



Overtime: The Cultural Political Economy of Illicit Labor in the Electronics Industry



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abstract

This article investigates the relationship between overtime and corporate codes of conduct in the global electronics industry through a cultural political economy perspective. First, drawing on examples from China, it considers how the changing political economy of global production has contributed to the emergence of illicit overtime in the electronics industry. The article examines the endemic use of excessive working hours at the first-tier supplier level and explains it as a systemic method to sustain competitive accumulation in a sector characterized by tight production cycles. Second, the article analyzes the economic imaginary that supports the use of overtime and the accompanying mechanisms that institutionalize it as a material practice. It shows that the Responsible Business Alliance Code of Conduct plays a crucial role in reproducing illicit conditions. Conclusions explore the potential of reorienting geographic understandings of illicit practices within the mainstream economy.

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A conceptual device to investigate illegal, but socially accepted practices, and legal but unethical activities, the illicit has gained considerable traction in economic geography in recent years (Gregson and Crang 2016). This article develops a critical analysis of the relationship between illicit practices and the electronics industry. While the electronics industry often evokes futuristic imaginaries of modernity and progress, it is, in fact, a business deeply enmeshed with the harsh realities of everyday life. Criminal sourcing of raw materials, illegal labor conditions in production processes, and informal practices in the disposal and recycling of electronic devices are some of the recurrent concerns that involve the sector (Inverardi-Ferri 2017; Know the Chain 2020). Within this context, this work analyzes the issue of excessive overtime to show how the intertwining of licit and illicit practices has sustained the development of the electronics industry in recent decades (Verité 2014). Investigative reports have documented the use of excessive overtime at the first-tier supplier level. All the top eight electronics contract manufacturers (CMs), as of 2018, have been known to use long working hours in their production facilities (China Labor Watch [CLW] 2012, 2014a, 2014b, 2015; Danwatch 2015). In 2015, CLW, a not-for-profit organization, published a report based on pay stubs from Pegatron Shanghai, an Apple supplier, documenting that the median monthly overtime was 83 hours at this factory at the time, with peaks of 119 hours, and 57 percent of the labor force working more than 60 hours overtime in a month and 32 percent more than 90 hours, far beyond legal limits (CLW 2015). In October 2017 and October 2018, an investigator from the same not-for-profit organization put in 130 overtime hours to produce iPhones at a Foxconn factory in Zhengzhou (CLW 2019). Excessive overtime is a systemic transgression (Dell Technologies [Dell] 2017), a structural element of the industry, widely accepted as a means of maintaining high levels of accumulation in a market increasingly characterized by very short and highly flexible production cycles.

Against this background, the article develops a *cultural political economy* (or CPE) perspective to draw connections between political economic and

cultural economic approaches (Inverardi-Ferri 2021), and engages with the growing literature on illicit practices in economic geography (Hall 2012; Hudson 2018). The research contributes to challenging scholarly understandings which have conflated different phenomena (e.g., illegal activities, informal practices, unethical behaviors) within the category of illegality and have confined illicit activities to marginal areas, often overlooking the role that these phenomena play in the mainstream economy (Gregson and Crang 2016). A cultural political economy of the illicit is a powerful analytical tool to shed light on the material conditions and the discursive mechanisms that brought about the systemic use of excessive overtime in the electronics industry. The article primarily focuses on electronics CMs being the principal labor-intensive segment of the electronics value chain, and shows that the use of long working hours has become a socially accepted practice, reproduced over the years as a critical element of manufacturers' peculiar labor regime (Schling 2017, 2022; Smith et al. 2018; Baglioni et al. 2022).

The article analyzes structural political economic reasons that force electronics CMs to operate in a segment characterized by low-profit margins and high turnover rates. Reiterating these arguments, although by now established in the literature, is key to advancing an understanding of the development of electronics as a global industry in conjunction with the instituting of excessive overtime as a structural element of production processes. The article shows that CMs adopt excessive overtime in the context of commercial pressures and vulnerable labor markets. This peculiar articulation has also driven high degrees of automation to cope with flexible production cycles, engendering de-skilling dynamics, a significant driver of long working hours. As a result, workers are systematically subjected to illicit labor conditions that often break national laws and most international labor standards.

The article analyzes the narrative that supports the use of overtime in China and the mechanisms that institutionalize it as a material practice. As shown in the following pages, overtime is usually justified at the level of discourse. It is contended that long working hours are critical to carrying out operations in a segment characterized by low wages and tight production, often romanticizing this practice through a narrative that builds on ethics of hard work and sacrifice. Conjointly these arguments construct an imaginary in which long working hours are rendered licit.

Further, the article shows that corporate codes of conduct play a key role in institutionalizing this discourse into material practice. These private governance mechanisms, originally designed to raise social and environmental standards in the sector, today seem to perform a better function in mitigating reputational risk and protecting the brand image of transnational corporations that operate in highly fragmented production networks (Clark and Hebb 2005; Mayer and Gereffi 2010; Lund-Thomsen and Lindgreen 2014). In particular, the article examines, as representative of the culture of the global electronics industry, the Responsible Business Alliance (RBA) Code of Conduct, nowadays one of the main initiatives in the sector. The article shows that the code plays a critical function in reproducing uneven relationships among different economic actors, failing to challenge labor violations in the industry. This process contributes, in turn, to the puzzling situation where illicit behaviors are accepted as licit.

The article first provides details on the methodology of the study. Second, it offers a short summary of the economic geography of the illicit and how this work contributes to

this nascent subfield. Third, it moves on to analyze the empirical material. Finally, it draws conclusions.

Methodology

The research builds upon a wide range of qualitative sources, including semistructured interviews, industry reports, and news that the author collected independently between 2013 and 2015, and collaborating with colleagues between 2017 and 2018. Semistructured interviews provide firsthand data on the operating of the industry, while reports offer essential documents for gathering data on working hours in the sector. The RBA regularly produces documents in which data on overtime, recorded through the association's auditing initiative, are published. In some instances, corporate social responsibility (CSR) reports of individual firms (e.g., Dell) also document the issue. This data, triangulated with investigative reports from nongovernmental organizations (NGOs) (e.g., CLW, GoodElectronics, Electronics Watch), and interviews conducted in the field provide the sources upon which the argument is developed.

All excerpts in the article are selected from interviews that the author carried out alone between 2017 and 2019 with three representatives of electronics CMs, one manager of a major brand firm, two representatives of industry associations, two information and communications technology (ICT) workers, and one NGO activist. These close dialogues are part of a wider corpus of eighty-one interviews with managers of ICT companies (e.g., brand firms, CMs, second- and third-tier suppliers), institutional actors, representatives of labor NGOs, industry organizations, and workers. This is a comprehensive firsthand data source spanning different segments (e.g., personal computers, mobile phones) and actors (e.g., brand firm, original design manufacturers, original equipment manufacturers, component suppliers). Overall, this variegated corpus represents an appropriate sample size to unfold richly textured analysis and ensure in-depth and case-oriented understandings of the phenomena under investigation (Vasileiou et al. 2018).

Interviews were mostly conducted between the beginning of 2017 and the end of 2018, when the author joined a research project investigating global production networks in East Asia (Singapore, China, Taiwan, and Korea) based at the National University of Singapore. This project focused on the top thirty lead firms in five segments of electronics (personal computers, mobile handsets and telecommunications equipment, consumer electronics, semiconductors, and other hardware) and their suppliers. Among the interviews carried out at this time, forty-six were conducted with top executives (vice-president, general manager, or higher) across all the five segments. The author conducted interviews in China, Taiwan, and Singapore in person while reaching representatives of organizations based in Europe and the US remotely. Among these close dialogues, multiple interviews were obtained with representatives (including top executives at the vice-president level and assembly line workers) of three of the top eight global electronics CMs as of 2018 (Buetow 2018), which provide a significant primary source of original data on the operating of these critical actors of the industry.

In China, interviews were carried out in Beijing, Shanghai, Hangzhou, Suzhou, Ningbo, Jinhua, Xiamen, Zhengzhou, and Qingdao, among other localities. On several occasions during fieldwork interviews, the author had the opportunity to visit

production facilities, including three Chinese premises of global CMs. In one case, the author gained access to the factory via participation in a field trip organized by a professional conference in 2014 in Shenzhen. This experience enabled a firsthand, direct observation of the facilities of a major contract manufacturer, which is usually very challenging to access. Prior to each interview, the author systematically carried out a detailed preliminary study using extensive secondary data, including annual and CSR reports, financial statements, industry and company value chain reports, NGO reports, news, and grey literature. This process allowed contextualizing interviews according to topical focus, contingent on the different organizations or informants involved. In this way, the study generated relevant questions for different interviewees while allowing consistency for data comparison. Names of firms and their representatives, as well as other critical information that could identify them (e.g., national origin), are never mentioned to preserve the anonymity of all informants involved in the research. When companies, institutions, or individuals are cited in the article, only publicly available information, such as reports or magazine articles, are referred to.

Illicit Practices and Economic Imaginaries

In the electronics industry, excessive overtime, illegal employment of migrant workers, forced student labor (Ngai and Chan 2012), lack of health and safety information, and other abusive management practices have been recurrently recorded by third-party auditing, NGOs investigations, and corporate reports in recent years (Know the Chain 2020). This section situates these illicit practices vis-à-vis scholarly debates in economic geography. Scholars have suggested that economic geographic research on illicit practices has mostly studied phenomena confined to the space of marginal actors, places, and commodities, often overlooking those aspects that pertain to the mainstream economy (Gregson and Crang 2016). However, illicit practices are potentially everywhere, while often socially accepted or considered licit in the mainstream economy. The article analyzes the issue of excessive overtime within a critical sector of the mainstream economy, the electronics industry, developing a cultural political economy approach through the mesolevel concept of economic imaginary.

Despite being a relatively novel endeavor, economic geographic scholarship on the illicit is a vibrant field that has nourished lively debates in recent years. Earlier works in this domain have adopted a political economic approach (Hall 2012; Hudson 2014) to examine a variety of themes, including the political economy of criminal organizations (Hall 2010; Hall and Scalia 2019), the role of corruption in urban processes (Chiodelli, Hall, and Hudson 2018), the geography of drugs (Taylor, Jaspardo, and Mattson 2013), and the globalization of illicit financial flows (Wójcik and Boote 2011) among others. More recently, a cultural economy perspective has emerged (Gregson and Crang 2016), suggesting that economic geography has tended to conflate the illicit with the illegal often overlooking cultural dimensions of this phenomenon. Indeed, illicit practices go beyond illegality and include a broad range of legal, but unethical activities, or illegal behaviors that are socially accepted. According to Gregson and Crang (2016), economic geographers have paid minor attention to the latter category, which refers to those behaviors that are accepted in a given space or time despite

being illegal. They have therefore proposed to shift geographic research toward cultural economy and to pay more attention to those *practices* that lay at the intersection of moral economies, illegality, and customs (Gregson and Crang 2016).

The article integrates these insights within an approach that considers both cultural and political economic elements to investigate illicit practices within the mainstream economy. Illicit practices are here understood as stabilized social actions that carry meanings and contribute to reproduce and structure economic space (Jones and Murphy 2011). The article engrains this understanding within a cultural political economy perspective (Inverardi-Ferri 2021). In recent years, CPE has made headway within geography as a way of articulating cultural and political economic readings of the economy (Jessop and Sum 2006; Sum and Jessop 2013; Arnold and Hess 2017; Inverardi-Ferri 2021), and engaging alternative conceptual approaches through their complementarities (Hudson 2008; Jones 2008). In economic geography, Arnold and Hess (2017) have operationalized a CPE approach to highlight the material and semiotic mechanisms that underpin the functioning of power in global production networks. The authors mobilize CPE to analyze corporate accountability initiatives in the Cambodian garment industry and show how the emergence of *decent work* agendas and *win-win arrangements* within global production networks contribute to an “image of morality and responsible or ‘ethical’ capitalism, deflecting from the systemic problems of the capital-labor relationship” (Arnold and Hess 2017, 4). Their understanding of CPE is helpful to think about similar dynamics in the electronics industry, a sector that, as shown in the work of Gale Raj-Reichert (2015), is characterized by crystalized power asymmetries, preserved despite the implementation of CSR practices.

Furthermore, CPE offers a powerful framework to analyze the illicit, enabling the possibility of highlighting which processes contribute to construct illegal and unethical practices as socially acceptable economic behaviors (Inverardi-Ferri 2021). In particular, CPE is a useful framework “when applied to the study of the illicit through meso-level concepts that would hold together questions relating to its discursive production (e.g. discourses, narratives, imaginaries), material constitution (e.g. accumulation and labor regimes) and ecological composition (e.g. flows of energy and matter)” (Inverardi-Ferri 2021, 13). Following this line of thinking, the article investigates the material and discursive facts that underpin the use of excessive overtime within the global electronics industry, deploying the mesolevel concept of economic imaginary.

Economic imaginaries can be defined as systems of ideas and aspirations on different aspects of social life such as the economy, the state, or the family. They frame lived experiences and are the creative product of semiotic moments and social practices in specific geoinstitutional contexts (Sum and Jessop 2013). According to Sum and Jessop, economic imaginaries have a distinctive performative power and play a central role in hegemonic struggles for the “reproduction or transformation of the prevailing structures of exploitation and domination” (Sum and Jessop 2013, 165). Imaginaries operate at varying scales and in different discursive sites such as cultural and economic institutions, research organizations, and policy centers (Dixon and Hapke 2003). They drive the strategies of individual actors and social groups who strive to produce and establish a specific knowledge or mobilize resistance to develop a

counterhegemonic position (Jones 2008). Imaginaries are “socially instituted and socially embedded and get reproduced through various mechanisms that help to maintain their cognitive and normative hold on the social agents involved in the field(s) that they map” (Sum and Jessop 2013, 166). Imaginaries mediate, therefore, the relationship between material and semiotic dimensions of economic processes and serve as an entry point in a complex reality.

The concept of economic imaginary is, therefore, used in CPE analysis as a device to study how particular discourses are established through the actions of social forces in context (Sum 2005). As Bas van Heur (2010) points out, economic imaginaries mediate between the economy as existing in the real world (i.e., a sum of chaotic and incommensurable human activities) and the capitalist economy as narrated by specific actors. Through selecting, observing, narrating, and governing economic activities, different actors (e.g., state institutions, private corporations) “aim to transform certain elements of substantive economies into moments of a profit-oriented capitalist economy” (van Heur 2010, 434). Imaginaries are constructed at the level of discourse and enacted as material practices. For example, they are translated into real activities through production processes and their networks of hardware (e.g., plants, machines) and software (e.g., labor management systems) (Fairclough 2003). Translating meaning into material forms, the development of economic imaginaries pass through the different moments of *variation*, *selection*, and *retention*, the process that “generate[s] the contingently necessary development of social practices, organizations, organizational ecologies, institutions, institutional orders and patterns of socialization” (Sum and Jessop 2013, 474). While competing economic imaginaries may originally exist, only particular discourses are privileged over others, become hegemonic, and are finally translated into material forms of social practice (Hauf 2015). However, economic imaginaries are only temporally stabilized, since residual and recalcitrant elements are always at action and may provide the opportunity for counterhegemonic narratives to emerge (Hauf 2015).

The concept of economic imaginary is here mobilized to analyze how illicit overtime is reproduced in the electronics sector. The distinction between what is socially accepted and what is not often relates to systems of ideas and modalities of power that are dominant at a specific moment in time and space. As the article aims to show, the use of excessive overtime has become accepted by key economic and institutional actors, and to a certain extent also by labor, despite being de jure an illegal practice. This circumstance has occurred because the imaginary portraying long working hours as inevitable and ethical has remained hegemonic for decades. As shown in the empirical section, electronics companies and industry associations are among those actors that reproduce this narrative, raising the question of *excessive overtime* in their reports, CSR initiatives, and direct interventions in public debates. While addressing this sensitive issue, they reaffirm a series of vested interests. Furthermore, the adoption of the RBA Code of Conduct and participation in the association’s Validated Assessment Program (VAP) have played a critical role in cementing this narrative and institutionalizing it into material practices. To flesh out these arguments, the following sections will provide an empirical analysis of the cultural political economic processes that brought about the endemic use of illicit overtime at contract manufacturer level.

The Cultural Political Economy of Illicit Overtime in the Electronics Industry

Today the electronics industry represents one of the fastest-growing sectors in the world economy. It is a major driver of the market, generating revenues in the hundreds of billions of dollars, employing millions of workers, and stimulating innovation across different spheres of the global economy (Sturgeon and Kawakami 2011). These astonishing results have been the consequence of significant shifts that the sector has undergone in the last decades (Yeung 2016; Lüthje and Butollo 2017). Most studies trace the beginning of these changes back to the decline of Fordism in the late 1970s when the classical model of vertical integration entered into profound crisis (Piore and Sabel 1984), and was progressively substituted by more flexible systems of production based on subcontracting, interfirm division of labor, and spin-offs (Coe and Yeung 2015). In this account, while companies are understood to pursue value capture trajectories within the margins of the market (Coe and Yeung 2015), less attention is given to the weight that different legislations and degrees of tolerance vis-à-vis illicit behaviors have in investment decisions (Andrijasevic and Sacchetto 2016). As a way to complement this narrative, this section provides a brief summary of the key changes that occurred in the electronics industry in the last decades from the entry point of labor. The aim is to show that the current organization of production is dependent upon a structural combination of licit and illicit practices that have allowed electronics companies to sustain competitive levels of accumulation over the years (Hudson 2018).

The section highlights the political economic mechanisms alongside the cultural elements that brought about the use of illicit overtime in the industry, cementing it as an endemic illicit practice. A shared belief among corporate actors operating in China is that the reasons underpinning this phenomenon lie in a sort of local peculiarity. As explained by an informant, there is “a cultural trend in China, where workers wanna leave their families and farms and go to work . . . get as many hours as they can to raise money for their families and go back to those families” (Industry representative, 2018).

Therefore, employers are *forced* to allow longer working hours, since most factory workers, being paid the minimum wage, would simply leave their jobs if no overtime was planned to raise their salaries. There is a dark irony in this explanation, implicitly suggesting that the causes of exploitation must be attributed to workers themselves. As further shown in the following section, Chinese entrepreneurs often reproduce this narrative to justify the adoption of overtime in their businesses, proactively producing an imaginary in which long working hours are rendered licit. They often couple this argument with an ethical discourse of hard work and sacrifice. Indeed, the long-held values of endurance to hardship, obedience to authority, and tolerance of maltreatment are deeply rooted in Chinese society (Cooke, Xu, and Bian 2019) constructing an imaginary that is fertile ground for labor rights violations. At the same time, these narratives tend to divert from the structural political economic reasons that have brought about the endemic use of long working hours in the global electronics industry. Capitalist imperatives drive CMs to adopt overtime to cope with orders in a segment of the industry characterized by low-profit margins, high turnover rates, and tight production cycles.

As such, the following pages explain this illicit practice within the broader political economic history of the sector, showing that workers have no choice but to work beyond legal limits to comply with employers' requirements and to make any money above survival levels. Overtime is therefore understood as the dynamic outcome of historic, material, and discursive processes (Coe and Kelly 2002; Smith, Rainnie, and Swain 2002; Arnold and Hess 2017). The interplay of these registers results in a peculiar labor regime characterized by distinct workplace dynamics, relations of domination, and dimensions of social reproduction (Schling 2017; Baglioni 2018; Smith et al. 2018; Baglioni et al. 2022).

In the early years of the industry, companies, such as IBM, Siemens, or Toshiba, were characterized by a high degree of vertical control that generated substantial economies of scale. The landscape was dominated by large corporations who designed, assembled, and marketed their products in house (Borrus and Zysman 1997). However, this organizational model was progressively abandoned and replaced by geographically dispersed networks of suppliers (Coe and Yeung 2015). Electronics brand firms outsourced assembly and manufacturing functions, which provided less value added, to focus on more lucrative areas of the production process such as research and development and marketing (Pawlicki 2016). While East Asia became a major destination for subcontracting, numerous local firms emerged during those decades and established themselves as strategic partners of electronics brand firms. Highly specialized suppliers came to inhabit a complex global ecosystem that reshuffled the sites and dynamics of value creation and drew the contours of a new global geography of electronics manufacturing (Yeung 2022). A significant step in this industrial restructuring was the establishment of a particular form of interfirm relationship, contract manufacturing (Borrus and Zysman 1997), which is still dominant today (Raj-Reichert 2015). Several strategic partnerships were forged between brand firms and CMs in those years. In some cases, certain CMs became the sole providers of products, locking brand firms within stable commercial relationships (Yeung 2016).

In recent decades, CMs have therefore occupied a critical yet considerably less profitable segment of the value chain (Pawlicki 2016). Assembling products that are marketed by brand firms, they usually capture less than 5 percent of margin, constrained under the burden of material and labor costs. In contrast, their clients, that is, brand firms such as Apple or Dell, generate between 20 percent and 30 percent of the total profit (Harris 2014). This polarization has driven many firms to pursue several strategies to generate higher margins. Some CMs have specialized in providing design services to brand firms, acting therefore as original design manufacturers. Differently, other companies have focused on material production through the acquisition of component suppliers and have considerably grown. These strategies have contributed to generate significant economies of scale. However, today, product assembling remains a relatively labor-intensive segment of the value chain. As such, one of the major costs for CMs is represented by the workforce that accounts for around 40 percent of manufacturing costs but only for 0.5 percent of the product end price (Electronics Watch 2017). Consequently, to contain costs as much as possible, CMs have implemented sophisticated practices of labor control, overtime being a critical element in a complex system of management that extends beyond the factory and involves all aspects of workers' lives.

At the heart of this system is the dormitory regime (Drahokoupil, Andrijasevic, and Sacchetto 2016; Schling 2017) that first emerged in China in the wake of the reform and opening up policies, when the increasing marketization of the Chinese economy required a considerable supply of cheap labor, mostly provided by the underemployed rural population (Ngai 2005). Electronics companies have brought this model to the farthest frontiers, building entire dormitory *towns* in order to house hundreds of thousands of migrant workers employed in their factories (Smith and Pun 2006). Factory dormitories offer the solution for basic living needs. They assure employers complete control over workers (Ngai 2007), enabling them to govern labor supply according to manufacturing cycles. These structural developments are the material, political economic, foundations upon which the use of excessive overtime has emerged, the productive and reproductive time of the workforce being at the mercy of employers.

At the same time, high turnover rates have become a distinctive feature of the industry (Pawlicki 2016), a practice that is a driver of long working hours. Contra the idea of workers changing employers to improve their material conditions, this phenomenon is also due to the temporary nature of assembly line jobs. As explained by a representative of the industry, this strategy is implemented to cope with seasonal orders.

It is because there is a large percentage of contract employees, [. . .] due to the seasonality of many of our products that we built. For example, a new phone comes out for the Christmas season. They have to ramp up to produce millions of products for 6 months or 4 months, and in that case their workplace requirements are not annual requirements, but a seasonal requirement. So, in many cases, they use contract employees or employees to employment agencies. (Industry representative, 2018)

As explained in the passage above, market imperatives engender very short and highly flexible production cycles (Yeung 2016). These capitalist pressures have therefore driven many firms to make use of seasonal workers that they can simply dismiss when they are not needed anymore. As a result, some segments within the electronics supply chain have reached impressive numbers, where some factories record significant turnover rates, with monthly peaks of 15 percent that generate in “about 6 to 7 months a whole new team” of operators as confirmed in a personal communication. Data published by Compal in its CSR annual reports provide evidence of this fact. In 2015, the Taiwanese company reached a dramatic peak of 200 percent turnover rate for the under thirty-year-old Chinese employees who had joined the firm that same year and an overall annual turnover rate of 50 percent (Compal Electronics 2016). This number refers to young workers who are largely employed on assembly lines. Published turnover rates have moderately decreased in subsequent years. This may partly be because starting from the financial year 2016, the company has stopped counting in its disclosed turnover statistics the number of contract workers employed on a temporary basis (Compal Electronics 2016). Nevertheless, Compal has continued to record significant annual turnover averages between 20 percent and 40 percent from 2017 to 2020 (Compal Electronics 2021). Consequently, CMs have streamlined their production process and implemented a meticulous division of labor that integrates high degrees of automation to cope with flexible manufacturing cycles. This organization enables fast training and smooth replacement of operators, mitigating potential disruptions and maintaining competitive levels of production throughout the year. This process has engendered dynamics of de-skilling that are a major driver of overtime. In the refined system of the electronics assembly line, workers have become part

of the machine rather than operating it (Ngai and Chan 2012), as the following close dialogue with two managers of a major CM aptly illustrates.

Manager A: Automation is the direction. And then we try to keep the whole job at foolproof.

Manager B: Yeah, stupid guy can work.

Manager A: We split all the working station into 10 seconds, 10 seconds . . . Every operator just has to remember 10 second work.

The division of the assembly process into the most straightforward tasks allows the management to replace workers with minor disruptions, since the job is *foolproof* and can be learned and performed, in the language of these informants, even by a *stupid guy*. This description hints at the imaginary that most managers of manufacturing corporations possibly have of their labor force and how it should be controlled. Indeed, the training of workers includes very little technical preparation. Some companies offer only a few days of *physical and psychological* training whose main objective is to familiarize newcomers to the harsh environment. “They want to see [your] suitability and adaptability; they want to know if you can adapt to this environment,” as described in a personal communication by a former ICT worker. Instead, technical skills are effectively learned on the factory floor, where resigning workers provide instructions to newcomers, as described in the excerpt below.

So, for example, you are assigned to a particular job post, and then you will be leaving the day after tomorrow. Then, I can come over to study with you today because you are leaving the day after tomorrow. I have three days to learn. It is like this. So, you can’t go before I have learnt everything well. (ICT worker, 2018)

These accounts document the extremely alienating nature of the work and illustrate the process of skill degradation that assembly line workers have undergone in electronics factories. The ultimate control over labor and the complete separation between conception and execution has resulted in a grinding process of de-skilling that renders “workers interchangeable and thus disposable” (Sonn, Hess, and Wang 2019, 225). The organizational fragmentation of the ICT value chain and the geographic dispersion of production activities have therefore engendered a significant transformation of the nature of labor itself (Newsome et al. 2015). Manufacturing has not only been offshored, but it has also been reinvented through “the establishment of more finely grained divisions of labor, and the standardization and deskilling of work tasks” (Peck 2017, 208). In such a production system, workers are temporarily recruited for their capacity to endure exhausting schedules, rather than for developing technical expertise over a longer period of time. Despite limits set by the Chinese labor law, the workforce is consistently subjected to conditions of illicit labor (Chan and Siu 2010). Many companies operate twenty-four hours a day with twelve-hour shifts, with a system that allocates employees to rotating day shifts and night shifts every two weeks, a process that adds temporal estrangement to the alienating nature of the tasks. During peak production periods, workers are exposed to inhumane schedules. A young ICT worker employed by a contractor of major brand firms described this phenomenon in the following terms: “Six days work one day off is when the work is not busy. Otherwise, every day non-stop. [. . .] There is no rest when I am busy. [. . .] For my current record, I have not rested for almost six months” (ICT worker, 2018).

The fragmentation of the production process on a global scale has created growing capitalist imperatives, generating the conditions for illicit overtime. In an environment characterized by a tough articulation of commercial pressures and vulnerable labor markets, exposing the labor force to long working hours is an endemic and accepted practice, even by some workers, to keep the business going during peak manufacturing periods. “It’s very tiring but seriously speaking, we must work hard. You must fight,” as a worker of a major electronics contract manufacturer told me in a personal communication.

Long working hours are not peculiar to the ICT industry but have become a common practice in different sectors in China (Zhang 2015) and a routinized part of life in East Asia more generally (Tsai et al. 2016). Recent audits, however, show that in the electronics sector excessive overtime is a particularly odious practice. In 2021, a significant number of electronics companies in China exceeded seventy-two working hours per week (RBA 2022), far beyond the limits set by both national regulations and corporate standards. The narrative that overtime is essential to raise wages beyond minimum living standards and enabling sustainable production processes is a widespread imaginary, sometimes embraced by workers themselves, who justify it through ethics of hard work and sacrifice. Yet overtime is not an unavoidable fact of life, but rather an illicit practice engendered by political economic dynamics that are rooted within the functioning of the sector, as explained by an NGO activist: “It is the industry which defines what workers need to do in order to gain a livelihood. If wages were increased to such a level where workers did not have to depend on overtime, then it probably would be best” (NGO activist, 2018).

Workers’ willingness to work overtime is driven by the fear of dismissal and the need to raise wages above survival levels (Chan and Siu 2010), making de facto long working hours a forced condition (International Labour Organization 2007; Verité 2014). The argument that employers have to offer overtime to retain the labor force does not hold. Recent years have seen a growing emergence of labor unrest in China, often in the form of unconventional protests such as sit-ins and suicide threats (Chan, Ngai, and Selden 2016). However, the dependence of unions on corporate management has prevented positive changes through official channels (Chan, Ngai, and Selden 2016), constraining worker agency in the electronics industry. The sector is resistant to democratic workplace representation and social bargaining. Furthermore, this situation has been substantially exacerbated by a capital-state collusion. Scholars have criticized Chinese local governments for their inaction in regulation enforcement and hard-handed suppression of spontaneous labor activism (Cooke, Xu, and Bian 2019). This condition is worsened by the narratives that construct excessive overtime as a licit practice in the public discourse. The following section will analyze how illicit overtime is discursively justified by ICT companies and industry associations, reproducing dominant interests through the institutionalization of specific narratives.

The RBA Code of Conduct and the Discursive Reproduction of Illicit Overtime

We have seen in the previous section that the peculiar articulation of commercial pressures and vulnerable labor markets of the electronics industry has generated not

only endemic precarious employment but also systemic illicit practices. This section develops a cultural political economy analysis to highlight how the practice of illicit overtime in the electronics industry is coproduced by political economic and semiotic mechanisms. As shown in the following pages, there is a pervasive imaginary that builds upon ethics of sacrifice to promote the idea that working long hours is an essential part of human life. This discourse is reproduced by key public figures such as major entrepreneurs of ICT companies. Further the section shows that while multinational corporations have implemented private governance mechanisms to address misconducts in supply chains, these fail to prevent the use of excessive overtime, but rather contribute, instead, in institutionalizing this illicit practice. In particular, the section analyzes the RBA Code of Conduct and its related auditing scheme, and shows that although the code raises the question of excessive overtime, it does so in a manner that implicitly restates existing interests and closes alternative possibilities of change.

Following the organizational restructuring of the electronics industry, several CSR practices have been introduced in the sector as a way to raise social and environmental standards in highly fragmented production networks in recent decades (Yeung and Coe 2015). However, the value of these private governance mechanisms has been recurrently questioned (Lund-Thomsen and Lindgreen 2014). The tragic events of the 2010 suicides at Foxconn factories in China have marked one of the most shocking examples of this failure (Lüthje et al. 2013). Some studies have even suggested that CSR practices are not only ineffective but also contribute to reproducing hegemonic relationships (Raj-Reichert 2013; Arnold and Hess 2017) that engender, in turn, the conditions of exploitation. Producing discourses from within the industry, CSR serves the interests of the firm, mitigating its reputational risks, rather than addressing systemic problems (Lund-Thomsen and Lindgreen 2014).

As a consequence of media and civil society attention, in 2004 a group of brand firms and CMs founded an association that was formerly known as the Electronics Industry Citizenship Coalition (EICC), renamed as the Responsible Business Alliance in late 2017 (RBA 2017). Today, the RBA Code of Conduct is one of the main private governance mechanisms in the electronics industry. The code was initially established to raise labor and environmental standards in the sector by companies that came under public scrutiny in the early 2000s. Around the turn of the century, several electronics firms engaged in a considerable number of legal cases regarding systemic poisoning of workers from toxic substances utilized in their facilities. IBM alone was involved in hundreds of such cases (Wired 2003), most of which the company settled out of court (NBC News 2004). Around the same time, a Catholic NGO, the Catholic Agency for Overseas Development, published a report, *Clean Up Your Computer: Working Conditions in the Electronics Sector* (Astill and Griffith 2004), revealing the questionable practices in terms of health and safety of suppliers of main brand firms (including IBM, HP, and Dell) that by the time had outsourced most of their manufacturing activities in developing countries (Raj-Reichert 2013).

The association established a code of conduct for the industry to standardize social and environmental practices in the supply chain. The code also aimed at reducing the costs of complying with the different paperwork, reporting obligations, and auditing procedures that their customers had in place at the time (Raj-Reichert 2011). Another objective was to bring auditing practices deep into supply chains to reach lower-tier suppliers that

usually slipped away from reporting processes (Raj-Reichert 2011). The code of conduct was mainly drafted following guidelines that HP had already implemented (Raj-Reichert 2011) and established some basic standards in terms of labor, health and safety, environmental, and ethical matters (RBA 2021). As stated in its current version, the RBA code of conduct “establishes standards to ensure that working conditions in the electronics industry, or industries in which electronics are a key component, and its supply chains are safe, that workers are treated with respect and dignity, and that business operations are environmentally responsible and conducted ethically” (RBA 2021, 1).

14 Adopting the code implies participation in what is one of the key features of the business association, the VAP. The VAP is a voluntary CSR practice aimed at auditing, through third-party entities, brand firms and their networks of suppliers on the issues relating to the code. To date more than one hundred multinational firms have joined the program, and through these companies the scheme reaches thousands of suppliers globally. In 2019, RBA members conducted 1,007 audits across 38 countries, although more than a half of all audits were completed in China (RBA 2020a). Through this initiative, the RBA and its affiliated members represent one of the world largest and more powerful industry coalitions addressing issues relating to CSR. As such, they have gained considerable authority in the public discourse. The RBA has come to be recognized as a credible institutional partner, with a significant track record of collaborations over the years and a constant practice of lobbying policy makers both in the US and in the EU, where it operates through its permanent offices in Alexandria, Virginia, and Brussels, Belgium (RBA 2020b).

Yet, this considerable effort has not translated into a resolution of the systemic problems of the industry, in particular relating to the illicit use of long working hours. As candidly stated in the 2017 Dell CSR report, “audits continue to show that allowing working hours in excess [. . .] is the most frequent finding” (Dell 2017). Recent audits realized by the RBA also show that excessive overtime is a persistent practice across countries. In 2021, a significant number of companies exceeded the dramatic peak of seventy-two working hours per week (RBA 2022). As such, the effectiveness of the program can be at least questioned. The RBA initiative can be interpreted, following Arnold and Hess (2017, 9), as a means to hold production networks together, constructing an image of a “more humane capitalism” but reproducing the systemic conditions of labor exploitation in the industry. This semiotic mechanism plays a fundamental discursive, that is cultural, function in producing an imaginary in which the industry acknowledges its labor violations without taking, however, substantial steps to challenge its structural political economic roots. A close reading of the code shows that this private governance mechanism is not only ineffective, but it may also produce negative consequences for workers, indirectly promoting long working hours. Point A.3 of the code states that “a workweek should not be more than 60 hours per week, including overtime, except in emergency or unusual situations. All overtime must be voluntary. Workers shall be allowed at least one day off every seven days” (RBA 2021, 3).

The code does not define, however, what an emergency or unusual situation is. As such, this recommendation is not binding in an industry characterized by *unusual* situations in which production must be recurrently boosted. The sixty-hour limit set by the code has become the accepted norm, despite that this exceeds most limits set by national labor laws, including Chinese regulations, which allow thirty-six hours of overtime per

month on average, on top of the forty-hour week.¹ In fact, the sixty-hour limit set by the RBA translates into twenty hours of overtime per week on average, which is equivalent to a minimum eighty hours of overtime per month, largely beyond the limit set by the Chinese labor law. Nonetheless, many companies struggle to enforce this *generous* standard, usually reaching more than one hundred hours of overtime per month in peak periods (Electronics Watch 2016), as the following excerpt of an interview with the CSR manager of a major ICT brand firm confirms:

I think overtime is persistent in China. [. . .] So, the [Chinese] labor law still remains a very strict requirement, 36 hours per month, but that's not going to work, because that's too strict. And so, we are for the industry and the [RBA] code, like 60 hours per week [. . .], that means . . . always average like 80 hours overtime per month, four weeks . . . 20 hours per week. So that's our policy. And to us even that standard is a little bit hard to achieve, as you know in some cases. (CSR manager, 2017)

As the informant quoted above clearly explains, the company management believes that the requirements established by the Chinese labor law are too strict to maintain sustainable production and welcomes the standard of the sixty-hour limit set by the RBA Code of Conduct. While it cannot be argued that the code itself has produced illicit overtime, adopting some of its recommendations encourages companies to break the law. The code reconnects corporate economic strategies with social, environmental, and ethical elements, but it does not change labor conditions on the ground (Arnold and Hess 2017). It does not challenge power relations within production networks, but leaves, instead, their systemic problems in the shadow (Raj-Reichert 2013). In so doing, it contributes to reinforce the cultural and political economic foundations of the industry in which high levels of overtime are considered licit.

Not surprisingly, in 2018, the founder of the Taiwanese contract manufacturer Foxconn, China's largest employer, Terry Gou publicly spoke against the *unreasonable* overtime caps imposed by China's labor law, declaring that most of his employees would prefer to work more to increase their incomes (Wu 2018). Terry Gou is not alone in promoting overtime in China, where a widespread culture considers that working long hours is all part and parcel of everyday life (Tsai et al. 2016). This practice is so rooted in Chinese society that a specific term, *996 regime*, has emerged to define a schedule that encourages employees to work from 9 a.m. to 9 p.m., six days a week (Wang 2020). Over the years, many Chinese entrepreneurs have spoken in support of this practice, although it clearly violates local labor regulations, effectively imposing a form of forced labor on workers (McGrath 2013; Strauss and McGrath 2017; Wang 2020; Hughes et al. 2022).

When in early 2019, the CEO of the internet company Youzan proudly publicized the 996 regime for his company, a backlash quickly developed, provoking debate and criticism (Li 2019). The website 996.icu, a name standing for 996 Intensive Care Unit, brought attention to the health issues associated with excessive working hours becoming viral on social media. In response to this initiative, major figures of the ICT industry entered the debate to defend the use of long hours at work. The founder of the digital platform JD.cn, Richard Liu, spoke in favor of the 996 regime, while the business magnate Jack Ma, chief of the tech giant Alibaba and one of the most affluent

¹China Labour Law. 2018. Labour law of the People's Republic of China—2018 revision, 中华人民共和国劳动法(2018修正). <https://www.pkulaw.com/chl/6393f2e43412bddbdfb.html>.

Chinese men, described it as a “blessing” for young Chinese who have “passion beyond monetary gains” (Hanbury 2019). Finally, in August 2021 a ruling by China’s highest court reminded the public that such a regime is illegal according to national labor regulations (Ming 2021). While this certainly represents a positive sign, it is difficult to say whether labor regulations will be effectively implemented in the future.

The use of long working hours in the Chinese electronics industry appears as a process that builds upon complex cultural political economic dimensions. Discourses on *ethical* overtime are produced by a variegated network of actors, including key public figures, and are operated as powerful semiotic mechanisms. Within this context the RBA Code of Conduct and its auditing practices play a critical role in institutionalizing narratives into material practice. Closer scrutiny shows that there is no tangible engagement in changing the structural causes behind overtime. Addressing this illicit practice would imply reconsidering the structural foundations upon which the electronics sector operates, including a redistribution of profits among different value chain segments, the seasonality of manufacturing cycles, and workers’ minimum standard of living. Neither of these points, however, are foreseeable in dominant narratives. Instead, widespread narratives describe most of these facts as inevitable conditions dictated by the market, implicitly reaffirming existing interests.

Conclusions

The relevance of illicit practices for social science research seeking to understand the *economy* has grown in recent years. The field has shown vibrancy and, despite being a relatively novel endeavor, has contributed to the intellectual agenda of economic geography in productive ways. While most accounts within this literature have privileged the analysis of a familiar list of actors and places, it is tempting, then, to focus on those phenomena that are usually not associated with illicit practices and give more attention to the mainstream economy (Gregson and Crang 2016). Following this line of thinking, the article has developed a cultural political economy perspective to shed light on the material conditions and the discursive mechanisms that are the constitutive elements of excessive overtime as a socially accepted practice in the electronics industry. The electronics industry has evolved in recent decades upon the structural combination of licit and illicit practices, allowing firms to sustain competitive levels of production, value creation, and profit capture. Over the years, electronics companies have become dependent upon a systemic use of excessive overtime. The article has shed light on the material and discursive facts behind this widespread condition to understand and analyze the processes that have made the use of long working hours licit.

The organizational restructuring of manufacturing activities on a global scale has resulted in specific power geometries, polarizations of profits, commercial pressures, and vulnerable labor markets, a combination of factors that has paved the way to the endemic use of excessive overtime. In a context characterized by very short and highly flexible production cycles, CMs have implemented new strategies to generate higher margins, including a meticulous division of labor and an increased use of automation, which in turn have contributed to the systemic use of long working hours. This shifting political economy has been accompanied by significant semiotic mechanisms. First, overtime has come to be accepted as an unavoidable practice for the

functioning of the industry, while long working hours are romanticized through the ethics of hard work and sacrifice. Second, this economic imaginary is institutionalized as a material practice through the adoption of corporate codes of conduct and voluminous auditing procedures. These private governance mechanisms result from the structural reorganization of production on a global scale. Lead firms have implemented them to mitigate reputational risks due to potential labor violations within the firms' geographically dispersed production networks. Yet the RBA Code of Conduct, the main private mechanism of the electronics industry, has been ineffective in preventing the use of excessive overtime. Instead, adopting some of the standards set in the code, notably regarding working hours, has contributed to institutionalizing this illicit practice. The article has thus argued that the real value of the code rests in the semiotic mechanism of reconnecting corporate interests with ethical discourses without improving, however, labor conditions on the ground. It contributes to producing an economic imaginary in which the consistent use of long working hours is rendered licit.

While some of the previous studies on illicit practices have implicitly mobilized material and semiotic dimensions, these pages have aimed to bring these different components together and make them visible (Inverardi-Ferri 2021). The objective is to reorient research on illicit practices to those areas of the mainstream economy that have received less attention in previous studies and challenge conventional legal/illegal binaries (Gregson and Crang 2016). The economic geographies of the illicit would benefit from analyses that focus on those areas within the mainstream economy that cross borders, such as those activities that are illegal but socially accepted or are licit but considered unethical. The value of this kind of work rests in providing a critical appraisal of human activities beyond conventional accounts that have tended to explain uneven development as the outcome of economic actors operating according to the rules of legal markets (Hudson 2018). The economic geographies of the illicit have, therefore, the potential to contribute to those questions pertaining to capitalist difference (Pickles and Smith 2016), highlighting the always diverse dimensions of the economy (Peck and Theodore 2007), most human activities being peculiar hybrids.

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