

# Norbert Elias in Troubled Times

Figurational Approaches to the Problems of the Twenty-First Century

Edited by Florence Delmotte Barbara Górnicka

> palgrave macmillan

## Palgrave Studies on Norbert Elias

Series Editor Tatiana Savoia Landini Universidade Federal de Sao Paulo Sao Paulo, Brazil Despite growing, widespread appreciation for Norbert Elias's theoretical approach—often called figurational or processual sociology—there exist only a few, specialized publications on Eliasian social theory, and as of yet, no academic book series.

Palgrave Studies on Norbert Elias will therefore fill a significant gap in the market, appealing to figurationalists across disciplines: Elias's social theory is used not only in Sociology, but also Sports, Psychoanalysis/Psychology and Social Psychology, Education, Criminology, International Relations, History, Humanities (Arts, Music, and Cultural Studies), Political Science, and Public Health. Respecting the multi-disciplinary Eliasian tradition, the series is open to receiving contributions from academics outside of Sociology departments, so long as the research is grounded on Elias's approach. Publications, which shall range from Palgrave Pivots to edited collections, can be expected to explore sports, habits and manners, criminology, violence, group relations, music and musicians, theory and methods, civilizing and decivilizing processes, involvement and detachment in social sciences, formation of the modern state, power relations, and the many dozens of other topics to which Eliasian theory has been applied.

More information about this series at http://www.palgrave.com/gp/series/16153

### Florence Delmotte • Barbara Górnicka Editors

# Norbert Elias in Troubled Times

Figurational Approaches to the Problems of the Twenty-First Century



### Contents

1	Troubled Times: Editors' Introduction Florence Delmotte and Barbara Górnicka	1
Par	t I Renewing Classical Themes	17
2	The Question of Inequality: Trends of Functional Democratisation and De-democratisation Nico Wilterdink	19
3	Vox Populi Then and Now Matt Clement	43
4	Figurational Sociology of the Rule of Law: A Case of Central and Eastern Europe Marta Bucholc	63
5	Transformations of Human Rights Within Ruptures and Continuity: A Historico-Sociological Approach Ludivine Damay and Florence Delmotte	83
6	Civilising Digitalisation: In Search of a New Balance with Today's Technological Innovations Adele Bianco	101

7	Confronting Uncertainties: Process Sociology Converges with the Ecological Risk Sociology of the Becks Alexander Mack	117
Part	II Violence and Faces of the War	137
8	The Civilising Process, Decline of Homicide, and Mass Murder Societies: Norbert Elias and the History of Violence Xavier Rousseaux and Quentin Verreycken	139
9	A Throwback to Violence? Outline for a Process-Sociological Approach to 'Terror' and 'Terrorism' Dominique Linhardt and Cédric Moreau de Bellaing	159
10	Violence and Power: The Kaiowá and Guarani Indigenous Peoples Maria Beatriz Rocha Ferreira, Marina Vinha, and Veronice Lovato Rossato	179
11	Analysing European Defence with Elias's Historical Sociology (1990–2020) Delphine Deschaux-Dutard	199
Part	III Established-Outsiders Relations and Habitus Issues	217
12	Weaving Elias's Thought with Indigenous Perspectives and Lives: Proposal for a Research Agenda Aurélie Lacassagne and Dana Hickey	219
13	A Question of Function: Unequal Power Ratios and Asylum Seekers in Ireland Steven Loyal	239

14	Thoughts on Describing Established and Outsider Figurations in Inner Mongolia Merle Schatz	259
15	Generational Figuration and We-Group Formation in the Palestinian West Bank Since the 1970s Hendrik Hinrichsen	277
16	The Israeli National Habitus and Historiography: The Importance of Generations and State-Building Alon Helled	295
17	The Established and the Outsiders: An Incomplete Study? Reinhard Blomert	313
Part	IV Conclusive Reflections	333
18	Some Political Implications of Sociology from an Eliasian Point of View Stephen Mennell	335
Inde	ex	353

#### Notes on Contributors

Adele Bianco is Associate Professor of Sociology at the Gabriele d'Annunzio University of Chieti-Pescara, Italy. Her research interests are classical (German) sociological theories; analysis of the work policies; technological changes. She is editor for Springer and Franco Angeli, and member of the editorial board of the most ancient Italian sociological journal Quaderni di Sociologia. Her publications include Domination and Subordination as Social Organization Principle in Georg Simmel's Soziologie (2014) and, as co-editor, Italian Studies on Quality of Life (2019).

Reinhard Blomert studied MA at Heidelberg and PhD in Sociology, Law and Economics at Berlin. He achieved his doctoral thesis on Norbert Elias ('Psyche und Zivilisation'), and his habilitation treatise on the Institute of state and social sciences at Heidelberg during the Weimar years. Visiting professor at Paris-Nanterre and University of Graz, he is editor of the social science quarterly *Leviathan*. He is also co-editor of the German edition of the collected writings of Norbert Elias.

Marta Bucholc works at the Faculty of Sociology, University of Warsaw. Between 2015 and 2020, she was a research professor of Law at Culture Centre of the University of Bonn. Her research focus is social theory, historical sociology and sociology of law. She edited the first full Polish translation of Norbert Elias's *On the Process of Civilisation*. Since September 2020, she has been the leader of the research project 'The national habitus formation and the process of civilization in Poland after 1989' funded by Polish National Science Centre. Her recent



#### CHAPTER 6

## Civilising Digitalisation: In Search of a New Balance with Today's Technological Innovations

#### Adele Bianco

#### 6.1 Introduction

The chapter aims to develop Norbert Elias's reflections on technology and the civilising processes and to apply his categories to today's technological innovations, particularly with reference to digitalisation. Contemporary society is experiencing a set of technological and organisational transformations, particularly in the industrial and economic fields. Working activity is also affected by this process. In facing this challenge caused by digitalisation, Elias's contribution can offer interesting indications in the attempt to find a new balance with digital processes and the diffusion and use of new technologies.

Elias's contribution is important for two reasons that show the topicality of his message. Firstly, he stressed that technological development requires the whole of society to engage in an adaptation process. Thanks

A. Bianco  $(\boxtimes)$ 

Università "G. d'Annunzio", Chieti-Pescara, Italy

e-mail: adele.bianco@unich.it

to it, human beings learn how to manage new technologies. In this sense, the civilising process occurs with reference to technology on both a sociogenetic and psychogenetic level.

Secondly, technological development, and in particular digitalisation, requires a learning and adaptation process in order to reach a new balance between society and technology, which means, with regard to today's society, a new 'civilised' societal disposition involving the labour market and new kinds of jobs as well as the appropriate behaviour required of the digital worker.

I have structured my chapter in three sections, devoted to highlight the issues mentioned above. The first deals with Elias's category of decivilisation (*Entzivilisierung*). It means that the civilising process is reversible and in this context the regression is due to the developing technology. Accordingly, I am going to focus on aspects of the concept that best fit the aims of this chapter and apply it to the current negative fall-out of the digitalisation process in the labour market.

The second section is devoted to the way in which Elias pointed out the relationship between technisation and civilisation. According to him, people have developed a self-regulating behaviour in consequence of the spreading of technology. The self-regulating behaviour enables people to use technology in a correct and safe way.

The third section deals with Elias's terms 'sociogenesis' and 'psychogenesis'. My premise is that this topic can give us stimulating input and help in explaining whether and how it is possible to 'civilise' the digital worker. On the one hand, the digital skills—a set of specific professional skills required by the twenty-first-century labour market—could be considered the 'sociogenesis' of the digitalisation process. On the other hand, soft skills could play the role of the 'psychogenesis'. In fact, the so-called social abilities enable the digital worker to interact in a proper way in the new technological and organisational context.

# 6.2 Entzivilisier ung as Regression of Developing Technology

According to Elias, the process of social change—and civilising too—should be considered a spontaneous, unplanned, never-ending and purposeless process and not a sequence of phases. It is similar to a long, non-linear transition because it is the result of the interaction of social

actors (Elias 1977, 127–149; 1978a, b; Tabboni 1993, 87–91; Kuzmics and Mörth 1991; Perulli 2012, 34 ff.). It means that the civilising process has also a flip side and that it could be reversible and turn into a decivilising process (*Entzivilisierung*).<sup>1</sup>

According to Mennell (1990), Elias has drawn attention on the *Entzivilisierung* topic with regard to four different issues. The first one concerns the so-called permissive society.<sup>2</sup> The others are the 'long term and recent trends in the incidence of violence, the case of Nazi Germany, and [the] longer-term processes of decline in social complexity' (Mennell 2001, 47). More recently, Nachtwey (2017) notes that individualisation today—which was originally a driver of the civilising process—has acquired negative features. Moreover, the today tendencies in Western societies are becoming increasingly regressive and, in this sense, we are witnessing a decivilising trend, such as the rise of nationalism and of populist movements as well as the crisis of democracy (Crouch 2004; Fitzi et al. 2018).

In his paper *Technisierung und Zivilisation* (2006a) Elias introduced a new feature of a decivilising process, with reference to technological innovation. More specifically, his argument not only concerns the positive and negative aspects of the technological innovations but also highlights that it is possible to overcome the regression due to technological development, to establish a new balance with it and, in so doing, to join a new civilisation.

Elias has pointed out that technical progress gives a push both in improving development and growth and, at the same time, in the opposite direction, thereby generating a regression. In this sense, he could be considered one of the first authors to theorise about the risk society. In fact, from his time onward, contemporary society has experienced several kinds of technological accidents (Beck 1986; Baldissera 1998).

Elias has noted that the negative side of technisation is the human costs. He reported and analysed the data concerning road accidents because of the increasing number of vehicles. He reported that the first road accidents were caused either by insufficient regulation or because the infrastructures were not adequate. In other words, according to Elias,

<sup>&</sup>lt;sup>1</sup>'As usual when working with Norbert Elias's theories, we need to think in terms of a tension balance between conflicting pressures' (Mennell 2001, 32).

<sup>&</sup>lt;sup>2</sup> Concerning these issues Mennell (1990, 2001, 41) mentions 'disorders connected with politics, with industrial disputes, with sports and leisure, and with the community in general, the last serving as a catch-all for episodes of street fighting not clearly belonging in the other categories' as an indicator of the 'permissive society'.

automobiles were not only an element of novelty, progress and even fun but also a source of danger.

Despite a strict road code having been developed—setting speed limits, punishing drunk driving, implementing vehicle safety and improving technical-mechanical solutions and specific devices such as seat belts— Elias stresses that people's behaviour and, in particular, the self-regulation of drivers are crucial (Elias 2006a, 202). In this regard, he made a comparison between countries (Elias 2006a, 204). He has shown that fewer accidents occur in the advanced countries and that they have the fewest road deaths because of more frequently road checking by police and also because of the more careful behaviour of drivers (Elias 2006a, 203). These data are still confirmed today in the most recent reports (ERSO 2018).

Starting from Elias's point of view and looking at the current technological development driven by digitalisation, it could be possible to consider *Entzivilisierung* as the consequence of digitalisation's impact on employment and particularly job loss (Frey and Osborne 2012; Spath et al. 2013; Brynjolfsson and McAfee 2014; for a critique of this view see Pfeiffer and Suphan 2015), as well as the risks that workers face, especially in the so-called *gig economy*. The gig economy is a complex and highly diversified phenomenon in terms of both internal organisation and business model (De Stefano 2016).<sup>3</sup> The quantitative impact of the gig economy is surprisingly limited in comparison to its social relevance. In fact, the World Bank estimates show that few people are involved: 'less than 0.5 percent of the active labour force participates in the gig economy globally' (World Bank 2019, 26).

Among the positive aspects, the platform economy facilitates the meeting of job demand and supply thanks to digital technologies. It also makes the purchase of goods and services possible at lower costs. The platform economy creates flexible job opportunities and allows professionals to develop their skills and competences.

Among the negative aspects, the platform economy fuels new social imbalances, diminishes the status of human work in micro-jobs such as gigs, tasks and so on and reduces the earning power. It also improves the flexibilisation processes in a deeper form in comparison to that known

<sup>&</sup>lt;sup>3</sup>The gig economy includes chiefly two forms of work: 'crowdwork' and 'work on-demand via apps'. The first term is usually referred to working activities that imply completing a series of tasks through online platforms. The second term refers to working activity organised online and carried out also offline.

over the past thirty years. The rating system referred to the performance of the workers could have a negative impact on them because of job insecurity. It means that this is a new form of vulnerable work. It is the dark side of digitalisation, particularly stressed in the gig economy (Crouch 2019). In this context the leading idea is 'humans as a service [instead of] making the gig economy work a sustainable business model in which we all get to enjoy the benefit of the platform innovation' (Prassl 2018, 6).

This is the reason why the debate today concerns how to determine the status of employment, to fix adequate income, to establish social protection and other benefits in favour of gig workers (Tullini 2017; ILO 2018), similarly to the first interventions that Elias mentioned as necessary to regulate the movement of motorised vehicles.

#### 6.3 Elias: Technisation and Civilisation

This section focuses on Elias's idea of the relationship between technisation and civilisation, that is, the progressive diffusion of technology within modern society. Although he died shortly before the coming of the internet, Elias experienced the spread of ICT.<sup>4</sup> In his paper *Technisierung und Zivilisation* (2006a), he discussed technology as a social matter.<sup>5</sup> He pointed out that it is the result of accumulating knowledge at the social level, and then he analysed the impact of innovation on the whole society and the use we make of technology.

There are several interesting elements in Elias's paper. Firstly, he represents a novelty in the German sociological—and, more in generally, cultural—panorama concerning the relationship between technology and modernity (Weyer 2008, 58–81). Elias considered technology as an element of change, a tool to improve wealth within the society as well as presenting a risk of danger. This is the reason why, he believes, technological development requires people to adapt their behaviour if they are to use

<sup>&</sup>lt;sup>4</sup>At this regard, see Treibel (2008, 95 ff.). Moreover, the approach of Elias's thinking to internet issues is not new: as Arditi (2001) argues human relationships in virtual space are different from those in the physical sphere but real nonetheless. The relationship in the cybernetic space can weak self-control and reduce the level of civilisation, because protected by anonymity.

<sup>&</sup>lt;sup>5</sup>The paper was presented by Elias at the German Sociological Association Conference in 1984. According to Pfeiffer (2010, 231) in the 1970s and 1980s—at the time when Elias conceived this paper—industrial sociology was strongly committed to the technological development topic.

it in a correct and safe way. It means that Elias does not have a negative idea of technological development and indeed he suggests an adaptation strategy called 'civilisation'. This is perhaps the most important message of his paper.

Secondly, Elias presented here the concept of civilisation here in a new way. He replaced the first term of the original binomial-Kultur und Zivilisation—with the term Technisierung (technisation). This aspect should be noted because in the German cultural tradition Kultur has been generally opposed to technology. Consequently, it could be argued that the technology can be tamed, thanks to Zivilisation.

Thirdly, technisation is to be considered the result of the accumulation of knowledge<sup>6</sup> at the social level, firstly because the inventions and discoveries are the result of the collective efforts of the innovator's community, and secondly because people learn—as a social process—to use the technology in a safe way.

Lastly, referring to the stories of inventors, Elias outlines the living condition of young generations, remarking that the *chance* of young people to be successful reflects their status and the consideration they are given by society.7

At the beginning of the quoted paper Elias outlines the definition of technisation. It is a process by which human beings transform any kind of material to satisfy their life needs. In so doing people improve their quality of life. An example of it is the invention of the plough. Elias does not consider the development of technology as a special feature of modern times. The tendency to transform materials to satisfy human needs and to better their living conditions is a human attitude and a constant feature of human history.

Elias then highlights the idea that technical advancement is closely related to the knowledge level developed and is accumulated at the social level. This means that even if a technical innovation is attributed to an inventor, it is actually—as happened in the history of the car (Elias 2006a, 195-196)—the result of collective efforts within the innovator's

<sup>&</sup>lt;sup>6</sup> Elias refers to the sociology of science. One of the most important theorists in this field was Karl Mannheim, his teacher. About their affinities and divergences see Kilminster (2007, 40-71; 2013).

<sup>&</sup>lt;sup>7</sup>This topic has been dealt with by Elias in other works, such as the 'Mozart case' (1993) and his young workers research project (Goodwin and O'Connor 2015), and, last but not least, in his paper devoted to the subject of work (Elias 2006b). In this paper he remarked that young people face a lot of problems in getting a good job in the contemporary society.

community, the result of a long experimentation period advancing through trial and error. The finally successful inventor is only by chance luckier or more brilliant than his colleagues.

Something similar happens today in relation to the so-called Fourth Industrial Revolution. Many scholars believe that we are witnessing a normal technological development process (Roth 2016, 1–15; Jasperneite 2012) and not a disruptive change (Schwab 2015). Many elements mentioned as peculiar to so-called Industry 4.0 had already been seen and discussed in the 1980s during automation processes. At that time, changes in human-machine interfaces in complex technological systems took place, thanks to the simulation models and first applications of artificial intelligence. In other words, we are nowadays facing a set of radical and incremental innovations which are rooted in the third technological-organisational revolution described by the Schumpeterian economists Freeman and Soete (1985).

Returning to Elias, technisation as a social learning process concerns in modern society the relationships between people and their environment made by tools, machinery and technological products. The example given by Elias is traffic. The history of the car's success is also the history of the relationship between people and the car. Beyond the necessary regulations provided by the state and the enforced checking by police, people—as drivers, passengers or pedestrians—have learned the right way to approach this new situation and how to interact appropriately with motorised vehicles. This means that the spread of technology in everyday life required modern people to self-regulate their behaviour if they were to use it individually and collectively in an appropriate and safe way.

Self-regulated behaviour is the outcome of a civilising process referred to technisation. In turn, civilisation—which induces people to inhibit impulses and passions—is based on a learning process (*Lernprozeß*) that makes people fit to use, in this case, technology. In this sense, civilisation seems to be a form of adaptation to modern life characterised by an increasing spread of technology. Thanks to an appropriate behaviour, as a result of self-control (*Selbstregulierung*), it is possible to benefit from the advantages of technical development and to reduce as much as possible the risks and the negative effects coming from the spread of technology. In this sense, technisation and civilisation go hand in hand in Elias's argument.

This consideration by Elias seems to fit the challenges coming today from the emerging technologies such as artificial intelligence, robotics and biomedical sciences. In fact, they could impact many sectors of social life in an impressive way (Brühl 2015). This is the reason why they require new governance at the macro (social) level, as well as a learning process at the micro (individual) level for everybody to adapt to a technologically developing environment.

# 6.4 Sociogenesis and Psychogenesis of the Digital Worker

In the introduction to this chapter I mentioned *digital skills* as a set of professional abilities that enable people to face innovations and stay ahead of technological changes. In this sense they constitute the 'sociogenesis' of the digitalisation process. According to Elias, sociogenesis concerns the structural aspects of social change, also involving the psychological asset (Elias 1982).

In applying the concept of 'sociogenesis' to today's technological innovations, particularly the digitalisation process, it could be possible to consider that the relation between digital technologies and skills involves all workers and not only those more oriented to technical qualifications.

The skills required by the twenty-first-century labour market mainly concern three different kind of abilities (Levy and Murnane 2012; Trilling and Fadel 2009; OECD 2015). The first one (the *technical skills*) means to be competent in digital tasks also thanks to *ad hoc* educational programmes. The second one (the *high cognitive skills*) regards the ability to think in an innovative way. It implies creativity and a problem-solving attitude (Athreya and Mouza 2017). The third kind of skills implies the social abilities, the so-called *soft* (or *non-cognitive* or *socio-emotional*, *relational*) *skills*. In this case people are required to be able to work in teams, to communicate, to be easily adaptable to new contexts. This kind of attitude helps people both in their career and life (Chu et al. 2017, 20–24). Roughly speaking, on the one hand there are technical skills and on the other hand the relational ones.

The increasing professional content required by digitalisation means that workers should be able not only to manage sophisticated technologies but also to handle information processes, to manage data flows in real time, to collaborate in production support processes, such as planning and logistics management,<sup>8</sup> to find and solve problems, to face possible emergencies. In some cases, the digital worker could play the role of decision maker in resolving complex situations, dealing with unexpected events and also technological accidents (Bainbridge 1983, 775; Dombrowski et al. 2014, 149; Grote 2015). In other words, in addition to the technical skills, the digital worker is asked to develop *high cognitive skills*. In fact, the activities previously carried out by technicians are done by operators specialising in complex systems (Windelband and Dworschak 2015). All of this means that more complex and interactive machines require more qualified workers (Attewell 1990; Baldissera 1996) and that the worker is required to have a critical mind.

But the technical and high cognitive skills will not be sufficient. The *soft skills* will be the further important competence<sup>9</sup> for the digital worker. These three kinds of skills—*technical*, *high cognitive* and *soft skills*—will form the digital worker's professional outfit making him/her profitable when placed on the labour market (World Bank 2016, 122 ff.).

Concerning the soft skills, it is difficult to find a clear definition of them. They were originally associated with mostly monotonous, repetitive and low-paid manual tasks (Lloyd and Payne 2016, 36 ff.). Their function was to shape the workers to factory life and its working time and conditions, to conform the workers to the instructions of the employer. Scholars have usually referred the soft skills to specific personal vocational aspects of the worker. Generally speaking, they cover a wide range of interpersonal abilities which are difficult to develop and to improve on by increasing automation.

The soft skills also include confidence in one's ability to engage in and maintain interpersonal relationships (social self-efficacy), such as

<sup>&</sup>lt;sup>8</sup>An example is today's health sector characterised by large medical devices (Bauer and Schlund 2015).

<sup>&</sup>lt;sup>9</sup>Competence is the ability to do something successfully or efficiently (Woodruffe 1993).

<sup>&</sup>lt;sup>10</sup> Other authors identify the origins of *soft skills* in *emotional labour* (Hochschild 1983). In the services sector, sales staff are driven to tune into customers, to develop empathy for them by establishing trust and sympathy to facilitate purchasing. This means that the character and emotional predisposition of the sales employee plays a role in the work activity in bringing a commercial benefit to the company. Consequently, these abilities become an important aspect of the work and professional equipment of the worker, so much so that it assumes relevance in the context of both trade union bargaining and economic policy (Streeck 2011; Busemeyer and Trampusch 2012).

self-esteem, motivation, self-confidence and resilience, up to so-called emotional intelligence (Goleman 1995).

As remarked by Dell'Aquila et al. (2017), relational skills interact with other technical and professional (the so-called *hard*) *skills*. Consequently, it would be a mistake to present them in opposition. The co-existence of *hard* and *soft* skills, the fact that they are complementary to each other, enables people to be competent from the professional and working as well as from the social point of view.<sup>11</sup> In short, the soft skills cover a wide range of abilities and therefore they are pivotal for the development both of individual careers and for the growth of organisations.

The soft skills—considered as (the result of cultivated) abilities focused on the social, behavioural side of (working) life—could be seen as the 'psychogenesis' of the digitalisation process. Psychogenesis affects the cultural, value and psychological sides of the social change. In this sense, it can contribute to defining a possible psychological profile of the digital worker, showing how he/she will react to future labour market inputs.

Taking advantage from Elias's lesson, the soft skills therefore seem to be the touchstone to identify the digital worker. In this regard, they would support him/her in work relations with colleagues, suppliers, clients and other partners at different levels (Böhle 2013). They would make the digital worker adaptable to changing situations, enable him/her to organise the work and to interact in different and variable groups. The soft skills would also make the digital worker collaborative, able to define work plans based on his/her knowledge and experience. The soft skills based on language and empathy, in particular, give the digital worker the best chance to fully deploy their own professional skills, techniques and cognitions. Consequently, the digital worker would be able to communicate with their colleagues and to adopt an appropriate behaviour in the working contexts that the digital economy will develop (Funken and Schulz-Schaeffer 2008).

In fact, the digital worker will experience a new context in comparison with the usual one. Firstly, one characteristic of the working places shaped

<sup>&</sup>lt;sup>11</sup>With regard to the differences between *hard* and *soft skills*, the first 'can be codified and transmitted and are referred to as goal directed behaviours that draw on the capability to perform a specific task within a specific area or domain. They refer to education, knowledge, training and experience. Soft skills, on the other hand, are subject independent and focus on individual and relational spheres, although as we will see the following are often employed in response to the demands of a task in order for this to be efficiently complete' (Dell'Aquila et al. 2017, 10).

by digitalisation is linked to a more horizontal organisation. It is also expected to be structured in flexible groups where everyone will be required to be collaborative. That means that a new social configuration could emerge, significatively reducing the traditional hierarchies. In this sense, the new technologies are a challenge for internal relations at the workplace because of possible conflicts in transforming and overcoming the old balances (Zuboff 1988; Beverly 1998).

The second aspect is that the digital worker will be required to adapt to technological changes, to manage the job according to the new technologies. Moreover, he/she will not receive information on how to carry out the job and will be responsible for defining working plans thanks to his/her competences and experience. That means that he/she will be more independent and proactive. This aspect is actually not new. For at least twenty years it has been argued that work is increasingly characterised in terms of knowledge (Reich 2002; Butera 2008; for a critique of this view see Lloyd and Payne 2016, 14–42) and that the employee today acquires a professional profile closer to a collaborator than a subordinate worker.

All of this makes the digital worker autonomous and not heterodirect, responsible and conscious about what is to be done and the behaviour to be implemented. At the same time, he/she should be cooperative. In this regard, Dechaux makes clear that in Elias's idea of figuration 'the cooperative dimension [...] [is] an integral part of the idea of collective interdependence' (2013, 299). In this sense, it can be argued that the digital worker's profile is close to that of the modern human being after the civilising process and this is the reason why it could be assumed that the digital skills, especially the soft ones, 'civilise' the worker of the future and build the arrangement of the new technological-social order.

Finally, applying the categories of sociogenesis and psychogenesis to technological changes makes us more conscious of the innovation process we are witnessing and of its novelty. In fact, like the civilising process that shapes people's social as well as mental life to conform their behaviour to modern organisation, digitalisation would be a process that transforms workers, not only from the technical and professional point of view but also as citizens of twenty-first-century society. Like the civilising process that asks modern people to act more peacefully, to improve their self-control, to interact with other people in an affective-neutral way, digitalisation would ask the digital worker a greater versatility profile and at the same time to be more autonomous and responsible in carrying out the work process.

#### 6.5 Conclusion

The aim of this chapter was to apply Elias's categories to today's technological innovation particularly with reference to digitalisation. In so doing it is possible to show the topicality of Elias's message.

According to him, technical innovation is not only progress but also a challenge. Thanks to the Elias's category of decivilisation, it is possible to consider the dark side of digitalisation and promote an exit strategy. At the social level, the current technological innovations require a learning and adaptation process to reach a new balance between society and technology, so that the whole society can benefit from it. At the individual level, everybody develops self-regulating mechanisms, also involving their psychological structure, so that the result could be a controlled and responsible behaviour. In this sense Elias proposed a positive idea of socio-technical change.

So, considering the impact of digitalisation on the labour market, the future digital worker is required to manage an appropriate behaviour. In this sense the Elias's terms 'sociogenesis' and 'psychogenesis' help us in drafting a new civilised social set-up involving the new kinds of jobs and the way to manage technical developments.

In conclusion, applying Elias's thinking to today's technological and organisational transformations can help us to be actors rather than merely helpless witnesses of change and to keep natural intelligence (i.e. that of human beings) ahead of artificial intelligence.

**Acknowledgements** It was possible to write this chapter thanks to a grant received by the author from the Deutsche Schillergesellschaft e. V. and by the Deutsches Literaturarchiv Marbach.

#### REFERENCES

Arditi, J. 2001. Exploring Netiquette: Figurations and Reconfigurations in Cybernetic Space. In Norbert Elias and Human Interdependencies, ed. T. Salumets. Montreal: McGill-Queen's University Press.

Athreya, B.H., and C. Mouza. 2017. Thinking Skills for the Digital Generation. Switzerland: Springer.

Attewell, P. 1990. What is skill? Work and Occupations 17 (4): 422-448.

Bainbridge, L. 1983. Ironies of Automation. Automatica 19 (6): 775–779.

Baldissera, A. 1996. Re-engineering organizzativo: innovazione o moda manageriale? *Quaderni di Sociologia*: 131–140.

- ——. 1998. Verso una teoria organizzativa degli incidenti tecnologici. *Sociologia* e ricerca sociale, XIX 56: 5–34.
- Bauer, W., and S. Schlund. 2015. Wandel der Arbeit in indirekten Bereichen—Planung und Engineering. In *Digitalisierung industrieller Arbeit. Die Vision Industrie 4.0 und ihre sozialen Herausforderungen*, eds. Hirsch-Kreinsen et al., 53–69. Baden-Baden: Nomos Verlag.
- Beverly H. Burries. 1998. Computerization of the Workplace. *Annual Review of Sociology* 24 (1):141–157.
- Beck, U. 1986. Risikogesellschaft. Auf dem Weg in eine andere Moderne. Frankfurt am Main: Suhrkamp.
- Böhle, F. 2013. Subjectifying Action' as a Specific Mode of Working with Customers. In *Customers at Work—New Perspectives on Interactive Service Work*, eds. W. Dunkel and F. Kleemann, 149–174. London: Palgrave Macmillan.
- Brühl, V. 2015. Wirtschaft des 21. Jahrhunderts. Herausforderungen in der Hightech-Ökonomie. Wiesbaden: Springer.
- Brynjolfsson, E., and A. McAfee. 2014. The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies. New York: W. W. Norton & Co Inc.
- Busemeyer, M.R., and C. Trampusch, eds. 2012. *The Political Economy of Collective Skills Formation*. Oxford: Oxford University Press.
- Butera, F. 2008. Knowledge Working. Milano: Mondadori.
- Chu, S.K.W., et al. 2017. 21st Century Skills Development Through Inquiry-Based Learning. Singapore: Springer.
- Crouch, C. 2004. Postdemocracy. Cambridge: Polity Press.
- -----. 2019. Will the Gig Economy Prevail? Cambridge: Polity Press.
- De Stefano, V. 2016. The Rise of the Just-in-Time Workforce': On-Demand Work, Crowdwork and Labour Protection in the Gig-Economy. Geneva: ILO.
- Dechaux, J.H. 2013. From Figuration to Coordination: An Analysis of Social Interdependence Mechanisms. In *Norbert Elias and Social Theory*, ed. F. Dépelteau and T. Savoia Landini. New York: Palgrave Macmillan.
- Dell'Aquila, E., et al. 2017. Educational Games for Soft-Skills Training in Digital Environments, Advances in Game-Based Learning. Switzerland: Springer.
- Dombrowski, U., C. Riechel, and M. Evers. 2014. Industrie 4.0—Die Rolle des Menschen in der vierten industriellen Revolution. In *Industrie 4.0 Wie intelligente Vernetzung und kognitive Systeme unsere Arbeit verändern*, ed. H. Kersten, W. Koller, and H. Lödding, 129–153. Berlin: Gito.
- Elias, N. 1977. Zur Grundlegung einer Theorie sozialer Prozesse. *Zeitschrift für Soziologie* 3 (2): 127–149. https://doi.org/10.1515/zfsoz-1977-0201.
- ——. 1978a. *The Civilizing Process: The History of Manners*. Oxford/New York: Blackwell/Urizen Books.

- ——. 1982. The Civilizing Process: State Formation and Civilisation. Oxford: Basil Blackwell.
- . 1993. Mozart: Portrait of a Genius. Cambridge: Polity Press.
- ——. 2006a. Technisierung und Zivilisation. In *Gesamtausgabe*, vol. 16. Frankfurt am Main: Suhrkamp. (Engl.: 1995. 'Technisation and Civilisation'). *Theory, Culture and Society* 12 (3): 7–42.
- 2006b. Einige Anmerkungen zum Problem der Arbeit, Gesamtausgabe. Vol. 15. Frankfurt am Main: Suhrkamp.
- ERSO (European Road Safety Observatory). 2018. Annual Accident Report 2018. https://ec.europa.eu/transport/road\_safety/sites/roadsafety/files/pdf/statistics/dacota/asr2018.pdf.
- Fitzi, G., J. Mackert, and B.S. Turner, eds. 2018. *Populism and the Crisis of Democracy*. London: Routledge.
- Freeman, C., and L. Soete. 1985. *Information Technology and Employment*. Science Policy Research Unit, University of Sussex.
- Frey, C., and M. Osborne. 2012. *The Future of Employment*. Oxford: Oxford Martin School (OMS) Working Paper.
- Funken, C., and I. Schulz-Schaeffer, eds. 2008. *Digitalisierung der Arbeitswelt*. Wiesbaden: VS Verlag für Sozialwissenschaften.
- Goleman, D. 1995. Emotional Intelligence: Why it Can Matter. New York: Bantham. Goodwin, J., and H. O'Connor. 2015. Norbert Elias's Lost Research: Revisiting the Young Worker Project. Farnham: Ashgate.
- Grote, G. 2015. Gestaltungsansätze für das komplementäre Zusammenwirken von Mensch und Technik. In *Digitalisierung industrieller Arbeit. Die Vision Industrie 4.0 und ihre sozialen Herausforderungen*, eds. H. Hirsch-Kreinsen et al., 131–146. Baden-Baden: Nomos.
- Hochschild, A. 1983. *The Managed Heart: Commercialization of Human Feeling*. Los Angeles: University of California Press.
- ILO. 2018. Digital Labour Platforms and the Future of Work: Towards Decent Work in the Online World. Geneva: ILO.
- Jasperneite, J. 2012. Industrie 4.0: Alter Wein in neuen Schläuchen? *Computers and Automation* 12: 24–28. http://www.ciit-owl.de/uploads/media/410-10%20gh%20Jasperneite%20CA%202012-12\_lowres1.pdf. Accessed 16 February 2017.
- Kilminster, R. 2007. Norbert Elias: Post-Philosophical Sociology. New York: Routledge.
- 2013. Norbert Elias and Karl Mannheim: Contrasting Perspectives on the Sociology of Knowledge. In *Norbert Elias and Social Theory*, ed. F. Dépelteau and T. Savoia Landini. New York: Palgrave Macmillan.
- Kuzmics, H., and I. Mörth. 1991. Der unendliche Prozess der Zivilisation: zur Kultursoziologie der Moderne nach Norbert Elias. Campus Verlag: Frankfurt am Main.

- Levy, F., and R.J. Murnane. 2012. The New Division of Labor: How Computers are Creating the Next Job Market. Princeton, NJ: Russell Sage Foundation.
- Lloyd, C., and J. Payne. 2016. Skills in the Age of Overqualification. Oxford: Oxford University Press.
- Mennell, S. 1990. Decivilising Processes: Theoretical Significance and some Lines of Research. *International Sociology* 5 (2): 205–223.
- ——. 2001. The Other Side of the Coin: Decivilizing Processes, in Norbert Elias and Human Interdependencies. In *Norbert Elias and Human Interdependencies*, ed. T. Salumets. Montreal: McGill-Queen's University Press.
- Nachtwey, O. 2017. Entzivilisierung. Über regressive Tendenzen in westlichen Gesellschaften. In *Die große Regression: Eine internationale Debatte über die geistige Situation der Zeit*, ed. H. Geiselberger, 215–231. Frankfurt am Main: Suhrkamp.
- OECD. 2015. OECD Digital Economy Outlook 2015. Paris: OECD Publishing. https://doi.org/10.1787/9789264232440-en.
- Perulli, A. 2012. Norbert Elias. Processi e parole della sociologia. Roma: Carocci.
- Pfeiffer, S. 2010. Technisierung von Arbeit. In Handbuch Arbeitssoziologie, eds. F. Böhle, G. Voß, and G. Wachtler. Wiesbaden: VS Verlag für Sozialwissenschaften.
- Pfeiffer, S., and A. Suphan. 2015. Industrie 4.0 und Erfahrung—das unterschätze Innovations- und Gestaltungspotenzial der Beschäftigten im Maschinen- und Automobilbau. In *Digitalisierung industrieller Arbeit. Die Vision Industrie 4.0 und ihre sozialen Herausforderungen*, ed. Hirsch-Kreinsen et al., 275–301. Baden-Baden: Nomos.
- Prassl, J. 2018. Humans as a Service. The Promise and Perils of Work in the Gig Economy. Oxford: Oxford University Press.
- Reich, R. 2002. The Future of Success: Working and Living in the New Economy. New York: Vintage Books.
- Roth, A. 2016. Industrie 4.0—Hype oder Revolution? In *Einführung und Umsetzung von Industrie 4.0*, ed. A. Roth, 1–15. Berlin: Springer.
- Schwab, K. 2015. *The Fourth Industrial Revolution*. Cologny, Switzerland: World Economic Forum.
- Spath, D., et al. 2013. Produktionsarbeit der Zukunft—Industrie 4.0. Stuttgart: Fraunhofer Verlag.
- Streeck, W. 2011. *Skills and Politics: General and Specific*. MPIfG Discussion Paper 11/1. https://www.mpifg.de/pu/mpifg\_dp/dp11-1.pdf.
- Tabboni, S. 1993. Norbert Elias. Un ritratto intellettuale. Bologna: Il Mulino.
- Treibel, A. 2008. Die Soziologie von Norbert Elias. Wiesbaden: Verlag für Sozialwissenschaften.
- Trilling, B., and C. Fadel. 2009. 21st Century Skills: Learning for Life in Our Times. San Francisco: Jossey-Bass.

- Tullini, P. 2017. La digitalizzazione del lavoro, la produzione intelligente e il controllo tecnologico nell'impresa. In Web e lavoro. Profili evolutivi e di tutela, ed. P. Tullini, 3–20. Torino: Giappichelli.
- Weyer, J. 2008. Techniksoziologie. Genese, Gestaltung und Steuerung soziotechnischer Systeme. Weinheim und München: Juventa Verlag.
- Windelband, L., and B. Dworschak. 2015. Arbeit und Kompetenzen in der Industrie 4.0. In *Digitalisierung industrieller Arbeit. Die Vision Industrie 4.0 und ihre sozialen Herausforderungen*, eds. Hirsch-Kreinsen et al., 71–86. Baden-Baden: Nomos Verlag.
- Woodruffe, C. 1993. What is Meant by a Competency? Leadership and Organization Development Journal 14 (1): 29–36.
- World Bank. 2016. World Development Report 2016: Digital Dividends. Washington, DC, https://doi.org/10.1596/978-1-4648-0671-1.
- ——.sss 2019. World Development Report 2019: The Changing Nature of Work. Washington, DC: World Bank.
- Zuboff, S. 1988. In the Age of the Smart Machine. New York: Basic Books.