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Regulation and the future of work: The employment relationship as an innovation facilitator

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Abstract. *Digital transformation and the reorganization of the firm have bred new forms of work that diverge significantly from the standard employment relationship. Advocates of digital disruption suggest that the existing legal framework cannot accommodate "innovative" working templates and business models. This article, however, argues that labour regulation can continue to facilitate innovation, presenting the employment relationship as a flexible instrument, and standard forms of employment as the means of achieving efficiencies and cost advantages. First, they allow for the fully-fledged exercise of managerial prerogative and attendant internal flexibility in workforce deployment, and, second, they constitute an effective device to deliver training and develop skills.*

In a recent interview, Angelo Gaja – one of Italy's most iconic wine producers – shared a revealing anecdote about the secret of his wine's long-lasting tradition of success (Ferrero, 2018). In the middle of the last century, his father Giovanni was obsessed with the idea of developing a superior product by using high-quality raw materials. He used to spend time walking through the vineyard getting rid of imperfect grapes with his pruning shears. In a time of austerity, this practice was perceived as a vicious crime in the eponymous village of Barbaresco, in the district of Langhe, a hilly region shadowed by the western Alps. The *mezzadri*, the independent sharecroppers who tended the lands owned by the Gajas in exchange for a percentage of the harvest, believed that it was a sin against Nature.

Giovanni, however, was so interested in excellence that he accepted the risk of producing less in order to raise the quality of his wine by developing new techniques and testing ground-breaking processes. Still, the sharecroppers were dependent on quantity, since their income depended on the quantity of the grapes that they were able to collect: the more, the better. Understandably, they were sceptical about Gaja's wasteful approach. To reassure them, but also to make them follow orders, Giovanni decided to hire them as employees. As a result, they could work without worrying about the harvest. More importantly, they had to tolerate the landowner's legendary eccentricities and obey him – "even those who thought he was crazy" (ibid.).

We do not relate this anecdote merely out of a love of good wine. This is a good example of mutualization of risk, integration of the production chain, organizational efficiency, investment in long-term relationships, support for commitment, promotion of incentive alignment, and, not least, flexibility. Undoubtedly, it is a case of "fruitful" innovation. The Gajas' story illustrates the argument that we intend to make in this article. Contrary to warnings about the imminent fall into disuse of the standard employment

relationship[1] in the wake of technological disruption and the rise of alternative business models, existing social institutions may well co-exist with authentic modernization, even in the era of smart factories, hyper-digital systems and gig work. Social institutions can be true innovation facilitators, upholding and accelerating the digital transformation (Däubler, 2004), by providing legal solutions to genuine requests for flexibility. In particular, hierarchical models based on authority mechanisms are crucial for businesses, since they provide structures that can issue and enforce guidelines and directives quickly and effectively (Simon, 1991). This allows rapid adjustments of production lines to meet new requests or requirements, and results in a significant amount of organizational elasticity (De Stefano, 2009). When it comes to pursuing innovative strategies, flexibility, motivation and involvement are crucial: the employment relationship might well provide both contractual parties with these.

This article represents the employment relationship as a resilient and developmental legal category, capable of adapting to constantly changing socio-economic landscapes. Moreover, it shows that, compared to non-standard employment templates, standard forms of employment offer various efficiencies and cost advantages that cannot be disregarded if – as in the winemaker's case – the purpose is to implement innovative and effective organizational strategies. First, they allow for the fully fledged exercise of managerial prerogative and functional flexibility in the use of the workforce – all the more so after the recent reforms implemented in several European countries in order to "mitigate" alleged rigidities (Carinci, 2004). Second, the employment relationship constitutes the most effective device to deliver training and nurture long-term investment in firm-specific or transferable

[1] The "employment relationship" is an umbrella definition, of which the "standard employment relationship" is only one modality. The former "expands the coverage of EU labour regulation from a narrower scope limited to a 'contract of employment', based on the criterion of subordination of the employee to the employer" (Eurofound, 2011). The "standard employment relationship" is "understood as work that is full time, indefinite, as well as part of a subordinate and bilateral employment relationship" (ILO, 2016, p. 7).

skills, which are key strategies for innovating and competing successfully. Conversely, in non-standard arrangements, the contingent nature of the tasks, reliance on outsourced work and opportunistic assessment schemes often cause a significant misalignment of interests between employers and employees (and even between clients and contractors) in the development of human capital and, more generally, loyal commitment (Deckop, Mangel and Cirka, 1999), which may have a negative and statistically significant effect on productivity (Boeri and Garibaldi, 2007).

Vertically-disintegrated firms, digitally facilitated personnel outsourcing and non-standard forms of employment are not necessarily incompatible with the pursuit of flexibility through quasi-hierarchical models and extra-juridical tools. However, vertical organization of business activities and the employment relationship afford a higher degree of legitimate managerial power over the workforce. Most of the time, alternative patterns are expressly designed to evade formal regulation and save labour costs (Collins, 1990). In particular, the proliferation of self-employment and non-standard forms of employment enables companies to gain a competitive advantage over their contenders, as they face a much smaller regulatory burden compared to compliant firms. Recognizing this helps to address a narrative put forward by many gig companies claiming that their model represents "an inevitable future of work that must be protected and nurtured exactly as is" (NELP, 2019, p. 1). More importantly, this gives an affirmative answer to the question of whether the existing regulations are still appropriate to cope with the second machine age, as long as minor adaptations are put in place. To put it bluntly, it is not the rigidity of the employment relationship that discourages its adoption, but rather the desire to avoid its attendant costs. Instead of eroding statutory protections and diluting legal responsibilities, it might be more appropriate to make labour convenient for both business and workers in terms of fiscal burdens, social security contributions and other institutional constraints.

Two strands of analysis run intertwined. First, we argue that, while engaging workers as independent contractors instead of employees, many innovative companies want it both ways. They exercise a significant degree of control over the workforce – whose performance is central to the core business – in line with the employment model but without being held accountable as employers (Perraudin, Thèvenot and Valentin, 2013). Worse still, they are promoting lobbying campaigns aimed at creating tailor-made exceptions for "digital intermediaries". Second, we stress that the employment relationship is a complete and effective template, capable of enabling innovation and supporting new organizational patterns. It establishes a framework where employers and managers can benefit from flexibility to adapt swiftly to changes in the economic context, while employees can commit themselves on the basis of its inherent security. By way of example, several gig companies, such as Managed by Q in the United States and Hilfr in Europe (the latter by virtue of a collective agreement), rely on standard contracts and flexible schedules (NELP, 2017; Griswold, 2019). These cases demonstrate that the platform economy can co-exist with providing workers with the rights afforded to employees. Concerns that regulation will drive platforms or new companies out of business would therefore seem to be overblown, much like earlier arguments that regulation would end various components of the "Fourth Industrial Revolution" (Cherry and Aloisi, 2017).

Initially, the employment relationship provided an equilibrium between the forces of freedom and equality, risk and solidarity, efficiency and sociality (Romagnoli, 2003). In a sense, there is a strong correlation between labour regulation, vertically-integrated firms and the rise of capitalism in the Global North (Chandler and Daems, 1980; Deakin, 2016), given that labour regulation offers several means of enhancing flexibility, rapidity, uniformity and adaptability by legally underpinning and, at the same time, rationalizing the managerial prerogative (Hepple, 1986). Several countries around the world began introducing regulation

over a century ago, when labour was mostly fragmented and precarious. This regulation was intended to provide protection for workers in what was identified as a particular relationship of exchange, but it primarily authorized managers to organize and control their (subordinate) employees' work, and to react to any serious breach of their orders. Undeniably, the world of work has changed since then, but the fundamental reasons for the existence of the employment relationship remain valid (Berg and De Stefano, 2017). More than ever before, we are seeing a resurgence of highly standardized organizational modules, while labour markets have reacquired characteristics that were prevalent at the end of the nineteenth century. Accordingly, our analysis focuses on the employment relationship as an instrumental vehicle for multi-dimensional flexibility.

This remainder of this article is organized into three sections. The first provides a summary of the current debate regarding the implications of digital transformation and its impact on labour regulation. In particular, after describing the processes of digital transformation, the vertical disintegration of the firm and "platformization" – often resulting in a situation of "disorganization of labour law" (Valdés Dal-Ré, 2005) – we argue that some self-proclaimed change-makers present a rather distorted picture of flexible innovation, based on cost-cutting, risk-shifting and the misapplication of legal provisions (Purcell, 2000). The second section takes a critical approach in tracing the socio-economic foundations and organizational justifications of labour institutions. Rebutting the allegation that the existing legal frameworks are unsuitable for dealing with changing needs and unforeseen situations, we claim that the employment relationship goes hand in hand with the development of the modern enterprise (Boltanski and Chiapello, 2005), since it confers managerial powers to the employer, thereby supporting adaptable organizational needs. The third section concludes by claiming that flexibility is embedded in the employment relationship. When it comes to boosting innovation and competitiveness, there are a number of alternative measures to be

implemented instead of tolerating fraudulent practices aimed at circumventing the manifold labour-related responsibilities to the detriment of workers, partners and competitors.

Behind the scenes of digital transformation

Research to date identifies a number of reasons for the increasingly turbulent changes in the world of work (OECD, 2018). Far from being totally unprecedented, these transformations appear alongside drivers such as globalization, financial restructuring, technology and new models of entrepreneurship (Kohler and Finkin, 1998), as well as changing demographics and social norms (Vosko, 2009). Analysing all the consequences of these concurring developments would far exceed the scope of this contribution. However, a specific reference must be made to technology-driven innovation and its impact on the organization and execution of work. As a catalyst for change and a social challenge, digital transformation currently pervades all facets of society (including private life), spawning jobs in new industries or work roles that were previously unimaginable, while making others flexible, "taskified" or even obsolete. In addition, technology accelerates a radical reconfiguration of how firms and workplaces are envisioned and structured.

Against this backdrop, advocates of "business reorganization" and "digital disruption" postulate the obsolescence or incompatibility of existing legal categories, considered unfit to respond to markets' changing needs and adjust to workload fluctuations. In this vein, labour law, "as a discipline, as a set of regulatory norms and practices and as a repository of social justice objectives – is pushed aside, regarded as a relic of an era that has now passed away" (Rittich, 2010, p. 571). This, however, seems to be an "ideological assumption" (Pollert, 1988a) that has been used to justify any circumvention of existing regulatory regimes on account of their alleged unsuitability to tackle present and future societal challenges (Gobble, 2015). On closer inspection, this approach is often responsible for a throwback to the harshest

version of the industrial model, "incorporating the efficiency and control of automatic management, without the industrial model's job security or stability" (Cherry, 2016, p. 602). This approach raises doubts as to the entrepreneurial spirit of "innovative" start-ups and companies turned into "tech giants" obsessed with elusive and collusive dynamics (Manjoo, 2017).

In fact, various sources state that labour market institutions can affect propensity towards innovation (Boyer, 1988). Since many scholars identify a positive relationship between strategic flexibility, innovation performance and environmental dynamism (Cingöz and Akdoğan, 2013; Altuzarra and Serrano, 2010), it is worth focusing on the major organizational strategies implemented in the so-called second machine age. In this respect, many different organizational formats, managerial practices and policies relating to human resources are often lumped under the ambiguous label of "innovation". Using a more detailed taxonomy, both "digital transformation" and "fissurization of the workplace" are being heralded as direct effects of the introduction of new technologies, determining an escape from statutory responsibilities and a shift of burdens onto workers (Estlund, 2018). Moreover, the platformization of work can be seen as the aggregate effect of a process of vertical disintegration of firms combined with digitally-facilitated just-in-time distribution of subcontracted work assignments (Tomassetti, 2016; De Stefano, 2016).

Arguably, these practices also result from converging public and entrepreneurial policies designed to implement flexibility (Thornley et al., 2010). On the one hand, firms want to adjust the volume of the workforce by hiring and firing workers with ease on the basis of contingent needs or by adapting the duration of working relationships (Euwals and Hogerbrugge, 2006). On the other hand, they want to be free to redeploy workers from one task to another quickly enough to cope with shifts in market opportunities and consumer demands. However, as noted by Sachs, the "trope" of flexibility too often plays into the hands

of industries that want "to continue misclassifying workers as independent contractors" (2018, para. 6). In parallel to these explanations, the growth of non-standard work is also closely related to notions of selective "de-regulation". By giving their "blessing" to alternative forms of work through specific incentives for enterprises, recent policies have not just condoned but also encouraged – whether intentionally or otherwise – the avoidance of regulations (Bisom-Rapp and Coiquaud, 2017). So far, the result of disruptive forces, namely digitization, fissurization and platformization, is predominantly a one-dimensional form of flexibility, to the advantage of businesses.

A self-fulfilling prophecy on the future of work

Accurate analyses (Atkinson and Wu, 2017) have disproved the narrative of a "jobless" world of work (Frey and Osborne, 2017; Ford, 2015), by clarifying that a task-based approach dramatically reduces the (over)estimated impact of automation. However, panic over the magnitude of technological displacement is being used as an excuse to force workers to accept bad jobs as a means of survival (Piasna, 2017). Indeed, the main threat to labour is not the spectre of mass displacement, but the slow and continual downward pressure of digitization on the value and availability of work (Berg, 2019; Munger, 2018; Arntz, Gregory and Zierahn, 2016). Technology-driven innovation will not make human work redundant (Autor, 2015), but a technological change on this scale empowers capital over labour, in such a way as to make worker self-organization more difficult, encourage regulatory arbitrage, and facilitate rent-seeking by employers. Yet much less attention has been devoted thus far to the quality and the content of the jobs that will survive digitization (De Stefano, 2018). It is therefore important to focus on the cases where automation is not economically viable or technically possible (McGaughey, 2018). Such businesses will most likely be able to

organize, monitor and discipline workers in their performance of tasks in a way that is unprecedented, tighter and undesirable (Ivanova et al., 2018).

Needless to say, technology-driven innovation has numerous positive effects on working life, such as job market activation, enhanced efficiency and emancipation, frictionless mobility and the reduction of dangerous and hazardous tasks. However, more recently, scholars have shed some light on the potential of technological devices in terms of intensified authoritarian and surveillance practices (Moore, Upchurch and Whittaker, 2018). Instead of facilitating an emancipating new environment, the risk is that technology will be used to deepen hierarchy and control over the workforce (Aloisi and Gramano, 2019). Technological advancements (e.g. electronic bracelets, collaborative widgets and software installed on workers' devices) open up the possibility of new practices of profiling, organization and supervision of the workforce, such as "people analytics" and "algorithmic management" (Bodie et al., 2016). Thanks to machine learning techniques applied to the huge amount of data available, algorithms can be trained to become increasingly efficient in automating internal processes and vetting workers, with the risk of them spiralling out of control (Pasquale, 2015).[2] Far from being neutral, these systems based on analysing increasingly granular data may perpetuate bias, thereby reinforcing pre-existing discrimination. All these processes – if left ungoverned – blatantly contradict the idea that technology-driven innovation will necessarily grant workers more freedom.

Turning now to "fissurization" (Weil, 2014), the archetype of the integrated firm has long been undergoing a process of fragmentation in many industries, as firms push more work outside their organizations and engage a rising number of contractors, contingent workers and freelancers (Collins, 1990) by means of, though not exclusively, digital

[2] By combining automatisms, based on the data, and programing, algorithms and statistical models are able to progressively improve their performance on a specific task thanks to step-by-step procedures. This results in the possibility of making predictions or decisions without being explicitly programmed to perform the task.

platforms. Accordingly, major companies in manufacturing and low-wage service industries, such as maintenance, security, education and food services, came under market pressure to improve their financial performance and produce results for investors. The strategy to boost competitiveness relied on concentrating resources in a set of core competencies representing distinctive capabilities and the source of comparative advantage in the markets in which they competed. Initially, this segmentation involved marginal functions of the productive cycle, but modern cases reveal a rising "fissurization" and the consequent assignment to third parties of key functions and crucial company processes, such as accounting, payroll, human resources, and client care (Corazza, 2004). In the platform economy, the core activities of the "underlying" business model are externalized to own-account providers in an attempt to design an "asset-light" company.

Fissurization is not merely caused by technology. However, thanks to the "creation, monitoring, and enforcement of standards on product and service delivery, made available through new information and communication technologies" and enabled by digital tools (Weil, 2014, pp. 8-9), firms are now able to impose detailed and stringent instructions on workers hired on the spot for a specific task. More recently, these processes have gone even further, affecting activities that had previously been carried out directly and could be regarded as core to the company (Weber, 2017). The very fact that a company has a core business is now considered to create rigidity (Leonard□Barton, 1992). Today, seemingly "bossless" firms have the potential to become dominant providers of back- and middle-office functions and other central functions in every industry, dramatically shrinking the size and redesigning the notion of the firm (Foss and Klein, 2019). Management scholars are forecasting that these trends will lead to organizations that are "fluidly assembled and re-assembled from globally networked labor markets" (Kessler, 2017, para. 4), thus defining the business's next evolutionary step.

Platform work: A telling example of combined trends

Although poorly captured in statistics, the gig economy is a visible example of the practices described above. Online labour platforms use technology to connect "providers" with "clients" for one-off tasks, in other words, jobs that are completed either virtually or in person by an on-demand workforce (Eurofound, 2018). Information and communications technology (ICT) applications minimize the transaction costs associated with contracting out jobs (obtaining information, setting a price, negotiating and enforcing a contract) and thus make the intermediation of work more rapid and convenient (Gilson, Sabel and Scott, 2009). Organizations can assemble casual workers very quickly for projects, and rely more on outside suppliers (Eichhorst et al., 2016). From a legal perspective, these formats blatantly exclude workers – questionably classified as self-employed – from the labour protections and social security benefits traditionally granted to employees. Workers are also excluded from fundamental principles and rights at work, such as freedom of association, collective bargaining or protection against discrimination (De Stefano and Aloisi, 2019).

Without regulatory or collectively-taken countermeasures (Aloisi, 2019), not only does this model determine "a transfer of risk from employer to employee and, by extension, to the state" (Purcell, 2000, p. 24), but it may also lead to the widening of managerial prerogative, which now finds more pervasive and invisible channels, without the security that such a prerogative previously guaranteed (De Stefano and Aloisi, 2018; Méda, 2016). In fact, it is predominantly based on potent managerial prerogative and liquid responsibilities.[3] The

[3] C-434/15 *Asociación Profesional Elite Taxi v Uber Systems Spain, SL* (2015). In 2017, the Court of Justice of the European Union took the view that the service provided by Uber's platform is more than a matching activity, connecting, by means of a digital app, a non-professional driver with a private individual. Indeed, the provider of the intermediation service organizes and offers urban transport services simultaneously. The Court observed that "Uber determines at least the maximum fare by means of the eponymous application, […] receives that amount from the client before paying part of it to

risk of uncertainty in demand, a traditional component of "business risk", is shifted from firms onto workers by means of a process of re-casualization and de-standardization of employment, somehow contrary to that which occurred in earlier industrialization. Digitally facilitated outsourcing is often deliberately used to obtain an instant pool of workers, abating sunk costs and assembling a hyper-volatile organization (Dau-Schmidt, 2001). In light of this, a growing body of literature acknowledges that platform-mediated work is "one small but salient aspect of the larger trend toward outsourcing of work to individual independent contractors without any of the responsibilities and burdens that attend the employment relationship" (Estlund, 2018 p. 285).

Labour platforms represent a formidable paradigm of relational or hierarchical forms of outsourcing (Muehlberger, 2005), as they seek total control by consolidating authority structures that resemble those found in an employment relationship – such as setting goals, monitoring and evaluating work, providing feedback and imposing consequences on workers on the basis of their loyalty – while shedding responsibility. As explained by Tomassetti (2016), the result is, apparently, a "win–win situation" where modern firms control resources without owning them, rapidly adapting to downturns in the market, thanks to "a set of calls on resources that are then assembled into a performance" (Davis, 2016, p. 513). Downsides for business are less evident. Employers may face difficulties in dealing with a segmented and inharmonious workforce that lacks commitment, in supervising isolated workers operating outside the firm's premises and, ultimately, in meeting the needs of demanding customers in terms of quality and reliability (Prassl, 2018).

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the non-professional driver of the vehicle, and that it exercises a certain control over the quality of the vehicles, the drivers and their conduct, which can, in some circumstances, result in their exclusion" (ECLI:EU:C:2017:981).

What does labour regulation stand for? Understanding the foundational exchange underpinning the employment relationship

The study of how to combine digital transformation and regular forms of work is an under-researched topic, while more extensive consideration has been given to the positive effect on innovation and growth of employment protection legislation that makes it harder to dismiss employees (Subramanian, 2018; Acharya, Baghai and Subramanian, 2013). Broadly speaking, social institutions should be seen as enablers of authentic innovation, since they level the playing field between competitors, prevent the abuse of dominant positions, enable tentative experimentation and protect the relevant results. They also mediate between conflicting interests by ensuring determinacy and certainty in the application of the law. More importantly, social institutions can lower transaction costs, thus bringing considerable added value, promoting organizational efficiency and offering greater flexibility, while labour market institutions, such as collective bargaining and employment standards, can facilitate trade and ease impediments to investment and growth. This has been rightly labelled as the "efficiency-enhancing dimension" of labour law (Deakin, 2016).

Transaction cost economics' taxonomies explain how competitive forces lead activities to be completed internally, through market transactions or through hybrid agreements. Among others, Coase (1937) highlighted a correlation between the notion of the firm (intended as a "command hierarchy") and the employment relationship, on the one hand, and the notion of market and self-employment, on the other (Williamson, 1979). Indeed, the contract of employment normally gives the employer the right to control and direct an agent's performance, in exchange for a promise of continuity and job security (Hart and Moore, 2005). Accordingly, an employee "agree[s] to accede to the authority" of the employer without resistance (Williamson, 1996, p. 17). This analysis explains why, in general, the vertically integrated firm recurred instrumentally to contracts of employment rather than to a

set of contracts of service: strong interdependence makes it convenient to organize people instead of depending wholly on market transactions (Simon, 1991). The increase in organizational costs associated with employment is compensated by the possibility of exercising fully-fledged managerial authority and command-and-control power (Razzolini, 2010). What makes the employment relationship unique is its essential flexibility, enjoyed by the parties and associated with the intrinsic nature of "contractual incompleteness" (Macneil, 1980), aimed at achieving cooperation between parties through gradual adjustments (Collins, 1986).[4]

An organization based on multiple hierarchical relationships makes labour resources a "quasi-fixed cost in production", in other words, a cost that is not completely variable, which is the case when labour is hired as a service by means of commercial contracts (Oi, 1962). In particular, internally flexible firms could become specialized, competitive and responsive to changes that are unexpected or unforeseeable at the moment of negotiating the employment contracts (Cappelli and Neumark, 2004), resulting in high economic performance (Gittleman, Horrigan and Joyce, 1998). Regrettably, most studies in this field have concentrated only on numerical (or external) flexibility rather than considering the internal (or functional) one,[5] in the so-called "'zone of acceptance' within which an employee can be expected to obey orders" (Simon, 1991, p. 31). In addition, the main focus has been on the alleged inefficiencies and rigidities associated with stringent employment protection legislation (Noelke, 2011). As a result, the legal challenges posed by the technological changes and

[4] In the light of the practical impossibility for the contractual parties to consider the immense set of circumstances that might occur over an indefinite period of time, such relational agreement postpones the precise determination of a significant part of its terms and conditions to a later moment, in order to adjust it over the course of time (Holmström and Roberts, 1998).

[5] "A reversal of the division of labour and the fragmentation of work organization which were typical of the traditional production-line model; this is achieved both by extending the range of tasks and skills involved in a job and by increasing internal mobility" (Treu, 1992, p. 505).

business reorganization have been addressed "exclusively from an external perspective … outside the boundaries of the employment relationship" (Gramano, 2018, p. 2). Yet, all forms of flexibility interact (Pollert, 1988b).

Very often, lawsuits brought by workers in different sectors (and jurisdictions), demanding that they be reclassified as employees have resulted in the rejection of their claims on the grounds of the supposed flexibility that they enjoy in deciding if and when to accept a call and complete a task or a project.[6] In addition to underestimating the role played by technology in organizing, monitoring and disciplining the workforce, this theory of flexibility is accompanied by the popular mantra of contemporary commentaries on management and labour law: employment status will require firms to take away a good deal of the workers' flexibility (Berger et al, 2018; Hall and Krueger, 2018). Arguably, most of the evidence in support of this statement is anecdotal. By contrast, it is important to stress that flexible arrangements can comfortably coexist with the legal determination of an employment status. Indeed, "workers can choose when and how much to work, and can even work without immediate supervision, and still be employees within the meaning of the law" (Sachs, 2015, para. 6). From both the worker's and the employer's perspective, the employment relationship may well imply the possibility of enjoying both the security of employment and the benefits of flexibility, given that this status is completely compatible with various forms of organizational "non-standardness" (Berg and Johnston, 2018).

The expansive and enduring promise of the employment relationship

Several questions need to be answered: has the underlying normative model of employment been fatally "injured" (Fudge, 2017)? Is this archetype anachronistic or, even worse,

[6] Such flexibility often does not end up working in workers' favour (Rosenblat and Stark, 2016; Wood, 2017). The vaunted flexibility seemingly offered by platforms is at odds with the idea of independent contractors able to work freely and autonomously (Aloisi, 2018).

incapable of governing complex organizational structures? Lastly, is the employment relationship's core too rigid or unsuitable to accommodate modern and multifaceted arrangements? In order to rebut the allegation that this relationship is antiquated and unable to cope with the most recent technological advancements, two key arguments need to be addressed. On the one hand, the conflation between the employment relationship and the twentieth century mode of production, based on the assembly line and the "mass prototype" of the blue-collar worker, must be rejected. Indeed, on the one hand, the employment relationship has a primarily technical nature that can also accommodate novel forms of management enabled by digital transformation. On the other hand, the exercise of the managerial prerogative has to be seen as the key technical determinant of the employment relationship, whatever means is chosen, whether traditional or innovative, whether analogue or digital.

According to the accounts proclaiming the "crisis" of labour law, there should be a strong correspondence between the Ford–Taylorist method and the employer–employee relationship. In short, the dissolution of the vertical undertaking will result in the simultaneous collapse of the standard employment relationship. Originally, however, employment law had little to do with the industrial production model (Bavaro, 2018; Romagnoli, 2003) or, to put it differently, its original beneficiaries were not people working in large companies, especially in countries where vast mass production lagged behind until the second half of the twentieth century. Indeed, several scholars have observed that the mutual, yet artificial, regime based on control and subordination descends from specific legislative intervention introduced in pre-industrial eras and at the outset of industrialization (Deakin, 2006; Deakin and Wilkinson, 2005). This included measures providing for the removal of wages and the imprisonment of servants and labourers due to "misdemeanour, miscarriage or ill behaviour" in common law systems (De Stefano, 2018, p. 14); and

requiring an employment record book, which ensured that workers would not leave their workplace in search of another job without the consent of their employers, in civil law systems (Veneziani, 1986).[7]

Moreover, the employment relationship must not be conflated with work in large and vertically integrated firms (De Stefano, 2009). When it comes to demonstrating the "non-industrial" nature of the employment relationship, at most it can be agreed that recent decades have shown a transition from large manufacturing enterprises to the ICT-based companies in the service-based sector where different keystones of scientific management are still in place (Sprague, 2007). This latter point in particular has led many commentators to argue that Taylorism – defined as "management strategies that are based upon the separation of conception from execution" (Pruijt, 2000, p. 2) – is very much alive (Vallas, 1999). Principles of scientific management not previously incorporated into traditional Ford–Taylorist regimes have assumed key positions in the post-industrial era – for instance, managers delegate more responsibility to workers or teams, while retaining an enhanced possibility to control and manage them with increasing sophistication (Salento, 2003). Experts argue that modern production techniques consistently implement stereotyped ideals of standardization, efficiency, intensification and control to many different industries (Kraft, 1999). To this aspect of the platform-mediated labour model should be added other defining components based on gamification, behavioural incentives and participatory "nudges".

[7] The model has its roots in the putting-out system, in which merchant-employers-intermediaries "put out" raw materials to rural producers who usually worked in their homes (Landes, 1969). In a subsequent phase, before the introduction of machinery, workers moved to factories in order to ensure employers the possibility of monitoring and taking effective measures to punish theft or other breaches (Marsden, 1999). Machines made the need for programmability even more pressing and essential.

Integration for stability, control for efficiency and flexibility for innovation

The emergence of the standard employment relationship as a point of reference in the early decades of the twentieth century "was the result, in part, of employer strategies which at that point favoured the vertical integration of production" (Deakin, 2016, p. 9), and the effect of the rise of collective bargaining within industries. Coupled with the introduction of limited liability, which unleashed vital sources of finance, this template propelled the rise and accompanied the development of the vertically integrated modern enterprise. In particular, in several legal systems the employment contract provides the basis for a defined organizational structure, namely, the modern firm. Within this "responsible" model (Gallino, 2009), management is entitled to change the content of performance unilaterally through binding orders, without obtaining the worker's individual consent.

Labour regulation played a pivotal role in facilitating the effective and dynamic management of the productive organization by fulfilling the requirements of flexibility and predictability that are essential for the proper functioning of an efficient enterprise used to "planning under uncertainty" (Simon, 1951, p. 304). Since the power of direction "vests in the entrepreneur–coordinator" (Deakin, 2016, p. 2), the template of wage work is "instrumental" in addressing identified and emerging needs of organizational flexibility much beyond these organizational modes (Vardaro, 1989). In other words, the essential legal feature of the contract of employment, together with its relevant socio-economic function, recurs also when the employment relationship is carried out in loosely hierarchical conditions and/or environments (De Stefano, 2009; Veneziani, 2002). For instance, workers could have a considerable amount of autonomy in the implementation of the allocated task – granted by programmatic directives or by a particular mode of decentralized organization – yet they could still be subject to a considerable "upstream" managerial power (Del Punta, 2018).

The employment relationship grants management essential organizational and coordination prerogatives: (i) the power to assign tasks and give unilateral orders and instructions to workers; (ii) the power to monitor both the execution of such tasks and compliance with orders and instructions; and (iii) the power to discipline disloyal or recalcitrant workers. This "unitary" model leads to a more efficient outcome than investing in repeated economic exchanges (ILO, 2016). Labour regulation, therefore, is much more than mere workers' protection. Indeed, the flip-side of its protective features is too often neglected. It creates a private governance structure ("a miniature legal system", as Collins (1986) termed it), giving employers' the prerogative of "us[ing] the contract to provide rules … on controversial matters and reserve to itself explicit discretionary power to fill in any gaps" (Collins, 2007, p. 6).[8] This was recognized as one of the critical functions of the employment relationship decades before the advent of classical and neoclassical economic theory. It implies that workers accept spreading their energies out over the time available to the employer, without necessarily having to produce a tangible result (Castelvetri, 2001; Mengoni, 2000).

The contract of employment is still based on the mutual and, hence, bilateral consent of the parties at the moment of its conclusion (Countouris, 2019). However, once the contract is in force, workers are subject to the unilateral powers of employers, who no longer need their consent to direct, supervise and discipline their work performance (Chandler, 1977). As an exception to the general legal principle of obtaining the consent of the debtor (in the context of the employment relationship, the employee) in order to implement and enforce unilateral decisions, the employment contract allows employers not to get employees'

[8] Perulli (2017, p. 359) argues that "[t]he labour contract's structural flexibility, consisting in the creation of 'areas of acceptance', within which the orders shall be executed without resistance, especially guarantees the adaptability of the firm to ever-changing market and technological conditions, in the same way the internal organization responds to those issues more efficiently than the inter-firm bargaining".

approval before issuing orders or modifying the relevant duties – within the limits of what is reasonable and lawful under the given legal order – and to monitor execution and sanction non-compliant workers. In a nutshell, the legal subjection to the managerial authority of the employer is the *raison d'être* of the employment relationship, not a mere legal effect of such contractual regimes (Persiani, 1966).

As claimed by Farnham (2015), employers have the legal right to decide how to deploy and utilize the labour powers of workers in the workplace, provided such uses are not themselves unlawful. This regime emerged and evolved alongside economic vicissitudes (Deakin and Wilkinson, 2005). Historically, once "contractualized", the employment relationship gave capital the power to direct labour within certain limits, allowing firms to invest in the skills of their workforce, thus increasing labour productivity, raising individual and corporate performance, and promoting organizational efficiency (Deakin, 2000). Concomitantly, employees gained stability and continuity in work, which made them "available" to develop firm-specific skills and commitment to innovation (Deakin and Wilkinson, 1998). Employees' capacity for work is maintained over the long term by protecting them from excessive demands, for example by establishing maximum working times and holiday entitlements (Bosch, 2004).

On closer inspection, the regulation of the standard employment relationship has come to be premised upon a "structural ambivalence" (Supiot, 1994). While providing management with ample unilateral power to direct, control and discipline human work, labour regulation has to "reconcile these almost 'seigniorial' prerogatives with the respect of the human dignity of workers", which is necessary in industrialized democracies founded on the principle of equality (De Stefano, 2018, p. 15). As a consequence, this contract pursues the additional aim of rationalizing managerial powers and containing the employers' juridical domination (Dockès, 2004). Interestingly enough, such a function is largely neglected, because of an

overly simplistic conceptualization of the employment contract as a mere exchange between labour and remuneration and "labour protection as a simple form of protecting the workers' income from the superior bargaining power of employers" (De Stefano, 2018, p. 15). In addition to this, in many jurisdictions, the employment relationship has been traditionally established – either statutorily or in case law – as a gateway to full labour protection, in contrast to self-employment (Freedland and Kountouris, 2011).

More often than not, employment status is denied in order to avoid the mandates and costs associated with it. As mentioned above, in times of digital transformation, we witness organizational patterns based on tight direction, pervasive control and stringent disciplinary powers. These closely resemble the exercise of managerial powers that are legally enshrined in the employment relationship without being surrounded by the regulation essential to counterbalance them. In addition, the existence of an area of murkiness has made commentators wonder whether the employment relationship should continue to represent the only "vehicle for the delivery of rights and entitlements" (Davidov and Langille, 2006, p. 4). Some scholars have warned that concerns that the employment relationship is allegedly under-inclusive should not cast doubt on its main components, namely flexibility and adaptability. This contractual "way of being" retains its normative salience and its central role in qualifying work relationships, including those forms that do not seemingly fit into the traditional domain of labour (Countouris, 2019).

Despite the increasing calls for the dissolution of the distinction between employees and the self-employed (Taylor et al, 2017; Harris and Krueger, 2015), the model should not be regarded as exclusionary (Davidov, 2014). The traditional binary divide does not prevent self-employed persons from being granted some basic labour and social rights. Besides the extension of some protection to quasi-subordinate and economically dependent workers, various legal systems now afford a minimum amount of protection to self-employed persons

(Cherry and Aloisi, 2017). Many initiatives are being carried out to develop a broader construction of the personal scope of labour rights by crafting a definition of personal work including any "person … engaged by another to provide labour and is not genuinely operating a business on his or her own account" (Countouris and De Stefano, 2019, p. 58, drawing on Freedland and Kountouris, 2011) within the scope of labour protection. These proposals could develop a more effective framework by extending labour regulation to workers who are still unreasonably excluded from the scope of employment law, as a consequence of the narrow construction of existing labour standards.

Shaping the future: A law that works to the benefit of all

This article has sought to address the regulatory conundrum of achieving a balance between enabling flexible organization, facilitating innovative practices and ensuring the effectiveness of labour regulation. In particular, the previous sections have argued against a one-dimensional concept of flexibility which has been "weaponized" in order to push an increasing number of workers to be classified under non-employment contractual arrangements (Tveten, 2018). This approach indeed reflects a vision of labour resources as a cost to be minimized in order to increase productivity and competitiveness. We have argued instead that, by providing businesses with hierarchical power and a managerial prerogative, the employment relationship is one of the key legal "bricks" of the modern (and innovation-driven) firm. The principal purpose of the corresponding legal analysis has been to prove the functionally resilient nature of the employment relationship, recently "flexibilized" in the light of the assumption that mandatory protections are (too heavy) a burden on business. Several reforms in different legal orders have been designed to confer greater authority on employers and give them greater latitude to determine when and how work is performed (Gramano, 2018; Rittich, 2010).

Our analysis was indeed aimed at supporting the viability and flexibility of the employment relationship (Santoro-Passarelli, 1999). According to some scholars, the prophecy of the demise of labour regulation and the decline of the employment relationship may well represent nothing more than a convenient attempt to provide legal arguments to justify business practices that allow firms to cast aside their responsibilities (Bavaro, 2018). This concluding section sheds further light on the foundations of the concept of the employment relationship, understood as an all but monolithic paradigm whose "descriptive validity, statistical incidence and normative power" have been weakened only allegedly (Stone and Arthurs, 2013, p. 7). As a matter of fact, although the social environment is characterized by an increasing heterogeneity of arrangements, employment is still the dominant form of work in most advanced economies,[9] allowing companies to flourish, innovate and create employment, and allowing workers to become integrated into a system of rationalized authoritative power.

The organizational function of employment, as a cornerstone of business' flexibility, instead, has not experienced any decline. As shown above, the foundational characteristics of the employment relationship are general and adaptive enough to be relevant for a wide panoply of business models. The key element of the employment relationship is the worker's personal subjection to the command, organizational and disciplinary powers of the employer. This legal template facilitates the implementation of a hierarchical structure, allowing the employer to implement innovative business strategies in such a way as to cope with changing organizational and market needs (Storm and Naastepad, 2007). More specifically, managerial power – whatever the means used to exercise it – and the duties of obedience, loyalty and co-operation (Collins, 1986) are hallmarks of the employment relationship. This arrangement

[9] The standard employment relationship accounted for 59 per cent of the total share of employment in 2015 in Europe, while more contingent forms of work continue to "grow in both significance and size" (Hudson-Sharp and Runge, 2017, p. 17).

can facilitate the development of consolidated production methods and skills efficiency, by encouraging employees to engage in more successful, significant and innovative pursuits in a context of digital transformation (Acharya, Baghai and Subramanian, 2013).

A key policy challenge for the changing world of work, as argued by the OECD is "to promote innovation, entrepreneurship and flexibility, on the one hand, while improving job quality and worker rights and protections, on the other" (2018, p. 262). Taking a step forward in this direction, within the systemic–evolutionary model of labour law, the employment relationship can be better appreciated in relation to its social and legal capacity to provide a comprehensive umbrella for organizational innovations. There are sufficient reasons to conclude that it is a categorical error to argue that labour regulation has now become redundant: it is not only more necessary but also more relevant than ever. Although labour legislation, as a mode of regulation, grew out of and responded to the rise of capitalist forms of production, it is also essential for a well-functioning modern firm in the post-industrial economic scenario. The over-reliance on work arrangements that are excluded from meaningful labour protection results in lower productivity growth because it erodes firm-specific skills and decouples managerial power from protective obligations.

Giovanni Gaja, whose story inspired the opening section of this article, was looking for a contractual template that would allow for the fully-fledged exercise of managerial prerogatives, in an attempt to adopt an innovative organization that captured the international market and achieved efficiency. The winemaker's decision to hire the sharecroppers as waged employees illustrates how, far from assembling and orchestrating a light business, breakthrough firms need to be functionally flexible in order to anticipate, lead and react to changes in economic circumstances and operational requirements. The employment relationship, seen as a heterogeneous "legal platform", is able to adapt to the quickly evolving environment, without losing its identity and autonomy in the current socio-economic context.

Even in a context of digital transformation, this relationship could facilitate and enhance "closure of 'pores' in the labour process" (Mhone, 1998, p. 203) by fostering "functional flexibility", which is all the more important when there is a legitimate interest in maintaining an unvarying quality of products or services. In addition, from the worker's perspective, it offers several alternative ways of executing work (e.g. fixed-term, part-time, intermittent and remote work) while ensuring a robust system of security, skills development and motivation.

Viewed in this way, there is no inconsistency between labour regulation and innovative organizational patterns. Overall, the evidence indicates that classifying workers as employees does not entail a loss of flexibility for employers and businesses. Contrariwise, some non-standard forms of work exclude workers from the scope of employment regulation, thus compressing managerial power and misaligning interests. In addition, the inherent flexibility of standard contracts represents a powerful vehicle for integration and success. It allows the development of the novel managerial strategies and organizational arrangements made possible by technological advances and digital transformation. Therefore, at a time when both employers and workers crave more flexibility, autonomy and discretion (Collins, 2005), the goal should be a labour market where innovation is a synonym for flexible, yet regular, employment, high-quality jobs, sustainable conditions and enhanced dynamism, rather than a competitive edge gained because business models are based on evading regulation and/or reducing the tax bill (OECD, 2018). Undeniably, labour regulation still has a crucial role to play in the changing world of work.

The employment relationship as an innovation facilitator

International Labour Review

References

Acharya, V.V.; Baghai, R.P.; Subramanian, K.V. 2013. "Labor laws and innovation", in *Journal of Law & Economics*, Vol. 56, No. 4, pp. 997–1037.

Aloisi, A. 2019. *Negotiating the digital transformation of work: Non-standard workers' voice, collective rights and mobilisation practices in the platform economy*. EUI Working Paper No. 3. San Domenico di Fiesole, European University Institute.

—. 2018. "'With great power comes virtual freedom'. A review of the first Italian case holding that (food-delivery) platform workers are not employees", in *Comparative Labor Law & Policy Journal*, Dispatch No. 13. Available at: https://cllpj.law.illinois.edu/dispatches [accessed 24 Oct. 2019].

—. Gramano, E. 2019. "Artificial intelligence is watching you at work. Digital surveillance, employee monitoring and regulatory issues in the EU context", in *Comparative Labor Law & Policy Journal*, Vol. 41, No. 1, pp. 101–127.

Altuzarra, A.; Serrano, F. 2010. "Firms' innovation activity and numerical flexibility", in *ILR Review*, Vol. 63, No. 2, pp. 327–339.

Arntz, M.; Gregory, T.; Zierahn, U. 2016. *The risk of automation for jobs in OECD countries: A comparative analysis*. OECD Social, Employment and Migration Working Papers, No. 189. Paris, OECD.

Atkinson, R.D.; Wu, J. 2017. *False alarmism: Technological disruption and the U.S. labor market, 1850–2015*. Washington, DC, Information Technology and Innovation Foundation.

Autor, D.H. 2015. "Why are there still so many jobs? The history and future of workplace automation", in *Journal of Economic Perspectives*, Vol. 29, No. 3, pp. 3–30.

Bavaro, V. 2017. *Questioni in diritto su lavoro digitale, tempo e libertà.* Paper presented at "Impresa, lavoro e non lavoro nell'economia digitale", held in Brescia, 12–13 Oct.

Berg, J. 2019. “Protecting Workers in the Digital Age: Technology, Outsourcing and the Growing Precariousness of Work”, in *Comparative Labor Law & Policy Journal*, Vol. 41, No. 1.

—; De Stefano, V. 2017. “It’s time to regulate the gig economy”, in *Open Democracy*, 18 Apr. Available at: https://www.opendemocracy.net/beyondslavery/janine-berg-valerio-de-stefano/gig/it-s-time-to-regulate-gig-economy [accessed 21 Oct. 2019].

—; Johnston, H. 2018. “Too good to be true? A comment on Hall and Krueger’s analysis of the labor market for Uber’s driver-partners”, in *ILR Review*, Vol. 72, No. 1, pp. 39–68.

Berger, T.; Frey, C.B.; Levin, G.; Danda, S.R. 2018. *Uber happy? Work and wellbeing in the ‘Gig Economy’*. Working paper presented at the 68th Panel Meeting of Economic Policy, held in Vienna, 4–5 Oct.

Bisom-Rapp, S.; Coiquaud, U. 2017. “The role of the state towards the grey zone of employment: Eyes on Canada and the United States”, in *Papers in Political Economy /Revue Interventions économiques*, Vol. 58. Available at: https://journals.openedition.org/interventionseconomiques/3555 [accessed 22 Oct. 2019].

Bodie, M.T.; Cherry, M.A.; McCormick, M.L.; Tang, J. 2016. *The law and policy of people analytics*. Saint Louis University Legal Studies Research Paper No. 6. Available at: https://ssrn.com/abstract=2769980 [accessed 28 Oct. 2019].

Boeri, T.; Garibaldi, P. 2007. “Two tier reforms of employment protection: A honeymoon effect?”, in *Economic Journal*, Vol. 117, No. 521, pp. F357–F385.

Boltanski, L. ; Chiapello, E. 2005. *The new spirit of capitalism*. London, Verso.

Bosch, G. 2004. “Towards a new standard employment relationship in Western Europe”, in *British Journal of Industrial Relations*, Vol. 42, No. 4, pp. 617–636.

Boyer, R. 1988. “Technical change and the theory of ‘regulation’” in G. Dosi, et al. (eds): *Technical change and economic theory*. London, Pinter, pp. 67–94.

Cappelli, P.; Neumark, D. 2004. “External churning and internal flexibility: Evidence on the functional flexibility and core periphery hypotheses”, in *Industrial Relations: A Journal of Economy and Society*, Vol. 43, No. 1, pp. 148–182.

Carinci, F. 2004. “Outflow rigidity and flexibility in Italian employment law”, in *International Journal of Comparative Labour Law and Industrial Relations*, Vol. 18, No. 2, pp. 215–228.

Castelvetri, L. 2001. *Libertà contrattuale e subordinazione*. Milan, Giuffrè.

Chandler, A.D. Jr. 1977. *The visible hand: The managerial revolution in American business*. Cambridge, MA, Harvard University Press.

—; Daems, H. (eds). 1980. *Managerial hierarchies: Comparative perspectives on the rise of the modern industrial enterprise*. Cambridge, MA, Harvard University Press.

Cherry, M.A. 2016. “Beyond misclassification: The digital transformation of work”, in *Comparative Labor Law & Policy Journal*, Vol. 37, No. 3, pp. 544–577.

—; Aloisi, A. 2017. “‘Dependent contractors’ in the gig economy: A comparative approach”, in *American University Law Review*, Vol. 66, No. 3, pp. 635–689.

Cingöz, A.; Akdoğan, A.A. 2013. “Strategic flexibility, environmental dynamism, and innovation performance: An empirical study”, in *Procedia – Social and Behavioral Sciences*, Vol. 99, pp. 582–589.

Coase, R.H. 1937. “The nature of the firm”, in *Economica*, Vol. 4, No. 16, pp. 386–405.

Collins, H. 2007. “Legal responses to the standard form contract of employment”, in *Industrial Law Journal*, Vol. 36, No. 1, pp. 2–18.

—. 2005. “Flexibility and stability of expectations in the contract of employment”, in *Socio-Economic Review*, Vol. 4, No. 1, 139–153.

—. 1990. “Independent contractors and the challenge of vertical disintegration to employment protection laws”, in *Oxford Journal of Legal Studies*, Vol. 10, No. 3, pp. 353–380.

—. 1986. “Market power, bureaucratic power, and the contract of employment”, in *Industrial Law Journal*, Vol. 15, No. 1, pp. 1–14.Corazza, L. 2004. *“Contractual integration” e rapporti di lavoro. Uno studio sulle tecniche di tutela del lavoratore*. Padua, Cedam.

Countouris, N. 2019. *Defining and regulating work relations for the future of work*. Geneva, ILO.

—; De Stefano, V. 2019. *New trade union strategies for new forms of employment*. Brussels, European Trade Union Confederation.

Dau-Schmidt, K.G. 2001. “Employment in the new age of trade and technology: Implications for labor and employment law”, in *Indiana Law Journal*, Vol. 76, No. 1, pp. 1–28.

Daübler, W. 2004. “Erleichterung von Innovationen-eine Aufgabe des Arbeitsrechts?”, in *Betriebs-Berater*: pp. 2521–2523.

Davidov, G. 2014. “Setting labour law’s coverage: Between universalism and selectivity”, in *Oxford Journal of Legal Studies*, Vol. 34, No. 3, pp. 543–566.

—; Langille, B. 2006. “Introduction: Goals and means in the regulation of work”, in G. Davidov and B. Langille (eds): *Boundaries and frontiers of labour law: Goals and means in the regulation of work*. Portland, OR, Hart, pp. 1–10.

Davis, G.F. 2016. “What might replace the modern corporation? Uberization and the web page enterprise”, in *Seattle University Law Review*, Vol. 39, No. 2, pp. 501–516.

Deakin, S. 2016. *The contribution of labour law to economic development and growth*. Centre for Business Research, Working paper No. 478. Cambridge, University of Cambridge.

—. 2006. “The comparative evolution of the employment relationship”, in G. Davidov and B Langille (eds): *Boundaries and frontiers of labour law*, Portland, OR, Hart, pp. 89–108.

—. 2000. *The many futures of the contract of employment*. ESRC Centre for Business Research, Working Paper No. 191. Cambridge, University of Cambridge.

—; Wilkinson, F. 2005. *The law of the labour market: Industrialization, employment, and legal evolution.* Oxford, Oxford University Press.

—; —. 1998. *Labour law and economic theory: A reappraisal*. ESCR Centre for Business Research, Working Paper No. 92. Cambridge, University of Cambridge.

Deckop, J.R.; Mangel, R.; Cirka, C.C. 1999. “Getting more than you pay for: Organizational citizenship behavior and pay-for-performance plans”, in *Academy of Management Journal*, Vol. 42, No. 4, pp. 420–428.

Del Punta, R. 2018. “Un diritto per il lavoro 4.0”, in A. Cipriani, A. Gramolati and G. Mari (eds): *Il lavoro 4.0: La Quarta Rivoluzione industriale e le trasformazioni delle attività lavorative*. Florence, Firenze University Press, pp. 225–249.

De Stefano, V. 2018. *‘Negotiating the algorithm’: Automation, artificial intelligence and labour protection*. Employment Working Paper No. 246. Geneva, ILO.

—. 2016. “The rise of the ‘just-in-time workforce’: On-demand work, crowdwork, and labor protection in the ‘gig economy’”, in *Comparative Labor Law & Policy Journal*, Vol. 37, No. 3, pp. 471–504.

—. 2009. *Smuggling-in flexibility: Temporary work contracts and the ‘implicit threat’ mechanism – Reflections on a new European path*. Working Document No. 4, Labour Administration and Inspection Programme. Geneva, ILO.

—; Aloisi, A. 2019. “Fundamental labour rights, platform work and human rights protection of non-standard workers”, in J.R. Bellace and B. ter Haar (eds): *Labour, Business and Human Rights Law*. Cheltenham, Edward Elgar, pp. 359-379.

—; Aloisi, A. 2018. *European legal framework for digital labour platforms.* Luxembourg, Publications Office of the European Union.

Dockès, E. 2004. “De la supériorité du contrat de travail sur le pouvoir de l’employeur”, in Vv.Aa.: *Analyse juridique et valeurs en droit social – Etudes offertes à Jean Pélissier*. Paris, Dalloz, pp. 203–211.

Eichhorst, W.; Hinte, H.; Rinne, U.; Tobsch, V. 2016. *How big is the gig? Assessing the preliminary evidence on the effects of digitalization on the labor market*. IZA Policy Paper No. 117. Bonn, Institute of Labor Economics.

Estlund, C.L. 2018. “What should we do after work? Automation and employment law”, in *Yale Law Journal*, Vol. 128, No. 2, pp. 254-326.

Eurofound. 2018. *Employment and working conditions of selected types of platform work*. Luxembourg, Publications Office of the European Union.

Eurofound. 2011. *Employment relationship*. Available at: https://www.eurofound.europa.eu/observatories/eurwork/industrial-relations-dictionary/employment-relationship

Euwals, R.; Hogerbrugge, M. 2006. “Explaining the growth of part□time employment: Factors of supply and demand”, in *Labour*, Vol. 20, No. 3, pp. 533–557.

Farnham, D. 2015. *The changing faces of employment relations: Global, comparative and theoretical perspectives*. London, Red Globe Press.

Ferrero, F. 2018. “Angelo Gaja, il barbaresco del re. E quella volta con Fenoglio”, in *Corriere della Sera*, Turin edition, 9 Feb. Available at: http://www.federicoferrero.it/?p=654 [accessed 21 Oct. 2019].

Ford, M. 2015. *Rise of the robots. Technology and the threat of a jobless future*. New York, NY, Basic Books.

Foss, N.; Klein, P. 2019 "No boss? No thanks", in *Aeon*, 14 Jan. Available at: https://aeon.co/essays/no-boss-no-thanks-why-managers-are-more-important-than-ever [accessed 23 Oct. 2019].

Freeland, M.; Kountouris, N. 2011. *The legal construction of personal work relations*. Oxford, Oxford University Press.

Frey, C. B.; Osborne, M.A. 2017. "The future of employment: How susceptible are jobs to computerisation?", in *Technological Forecasting and Social Change*, Vol. 114, pp. 254–280.

Fudge, J. 2017. "The future of the standard employment relationship: Labour law, new institutional economics and old power resource theory", in *Journal of Industrial Relations*, Vol. 59, No. 3, pp. 374–392.

Gallino, L. 2009. *L'impresa irresponsabile*. Turin, Giulio Einaudi editore.

Gilson, R.J.; Sabel, C.F.; Scott, R.E. 2009. "Contracting for innovation: Vertical disintegration and interfirm collaboration", in *Columbia Law Review*, Vol. 109, No. 3, pp. 431–502.

Gittleman, M.; Horrigan, M.; Joyce, M. 1998. "'Flexible' workplace practices: Evidence from a nationally representative survey", in *ILR Review*, Vol. 52, No. 1, pp. 99–115.

Gobble M.M. 2015. "Regulating innovation in the new economy", in *Research-Technology Management*, Vol. 58, No. 2, pp. 62–67.

Gramano, E. 2018. *Working performance and organisational flexibility: At the core of the employment contract*. Paper presented at the 16th International Conference in commemoration of Professor Marco Biagi, held in Modena, 19–20 Mar.

Griswold, A. 2019. “What happens when delivery startups use employees instead of contractors”, in *Quartz*, 19 Sept. Available at: https://qz.com/1707924/ [accessed 5 Nov. 2019].

Hall, J.V.; Krueger, A.B. 2018. “An analysis of the labor market for Uber’s driver-partners in the United States”, in *ILR Review*, Vol. 71, No. 3, No. 705–732.

Harris, S.D.; Krueger, A.B. 2015. *A proposal for modernizing labor laws for twenty-first-century work: The “independent worker”*. The Hamilton Project, Policy Brief No. 2. Washington, DC, The Brookings Institution.

Hart, O.D.; Moore, J. 2005. “On the design of hierarchies: Coordination versus specialization”, in *Journal of Political Economy*, Vol. 113, No. 4, pp. 675–702.

Hepple, B. (ed.). 1986. *The making of labour law in Europe: A comparative study of nine countries up to 1945*. London, Mansell Publishing.

Holmström, B.; Roberts, J. 1998. “The boundaries of the firm revisited”, in *Journal of Economic Perspectives*, Vol. 12, No. 4, pp. 73–94.

Hudson-Sharp, N.; Runge, J. 2017. *International trends in insecure work: A report for the Trades Union Congress*. London, National Institute of Economic and Social Research.

ILO. 2016. *Non-standard employment around the world: Understanding challenges, shaping prospects*. Geneva.

Ivanova, M.; Bronowicka, J.; Kocher, E.; Degner, A. 2018. *The app as a boss? Control and autonomy in application-based management.* Arbeit, Grenze, Fluss – Work in Progress interdisziplinärer Arbeitsforschung Nr. 2. Frankfurt (Oder), Viadrina European University.

Kessler, S. 2017. “Forget the on-demand worker: Stanford researchers built an entire on-demand organization”, in *Quartz*, 13 July. Available at: https://qz.com/1027606 [accessed 23 Oct. 2019].

Kohler, T.C.; Finkin, M.W. 1998. “Bonding and flexibility: Employment ordering in a relationless age”, in *American Journal of Comparative Law*, Vol. 46, Supp. 1, pp. 379–402.

Kraft, P. 1999. “To control and inspire: U.S. management in the age of computer information systems and global production”, in M. Wardell, T.L. Steiger, and P. Meiksins (eds): *Rethinking the labor process*. Albany, State University of New York Press, pp. 17–36.

Landes, D.S. 1969. *The unbound Prometheus: Technological change and industrial development in Western Europe from 1750 to the present*. Cambridge, Cambridge University Press.

Leonard□Barton, D. 1992. “Core capabilities and core rigidities: A paradox in managing new product development”, in *Strategic Management Journal*, Vol. 13, No. S1, pp. 111–125.

McGaughey, E. 2018. *Will robots automate your job away? Full employment, basic income, and economic democracy*. Centre for Business Research, Working Paper No. 496. Cambridge, University of Cambridge.

Macneil, I.R. 1980. “Economic analysis of contractual relations: Its shortfalls and the need for a ‘rich classificatory apparatus’”, in *Northwestern University Law Review*, Vol. 75, No. 6, pp. 1018–1063.

Manjoo, F. 2017. “How the frightful five put start-ups in a lose–lose situation”, in *The New York Times*, 18 Oct. Available at: http://nyti.ms/2gSjPIO [accessed 22 Oct. 2019].

Marsden, D. 1999. *A theory of employment systems: Micro-foundations of societal diversity*. Oxford, Oxford University Press.

Méda, D. 2016. *The future of work: The meaning and value of work in Europe*. ILO Research Paper, No. 18. Geneva, ILO.

Mengoni, L. 2000. "Il contratto individuale di lavoro", in *Giornale di diritto lavoro e di relazioni industriali*, Vol. 2, pp. 181–200.

MhoneG. C. 1998. *Atypical forms of work and employment and their policy implications* in *Industrial Law Journal*, *19*(2), pp. 197–214.

Moore, P.V.; Upchurch, M.; Whittaker, X. (eds). 2018. *Humans and machines at work: Monitoring, surveillance and automation in contemporary capitalism*. London, Palgrave Macmillan.

Muehlberger, U. 2005. *Hierarchies, relational contracts and new forms of outsourcing*. ICER Working Paper No. 22. Turin, International Centre for Economic Research.

Munger, M.C. 2018. *Tomorrow 3.0: Transaction costs and the sharing economy*, Cambridge, Cambridge University Press.

NELP (National Employment Law Project). 2019. *Rights at risk: Gig companies' campaign to upend employment as we know it*. Available at: https://s27147.pcdn.co/wp-content/uploads/Rights-at-Risk-4-2-19.pdf [accessed 21 Oct. 2019].

—. 2017. *Employers in the On-Demand Economy: Why Treating Workers as Employees is Good for Business*. Available at: http://www.nelp.org/content/uploads/Fact-Sheet-Employers-in-the-On-Demand-Economy.pdf.

Noelke, C. 2011. *The consequences of employment protection legislation for the youth labour market*. Working Papers, No. 144. Mannheim, Mannheimer Zentrum für Europäische Sozialforschung.

OECD. 2018. *Good jobs for all in a changing world of work: The OECD jobs strategy*. Paris.

Oi, W.Y. 1962. "Labor as a quasi-fixed factor", in *Journal of Political Economy*, Vol. 70, No. 6, pp. 538–555.

Pasquale, F. 2015. *The black box society: The secret algorithms that control money and information*. Cambridge, MA, Harvard University Press.

Perraudin, C.; Thèvenot, N.; Valentin, J. 2013. "Avoiding the employment relationship: Outsourcing and labour substitution among French manufacturing firms, 1984–2003", in *International Labour Review*, Vol. 152, No. 3–4, pp. 525–547.

Persiani, M. 1966. *Contratto di lavoro e organizzazione*. Padua, Cedam.

Perulli, A. 2017. "The theories of the firm between Economy and law", in A. Perulli and T. Treu (eds): *Enterprise and Social Rights.* Alphen aan den Rijn, Wolters Kluver, pp. 351–378.

Piasna, A. 2017. *'Bad jobs' recovery? European Job Quality Index 2005–2015*. ETUI Working Paper No. 6. Brussels, European Trade Union Institute.

Pollert, A. 1988a. "Dismantling flexibility", in *Capital & Class*, Vol. 12, No. 1, pp. 42–75.

—. 1988b. "The 'flexible firm': Fixation or fact?", in *Work, Employment and Society*, Vol. 2, No. 3, pp. 281–316.

Prassl, J. 2018. *Humans as a service: The promise and perils of work in the gig economy*. Oxford, Oxford University Press.

Pruijt, H. 2000. "Repainting, modifying, smashing Taylorism", in *Journal of Organizational Change Management*, Vol. 13, No. 5, pp. 439–451.

Purcell, K. (ed.) 2000. *Changing boundaries in employment*. Westbury-on-Trym, Bristol Academic Press.

Razzolini, O. 2010. "The need to go beyond the contract: 'Economic' and 'bureaucratic' dependence in personal work relations", in *Comparative Labor Law & Policy Journal*, Vol. 31, No. 2, pp. 267–304.

Rittich, K. 2010. "Between workers' rights and flexibility: Labor law in an uncertain world", in *Saint Louis University Law Journal*, Vol. 54, No. 2, pp. 565–583.

Romagnoli, U. 2003. “Il diritto del lavoro nell’età della globalizzazione” in *Lavoro e diritto*, No. 4 (Autumn), pp. 569–580.

Rosenblat, A.; Stark, L. 2016. “Algorithmic labor and information asymmetries: A case study of Uber’s drivers”, in *International Journal of Communication*, Vol. 10, No. 27, pp. 3758–3784.

Sachs, B. 2018. “Enough with the flexibility trope” [blog post], in *On Labor*, 15 May. Available at: https://onlabor.org/enough-with-the-flexibility-trope/ [accessed 22 Oct. 2019].

Sachs, B. 2015. “Uber: Employee Status and Flexibility” [blog post], in *On Labor*, 25 Sept. Available at: https://onlabor.org/uber-employee-status-and-flexibility/ [accessed 1 Nov. 2019].

Salento, A. 2003. *Postfordismo e ideologie giuridiche. Nuove forme d’impresa e crisi del diritto del lavoro*. Milan, Franco Angeli.

Santoro-Passarelli, G. 1999. “Attualità della fattispecie lavoro subordinato”, in Aa.Vv.: *Le trasformazioni del lavoro. La crisi della subordinazione e l’avvento di nuove forme di lavoro*. Milan, Franco Angeli, pp. 569–580.

Simon, H.A. 1991. “Organizations and markets”, in *Journal of Economic Perspectives*, Vol. 5, No. 2, pp. 25–44.

—. 1951. “A formal theory of the employment relationship”, in *Econometrica*, Vol. 19, No. 3, pp. 293–305.

Sprague, R.D. 2007. “From Taylorism to the Omnipticon: Expanding employee surveillance beyond the workplace”, in *John Marshall Journal of Computer & Information Law*, Vol. 25., No. 1, pp. 1–36.

Stone, K.V.W.; Arthurs, H. 2013. “The transformation of employment regimes: A worldwide challenge”, in K.V.W. Stone and H. Arthurs (eds): *Rethinking workplace regulation:*

Beyond the standard contract of employment, New York, NY, Russell Sage Foundation, pp. 1–20.

Storm, S.; Naastepad, C.W.M. 2007. *Why labour market regulation may pay off: Worker motivation, co-ordination and productivity growth.* Economic and Labour Market Paper No. 4. Geneva, ILO.

Subramanian, K.V. 2018. *Dismissal laws, innovation, and economic growth*. ADBI Working Paper Series, No. 846. Tokyo, Asian Development Bank Institute.

Supiot, A. 1994. *Critique du droit du travail*. Paris, Presses Universitaires de France.

Taylor, M.; Marsh, G.; Nicol, D.; Broadbent, P. 2017. *Good work: The Taylor review of modern working practices*. London, Department for Business, Energy & Industrial Strategy.

Thornley et al. 2010 Thornley C., Jefferys S. and Appay B. (eds) 2010). *Globalization and precarious forms of production and employment: Challenges for workers and unions*, Cheltenham, UK and Northampton, MA.

Tomassetti, J. 2016. "Does Uber redefine the firm? The postindustrial corporation and advanced information technology", in *Hofstra Labor & Employment Law Journal*, Vol. 34, No. 1, pp. 1–78.

Treu, T. 1992. "Labour flexibility in Europe", in *International Labour Review*, Vol. 131, No. 4–5, pp. 497–512.

Tveten, J. 2018 "Silicon Valley's 'flexibility' fetish", in *The New Republic*, 31 May. Available at: https://goo.gl/JbvoMA [accessed 24 Oct. 2019].

Valdés Dal-Ré, F. 2005. "Decentralisation productive et desorganisation du droit du travail" in A. Lyon-Caen and A. Perulli (eds): *Trasformazione dell'impresa e rapporti di lavoro. Atti del Seminario dottorale internazionale, Venezia, 17–21 giugno 2002*. Padua, Cedam, pp. 53–71.

Vallas, S.P. 1999. “Rethinking post-Fordism: The meaning of workplace flexibility”, in *Sociological Theory*, Vol. 17, No. 1, pp. 68–101.

Vardaro, G. 1989. “Tecnica, tecnologia e ideologia della tecnica nel diritto del lavoro” in L. Gaeta, A.R. Marchitello and P. Pascucci (eds): *Itinerari*. Milan, Franco Angeli, pp. 231–308.

Veneziani, B. 2002. “Contratto di lavoro, potere di controllo e subordinazione nell’opera di Lodovico Barassi”, in *Giornale di diritto del lavoro e di relazioni industriali*, No. 93, No. 1, pp. 39–83.

—. 1986. “The evolution of the contract of employment”, in B. Hepple (ed.): *The making of labour law in Europe: A comparative study of nine countries up to 1945*. London, Mansell Publishing, pp. 115–121.

Vosko, L. 2009. *Managing the Margins: Gender, Citizenship, and the International Regulation of Precarious Employment*. Oxford, Oxford University Press.

Weber, L. 2017. “The end of employees”, in *The Wall Street Journal*, 2 Feb. Available at: http://on.wsj.com/2lndKEK [accessed 23 Oct. 2019].

Weil, D. 2014. *The fissured workplace: Why work became so bad for so many and what can be done to improve it*. Cambridge, MA, Harvard University Press.

Williamson, O.E. 1996. *The Mechanisms of Governance*. Oxford, UK and New York.

—. 1979. “Transaction-cost economics: The governance of contractual relations”, in *Journal of Law & Economics*, Vol. 22, No. 2, pp. 233–261.

Wood, A.J. 2017. “Powerful times: Flexible discipline and schedule gifts at work”, in *Work, Employment and Society*, Vol. 32, No. 6, pp. 1062–1077.