegories for forces of materialisation proposing infrastructures of social encounters beyond class barriers and exclusive contexts. These are, for example, an online archive, in which the workforce may share, distribute and collect information on the changes of working structures regarding the process of automation or technology-driven displacement or violence, as briefly mentioned above.

In the following, let me, as an example, briefly demonstrate the reorganisation of construction labour through automation, as a way to carve out politically organised scenarios of action. These are linked to the current developments in finance, labour and logistics in HafenCity, as well as algorithmic infrastructures of leisure (such as smart homes, in which Google and other companies' design apps that interact with you around themes they can track on your social media profiles or consumption behaviour, to entertain you, fulfil your desires, and help you imagine your future; or other sharing technologies that aim at enhancing your life by turning it into a continuous comfort zone).

The substitution of human labour with automated technologies is challenging European welfare systems, generating complex debates about the policies that should be adopted to regulate this process. According to recent discussions between politicians and representatives of other positions, such as unions and activist organisations in Europe, either robots or the companies using them should pay a tax to lessen the social costs arising from an automation's displacement effect. This 'robot tax', some argue, should be used to finance a universal basic income.

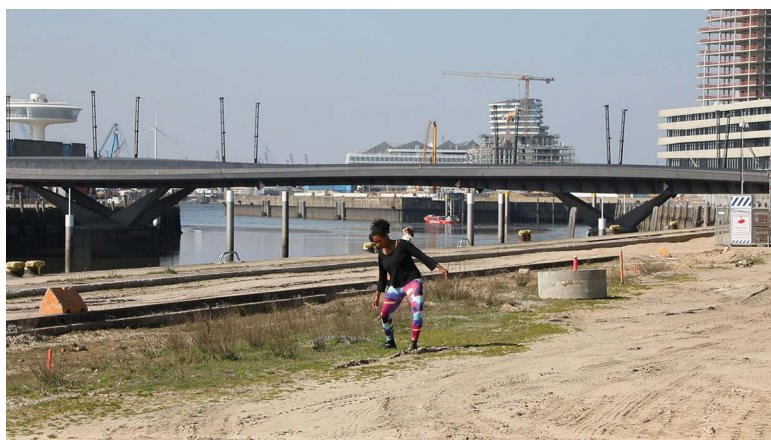
According to economist Robert Seamans, 'the robot tax ends up being a tax borne primarily by the manufacturing sector, and not by other sectors of the economy that will likely invest heavily in automation, including autonomous vehicles in trucking and transport, smart conveyor belts in warehouses, electronic checkouts in retail, etc.' However, the transformations in the former warehouse areas, in particular, are a testing ground for the practical and

theoretical implementation of the robot tax, as well as for discussions of the problems it may cause.

This script for a performed role-playing game (from which I present only a small excerpt here) is not just about the idea of a tax on robots that may indeed be introduced in the future, but also about the social and political impact of displacing a large physical labour force and replacing it with automation. Could a game aimed at rehearsing our solidarity skills respond to the automation of the labour force in the former warehouse territories of Hamburg by suggesting solutions to the problematic displacement scenarios? This game unfolds in such a way that the dancing bodies each stand for a certain figure (which could be, for example, an organisation, a political representative, or a local voice) through which they interact via the dance scores and their voice. In between the movement, they speak the text, from which an excerpt is printed above. It is not a game, which is conceived of winners and losers, as is often expected. Rather, the concept of the game is relevant for me because codes of conduct between the individual positions can be tested and negotiated (which here happens through the structures of movement).

So this game offers us the opportunity to play around with other infrastructure models brought about as a result of automation, and to consider in particular questions relating to the ambiguities of taxing robots. Ethical principles for the development and deployment of robots and artificial intelligence are to be identified and discussed.

Fig. 1: Johanna Bruckner, local labour union, production still



To calculate the robot tax, a worker's last annual income may be used as a reference salary, with income tax and social security charges equivalent to those paid by the worker being subtracted. However, in the case of employment conditions in Hamburg's HafenCity, most of the payments are made by businesses operating under corrupt, deregulated conditions, and thus can hardly be used as reference values for any future operation. The workers in Hamburg's HafenCity receive different incomes for the same work depending on their employer. Most of them work without an employment contract, or work as freelance construction site workers, without knowledge of this fact. Moreover, as most of the jobs that might be created in HafenCity in the future may specifically be taken over by robots, there would be no previous human income to act as a reference salary for tax calculation purposes, as the majority of workers labour without contracts, missing any form of payment regulation. Another complication, especially in the building industry, is that robots may be integrated into other machines so that the boundaries become ever more fluid between automated and non-automated labour.

Fig. 2: Johanna Bruckner, global/international labour union, production still



The alternative to a robot tax, according to the Greek economist/former Greek minister of finance, Yannis Varoufakis, is a Universal Basic Dividend (UBD). A public trust created from shares in all major corporations operating in HafenCity would generate an income stream to be paid out to all citizens. Effectively, society would become a shareholder in every corporation,

and the dividends would be distributed evenly amongst all citizens. Insofar as automation would increase productivity and corporate profitability, the whole of society would begin to share in the benefits. Indeed, as higher profits and their automatic redistribution via the UBD boosted incomes, more funds would become available for the welfare state. Coupled with stronger labour rights and a decent living wage, the ideal of shared prosperity would receive a new lease on life.

In this context, it is essential for the local workforce that this public trust be coordinated by an international network of labourers through a critically decentralised strategy to again avoid the concentration of capital and power in the hands of a few, and the accumulation of capital in a certain territory.

Fig. 3: Johanna Bruckner, a few performers with members of another Hamburg labour global/international labour union, production still



HafenCity is an area characterised by unstable labour relations and working conditions, labour corruption and military-level surveillance, as is known from conversations with labour representatives from the unions IG BAU and Hochtief. Moreover, state and global actors camouflage and obscure one another. For example, governmental control over labour, along with its last hopes of regulation, will disappear when the state loses control over income from goods and their taxation. To whom will taxes be paid if there is no longer a clear division between state and non-state actors? Whose remit will taxation and tax control be?

Fig. 4: Johanna Bruckner, figure against military state surveillance, production still



Increasingly, the technological ‘smart tools’ and software systems used by companies, such as CISCO operating in the HafenCity, are produced as a result of military tests and/or for military purposes. The idea of a synergy between taxation and the UBI (Universal Basic Income) based on military resources, thus, is not an option in this scenario.

Again, the local workers’ union:

In light of recent developments in the sphere of automation, the labour force is likely not only to be confronted with different sorts of work but also with far fewer jobs. More than fifty per cent of existing jobs in the harbour area are vulnerable to automation by means of the ‘smart’ technologies that are now commonplace and that govern our social interactions. These jobs

are in transport, warehousing, and the remnants of the retail sector. If these predictions are accurate, the existence of a stable middle class seems to be a prerequisite for a liberal democracy.

With the reorganisation of the labour market, the migrant workforce from the Southeast no longer has a place in this scenario because a great part of the labour is uncontracted, and the workers lack social rights. A robot tax destroys these jobs and establishes an invisible multitude of labouring subjects with lost and marginal perspectives, abandoned along with their families to the trade in humans. As an alternative, could the common public trust create new jobs for the former temporary labour force?

As the role of the state, and indeed its influence, vanish in response to these developments and the current transformations in the areas of labour and property, we, the performers, members of IG BAU and initiators of this game-based thinking structure, now call for stronger regulation of the new post-industrial residential urban zones!

The bodies perform in relation to each other, creating a bodily language that temporarily stays autonomous. The bodies' movements are beyond the range and scope of HafenCity's surveillance mechanisms, as they interrupt and disrupt the algorithmic streams of data and finance through the emerging bodily constellations; as they perform as a self-determined, self-composed durational social endeavour, rehearsing the relational accountabilities. Communal knowledge is created through horizontal exchange and learning, and different experiences in the investigation of labour/automation are discussed and put forward.

The organisational practice proposed in my work is simultaneously a general support structure and a yet to be generated data resource available to those who need it. It collates information shared by workers about conditions on-site and is updated with information based on local and situational experiences. Technology has the potential to link agencies worldwide, but it may involve politicising co-ordination and envisaging a future in which education, labour and data have to be considered more closely interrelated. These practices, which we refer to as scaffolding – and micro-agencies – are to be elaborated upon.