Artificial Intelligence, Emotional Labor, and the Quest for Sociological and Political Imagination Among Low-Skilled Workers

A pictured created by DALL·E, OpenAI's AI-based image generator, following the instruction "AI and call centers in the future"

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Abstract

This study examines the impact of artificial intelligence (**"**AI**"**) on low-skilled workers. Emphasis is placed on call center agents – an occupational group facing a particularly high automation risk. Drawing on Constructivist Grounded Theory methodology and semi-structured interviews in an Austrian call center, their discourses are explored. The results indicate that the introduction of flawed technological tools has led to an increase in emotional labor among call center agents. This increase in emotional labor seems to result in agents' inability to embed their own problems in the larger social context of AI's impact on the labor market, let alone to politicize these problems. They thus lack sociological and political imagination. While in this regard works councils (i.e., bodies within a company representing and promoting the economic, social, and health interests of employees) foster sociological imagination, it has been found that they do not foster political imagination. This has significant implications for workers, as works councils are important for protecting workers' rights when introducing AI systems within companies. Yet works councils are also instrumental in shaping workers' imaginations. To promote the development of sociological and political imagination among both workers and works councils, this study proposes a reformed approach of trade union education. Its objective is to raise workers' and works councils' awareness of the impact of AI on the labor market. This would simultaneously enable them to advocate for their rights in the age of AI-driven automation. Beyond trade unions, the findings of this study also bear broader relevance for policymakers in Austria and beyond, as they demonstrate the need for both worker education on AI as well as for attractive up- and reskilling programs. This study thus offers a valuable contribution to scientific research while providing practical implications for policymakers and trade unions.

Résumé de Recherche

Cette étude examine l'impact de l'intelligence artificielle (« IA ») sur les travailleur.euse.s peu qualifié.e.s. L'accent est mis sur les employé.e.s des centres d'appel, un groupe professionnel dont le risque d'automatisation est particulièrement élevé. Leurs discours sont recueillis puis analysés au moyen d'une méthodologie de théorie enracinée constructiviste et d'entretiens semi-structurés dans un centre d'appel autrichien. Les résultats indiquent que l'introduction d'outils technologiques sous-performants a entraîné une augmentation du travail émotionnel chez les agents. Cette augmentation du travail émotionnel semble liée à l'incapacité des agents à intégrer leurs propres problèmes individuels dans le contexte social plus large des effets de l'IA sur le marché du travail, et à politiser ces problèmes. Iels manquent donc d'imagination sociologique et politique. Bien que le comité social et économique (« CSE »; c'est-à-dire les organes d'une entreprise qui représentent et promeuvent les intérêts économiques, sociaux et sanitaires des salarié.e.s) fasse preuve d'imagination sociologique à cet égard, il a été constaté qu'il manquait néanmoins d'imagination politique. Ceci a des implications significatives pour les travailleur.euse.s, puisque les CSE sont essentiels à la protection de leurs intérêts lors de l'introduction de systèmes d'IA dans les entreprises. Les CSE jouent également un rôle essentiel dans la formation de l'imagination des travailleur.euse.s. Afin de promouvoir le développement de l'imagination sociologique et politique des employé.e.s et des CSE, cette étude propose une approche réformée de la formation syndicale. Son objectif est de sensibiliser les travailleur.euse.s et les CSE à l'impact des technologies de l'IA sur le marché du travail, ce qui leur permettrait de mieux défendre leurs droits à l'ère de l'automatisation induite par l'IA. Au-delà des syndicats, les résultats de cette étude revêtent également une importance plus large pour les décideur.euse.s politiques en Autriche et ailleurs, en démontrant la nécessité de former les travailleur.euse.s à l'impact de l'IA et de mettre en place des programmes attractifs de formation continue et de requalification. Cette étude apporte donc une contribution précieuse à la recherche scientifique tout en formulant des recommandations pratiques pour les politicien.ne.s et les syndicats.

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1. Introduction

The COVID-19 pandemic has exposed to the broad public what social scientists have been highlighting for years: the systemic underpayment and precarity of those who keep the infrastructure, the economy, and social life running. This led, at least conceptually and for a short time, to a shift in thinking away from the pejorative notion of "low-skilled workers" towards the idea of "essential workers" (cf. Gaitens et al., 2021; Mejia et al., 2021). This initial wave of recognition has now largely subsided, and not much has changed overall, as low-skilled workers still share three common factors: precarious employment, little protection from exploitation, and low pay (cf. Palier, 2020).

At the same time, a new threat is looming over them in the form of the current wave of automation caused by machine learning ("ML") and artificial intelligence ("AI")[1]. According to various studies, it is precisely these low- and middle-skilled workers who exhibit the highest risk of job loss due to automation (cf. Deming, 2017; Nedelkoska & Quintini, 2018; Suta et al., 2018). The potential of AI to profoundly impact societies has become apparent to the general public at the very latest since the release of ChatGPT-3 in November 2022 (cf. OpenAI, 2023). However, research is lacking on how the current wave of automation impacts low- and middle-skilled workers in their daily lives, what emotions it evokes in them, and what, if any, strategies they develop to cope with this new reality.

This master's thesis aims to deepen our understanding of this phenomenon. Through the application of Constructivist Grounded Theory ("CGT") and by conducting semi-directed interviews with call center employees in Vienna, Austria, it departs from the predominantly quantitative studies on the impact of AI on the labor market. Such a methodological choice

[1] Artificial intelligence ("AI") constitutes a branch of computer science, which imitates human cognitive abilities by recognizing and sorting information from input data. This intelligence can be based on programmed processes or generated by machine learning ("ML"). In ML, an algorithm learns to perform a task independently through repetition. The machine is guided by a predefined quality criterion and the information content of the data. Unlike conventional algorithms, no solution path is modeled. The computer learns to recognize the structure of the data independently (cf. Department of Computer Science, University of Oxford, n.d.)

enables an analysis of low-skilled workers discourses, thereby allowing to derive a deeper comprehension of how the disruptive effect of AI operates onto them.

This study draws a hitherto unexplored connection between emotional labor, sociological imagination, and political imagination. The results illustrate an increase in emotional labor among call center agents due to flawed automated tools. This increase, in turn, seems to make workers believe that their job is not at risk of automation by AI in the near future. It hinders them from embedding their personal problems with technological tools into the larger trend of rapidly advancing AI developments, let alone politicizing these problems. Workers were thus found to lack both sociological and political imagination. While works councils do possess sociological imagination in this regard, they lack political imagination too. This has significant implications for workers, as works councils without political imagination are unlikely to effectively respond to AI-specific challenges in the workplace. Moreover, works councils also play a major role in shaping employees' sociological and political imagination. To foster the development of sociological and political imagination, a reform of union education efforts is thus proposed. This reform places the adoption of AI in the workplace in a broader societal and political context, thereby enabling both works councils and workers to advocate for AI policies in which workers' needs and concerns take center stage.

The findings hence provide significant contributions to existing scientific research. Yet they also pave several paths for future studies on the impact of AI in the workplace, sociological and political imagination, emotional labor, and union education. At the same time, this study can help inform policy making and guide trade union work regarding AI-driven automation and its impact on low-skilled workers.

This thesis is comprised of 7 chapters. After the present Introduction, Chapter 2 provides a literature review and embeds this research in the relevant academic context. Chapter 3 familiarizes with the key concepts, Chapter 4 with the methodology of this thesis. Chapter 5 then presents the results of the interviews, which are discussed in detail and linked together in

Chapter 6 to formulate policy recommendations. Chapter 7 concludes with a summary of the main points of the thesis and an outlook for future research.

2. Literature Review and Context

2.1. AI's Impact on the Labor Market – Complementarity or Substitution of Jobs?

Since at least the Industrial Revolution of the 18th and 19th century, people have been apprehensive about automation and substitution of workers by machines (cf. Martens & Tolan, 2015; Mokyr et al., 2015). This ongoing "fear of the machine" is primarily due to technological changes leading to job losses, something that, according to Keynes (1930), can also be referred to as "technological unemployment" (cf. Ernst et al., 2019). When thinking about automation in this context, economists usually juxtapose two models. First, complementarity models "predict that the labour-saving impact of technological progress is counterbalanced by higher wages, economic growth, and more employment in other sectors. By contrast, substitution models assert that technology causes job displacement and leads to polarisation, de-skilling, and possibly a jobless economy" (cf. Martens & Tolan, 2015). While previous industrial revolutions have provided strong evidence for the complementarity models and hence for a productivity effect (cf. Mokyr et al., 2015), there is a certain degree of disagreement in the literature about the impact of the current wave of automation caused by ML and AI (cf. Iscan 2021).

Such disagreement already arises with regard to the exact measurement. Different approaches emerge in the literature when trying to calculate the exact odds and factors involved in answering the following question: "[W]hich of the two labor market effects – displacement or productivity – will dominate in the artificial intelligence (AI) era?" (Petropoulos, 2018, p. 121). Some studies investigate how technological developments affected the labor market in

past waves of automation and thereby attempt to draw lessons for current trends (cf. Dobbs, 2015; Soete, 2018; The Economist, 2016). Other authors, in turn, "assess the risk of occupations and tasks to be automated in the next decades because of AI systems [… and] can be viewed as feasibility tests on the potential impact of AI" (Petropoulos, 2018, p. 124).

Probably the most cited study in this strand was carried out by Frey and Osborne (2017). The authors relied on a dataset containing skill requirements for about 700 occupations in the United States. Using three different skill categories (perception and manipulation tasks, creative tasks, and social intelligence), the automation risk of jobs was then gauged by ML experts, resulting in the alarming figure that 47% of all US jobs may be replaced by machines in the next two decades. The findings of Frey and Osborne have not only sparked a broader debate about the future of work among the general public and policymakers, but have also triggered many further related studies within the discipline (cf. Gray, 2017; Mahdawi, 2017; The Economist, 2018).

In their cross-country study of more than 30 countries, Nedelkoska and Quintini (2018) devise a "probability-of-automation score" and calculate that, similar to Frey and Osborne, about 50% of all jobs face a significant risk of automation. In contrast, Arntz et al. (2017) arrive at a much less dramatic conclusion in their study for 21 OECD countries, computing that only 9% of all jobs are threatened. Moreover, Dauth et al. did not find any net job losses due to automation in their study for Germany (2015). Finally, Autor (2015), Berriman and Hawksworth (2017) as well as Servos (2019) argue rather for an impact on the content and nature of jobs, i.e., on the tasks that are performed within jobs, than on the jobs per se.

Primarily because of their predictive nature, these studies show a high degree of inconsistency and a low degree of validity (cf. Ernst et al., 2019). They are not (and largely cannot be) based on real data sets or empirical evidence, as these do not yet exist given that we are just at the beginning of the AI era. Even though some authors try to circumvent this limitation by grounding their analyses in the already abundant data on the impact of industrial

robots, this type of approach ultimately does not provide reliable results either (cf. Chiacchio et al., 2018; Dauth et al., 2015). This is because robots, unlike AI, are rival products, meaning that they are only deployable to perform one task in one place at a time. In contrast, algorithms are of non-rivalry nature.

> *"It would be sufficient for one scalable algorithm to have acquired the knowledge or skills for a specific task in order for it to be used in any production process anytime anywhere. Contrary to robots, there is no need to replicate or embody that skill or knowledge in another object. A single algorithm can, in principle, displace all workers that were performing that particular task for which the algorithm is trained" (Martens & Tolan, 2015, p. 15).*

2.2. The Common Denominator – AI's Unequal Impact on the Labor Market and Beyond

Despite the major differences between the studies, there are two interconnected, unifying characteristics shared by the majority of them. First, they argue that AI negatively affects social equality. Second, they demonstrate that while many high-skilled jobs will rather be complemented than replaced by AI, "low and medium-skilled jobs" are facing the opposite faith – a high risk of being replaced by automation (cf. Graetz & Michaels, 2018; Ma et al., 2022). As a result, a difference in the respective job conditions emerges, i.e., wages increase in already high-paid jobs that require skills that complement AI, while they decrease at the other end of the income-skill-spectrum due to less supply and increased demand (cf. Cai & Chen, 2019; Goyal & Aneja, 2020; Humlum, 2022; Martens & Tolan, 2015; Servos, 2019; Suta et al., 2018).

Put in less abstract terms, the following jobs in particular are among the ones most at risk of automation: postal service jobs, such as mail sorters, processors, and carriers; shop assistants; data entry clerks; truck, taxi, bus drivers; cleaners and helpers; food preparation assistants; as well as *call center agents* (cf. Broady et al., 2021; Nedelkoska & Quintini, 2018). A disproportionate share of these jobs is performed by women and racialized minorities (cf. Giesing and Rude, 2022; Manyika et al., 2017), who are also underrepresented in key growth

areas and STEM occupations (Fry et al., 2021; OECD, 2017). For this reason, the World Economic Forum (2018) and Ernst et al. (2019) assume that the effects of job automation will be particularly palpable for them, generating a strong gender-race effect.

Yet AI does not only produce more inequality in the labor market. Various studies have shown that it also reinforces and exacerbates existing inequalities in many other areas of society (cf. Zajko, 2022). While a few years ago it was widely assumed in the scientific community that algorithms were "objective" (Jouvenal 2016; Smith 2015), we now know that this is not the case. Algorithms can contain multiple kinds of biases, ranging from racial biases to sexist as well as homophobic and ableist ones (Hamilton, 2019; Schroeder, 2021). In 2015, a now often-cited incident occurred that vividly illustrated such biases. Google's photo service incorrectly classified black people in certain photos as gorillas, thus reproducing racist stereotypes (cf. Gasparotto, 2016; Katyal & Jung, 2021; Noble, 2018; Righetti et al., 2019). Furthermore, in 2020, a Facebook ad featuring an album cover of a same-sex couple was rejected by an algorithm on the grounds of being sexually explicit – simply because their foreheads were touching. When tested with similar photos, albeit of heterosexual couples, the algorithm found no reason for censorship (cf. Golding-Young, 2020; Horner, 2023).

Moreover, the deployment of AI can also lead to a reinforcement of existing inequalities in justice systems (Hübner, 2021). This can best be demonstrated with COMPAS (Correctional Offender Management Profiling for Alternative Sanctions), an algorithmic tool used in U.S. courts to decide how likely it is that a defendant or convict will recidivate. Based on 137 parameters, COMPAS creates a score of an offender ranging from one to five to assist in the sentencing process. Those who receive more than five points are considered to be at medium to high risk of re-offending, influencing whether the defendant will be released on bail pending trial, receive a suspended sentence, or be incarcerated and for how long. More than a million offenders in the U.S. have been assessed with COMPAS since its introduction in 1998. The major problem is that the program errs disproportionately to the disadvantage of racialized

people. As Angwin et al. (2016) have demonstrated, the latter were overrepresented in the group incorrectly classified as being at risk of recidivism, while whites were overrepresented in the group falsely classified as rehabilitated.

Another related area of concern stems from the risks associated with using algorithmic profiling in policing (cf. Benjamin, 2020; Jefferson, 2018). These tools rely on neighborhoods' historical arrest data, which can reflect racially biased policing practices. This, in turn, may then lead to over-policing of these neighborhoods, more arrests, and thus a dangerous feedback loop – that is, another case of AI exacerbating existing inequalities (UN Committee on the Elimination of Racial Discrimination, 2020).

2.3. Understanding AI's Unequal Impact on the Labor Market – An Urgent Need for Qualitative Research

To cushion and/or counteract these negative effects of AI on equality, both academics and policymakers have called for new innovation policies "to orient the technological progress in socially desired ways" (Ernst et al., 2019, p. 17). Some authors therefore advocate, at least in theory, for an "open consultation of all involved parties" to identify what the socially desired development is and what policies are needed to achieve it (cf. Petropoulos, 2018). In practice, however, such consultations are rarely to be found – especially when it comes to AI's impact on workers.

Being among the few examples of qualitative studies carried out to date, the Global Partnership on AI's ("GPAI") Working Group on the Future of Work's study (2021) was particularly interested in observing the impact of AI on the labor market in real-life contexts. The authors argue that

> *"[t]o build a better future for workers collaborating with AI, to be more inclusive on various criteria such as disability, gender, ethnicity... a mandatory initial step is observation. The aim is to capture what is happening in the real context of workplaces: observe AI at the workplace, gather as diverse as possible use cases, conduct qualitative analyses of its impact in different situations, geographies, sectors, users (Global Partnership on AI, 2021, p. 4)."*

Second, a joint study by Siemens, the German trade union *ver.di*, and the German Federal Ministry of Labor and Social Affairs explored the impact of AI on workers in two case studies. Respectively using qualitative interviews and randomized field experiments, they examined the use of AI in both human resources and customer service (cf. Fregin et al., 2020).

Third, in "*Technopolitik von unten*", Schaupp (2021) examines the digitalization of the labor process from the perspective of moments of conflict. Using participant observation, during which he himself worked as a bicycle courier and in the electrical industry, Schaupp attempts to address the following question: What strategies do workers whose activities are algorithmically controlled use to respond to the polarization of employment? As his research makes clear, wherever algorithmic work control is used as a means of compressing and devaluing human labor, processes of resistance and self-organization can be found.

These studies present a *qualitative ex-post* analysis, i.e., they exclusively examine the impact of AI in those workplaces where such technology is already in use, at least in the proof-of-concept stage ("PoC")[2]. Such analyses that explore the discourses of designers, executives, and users of AI at work through interviews, experiments, and participant observation are extremely important and a necessary first step towards recognizing the relevance of qualitative methods in this field. However, especially when the GPAI (2021) authors emphasize the need for observation and the empowerment of workers in their policy recommendations, I argue that an essential step is missing. This essential step constitutes a *qualitive ex-ante* analysis: Qualitative studies of people whose job is at risk of automation – rather than already automated – are urgently needed to ensure that their concerns are fully considered in the formulation of policies and regulations.

Several *quantitative ex-ante* analyses have already been carried out. In this regard, Brougham and Haar (2018) became pioneers in developing the Smart Technology, Artificial

[2] "A PoC is a demonstration of feasibility, i.e., a concrete and preliminary experimental realization, short or incomplete, illustrating a certain method or idea in order to demonstrate or not the feasibility" (GPAI, 2021, p. 13).

Intelligence, Robotics, and Algorithms ("STARA") awareness index. This index aims to measure whether employees believe that their job will be replaced by STARA in the near future. It also includes a number of additional item scales to gauge how organizational commitment, career satisfactions, turnover intentions, depression, and cynicism are related to STARA awareness. On the whole, Brougham and Haar (2018) found a negative correlation between increased STARA awareness and organizational commitment as well as career satisfaction. In contrast, STARA awareness increased turnover intentions, cynicism, and depression. Following Brougham and Haar's (2018) study, numerous other quantitative studies have explored STARA awareness and its consequences for employees (Ghani et al., 2021; Kong et al., 2021; Lingmont & Alexiou, 2020; Morikawa, 2017; Xu et al., 2023).

All these studies are of great value. Unlike other quantitative research discussed above (see 2.1 & 2.2), STARA awareness studies do not concentrate on abstract job categories likely to be replaced or significantly changed by AI. Rather, they focus on the subjective perceptions of those potentially affected by AI-induced job upheavals – often neglected in the debate about AI's impact on the workplace, yet indispensable for evidence-based policy recommendations and decisions. In summary, then, they deal mostly with feelings and emotions. However, I argue that quantitative indicators and surveys cannot capture important nuances of these sentiments. They lack an interpersonal component, something that can only be achieved by means of qualitative, in-depth interviews. These allow for critical inquiries and can render accessible participants' implicit knowledge, a vital element remaining mostly concealed in quantitative research designs.

This thesis leverages the strengths of both lines of research discussed in this section. First, similar to GPAI (2021), Fregin et al. (2020), and Schaupp (2021), I follow a qualitative approach by conducting semi-structured, in-depth interviews. Second, I mobilize the underlying idea of STARA awareness studies and focus on employees whose job is at risk of automation rather than already having been automated. Through this approach, knowledge is generated that

contributes to the existing literature but, due to its *qualitative ex-ante* analysis, takes a new path away from both qualitative ex-post impact assessments and quantitative ex-ante STARA awareness studies.

3. Key Concepts

As will be explained in more detail in the methodology section, the aim of this work is not to generate and subsequently test hypotheses based on theory. It is rather to create a grounded theory from the data by abductive procedure (see 4.1). However, this grounded theory is linked to existing, appropriate concepts "that researchers import to the research process as analytical tools and lenses from outside" (Charmaz, 2014, p. 159). Three key concepts in particular have been influential in informing and strengthening the development of my grounded theory: emotional labor, sociological imagination, and political imagination. At this point, the intention is simply to give an overview of their core features. A more detailed discussion of the exact linkage of these concepts to my findings is provided in Chapters 5 and 6.

3.1. Emotional Labor

Hochschild's (1983) concept of emotional labor, as well as its further developments by Gross (1998) and Grandey (2000), will serve as the first theoretical lens informing my grounded theory. Emotional labor refers to the management and control of feelings in exchange for wages. Hochschild (1983) bases her concept on observations in the service sector, where many companies have implicit or explicit rules that dictate how employees should express their emotions when interacting with customers. In a work situation, employees usually rely on two strategies to consciously create and present an emotional expression consistent with these rules, i.e., deep acting and surface acting. Deep acting involves using cognitive techniques to imagine a state that actually produces the desired feeling, rendering the presentation "authentic". Surface

acting, on the other hand, involves pretending, meaning delivering the situationally desired emotional expression even though the corresponding emotion is not present.

Drawing on Hochschild, Gross (1998) demonstrated how the perception of representational rules leads to emotional labor in terms of emotional regulation. He distinguishes between two types of emotion regulation "that occurred at different points following exposure to a stimulus: antecedent-focused and response-focused ER [*emotional regulation, Author's Note*], referring to attempts to modify or change felt emotions, or to modify or suppress expressions, respectively" (Grandey & Melloy, 2017, p. 408). Gross also labels the former as "situation reappraisal", whereas he refers to the latter as "expressive suppression".

Grandey (2000) then linked Gross' concepts of emotional regulation strategies to deep and surface acting identified by Hochschild. More precisely, Grandey connected deep acting with situation reappraisal and surface acting with expressive suppression. The central idea of her model is that jobs requiring emotional labor are not inherently good or bad. Rather, the nature of their impact depends on several factors, including the duration and frequency of emotional labor performances, employees' individual features (gender, race, emotional intelligence), and the company's organizational characteristics (job autonomy, supervisor and co-worker support).

3.2. Sociological and Political Imagination

Second, I will draw on Wright Mills' (1959) concept of sociological imagination. Sociological imagination refers to the ability to see the connection between one's personal actions and the larger social forces in which those actions are embedded. Wright Mills argues that people often lack such sociological imagination. Their vision and way of thinking is limited to their "personal troubles of milieu" (ibid. p. 9), preventing them from recognizing that these personal troubles are actually part of larger "public issues of social structure" (ibid. p. 9).

One of the examples Wright Mills uses to illustrate this phenomenon is unemployment: If a significant proportion of the population in a given society is jobless, individuals do of course struggle with the personal problems of unemployment. Yet the blame for this lies not with themselves, but rather with the economic and political institutions of the society they live in. If these individuals lack sociological imagination, they are unable to make this broader connection. They feel trapped in their situation of unemployment and run the risk of becoming apathetic – that is, of perceiving their situation as inevitable (cf. ibid.)

Wright Mills argues that such a lack of sociological imagination among "ordinary people" is comprehensible or rather unsurprising, considering all the changes they are confronted with. It is demanding not to let all their personal problems and changes obscure their view of the bigger picture (cf. ibid.). In contrast, Wright Mills shows less sympathy for his colleagues, i.e., social scientists, lacking sociological imagination. The aim of social studies, he argues, should be to move back and forth between individual biographies and broader social structures and changes, thereby revealing their connections. By doing so, social scientists can and should also influence policies (cf. ibid.).

The central issue, though, is that sociologists view themselves too much as consultants to policymakers. As a result, they lose their critical perspective and independence as they are too closely linked to governments, corporations, and other powerful institutions. They focus too strongly on administrative issues and solving problems for the powerful. The actual goal of social studies – showing the connection between individual problems and societal issues – is thus defeated (cf. ibid.).

In other words: not only "ordinary people", but also social scientists often lack sociological imagination. This is insofar problematic as social scientists play a key role in making people aware of their connection between personal problems and larger social issues. Wright Mills therefore calls for a self-conception of social scientists as independent observers,

possessing both sociological imagination themselves as well as holding educational responsibility towards people without such "quality of mind" (p. 5).

Wright Mills' (1959) "The Sociological Imagination" has had a strong and lasting impact on sociology, fostering a critical approach to the discipline as well as heavily influencing the development of public sociology (cf. Jackson, 2016; Tilman, 1989). However, his sociological approach has also been criticized for being too utopian or overly focused on macro-structures. While these are fascinating and pertinent debates about the direction of sociology as a discipline, this thesis is more concerned with the relationship between sociological imagination and low-skilled workers. I shall thus refrain from a more comprehensive exploration of these *epistemological, disciplinary* arguments, and instead elaborate on the c*onceptual* development of sociological imagination.

To be more specific, I will focus on Burawoy's (2008; 2010) "political imagination", which I will mobilize as my third key concept. Burawoy criticizes Wright Mills in that "he thought that the analysis of the link between social milieu in which people live and the social structure which shaped that milieu would spontaneously give rise to the transformation of personal troubles into public issues" (Burawoy, 2010, p. 1). This is not the case, though. Or in the words of Burawoy (2008):

> *"Knowing that my unease or malaise is due to anomie in society, or knowing that I'm without a job because I live in a world of unregulated capitalism does not necessarily lead me to turn my personal trouble into a public issue. In fact, knowing the power of social structures is just as likely to paralyze as to mobilize […]. In addition to sociological imagination we also need a political imagination" (p. 368f).*

This political imagination is shaped by and can only be developed via collective efforts and collaborations with organizations, groups, and social movements outside of the academic sphere (cf. Burawoy, 2010). Political imagination hence theoretically stems from sociological imagination, albeit adding one critical layer overlooked by Wright Mills and which Burawoy argues is fundamental to social transformation.

4. Methodology

A methodology implies a thoughtful search – founded on an attention to its ontological and epistemological grounds – for the most appropriate way to produce an intellectually credible answer to a specific question. It guides the decision as to why a particular method, and not another, should be used for particular problems (cf. Halbmayer, 2009). In order to gain a deeper understanding of how the disruptive effect of AI operates upon low-skilled workers – and how they subjectively make sense of such disruption –, an analysis of their discourses is needed. I argue that such an analysis can best be achieved by means of an inductive-abductive approach, more precisely by applying the Constructivist Grounded Theory ("CGT") methodology as first developed by Kathy Charmaz (2009).

4.1. Constructivist Ground Theory ("CGT")

As a fundamental approach to qualitative social research, Grounded Theory ("GT") aims to develop new theories based on empirical data. These theories should be anchored in the data and usually relate to a specific limited domain, which is why they are also referred to as medium-range theories. Broadly speaking, three major GT approaches can be distinguished: classical, objectivist Glaserian Grounded Theory ("OGT"), Straussian Grounded Theory ("STG"), and constructivist Grounded Theory ("CGT") (cf. Rieger, 2019). For this thesis, I have chosen to use CGT for three main reasons.

First, in contrast to OGT and SGT, it does not introduce hierarchization and power dynamics between the knowledge of the researcher and the researched (cf. ibid.). In CGT, a real world is assumed, which, however, cannot exist independently of the observers, i.e., people (cf. Charmaz, 2011). In this world, many different viewpoints may be adopted, and knowledge is generated by people in social interaction. And knowledge is precisely also what researchers seek to produce, whereby their social characteristics, such as race, gender, or class, exert a strong influence. Consequently, a neutral stance of researchers, as required by OGT, is not

possible. To be able to comprehend the influence of their own social constructions, researchers need to be highly self-reflective with respect to not only one's identity, but also to the analytical findings of the research (cf. ibid.).

Second, just like this master's thesis, Charmaz places social justice at the center of this "critical inquiry". This is also in line with Wright Mills' (1958) understanding of social sciences, whose goal should be to reveal the connection between individual troubles and societal issues and thereby contribute to their improvement (see 3.2.1). Power, inequality, and injustice are thus important issues that ought to be addressed. The thorough acquisition of knowledge, the strong reflexivity, as well as the deep engagement with the researched aim at getting as close as possible to their empirical world (cf. ibid.). Such proximity shall enable tacit and silent knowledge to be made visible and addressed. However, due to the interconnectedness, complexity, and hegemony of social injustices and mechanisms of oppression, this often proves to be particularly challenging, making it impossible for an inductive analysis process alone to bring them to the surface.

Hence, an abductive approach complements an inductive approach in CGT. Abduction begins when researchers discover something surprising and are confronted with the question of what the surprise is, where it comes from, or the like. To find an explanation, the researcher first considers all possible explanations, then collects new data to either prove or reject the hypotheses, and finally selects the most plausible theory to be able to explain the empirical finding – or also to be able to solve problems, which is inherent to both the claim of pragmatism and CGT (cf. Charmaz, 2017). In general, through its iterative moment/circular research process, CGT offers researchers the possibility to work creatively with data and ideas about these data, jumping again and again from one to the other and having new ideas in the process.

Third, since CGT distances itself from positivist grounded theory, certain presuppositions are allowed in contrast to the latter. The goal of OGT is to enter the field as "unbiased" as possible, thus preserving the neutrality of the researcher and not stiffening their

gaze in a certain direction, which may cause other interesting things to go unnoticed. However, such neutrality on the part of the researcher, as mentioned earlier, is neither possible nor desirable according to CGT. I have therefore conducted an extensive literature review (see Chapter 2), which provided me with sensitivity for and orientation in the field, both of which are essential for a study to be most gainful (cf. Rieger, 2018).

4.2. Sample

The study took place in the city of Vienna, Austria, which was chosen for the following reasons. First, for the time being, changes in work due to automation are experienced much stronger in large cities than in rural areas. Therefore, exploring low-skilled workers' discourses in a metropolis should be prioritized. With its almost two million inhabitants, Vienna constitutes a suitable choice (cf. Stadt Wien, 2023). Second, a location was to be selected where the official language corresponds to my mother tongue, German. This is the case with Vienna and is important insofar as it allows for a deeper understanding of the participants, which would not be the case in my second and third language (English and French). Especially when it comes to eliciting implicit knowledge – as I am striving to do in this study – language barriers must be avoided at all costs (cf. Birkholz et al., 2023).

The idea was to recruit low-skilled workers from a specific occupational group whose jobs are at risk of being automated by AI. More specifically, I decided to limit my sample to people working in a call center in Vienna, as this occupational group exhibits a particularly high automation risk, but also does justice to the aforementioned gender-race bias (cf. Manyika, 2017; World Economic Forum, 2018). Even though no statistical data for call center employees are available for Austria or Vienna itself, data from Germany confirm the high number of women in this occupational field (cf. Bundesagentur für Arbeit, 2022). In addition, statistics from the United States reveal a significant proportion of racialized workers in the industry, with 45% of them being non-white (cf. Zippia, 2021).

I first contacted three members of the company's works council. Upon explaining the purpose of my research, they agreed to recruit call center agents who were interested in participating in a study on the topic of "automation in the workplace". In this initial stage of recruitment, which took place via email, I used purposive sampling (cf. Patton, 1999). This was to ensure that participants were selected based on their specific attributes and characteristics, and to identify individuals who could provide valuable insight into the topic based on their relevant knowledge or experience. I also factored in diversity of participants in terms of their gender, race, sexuality, and age.

As the study advanced, I further relied on theoretical sampling (cf. Thornberg & Charmaz, 2014), encouraging interviewees to suggest colleagues who could provide further insights to enhance the developing theory. At this stage of the research process, I decided to also interview works council members themselves to broaden the emerging categories and pursue leads within the data. After conducting interviews with eleven call center employees and three works council members, I reached data saturation (cf. Charmaz, 2006) and thus stopped conducting additional interviews.

4.3. Data Collection

Guided by the methodological choice of CGT, data were collected using the "*entretien compréhensif*" (comprehensive interview) developed by Kaufmann (1996). The comprehensive interview method allows to observe the representations held about an object of study. For the researcher who uses the comprehensive interview method, the data are concentrated in the words collected, which will become the central element of the device (cf. ibid.). The word of the other thus makes it possible to explore the characteristics of their thought, the criteria which make sense for them and the ways that they mobilize to build coherence. From this, we can deduce the mode of the interview: broad questions, barely evoking the theme of the research, in order to let the other person naturally move towards the categories proper to their thought.

The objective of the comprehensive interview is thus to "break the hierarchy" between the interviewer and the respondent, and to create an interview climate that encourages the respondent to open up to a conversation through which they will offer privileged access to their thoughts, values, and representations (cf. ibid.). The key is to be human, receptive, and empathetic in order to engage in a pleasant conversation.

Data collection took place in March 2023. On average, the interviews lasted half an hour and were recorded and transcribed verbatim. Examples of the questions asked during the interviews can be found in Table 1. To follow the lines of thought as the research progressed, some additional themes were added. These include, for example, questions about what makes for a good or bad customer, the experience with Interactive Voice Response ("IVR")[3] systems, and the perceived support of works councils.

Table 1. Examples of questions asked.

- You said you have been with the company for X years. Have you noticed any changes during this time, and if so, how would you describe them?
    - Have there also been any changes in the technology used in your workplace during this time?
- Which tasks in your job do you enjoy doing, and which do you like less?
    - How would you feel about automating the task(s) you like doing less?
- What do you think the job of a call center agent will look like in five to ten years?
    - Do you think there will be large changes due to (new) technologies?
- If your job were to be heavily changed / largely automated by technology, would you expect support from policymakers?
    - Why (not)?
    - If yes, what should this support look like?

4.4. Ethical Considerations

The conduction of this research was approved by the Research Ethics Board (REB-1) of McGill University. A study that examines the feelings and perceptions of a particular

[3] IVR refers to an electronic voice menu used in telephone customer service to automatically direct questions to the customer, who answers them via a dial key or by voice. This allows calls to be pre-screened and routed to the appropriate employee.

occupational group vulnerable to automation could have a negative impact on its members' psychological well-being, especially if they had never thought about the possibility that their jobs might be significantly impacted by automation. Therefore, participants were given the option to discontinue the interview at any time. In such cases, they would have also been informed about psychological support services in Vienna, which had been researched in advance. However, none of the participants discontinued the interview or were visibly negatively affected by their participation.

4.5. Data Analysis

In line with the CGT methodology, the data are systematically analyzed using three coding techniques. First, *initial* coding allowed me to become familiar with the data. This entailed line-by-line coding, where I assigned short and precise codes, consisting mainly of gerunds, to the data (cf. Thornberg & Charmaz, 2014). I then proceeded with *focused* coding. This helped me discover emerging key categories while still maintaining a certain degree of anchorage in the data. Thereby, the data material was successively abstracted and condensed, ultimately leading me to the final coding phase, i.e., *theoretical* coding. Through theoretical coding, I incorporated the three key concepts (emotional labor, sociological imagination, and political imagination) discussed in Chapter 3 into the research process, allowing me to refine the identified key categories. The goal was to "tell an analytic story that has coherence" (Charmaz, 2006, p. 63). Finally, these theoretical codes and their interrelationships were integrated into a grounded theory anchored in the data. The entire analysis process was further accompanied by the writing of memos in which I noted, among other things, my reflections on the codes and categories as well as on the emerging theory.

5. Findings

This chapter presents the key findings from the interviews, structured according to the three concepts introduced in Chapter 3: emotional labor, sociological imagination, and political imagination. Section 5.1 first discusses the high level of emotional labor that call center agents have to perform on a daily basis. Sections 5.2 and 5.3 then highlight the low level of sociological imagination and the absence of political imagination regarding the impact of AI on their job, which became apparent during the interviews with the agents. Finally, section 5.4 provides the results of the interviews with the works council members, who, unlike the regular employees, demonstrated sociological imagination, but also lacked political imagination.

5.1. Emotional Labor

5.1.1. Call Centers – Emotional Labor as "Daily Business"

The call center agents I interviewed perform a tremendous amount of emotional labor, i.e., they manage and control their feelings in exchange for wages on a daily basis. This includes, for example, having to deal with agitated or aggressive customers, and defusing conflict situations.

> *Agent 8 ("A8"): "The other day, a customer started crying about how she got yet another bill." – Researcher ("R"): "Oh, because she had to pay so much?" – A: "Yeah. And that's when a conversation just wasn't possible with her. So, I said to her, 'Well, this isn't going to work now, we're both going to calm down now. I'll call you again in ten minutes.' And, you wouldn't believe it, I gave her ten minutes, I called her back, and then it all went well."*

However, most employees simply accept this emotional labor as something that is just part of their job.

> *A8: "Often there are emotions involved – he's not angry with me now, but with the company. And that's just part of my job. Of course, he doesn't call you and say: 'The company is so great, I just wanted you to know that'. He'll call if something doesn't go right."*

Likewise, experiencing discrimination is also regarded as part of the job, i.e., as something you simply need to learn to deal with and where you have to suppress your true emotional reactions. In this regard, employees shared experiences of gender-based and racial discrimination.

> *A7: "As soon as I leave at 4:00 pm, I'm just shaking this off. Otherwise, you won't be able to make it if you take it all home and let it get too close to you. And listen, I was born in Vienna, but my father is Turkish, he comes from Turkey. That means I have a foreign last name, so I've had to deal with one or two racists because of that, yeah. Well … you just have to stand above it."*

Yet many of the agents referred to these conflictual moments, in which an increased level of emotional labor was required of them, not only as part of their job. They also described them as situations in which they felt proud of themselves for having solved a problem by means of their social skills. Against this background, it is not surprising that, when asked in which tasks they believe to outperform technological tools, employees unanimously pointed to their social skills in conflict situations.

> *R: "Is there some sort of task where you say, 'I'm much better at that than a computer, I can do that a lot better'?" – A1: "In administration, no, but in interpersonal things, yes. Because I can react more to what the customer says when I hear him. I can calm him down if he's upset, and a computer voice would never be able to do that. Because it doesn't notice how agitated I am as a costumer when I'm typing or yelling something into in."*

Most employees feel that customers appreciate the emotional labor they perform, and that they often prefer a conversation via telephone over using a chatbot. According to the agents, this preference for interpersonal interaction is particularly pronounced among older customers. The company, though, is more concerned with maximizing their profits. Almost all employees mentioned the immense sales pressure they feel, and complained about how their bosses do not seem to value the emotional labor they perform.

> *A5: "Now, when the customer comes in, you already have automated special programs where you can see: 'Which products does he have?'. You had to manually search for that before. In the past, you would 'open up' the customer, take a look, and listen to what he had to say. And now, in the automated program, you already see: 'What does he have? What else is possible? Sell it to him!'"*

> *A6: "It's an extremely helping job, very idealistic, and yet it's managed, like a – I don't know – like a factory job."*

Furthermore, especially service-oriented agents are required to strongly mobilize surface acting strategies (cf. Hochschild, 1983) when they are asked to offer customers unnecessary products, even though they know very well that they do not need them at all. Instead, they would rather prefer to help customers and respond more precisely to their needs. For this type of employees, sells pressure thus leads to an increase in emotional labor.

> *A2: "So, it starts like this: The customer calls you, because his product doesn't work. And the optimal solution suggested by the management for this conversation would be that you not only fix his issue right away on the phone, but that you also sell him two – and preferably even more – additional products. And then you are thinking: "Come one, be a bit realistic! He calls, he's boiling with rage, and I'm supposed to sell him something else right then and there?!'"*

Other agents complained about how this sales pressure also results in customers calling to cancel products they have been talked into buying. This creates additional labor for employees – including, once again, emotional one.

5.1.2. Increase in Emotional Labor due to Imperfect Automated Tools

As just discussed, employees complained about the interpersonal component of their job – and the emotional labor performed therein – not being recognized or appreciated by management. Instead, they are under the impression that the company is more concerned with automating as many customer interactions as possible regardless of the employees' needs. For example, this involves identifying problems and routing callers accordingly with an IVR system at the beginning of a call or using chatbots to replace the call altogether. In addition, efforts are being made to encourage customers to become more self-sufficient, i.e., to solve certain technical problems on their own using video tutorials or instructions generated by a chatbot. This could theoretically buy employees more time to deal with more complex cases. In practice, however, all call center agents have voiced complaints about how automated processes and tools tend to hamper rather than facilitate their work. This owes to the fact that these technical tools often make mistakes.

> *A2: "There's constant restructuring to improve the whole thing, to optimize it. Then, another program is dropped. In its place comes yet another program, which is supposed to replace the*

previous one, or actually replace all the other programs. In the end, however, you have only one problem, uh, one program more. [laughs]" – R: [laughs] "Freudian slip?" – A2: "Often a problem, too, yes [laughs]."

A3: "The downside, for example, is when something is automated using robots and then that thing works so poorly that it ends up taking you longer to correct the robot than it saved you time. That's less optimal, isn't it?"

Yet flawed automation tools not only cost employees time. They also cost them nerves. Or, to put it less bluntly: Faulty automated tools increase the amount of emotional labor call center agents must carry out. Most employees I spoke with told me about customers who were upset or aggressive because they had been "playing around" with an automated tool for some time but had not reached a satisfying resolution. This occurred, for example, when an IVR misidentified their request and routed them incorrectly.

The employees' task is then to first calm down these agitated customers and defuse the conflict situation. Only then can they proceed with solving their actual problem. The agents therefore not only feel that the automated tool does not save them any work, but that it actually also causes them more emotional labor that would otherwise not have been necessary. If, for example, the customer had directly been connected to an employee or if the chatbot had immediately suggested calling the hotline instead of providing incorrect information one after the other, the problem could have been solved without triggering too much emotion. Instead, the employees are forced to deal with one aggressive customer more.

A9: "It also happens that their frustration and anger increase even more when they have to click their way through something, and it doesn't work. You can yell at the robot all you want; it just doesn't react. It's much more fun when you give an employee hell. But then they often say [imitates older, grumpy man's voice]: 'Tell your boss that's nonsense! That's an impertinence! Why can't we just call you?' Then I respond: 'Yes, I know. I can gladly pass it on.'"

A3: "It also happens that they are misrouted. For example, a private customer is routed to a different department because of a numerical error – because he says six, and the IVR recognizes something else. And that's a burden on the customer because he's already pissed off anyway and then the IVR says: [imitates monotone, annoying voice] 'I didn't understand you. I didn't understand you'. And you know, he doesn't call because he's in a good mood and wants to talk to me, but he's already grumpy anyway, and then that happens on top of it."

The malfunctioning of automated tools thus not only increases the workload of human agents, but also the amount of emotional labor required from them.

5.2. Limited Sociological Imagination

A handful of call center agents managed to draw a connection between their personal job troubles (push for automated tools despite their susceptibility to error; low appreciation of time-consuming conversations with much emotional labor but no sales; etc.) and the larger societal issues within which they are situated (capitalist drive for profit maximization and cost-efficiency; constant development and improvement of technical, especially AI-based tools; etc.). I argue that it can thus be presumed that these employees, who overall represented a small minority, possess sociological imagination. For example, they were able to view the lack of appreciation for their conflict management skills through a broader economic lens.

> *A6: "But I think the question is simply: why? Because the employee is viewed in an automated way and not as a human being, as an individual being. So, what he accomplishes is considered only in terms of performance indicators, but not based on his individual human action. And the latter is unfortunately just not relevant to performance indicators in any way."*

When asked about their assessment of their profession's evolution in the near future, employees with sociological imagination pointed to the advancing digitization and automation in all areas of society. For them, it was clear that this would also have an impact on their own job and bring about significant changes.

> *R: "If we project ourselves into the future, what do you think the profession of a call center agent will look like in five years?" – A6: "More automated" [both laugh]. – "In what ways, would you say?" – "Well, you know, there are studies that say: these certain jobs will be more automated and so on."*

> *A7: "The IVR is going to work pretty damn well in the future." – R: "What makes you think that?" – A7: "Because call centers are being fully digitized, and that will also be the case in our company. I'm active on the stock market on the side, at least a little bit. And there you always have to keep up with the times. That means you always have to keep yourself informed about what's coming, and what's currently happening because of trading. And yeah, digitization isn't going to spare the call center."*

Some of these employees even proactively addressed advances in the development of AI technologies and linked them to the fate of their own job.

> *A10: "I definitely think we're going to see a lot less phone calls on the service line, since that's going to become a lot more digitized."– R: "Digitized towards having more chats, you think? Or more towards voice assistants?" – A10: "Both. You will less often really need an employee, I think, with whom you speak personally. Because the intelligence, the AI, will probably be so good by then that it can already respond to almost everything the customer says."*

Interestingly, those conscious of the connection between their own situation and the bigger picture did not believe that most of their colleagues were aware of it as well.

> *A7: "I don't think my colleagues or people in general are aware of what's coming. They know [imitates ignorant voice]: 'Yeah, digitization means you can do everything more conveniently on your smartphone'. But I don't think many people are aware of what that really means for us as people [...]. As I said, we're not just talking about digitization or a small development in a certain direction, but it's really a revolution."*

And indeed, they were right. Most of the call center agents I spoke to were exclusively preoccupied with their own personal troubles. They focused on their daily problems with automated tools, leading them to be reluctant to believe that their jobs would be greatly impacted by technology in the near future. Hence, the majority of employees was unable to see the larger social dynamic and problem behind it – that is, the capitalist drive for profit maximization and cost-efficiency, which implies a constant development and improvement of technical, nowadays especially AI-based tools.

> *R: "If we look at your profession in five years, what do you think it will look like? What's going to change, maybe? What will stay the same?" – A4: "Basically, not much will change. There will be some technical changes, meaning that we'll sell different products. But, for example, I don't think IVR and all its problems will change or improve much. Not in five years. I guess maybe in 20 years, but I'll be retired by then, so I don't really care."*

However, as also observed by Wright Mills (1959), a certain feeling of uneasiness became noticeable even among these call center agents who lacked sociological imagination and told me that they generally did not believe that their jobs would be greatly changed by technology.

> *A2: "Of course, the bosses always say that the tool is supposed to make our work easier. But in the back of our minds, we think: 'If this thing can do a little bit more, then soon I really won't need to be sitting here anymore'."*

Most of these employees then relied on humor – presumably to compensate for or suppress this feeling of uneasiness.

> *A2: "But maybe there will soon be an automation for that, an automated system that optimizes itself, or I don't know. I can't keep up with it anymore. I'm not the youngest anymore. I'm happy if I can download an app [laughs]."*

> *A4: "During breaks, we sometimes talk about it a little bit. We always say that they'd prefer it if the whole place was just a server farm [laughs]."*

Wright Mills (1959) argued that when we lack sociological imagination, we easily become susceptible to falling into a state of apathy, where we unquestioningly accept the naturalness and inevitability of the beliefs, actions, and traditions in our surroundings. A similar pattern emerged when talking to call center agents without sociological imagination about possible future changes within the company.

> *A5: "If it's like this, then it's like this, I always think to myself. I just have to come to terms with that, others have to deal with it too."*

5.3. Lack of Political Imagination

While sociological imagination was present among a few call center agents, all employees lacked political imagination. They did not recognize or engage with the political dimension, i.e., the realm of power relations and political processes, which influence their work and its conditions. Most of them talked about having to figure out their problems themselves, including job changes due to technology. According to them, this was not the responsibility of policymakers.

> *A11: "I think we don't even know what's coming next. Well, there's certainly many changes that we are going to have to face, and I think it's just important how you deal with it. Do you whine and say, 'It can't be done'? Or are you more like, 'I'll give it a try and see how it goes'?"*

> *R: "Do you think there could be more support from policymakers or from the employment office? Maybe more retraining offers?" – A6: "Well, you can get private training if – how should I put it – you are proactive and somewhat interested in changing."*

Some agents also expected greater support from their company, but reiterated that policymakers carry little responsibility in this regard.

R: "Do you think that more could be done by policymakers to support workers in that respect? Perhaps also regarding job changes?" – A4: "I'd say that this has nothing to do with politics. The company has to take care of it itself, of course. But at the end of the day, politics can't and also shouldn't interfere in these kinds of things."

However, most employees also frequently mentioned the importance of their works council in providing support with various issues. This even included helping out with job switches within the company due to automation.

R: "Do you also take advantage of the offers from the works council, or do you talk to them, for example, when it comes to job changes?" – A3: "Yeah, totally. They help you look for a new position within the company if your current job will soon mostly be done by a robot. We discuss a lot of things with them in general. They're like a lawyer for us. So yeah, they sort everything out."

R: "There are also company agreements, especially regarding the introduction of new technical things, right?" – A5: "Yes, exactly." – R: "Are they respected?" – A5: "Yes, for the most part. But there are also managers who try to circumvent or not do some things. In such cases, however, we very promptly receive e-mails from the works council saying: 'That's the way it is, don't put up with anything else, and if anything happens, let us know'. So yeah, that's really great, I have to say."

5.4. Works Councils – A Historically Strong Pillar of Support Crumbling in the Wake of Technological Developments?

I was puzzled that all call center agents, on the one hand, neither expected any support from government for their personal problems caused by automation nor even considered such support to constitute a political responsibility. On the other hand, though, a large number of the employees spoke of how much they did appreciate the support of their works council in a variety of matters – and that they would also count on their help if their job was heavily transformed or even automated by technology. This is all the more surprising since works councils are a highly politicized institution in Austria. They collaborate with the responsible trade union as well as with its umbrella institution, the Austrian Federation of Trade Unions ("*ÖGB*"). [4] In addition, they usually closely work together with the Austrian Chamber of Labor (cf.

[4] The *ÖGB* is divided into seven sub-trade-unions. Today's sub-trade-unions used to be called specialized trade unions and were organized by economic sector. The current division follows a far more complex logic, though. It can be explored in more detail by consulting Pellar et al. (2013).

Arbeiterkammer, 2018). Both the *ÖGB* and the Chamber of Labor are highly politicized and constitute two of the four institutions forming the Austrian social partnership, i.e., a system of economic and social policy cooperation.

How can it be, then, that employees see their problems as non-politicized, yet rely heavily on the support of a politicized body in solving them? This question has increasingly emerged during the research process (see Box 1). To understand this paradox, I thus decided to also interview the three work council members who initially helped me recruit "regular" employees.

Box 1. Memo – "Role of the Works Council"

"Role of Works Councils" – March 7, 2023

Agent 8 talked about how her problems had nothing to do with politics. At the same time, however, she repeatedly talked about how important the works council is and how much it has helped her with various things. For example, she has already changed her position within the company several times – once also because her old position was largely automated.

Other employees have told me similar things. It seems to be a recurring theme, but somehow it appears to be contradictory, too? I need to focus more on shedding light on this phenomenon to find a possible cohesion (if there is one?). The best way to do this would be directly interviewing the works council members. After today's interviews, I should write to the works councils to see if they are available for an interview in the coming days.

5.4.1. Sociological and Political Imagination for "Classic" Labor Market Issues

Throughout all three interviews, it became apparent that the works council members possessed sociological imagination concerning "classic" labor market problems of workers. For example, they associated the cutting of individual jobs with the broader problem of offshoring activities to countries with cheap labor.

W2: "They just offshore to Eastern Europe because labor costs are cheaper there. That's where employees cost them less. And in turn, we are getting smaller. We are shrinking, meaning jobs are being cut in our company."

Furthermore, they attributed the sales pressure felt by employees to the emergence of strong competing companies as well as to prevailing neoliberal economic policies more broadly.

W1: "The monopoly has fallen. All the companies like X and Y and whatever they are called have come up over the years. Of course, the pressure to sell got bigger as a result."[5]

W3: "We have been bought up for the most part by foreigners. That has brought along changes. And then, of course, there's the neoliberal trend in general: more and more focus only on short-term numbers and less on sustainable solutions."

The works council members also considered these broader societal issues as political problems, which they try to address and improve with the political instruments at their disposal. Therefore, it can be argued that they also possess political imagination when it comes to "classic" labor market issues.

R: "Do you think policymakers could or should do something about these challenges for employees you just talked about?" – W1: "There's one big thing they could do, and that would be really borderline brilliant, because that's an issue we've been struggling with for a long time. And that's outsourcing. That's really a political issue. You can't get to it any other way. If they changed something there ... In the last few years, we have fought to have our company take over leased employees after 10 years. But that's still too long. More needs to happen on the political front here."

5.4.2. AI's Impact on the Labor Market – A Lack of Political Imagination

The works council members also demonstrated sociological imagination with regard to developments in AI and their introduction into the company. They were thus capable of linking the individual problems of employees with the larger societal trend toward greater efficiency and profit maximization through AI-driven automation.

W2: "Yeah, hotline work will certainly become less. That's where the trend is going. What we have today in terms of number of employees, we will certainly no longer have in the future due to artificial intelligence. If it really continues to develop - well, actually it will continue to develop, you won't be able to stop the trend. And it's just getting better every year, like in every other sector."

[5] To preserve both the company's and the participants' anonymity, the names of the competing companies were disidentified.

W1: "I'm worried. I'm worried because we're getting fewer and fewer people. I always say automation is happening much faster than we are retraining and upskilling the employees. I'd like for it to happen side by side, because then it's a win-win situation for both. Of course, as a company, I'd have to keep the employee on the payroll for a year and a half longer, but at least it's fair and square. That also means, though, that in the appraisal interview – which we have two or three times a year – they have to already say today, 'Look, the job that you're doing now will no longer exist in this form in two years. But we are developing in a different direction. Would you let yourself be retrained for that? Could you imagine working in that field?'. Of course, the company should also cooperate with us in the retraining process. So yeah, that's what I would wish for. But not that the company says, 'I'm automating overnight, and I give a damn what happens to the employees.'"

Sociological imagination becomes evident here as the works council members recognize the need to understand the broader social and organizational implications of AI-driven job changes, including the importance of in-house retraining programs to mitigate the impact on affected employees. It reflects an awareness of the social context and consequences of technological advancements. There is no doubt that being able to draw this connection is important. However, to implement AI in companies in a way that benefits not only their shareholders, but also their workers, political imagination on the part of the works council is required. It is not enough to connect the dots between employees' personal problems and broader societal issues. Work councils should also politicize these issues (cf. Burawoy, 2008) *and* make employees aware of this political component, thereby contributing to the formation of sociological *and* political imagination among them.

Possessing political imagination in this context thus entails seeing the broader political dimensions and power dynamics of AI-driven technological changes. It means recognizing that in-house retraining programs alone will not suffice, but that political entities – first and foremost governments – must take the lead here. It also means realizing that additional policy measures will be required to strengthen workers' rights and make their voices heard in the wake of AI-driven automation. Ultimately, it means acknowledging the need for works councils to be involved in the design of collective solutions to address the impact of technological change on the labor market. Yet this essential additional step – moving from sociological to political

imagination – has not yet been taken by the works council, with far-reaching consequences for the workers they represent. One of the main objectives of the following chapter is to shed more light on this.

6. Discussion and Implications

6.1. Emotional Labor and the Formation of Sociological and Political Imagination

A variety of studies have already examined different aspects of emotional labor in call centers (Diefendorff et al., 2019; Gabriel & Diefendorff, 2015; Goldberg & Grandey, 2007; Kim & Choo, 2017; Rupp & Spencer, 2006). Call centers lend themselves well to the conduct of such case studies since agents fulfill several characteristics of emotional work as defined by Hochschild (1983). These include, for example, voice-to-voice contact with customers as well as altering their emotional state as an integral part of the job (cf. Hochschild, 1983). As already discussed in the theory section (see 3.2.2), the exact manifestation and perceived burden of emotional labor depends on various factors, e.g., on the company's organizational characteristics and the employees' individual traits. Different studies therefore tend to put a stronger emphasis on one or the other.

More company-focused studies concentrate on the relationship between company-specific communication rules or monitoring of customer conversations, and the intensity of emotional labor required (cf. Goldberg & Grandey, 2007; Holman et al., 2002; Pugh & James, 2013: Stanton & Weiss, 2000; Wilk & Moynihan, 2005). Individual-focused studies, on the other hand, are more interested in exploring how employees' personality, gender, and race influence the type and intensity of emotion labor required (cf. Cho et al., 2019; Dahling & Johnson, 2013; Grandey et al., 2004; Paner, 2013; Pradhan & Abraham, 2005; Totterdell & Holman, 2003).

What these studies have in common, though, is their unequivocal finding regarding the negative consequences emotional labor can have for employees. In particular, they shed light on adverse health effects, such as increased stress levels or burnouts (cf. Juster et al., 2010; Lewig & Dollard, 2003). Other studies also identified a link between emotional labor and job performance, job dissatisfaction as well as employee turnover (cf. Diefendorff & Richard, 2003; Zapf et al., 2001).

To my knowledge, however, no research to date has analyzed the relationship between emotional labor and sociological or political imagination – whether in call centers or other professions. The only studies that come closest to such an inquiry are those dealing with emotional labor and job disengagement (cf. Anaza, 2016; Eggli, 2022; Kim & Wang, 2018). Job disengagement refers to a state in which employees emotionally and cognitively disengage from their work. It has been found that performing emotional labor, when perceived as something stressful or overwhelming, can trigger job disengagement (cf. Brotheridge & Grandey, 2002).

The findings of my research do not point to an emotional disengagement of call center agents from their job. Rather, they revealed that personal problems on the job do preoccupy employees, but at the same time also seem to obscure the larger social issues and changes behind them. It became apparent that, despite the threat AI poses to their jobs, most call center agents do not believe this change will happen (see 5.1.2). I argue that the regular need for human intervention – which is still required for the time being in light of the level of advancement of AI – may reinforce the perception among call center agents that their roles are indispensable, as they are constantly resolving issues that the automated system could not. The concomitant increase in emotional labor may then also prompt call center agents to focus more on the immediate requirements of their job. This is because managing emotions requires a strong concentration on the needs of customers, which can be very exhausting and stressful for agents (cf. Juster et al., 2010; Lewig & Dollard, 2003). Dealing with future change and uncertainty of

their profession could add to this stress. Call center agents' reluctance to consider the potential impact of AI on their work could therefore be seen as a coping mechanism for the emotional demands of their job. It may be "easier" for them to focus on the immediate demands of their job and the challenges they currently face, rather than to worry about potential changes in the future. The increase in emotional labor may thus hinder employees in their formation of sociological imagination.

This is the first time that a study has suggested such a connection. In view of other discovered negative effects of emotional labor on employees (burnout, decrease in performance, job dissatisfaction), such a connection appears to be plausible. Additional research is required, though, to further explore in what ways emotional labor and sociological imagination are linked, and whether or not there is a causal relationship between them.

Where there is no sociological imagination, there can be no political imagination. Individual problems must first be embedded in their societal context (sociological imagination) in order to subsequently enable an understanding of them as political issues that need to be changed (political imagination). Or in less abstract terms: In order to advocate for political change, workers must first recognize that their personal troubles with AI and automation are connected to broader societal issues. These issues mainly comprise the capitalist drive for profit maximization, which requires a constant development and improvement of technical, nowadays especially AI-based tools to become even more cost-efficient. Yet political imagination does not automatically evolve following sociological imagination, as talking to those few employees who possessed sociological imagination has illustrated (see 5.2).

This is aligned with Burawoy's (2008) theory, according to which personal problems must also be politicized in order to be able to envision and enact change. Regardless of their sociological imagination or lack thereof, call center agents did not, however, expect any support from public authorities for their automation-related personal troubles nor considered such support to even constitute a political responsibility. At the same time, though, they spoke of

how much they rely on the help of their works council in a variety of matters, including when I asked them about their reactions and coping strategies in a hypothetical scenario in which their job was to be heavily transformed or even automated by technology.

The aim of the following section is to build on these expectations towards works councils. *In theory*, the latter could play a major role in the formation of sociological and political imagination with regard to AI-driven automation and its impact on the labor market. However, if they fail to recognize the political nature of these issues – that is, if works councils themselves lack political imagination– it will be impossible for them to fulfill this role *in practice*.

6.2. Works Councils' Role in Fostering Sociological and Political Imagination Among Workers

According to Burawoy (2010), political imagination is shaped by and can only be developed via collective efforts and collaborations with organizations, political groups, and social movements. Works councils are a highly politicized institution in Austria (see 5.4). There are thus multiple ways in which they could *theoretically* contribute to forming sociological and political imagination – especially in terms of AI – among employees.

First, works councils can help workers situate their individual working conditions in a broader social context. They can provide information about economic developments, social injustices, and technological innovations, and demonstrate how these affect workers' well-being and working conditions (cf. Negt, 1981). Second, works councils can promote solidarity and cooperation among workers through this emphasis on common interests and challenges, ultimately leading to collective action (cf. Gerlach et al., 2011; Kotthoff, 2006). Third, works councils can advocate for co-determination and active employee participation in decision-making processes (Frick, 1996). This can help increase employees' sense of responsibility while, at the same time, deepening their understanding of the interrelationships between

individual actions and social structures. Fourth, works councils can build networks with other workplace interest groups, unions, and political organizations. Through this collaboration, works councils can strengthen workers' political commitment and imagination by integrating them into broader political movements and discussions (cf. Behrens, 2009).

Works councils thus serve a strong educative function. This function has already been recognized in the workers' movement of the 19th century and was later coined under the term "trade union education" (cf. Bürgin, 2012). The basic idea is to promote the political awareness and political education of workers through training and education programs. This should then enable workers to effectively represent their rights and interests, and the working class as a whole to advocate for a more equal society.

My research has shown, however, that works councils cannot fulfill this educational function with regard to AI-specific developments *in practice*, if they themselves lack political imagination for it. I therefore argue that major changes in trade union education are required. In a nutshell, this reformed education must put a greater emphasis on the development of sociological and political imagination. In a first step, works council members are to be sensitized themselves for the political dimension of developments in AI and their impact on the labor market. In a second step, these works council members must then, in their own educational work in their respective companies, contribute to the development of sociological and political imagination among employees. The following section will describe in more detail what such revolutionary trade union education work might look like – and why it is actually not so revolutionary after all.

6.2.1. Cultivating Workers' Sociological and Political Imagination: Drawing Inspiration from the 1970s

In the 1970s, Oskar Negt, a German sociologist and philosopher, developed an alternative model to the trade union education work prevailing in the 1960s. Calling it "*soziologische Phantasie*" (sociological fantasy), he heavily drew on Wright Mills' (1959)

concept of "sociological imagination". Negt argued that traditional educational work in schools often ignores the reality of life and experience of the working class and instead conveys an idealized image of the bourgeoisie and its values. It falsely depicts certain cultural and social practices of the middle and upper class as universal, and thus bypasses or even devalues the reality and experiences of the working class (cf. Lisop & Huisinga, 1994). For example, traditional education often gives the impression that profit maximization and cost efficiency form the overriding, unquestionable objectives in companies. Working-class problems such as layoffs, which may help achieve these goals, are then portrayed as individual failures rather than as the result of structural injustices (cf. Bürgin, 2012).

The task of trade unions is therefore to develop their own understanding of education. It should be directed toward the social emancipation of the working class and hence represents a counter-project to the idealistic bourgeois concept of education. Negt criticized that trade union education work in the 1960s had adapted itself too much to the requirements of capitalist society, though, and that the revolution in education demanded by the original workers' movement had been disregarded (cf. ibid.).

In his work "*Soziologische Phantasie und exemplarisches Lernen. Zur Theorie und Praxis der Arbeiterbildung*" (Sociological Fantasy and Exemplary Learning. On the Theory and Practice of Workers' Education, 1966), Negt aims at redirecting attention to the revolutionary component of the educational system. He develops an alternative concept of trade union education, whose goal is the critical reflection of the connection between one's own living conditions, society, and the economic system. Following Wright Mills (1959), Negt's approach is based on the understanding that an individual's personal experience is always shaped by social and historical factors. It is the core task of trade union education to reveal this connection between individual experience and social structures. This should then give rise to a consciousness among the working class for its own interests and its social situation, thereby creating a basis for political engagement and change (cf. Negt & Kluge, 1972).

In practice, Negt's concept manifested itself in the form of booklets on various topics following the "exemplary principle" (cf. Negt, 1981). These booklets begin with a specific case, which provides workers with knowledge and theory about technical development, legal conditions, and relations of domination in the workplace and society. This will then allow them to interpret and classify their own personal "cases" themselves. Politically, the booklets seek to overthrow worker control and exploitation and establish more worker-centered policies. As forms of action, Negt not only mentions "official strikes" and the relying on the structures of traditional workplace interest groups. He also refers to individual and non-organized forms, such as wildcat strikes or the deliberate withholding of work (cf. Bürgin, 2012).

6.2.2. Trade Union Education *à la* Negt for the ContemporAIry Workforce

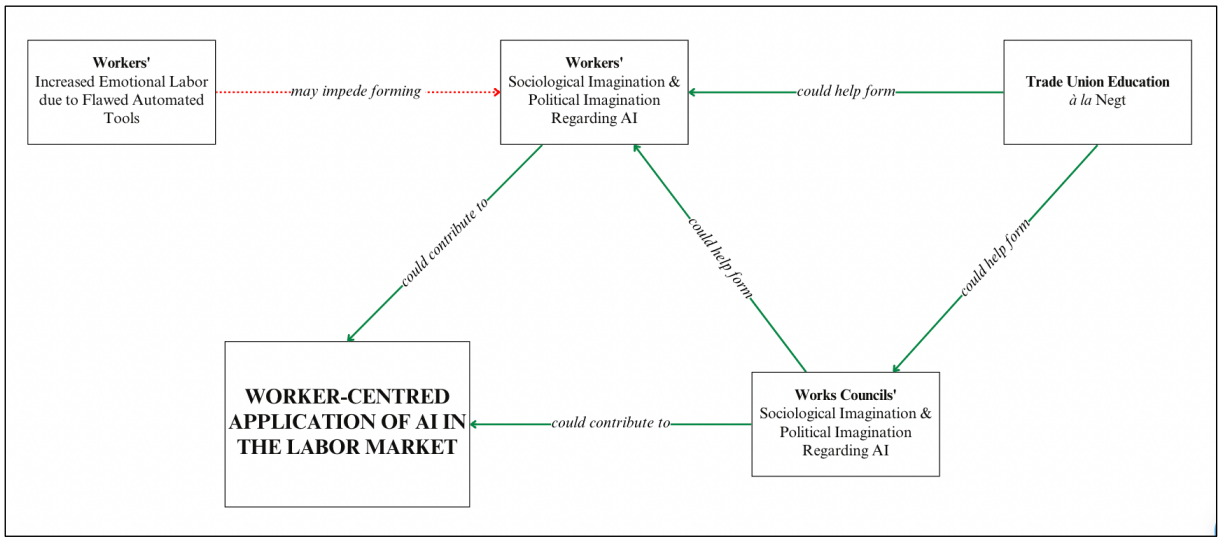
While Negt's concept was widely taken up and implemented by German trade unions in the 1970s and 1980s, its impact declined from the 1990s onward (cf. ibid). Trade union educational work once again started to conform to the requirements of capitalist society. However, my findings show that trade union education *à la* Negt is more relevant than ever, especially in light of major impending shifts on the labor market due to AI. I argue that Austrian trade unions and their umbrella organization, the *ÖGB*, should mobilize Negt's framework to contribute to the development of political imagination among works council members.

In fact, Austrian trade unions are already increasingly concerned with AI's impact in the workplace (cf. Angerler et al., 2021; Arbeiterkammer Europa, 2022; Leinfellner, 2023). This indicates that sociological and political imagination regarding this issue is present further up in the trade union hierarchy. The Austrian Trade Union for Private Employees ("*GPA*"), for example, has recently called for the expansion of the works council's rights to information, consultation, and co-determination on AI issues (cf. Austrian Press Agency, 2023).

Additionally, such co-determination rights were recently enshrined in the German Works Council Modernization Act (2021). The act states, among other things, that works

councils must consult a technical expert when an AI system is introduced and used in the employment relationship. These types of laws provide works councils with clear legal frameworks and powers to play an active role in the introduction of AI systems in the workplace. They establish a basis for them to engage with technical experts to develop a better understanding of the impact of AI, and to design effective and context-specific strategies to safeguard workers' rights. My findings imply that the introduction of a similar bill in Austria – together with a more targeted sensitization *à la* Negt for the political dimension of AI's impact on the labor market – could contribute to fostering the political imagination of works councils.

Figure 1. Illustrated Summary of Findings.



Having gained political imagination themselves, these works council members could subsequently help develop booklets on the impact of AI workers' jobs, following the exemplary principle discussed above. By handing out these booklets to employees, works councils would foster employees' sociological and political imaginations. Of course, more is required than just some exemplary booklets. What is needed is a mass education of employees on the subject of AI, organized by trade unions through voluntary union education officers in companies. In the 1960s, about 6000 voluntary union education officers were trained in the German metal union ("*IG Metall*") alone. This demonstrates that such mass education is feasible *if* unions show the

necessary determination and commitment. At the same time, wildcat strikes of about 80,000 workers in the organizational area of *IG Metall* in 1969 proved that such educational work is also capable of mobilizing large crowds (cf. Bürgin, 2012).

The promotion of sociological and political imagination through mass education could bring about great benefits for employees. It would allow them to better prepare for potential changes, advocate for their rights and protections as workers, and work towards collective solutions to address the impact of AI-driven technological change on the labor market.

6.3. Broader Policy Implications and Recommendations

The insights from this study are not only valuable to trade unions but also have wider implications for policymakers, both in Austria and beyond. In this regard, the findings can inform the design of labor market policies in two main ways. First, the lack of sociological and political imagination for AI's impact on their jobs demonstrates the urgent need for employee education. As extensively discussed in section 6.2, this can best be achieved through a reformed trade union education in countries with historically strong works councils and unions. In other jurisdictions, by contrast, workers may be educated through government programs that provide them with country-specific, fact-based information about AI's impact on the labor market, thereby sensitizing them to upcoming transformations and fostering their imaginations.

The German Observatory Artificial Intelligence in Work and Society (AI Observatory) can be cited as a positive example in this context. Created in 2020 by the German Federal Ministry of Labor and Social Affairs, the AI Observatory's goal is to analyze, discuss, and shape the social dimension of transformation and, in particular, the impact of AI on work and society (cf. KI Observatorium, 2023). This makes the AI Observatory a central instrument of the National Artificial Intelligence Strategy of the German Federal Government (2020) to implement the introduction and application of AI in a responsible and public welfare-oriented manner. Moreover, it also regularly integrates citizens and workers into policy development

processes and analysis, thus contributing to the formation of sociological and political imagination among them. Other countries – and especially those without strong unions or works councils – could hence create similar initiatives to strengthen the imagination of their workers and thus sensitize and prepare them for AI-driven transformation processes of the labor market.

Second, the company's constant drive for automation and the concomitant job cuts illustrate the need for up- and reskilling programs. However, such retraining comes with its challenges. Since low-skilled workers are most affected by job loss due to automation, it is to that very group that policymakers demand to undertake training and upskilling to avoid unemployment, thereby leading to two problems. First, this discourse erroneously individualizes the problem. Second, these training requirements are difficult to realize due to a shortage of time and energy caused by physically demanding workdays and additional obligations (childcare, household chores, etc.).

Besides these individualizing approaches, some retraining programs are also subsidized by the state. In general, however, these schemes often place participants in precarious financial situations: in Germany, for example, allowances for the first year of retraining are based on the sector-specific collective wage agreement earnings of apprentices in their second year of training (Bundesagentur für Arbeit n.d.). In Austria, in turn, the financial subsidy is equal to the amount of unemployment benefits to which one is entitled multiplied by 1.22 (cf. Arbeitsmarktservice Österreich, 2022). Participating in such a state-funded retraining program thus entails considerable income losses. Consequently, they are particularly unattractive for low-skilled workers, who tend to have less income and thus less savings to rely on during their retraining period. In summary, the current policy instrument does not work for this group.

Especially in view of the major AI-induced transformations of the labor market, it is crucial to develop governmental retraining programs that are appealing for workers – that is, not put them in a precarious financial situation. Moreover, such programs should also take into consideration workers' different and diverse needs. One initiative that addresses the specific

needs of immigrants and refugees, for example, is *MolenGeek*. Founded in 2015 in Molenbeek, a Brussels neighborhood with high levels of migration and unemployment, *MolenGeek* aims to provide immigrants and refugees with AI and computer skills. In doing so, the program helps them to enter the local labor market more quickly and also contributes to alleviating the aforementioned gender-race effect of AI-driven automation (cf. Ernst et al. 2019; World Economic Forum (2018).

Overall, attractive governmental retraining programs in general as well as more group-specific initiatives like *MolenGeek* can thus equip workers with vital professional skills required for future jobs. Yet by virtue of their political rather than individualizing nature, they can concomitantly help increase workers' awareness that their own problems with job transformations or job losses constitute societal and political problems. In other words: they can contribute to fostering workers' sociological and political imagination.

6.4. Limitations

Despite the insights and contributions provided by this study, there are certain limitations that have implications for the interpretation of the results. First, the study explores the impact of AI on low-skilled workers in general, but is based on a limited sample of only one occupational group in only one company. This particular context may reflect specific labor laws, organizational structures, and cultural influences, all of which might influence the results. A broader study, both in several call centers and in other sectors, is thus needed to help understand whether and how the results identified are echoed or lived in other settings.

Second, the study was carried out in a specific geographical context, which may additionally inform the experiences and discourses of employees. Trade unions have historically played an influential role in Austria. Since 1946, the *ÖGB* represents one of the four social partners at the federal level (cf. Sozialpartner, 2016). The Austrian social partnership is a system of economic and social policy cooperation between the interest groups of employers

and employees among themselves and with the government. The core of the social partnership lies in the commitment of the four major interest groups (*ÖGB*, Chamber of Labor, Chamber of Commerce, Chamber of Agriculture) to common longer-term goals of economic and social policy (cf. ibid.). By contrast, in other countries, e.g., the United States, such a system of social partnership does not exist. Furthermore, the legal framework for trade unions and works councils also varies from country to country (cf. European Trade Union Institute, 2014). In Austria, works councils must be established in every company that permanently employs at least five employees entitled to vote (cf. Amendment of the Austrian Works Council Election Regulations, 1974). In other European countries, such as the Netherlands or Slovakia, this threshold is much higher, requiring a minimum of 50 employees. And in Canada or the United States, there are no provisions for works councils at all (cf. Oesingmann, 2015). The different role, importance and legal situation of trade unions could thus not only affect their ability to shape sociological and political imagination, but also opens the question of how national contexts influence which bodies (trade unions or others) are best situated to foster sociological and political imagination among workers.

One of the central recommendations of this study, i.e., that trade unions should pursue educational work *à la* Negt in strong cooperation with works councils, is therefore limited to countries with similar historical and legal frameworks as Austria, such as Germany or France. Nevertheless, the findings that call center agents are largely unaware of the impending changes in their field of work due to AI are still relevant for other countries as well. As demonstrated in section 6.3, they can serve as a basis for developing alternative programs aimed at fostering sociological and political imagination among workers in countries with different legal frameworks and historical backgrounds. Furthermore, they may also inform the generation of up- and reskilling initiatives more broadly.

7. Conclusion and Outlook

This master thesis examined the impact of AI on low-skilled workers. The aim was to understand how the current wave of automation effects them in their daily lives, what emotions it evokes in them, and what, if any, strategies they develop to cope with this new reality. Emphasis was put on people in occupational groups whose jobs are at risk of being automated by AI. Applying a Constructivist Grounded Theory approach, Call center agents in Vienna were interviewed, since this occupational group exhibits a particularly high risk of AI-driven automation (cf. Nedelkoska & Quintini, 2018; Broady et al., 2021).

The study has provided three main insights. First, call center agents were found to perform high levels of emotional labor, which is consistent with various other studies in the field (Diefendorff et al., 2019; Gabriel & Diefendorff, 2015; Goldberg & Grandey, 2007; Kim & Choo, 2017). However, this study was the first to establish a link between emotional labor and sociological as well as political imagination: The amount of emotional labor that call center agents must perform increased due to faulty automated tools. This resulted in increased stress for call center agents. It was hypothesized that this would lead them to focusing on coping with the immediate challenges of their daily work, thereby limiting the development of their sociological and political imagination.

Second, the majority of the employees interviewed were not aware of the imminent changes in their profession due to AI or, when addressed, did not believe in such changes. Individual problems could thus not be linked to larger social issues, which was interpreted as a lack of sociological imagination (cf. Wright Mills, 1959). Moreover, managing the impact of AI-driven automation on the labor market was not regarded as a political issue or responsibility, but rather as a problem to be solved by the individual, the company, or the works council. This was interpreted as an absence of political imagination (Burawoy, 2008).

Third, in contrast to the majority of regular workers, works councils possessed sociological imagination as they were able to place individual problems with AI-driven automation in the broader societal context. However, just like the regular employees, they also lacked a comprehensive understanding of the political dimension of AI, especially with regard to the impact on employment and job security. This can adversely affect workers in two ways. On the one hand, without political imagination, works councils are unlikely to effectively respond to AI-specific challenges and to advocate for policies that protect workers' rights. On the other hand, works councils play a major role in shaping employees' sociological and political imagination. However, if they themselves lack political imagination on AI issues, exercising this role becomes impossible. Missing the educative influence of works councils, employees are therefore more likely to remain preoccupied with their individual work problems. They are unable to embed them in larger social contexts, let alone advocate for political changes to address these problems. Especially regarding AI's impact on the labor market, though, it would be crucial for low-skilled workers to be aware of the broader social and political dimensions. This would allow them, for example, to prepare for job changes, to fight against AI-based job monitoring, and to advocate for properly paid, public retraining programs.

To foster the development of sociological and political imagination among both workers and works councils, this study has proposed a reform of trade union education. More specifically, it called for a renaissance of Negt's "*soziologische Phanatasie*" approach implemented in Germany in the 1970s and 1980s. Its objective is to raise the consciousness of the working class for its own interests and its social situation, thereby creating a basis for political engagement and change – that is, a change towards the use of AI in the workplace centered not around corporate and shareholder interests, but rather around the interests of workers. This master's thesis thus provided practical insights and recommendations for political stakeholders, first and foremost for unions.

Beyond trade unions, the findings also bear relevance for policymakers – both in Austria and beyond – to enhance their understanding of what is required to address workers' needs in the context of AI-driven automation. In this regard, my research could inform the design of labor market policies in two main ways. First, in order to foster the development of sociological and political imagination in countries without strong unions or works councils, the establishment of AI labor market observatories was proposed as an alternative to a union education reform. Second, it was shown that more attractive, tailor-made government up- and reskilling programs are needed to equip workers with the skills required for future jobs. At the same time, these programs can help increase workers' awareness that their own problems with job transformations or job losses constitute societal and political problems, thereby nurturing their sociological and political imagination.

In addition to its practical implications for political stakeholders, this master's thesis has contributed to scientific research on the impact of AI in the workplace, emotional labor, sociological and political imagination, and union education. At the same time, it has also paved paths for future research, which can be divided into four main points.

First, future studies should examine the connection between emotional labor and sociological as well as political imagination in more detail. For example, longitudinal studies or experimental designs could capture the time course and possible connection more precisely. Moreover, it would also be essential to investigate whether and how gender and racial inequalities further increase certain workers' emotional labor in the specific context of automation. This, in turn, may impair their ability to develop sociological and political imagination. In fact, past studies in other contexts than automation have found that racial and gender inequalities influence the degree of emotional labor required from certain employees. Grandey et al. (2012), for example, have revealed that women often have to perform more emotional labor due to gendered expectations of women as being empathetic and helpful. Similarly, racialized workers usually have to perform more emotional labor to be able to deal

with prejudice and discrimination (cf. Pradhan & Abraham, 2005). Thus, the already increased level of emotional labor due to flawed automated tools could be even more intense for female and racialized employees. It would be pertinent to focus more closely on these gender and race-specific dynamics and their intersection in future studies to gain a more comprehensive understanding of the impact of flawed technological tools on emotional labor, and ultimately to have the tools and knowledge required for recommendations to be formulated in ways that fully address intersecting inequalities.

Second, the research design developed in this thesis can be extended to other occupational groups at risk of AI-driven automation. This may be undertaken in Austria, but also in other countries. Such an extension could enhance our understanding of AI's impact on different workers in different societal contexts.

Third, there is a need for research on trade union education in countries with similar historical and political contexts like Austria, such as Germany. These studies could examine whether works councils in those countries possess sociological and political imagination about AI's influence on the labor market, as well as whether and how union education *à la* Negt could best be implemented there.

Fourth, conducting studies in countries with different, and especially more restrictive legal conditions for unions, such as the United States, would also be beneficial. In particular, these could examine how sociological and political imagination regarding AI may be fostered among low-skilled workers when taking into consideration the different legal and historical circumstances.

In conclusion, this master's thesis can help enrich scientific understanding, inform policy making, and guide trade union work related to AI-driven automation and its impact on low-skilled workers. By doing so, I hope to have added at least a small step towards a more worker-centered, fair application of AI technologies in the labor market.

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