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From "Productivity Revolution" to "Digital Garden Cities": Recent Shifts in the Dominant Political Discourse on Digitalisation in Japan

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Abstract

This article investigates recent developments in the dominant political discourse on digitalisation in Japan with a particular focus on the suggested benefits and risks of digital technologies for workers and consumers. Whereas the discourse in the neoliberal Abe era (2012–2020) pushed for deregulation and flatly suggested economic benefits for "everybody," there has been a recent shift that locates digitalisation in the countryside specifically with an emphasis on rural revitalisation and public infrastructure development. The analysis reveals a continued marginalisation of the risks of digitalisation and an overemphasis of its benefits. The findings further suggest that the dominant Liberal Democratic Party (LDP) deliberately creates vagueness which allows the presentation of digitalisation as a panacea for various societal issues depending on the party's political exigencies. The end of the Abe era and the experience of the pandemic mark significant changes that might create more space for equality issues in the future. However, as "digitalisation for equality" pertains exclusively to the rural-urban divide, there is reasonable doubt that this might merely be the newest iteration of pork barrel politics. The analysis further suggests that benefits for workers as well as the dissemination of digitalisation in general might continue to be obstructed by lobby interests.

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digitalisation – digital divide – Japanese politics – LDP – rural revitalisation

1 Introduction

Digitalisation transforms our world with great speed and will continue to do so in the foreseeable future. Digital technologies have already provided great benefits to humankind, such as AI (artificial intelligence) in the development of COVID-19 vaccines. However, they also bear risks for individuals and societies. Among the most worrisome for workers and consumers are perhaps those pertaining to the future of work, especially as digitalisation is already exerting a profound negative influence on the labour market and the quality of work (Tyson and Zysman 2022). Another issue are new digital divides between generations, genders, and regions that exacerbate inequalities (van Dijk 2013).

In Japan, as elsewhere, these effects are not entirely new but are rather an acceleration of rationalisation processes going back as far as the 1960s when machines with programmable automation (Numerical Control [NC] and Computer Numerical Control [CNC] machines) were disseminated. Replacing workers has since then been a strategy used consistently by Japanese manufacturing businesses (Nishiyama 2022: 8; Shibata 2021: 6–7, 11–13). While this is still an issue with regard to mostly routine-based labour (Tyson and Zysman 2022), many adverse effects have been identified, most notably: growing inequalities, deskilling, fragmentation and intensification of work, as well as an unprecedented potential for surveillance (Shibata 2021; Elis 2022). Many businesses have also begun to rid themselves of their obligations as employers, sometimes transforming their employees into an ultra-flexible "just-in-time workforce" (De Stefano 2016). This is increasingly done by zero-hour contracts, platformisation, and other forms of gig work (Crouch 2019; Mazzucato 2019). Japan's "corporatism without labour" (Pempel and Tsunekawa 1979), with its heavily segmented labour market with nearly forty per cent working as "irregular" part timers and temp workers (Gordon 2017), might be especially susceptible for this kind of development. It is therefore doubtful whether Japanese workers will be better off in the digital future.[1]

1 "Regular" (*seiki* 正規) workers are predominantly male, skilled, have access to training, and work full-time. Women are overrepresented in the group of "irregular" (*hiseiki* 非正規) workers, who often work part-time, are less skilled, and have little or no access to training (Gordon 2017).

This article follows the assumption that a balanced and inclusive discourse is a precondition of fair results in the "real world." This means that the development and implementation of (digital) technologies must not take place isolated from the public or with a narrow focus on marketisation but must be informed by an inclusive and fair societal discourse. Unfortunately, public discourses in our societies tend to be dominated by those who have vast resources at their hands to marginalise unwanted positions and to steer the discourse in directions that are better aligned with their particular interests. Japan – where the Liberal Democratic Party (LDP) governs with few and short interruptions since 1955 and where a handful of media corporations and public relations (PR) agencies dominate the realm of media – is certainly no exception (McNeill 2019). There is also good evidence for the collusion of the LDP with business interests, specifically in the field of digitalisation. In 2021, for instance, tech-companies were among the biggest contributors to the party. The Japan Electronic Manufacturers' Association (JEMA) contributed seventy-eight million Yen, second only to the Japanese carmakers with seventy-nine million Yen. In addition to JEMA money, tech-companies Hitachi and Canon gave both forty million Yen as individual corporations (Mainichi 2022).

In this research, I investigate the LDP's discourse on digitalisation of the last ten years in order to examine how Japan's dominant party presented digitalisation to the people, especially with regard to risks and benefits for workers and consumers, and how this discourse developed diachronically over the long Abe era, the pandemic, and the leadership change from Abe (December 2012–September 2020) to the short-lived Suga Yoshihide 菅義偉 (b. 1948) premiership (September 2020–October 2021) and finally to the Kishida Fumio administration (since October 2021). For this, the discourse is operationalised by election platforms and prime ministerial policy speeches (see Appendix).[2] These "discourse fragments" (Jäger and Maier 2009: 47) are chosen as they are usually disseminated to the public somewhat effectively, notably by "trickling down" to the mass-media (Jäger 2012: 84). As policy papers rarely attract attention from a wider audience, they are excluded. Equally, the subject of privacy and data security had to be laid aside in order to adequately address the issues that pertain to work and equality. The time frame chosen encompasses the ten years since 2012 when the LDP regained power after a roughly three-year-long intermezzo of a centre-left government.

2 For the impact of election platforms, see Krukones 1984. There are two kinds of prime ministerial policy speeches: the *shisei hōshin enzetsu* 施政方針演説 that are held each January when the Diet convenes for the regular Diet session (January to June), and the *shoshin hyōmei enzetsu* 所信表明演説 which are usually given when the activities of the Diet are prolonged by an extraordinary Diet session (September to November). Both are referred to as "policy speech" in official translations.

2 Context: the Japanese Political Discourse on Digitalisation

Before investigating the corpus, it is important to contextualise it by outlining key discursive events prior to and outside of it. The political discourse on digitalisation in Japan has been dominated by the LDP and its successive and sometimes confusingly overlapping agendas to promote digital technologies. I argue that the LDP's dominance in this policy field results from its general predominance in Japanese politics but also from the opposition's delay in dealing with the issue (Spremberg 2022). Digitalisation first became a major topic at the turn of the century when then prime minister Mori Yoshirō 森喜朗 (b. 1937) announced *e-Japan* as the central strategy for national "rebirth" (*shinsei*) by IT (information technology). The goal was nothing less than making Japan the digital world-leader:

> The most important pillar for a newborn-Japan is the IT strategy, the so-called e-Japan plan. It is the realisation of a Japanese-style IT society which is key to bring about a rich national life and the strengthening of our country's competitiveness [...]. In five years we will have turned our country into the world-leading nation of telecommunication (Mori 2000).

This was later updated by the subsequent Koizumi Junichirō 小泉純一郎 (b. 1942) administration (*e-Japan strategy II*) (Kantei 2004). Although somewhat successful (MIC 2007), it became clear that five years were nowhere near enough to achieve the lofty goal of world leadership. Abe Shinzō 安倍晋三 (1954–2022), who succeeded Koizumi in 2006, was aware of this when he carved out his *Innovation 25* agenda which turned this into a long-term objective, with the year 2025 as the target line.

While this might suggest more realism, the outlook given by *Innovation 25* was grossly exaggerated, with PR material providing a utopian imagery including humanoid robots as family members (Robertson 2018: 50–80). At this time, digitalisation was still subsumed to a more general discourse on "innovation" and was mainly seen as an "engine for substantial, strong growth" (Kantei 2007). It is also notable that *Innovation 25* was not science-fiction – despite its lack of realism. It was rather a distinctive combination of past and future with digital technologies featuring as "retro-tech" in service of a conservative vision of Japan's glorious future that was "imagined as an improved and improvised version of the past" (Robertson 2018: 79). This included traditional gender roles and even a revisionist view of Japan's imperialist and fascist past – a future in line with Abe's greater vision of a "beautiful country" (ibid.: 33–49).

When Abe's first tenure ended in 2007 and the LDP was ousted from government two years later, conservatives' dreams of digital leadership came to

a sudden halt. Three years later, however, Abe made a comeback under the slogan "Taking back Japan" (*Nippon o torimodosu* 日本を取り戻す) that reflected and perhaps accelerated a shift to the right in Japanese society (Plenefisch and Spremberg 2013). The aim of world-leadership was renewed by the *Declaration to be the World's Most Advanced IT Nation* (2013) which tied directly into Mori's idea of a national "rebirth" necessitated by economic and moral crisis: "The Japan that once attracted the world's attention and praise no longer exists. The people have lost confidence and feel considerable unease about the future. The economy and society as a whole are at an impasse" (Kantei 2013).

This was also in line with the new Abenomics agenda – a political brand signifying a combination of massive quantitative easing and economic stimuli. The promises made by Abenomics were a revival of Japan's economy, overcoming chronic stagnation of wages (Shibata 2021: 8), and the creation of hope for a better future. The significance of hope in this context was perhaps best exemplified by Abe's speech about a "hope-driven economy" at the World Economic Summit and his policy speech of the same year, in which he blamed a "deflation mindset" (*defure maindo* デフレマインド) as the "biggest enemy" of the Japanese economy (Abe 2019a).

At the practical level, several state-led programmes were initiated in 2015, most notably the Robot Revolution Initiative, the Industrial Value Chain Consortium, and the Internet of Things Promotion Consortium (Nishiyama 2022: 30). In 2016, yet another digital agenda was crafted by the Abe administration, namely, *Society 5.0*. This was the successor of the *Innovation 25* concept ten years earlier insofar as it equally conveyed utopian, yet academically validated (Hitachi-UTokyo Laboratory 2020) visions of Japan as a "super-smart society" in which everything and everyone are connected, and technologies such as big data, the Internet of Things (IoT), robotics, and AI are widely disseminated. In PR material, the *Society 5.0* was presented as nothing less than the next evolutionary step of humankind (Cabinet Office n.d.).

After Abe stepped down in September 2020, he was succeeded by his long-term ally Suga Yoshihide. Even though this turned about to be a quite short-lived administration (until October 2021), Suga oversaw the establishment of the Digital Agency – a government entity led by a minister of state, the Minister for Digital Transformation. Suga is largely perceived as an epigone of Abe, but he successfully introduced the issue of rural-urban equality into the LDP's discourse. Under his successor Kishida Fumio 岸田文雄 (b. 1957) (since October 2021) this would become the major focus of the new digital agenda, the *Nation of Digital Garden Cities*. As the name suggests, this agenda localises

the digital transformation primarily in the countryside, including disadvantaged regions (Digital Agency n.d.).

It is beyond the scope of this article to evaluate the "success" of the subsequent digitalisation agendas. It is still important to note that the state of digitalisation in Japan is a far cry from digital world-leadership as has been revealed by the pandemic (Osawa and Kingston 2022; Watanabe 2022; see also Robertson 2018: 175–192). There are notable successes, such as a strong position in industrial robotics, but this pales in comparison to the expectations created by the LDP's discourse. According to the 2022 World Digital Competitiveness Ranking, which is also used in Japanese government reports (e.g., MIC 2021), Japan's position has consistently worsened since 2014, now ranking twenty-ninth out of sixty-three according to International Institute for Management Development (IMD 2022).

3 From the Promise of Affluence to Rural-Urban Equality: Digitalisation and the Economy

3.1 *Discourse of the Abe Era* (2012–2020)

Benefits for the stagnant Japanese economy have been the major argument for the adoption and dissemination of digital technologies in the Abe era. In the corpus, this was first mentioned in the 2016 platform, in which digitalisation was framed as a catalyst for a "productivity revolution" (*seisansei kakumei* 生産性革命) which in turn was expected to unlock new "growth markets" (LDP 2016: 9, 16). In the following year, the idea of "productivity through digitalisation" was connected to a promise of increasing wages, a benefit the LDP perhaps deemed more attractive for voters. In the economic chapter of the 2017 platform, digitalisation featured front and centre with the following outlook being promoted:

> We will increase citizens' wages [*chingin* 賃金] by a dramatic rise in productivity. To make the trend towards increasing wages – a product of four years of Abenomics – more sustainable we will unleash cutting edge innovations such as robotics, IoT and artificial intelligence, and we will realise a "productivity revolution" [...] By a "productivity revolution" through private-sector led innovation, we will increase the income [*shotoku* 所得] of all those who are working [*hataraku minasan* 働く皆さん] considerably (LDP 2017: 9; see also p. 20).

The promise that digitalisation would lead to rising wages was repeated by Abe in his November 2017 policy speech when he used the phrase "wages up" (*chingin appu* 賃金アップ) (Abe 2017). In a similar vein, the 2019 platform mentioned "[i]ncreasing incomes by a strong economy. By AI, IoT and Big Data, we will [...] create a flexible and strong economy" (LDP 2019: 9; see also Abe 2019a). This time, the awkward phrase "all those who are working" was avoided and it was instead implied that *all* forms of income would increase by the dissemination of digital technologies.

This outlook is, however, problematic as evidence suggests more nuanced and complex effects of digitalisation on incomes. As mentioned above, greater productivity by automation and robotisation has already been achieved in the last decades that have seen stagnating wages and decreasing *real* wages – rather than rising ones. Effects of digitalisation vary across economic sectors and demographics. As Shibata shows in her study on the Japanese hospitality industry, the implementation of digital technologies has led to a steep rise in corporate profits while wages remained weak (2021: 18–19). Investigating the impacts of robotics in elder care, Wright equally gives a bleak outlook, namely, that robotisation will lead to "further precaritization, commodification, and devaluation of care work" (2019). A smaller number of professionals, on the contrary, benefit as Japanese companies have already begun to raise the wage ceilings for IT professionals while the role of traditional sector-based wage negotiations is in decline (Nihon Keizai Shimbun 2020). It is likely that digitalisation will continue to exacerbate pre-existing inequalities in the Japanese workforce, most notably those between skilled/regular and unskilled/ irregular workers (Shibata 2021: 14–18).

Discourses on labour market inequalities and the resulting *gap society* (*kakusa shakai* 格差社会) have become a major topic in Japan in the last twenty years. Even the pro-business LDP has voiced support for the social democratic slogan "equal pay for equal work" (*dōitsu rōdō dōitsu chingin* 同一労働同一賃金) (Abe 2020; LDP 2017: 21; 2019: 29). However, the crucial connection between labour market inequality and digitalisation was never made.

Japanese workers, however, seem to be aware of the risks of digitalisation. A union survey published in 2018 revealed considerable anxieties about the effects of AI specifically on their wages (Rengō 2018: 9). Besides effects on wages, digitalisation poses further risks for workers, namely, by deskilling, task fragmentation, and increased surveillance and evaluation by so-called *people analytics* (Elis 2022). Another major concern not addressed by the LDP is job loss. This is particularly notable considering that in 2015 a widely noticed study was published by the Nomura Research Institute claiming that a staggering forty-nine per cent of the Japanese labour force would face a "high automation

risk" (Frey, Osborne, and Nomura Research Institute 2015), meaning replacement by robots or AI. Putting aside whether this outlook was too pessimistic or not,[3] it was a "shocking report" (Akiyama 2019) that initiated a crucial public debate. The LDP, however, seemingly chose to ignore the topic.

As for the LDP's motivation to do so, it is helpful to take a look at the reference to Abenomics in the quote from the 2017 platform above ("a product of four years of Abenomics"). At that time, Abenomics lost attractiveness as its key promises – including real wages – had failed to materialise (Kojima, North, and Weathers 2017: 2; Scherer 2018; Shibata 2021: 9). It was exactly at this point in time when the LDP put digitalisation in the focus of its economic discourse and retroactively connected it to Abenomics. I argue that this was done to restore hope in this agenda, and the promise for higher wages in particular.

It is also notable in this context that digitalisation was presented in an exceedingly vague fashion. While being a key-issue in the 2017 and 2019 platforms, no explanations or definitions were contained in them. This is in contrast to the oppositional Democratic People's Party (DPP), for instance, that included a definition of the *Society 5.0* in its 2019 platform.[4] The illustrations and photographs of both LDP platforms are also devoid of any imagery of digital technologies. Instead, the reader is shown stock images of happy workers (LDP 2017: 10) and photographs of Abe conversing with them (LDP 2019: 9). In the latter platform, the graphics of a pixelated *kanji* for wealth (*tomi* 富) was used to subtly reinforce the promise of affluence made at the textual level (ibid.). Furthermore, at least in the 2019 platform, the somewhat cryptic abbreviations "AI, IoT and Big Data" (AI and IoT in Roman letters) were employed, although easier to understand terms exist in the Japanese language and are commonly used (*jinkō chinō* 人工知能 for AI and *mono no intānetto* もののインターネット for IoT).[5] It seems that digitalisation was introduced into the economic discourse of the Abe era as a *deus ex machina* – as a game changer that will revive the stagnant Japanese economy and bring about economic benefits to the citizens. For this outlook to be convincing, it was helpful not to provide any information that could potentially raise doubts, such as, for example, the depiction of a smart factory without workers.

3 There is a controversial discussion to what degree digital technologies will lead to job loss (see, e.g., Hirsch-Kreinsen 2016). For the Japanese case, see, for instance, Konomi and Morikawa 2019; Iwamato 2016.

4 "A human-centred society, in which cutting-edge technologies are implemented into various industries and the social life, and in which everybody can lead a comfortable and high-quality life that is full of vitality" (DPP 2019: 13).

5 The term *jinkō chinō* has been used by Abe in his policy speeches (Abe 2017; 2018; 2019a; 2020).

Following a general neoliberal orientation of the Abe administration, digitalisation was further connected to deregulation, with "regulations hard as rock" (*ganban no yō ni katai kisei* 岩盤のように固い規制) (Abe 2014) being primarily blamed for Japan's economic crisis. Accordingly, the goal to abolish regulations for digital and other innovations was stated repeatedly, often with strong attributes such as "endless" (*owari naki* 終わりなき) (Abe 2014; LDP 2014: 8), "bold" (*daitan na* 大胆な) (Abe 2020; Suga 2020), and even "drastic" (*bapponteki* 抜本的) (Abe 2020). Following the LDP's predilection for superlatives, there was even mention of "world-leadership in deregulation" (LDP 2012: 7). To what degree plans for deregulation of digital technology would include further flexibilisation of the labour market was never discussed. It is rather clear, however, that digitalisation in the Abe era was part of a neoliberal agenda to create a "flexible and strong economy" (*shinayaka de tsuyoi* しなやかで強い) (LDP 2019: 9).

Some further discursive strategies used by Abe are notable, especially the extensive use of superlatives, nationalism, and the idea that digitalisation would increase national strength. As mentioned above, even before Abe, the goal of subsequent LDP administrations was to become the leading digital nation. Under Abe, however, the trope of world leadership was taken to the extreme and was disseminated in almost all policy areas. There were, in fact, only few things in which Japan was not imagined as the world's foremost nation: "country, in which life is easiest"; "most trustworthy country in the world"; "world-leading import-export administration system" (Abe 2016); and – pertaining to digitalisation – "most innovative country in the world" (LDP 2014: 6. 9).

Nationalist symbols and utterances rarely pertained to digitalisation directly but nonetheless created a discursive frame for the topic. This was most notable in the 2019 platform which contained a plethora of nationalist symbols and references.[6] In this specific document, the trope of national strength played a key role with the attributes *tsuyoi* 強い (strong) and the climactic *chikara zuyoi*

6 National symbols used were the red and white colour scheme (LDP 2012; 2014; 2017; 2019), instances of the *hinomaru* 日の丸 national flag (LDP 2012: 15; 2019: 1), and frequent mentions of the Reiwa era (LDP 2019: cover, 2, passim). Reestablishing wide use of the Japanese era name has been a major goal of right-wing groups and has therefore nationalistic connotations, and is therefore avoided in other parties' platforms. Nationalism also inspired the documents' titles, most notably *Nippon o torimodosu* 日本を取り戻す (Taking back Japan) and *Nippon no asu o kirihiraku* 日本の明日を切り拓く (Opening up Japan's future) (LDP 2012: 14; 2019). The former was widely interpreted as the Japanese version of "Making America Great Again!" and has attracted praise from right-wingers across the globe, most notably from Stephen Bannon who famously touted Abe as "Trump before Trump" (Osaki 2019).

力強い (with strong force) being among the keywords. As mentioned above, they were also used to describe the anticipated digital economy ("We will create a strong economy by AI, IoT and Big Data [...]") (LDP 2019: 8).

Arguably, this had two intended effects – namely, an instigation of patriotic sentiments to garner support for the Abe's digitalisation agenda and a delegitimatisation of criticism. It is notable in this context that leading LDP politicians have recently tended to conflate their policies with the national interest and condemned opposition as unpatriotic. Critics of the Tōkyō Olympics, for instance, were brandished as "anti-Japan" (*han-Nichi* 反日) (Tadokoro 2021). Needless to say, this heavily impinges on an open discourse in which workers and consumers can voice criticism on certain aspects of digitalisation. That digitalisation "from above" is portrayed as being without alternative – a common wording of neoliberal politics – something that is revealed in the following statement by Abe: "The whole world is now heading towards the Society 5.0 and new innovations [sic!] are invented one after the other. If the Japanese economy will not become a pioneer in the 'productivity revolution', it has no future" (2018a).

3.2 *Digitalisation and the Economy in the Post-Abe Era* (2020–)

In the current post-Abe era, the role of digitalisation in the LDP's economic discourse has changed considerably. Although still being portrayed as tools for growth (Kishida 2021a; 2021b; LDP 2021: 11), digital technologies have become subsumed under Kishida's overarching *New Capitalism* agenda and more tightly connected to rural revitalisation. By this, a tripartite discursive structure emerged whereby digital technologies serve as tools to foster growth by revitalising specifically rural areas. This connection can be readily identified in the following statement:

> Let's discuss growth strategies first. The first pillar is rural revitalisation by use of digital technologies [*dejitaru*]. The protagonists of the New Capitalism are the rural areas. We will strongly advance the Plan for a Nation of Digital Garden Cities. And while solving the issues of the rural areas, we will realise bottom-up growth from the regions to the whole country (Kishida 2022).

New Capitalism is the Kishida administration's signature agenda and aims to balance growth with a more egalitarian wealth distribution (Kishida 2021a; 2021b; 2022; LDP 2021: 7). Growing inequality has been identified as a major societal problem before, but Kishida openly blamed an "overreliance on the market principle" (Kishida 2022) for this, thereby clearly departing from the

neoliberal orthodoxy of prior LDP administrations, including that of Abe who had discounted redistribution as "equality in shrinking" (*shukushō kinkō* 縮小均衡) (LDP 2012: 6). In digitalisation policy, Kishida replaced Abe's *Society 5.0* and promulgated *The Plan for a Nation of Digital Garden Cities* (*dejitaru den'en toshi kokka kōsō* デジタル田園都市国家構想) (LDP 2021: 9, 11, 23–26; Kishida 2022). As will be discussed below, this is primarily an agenda for public infrastructure investments in rural areas. Whereas the goal of private sector-led growth is maintained, the role of the state as the provider of public services is much more emphasised.

Kishida also abandoned the trope of "digitalisation for productivity" and the promise of increasing incomes. In line with the departure from neoliberalism, a rather different view on regulations was articulated:

> We will advance revision of regulations and systems pertaining to the implementation of digital services. Not by mere deregulation but by making new rules [*rūru* ルール] we will create new services in the rural society and aim towards making everyday life richer (Kishida 2022).

It is notable, however, that the loanword *rūru* is used instead of *hōritsu* 法律 (law) or *kisei* 規制 (regulation). This leaves open whether actual legislation or softer measures such as industry self-commitments is meant. Also, Kishida had made contrarian statements on regulation of digital technologies as recently as the year prior (Kishida 2021a; see also LDP 2021: 9). This is nevertheless a remarkable rejection of the neoliberal approach to digitalisation. This could serve as a basis for critical discourse positions seeking to regulate digital technologies in order to protect the rights of Japanese workers and consumers.

However, although the questionable promise of higher wages by digitalisation was given up under Kishida, the various and ambivalent effects of digital technologies on the labour market, the risks of wage decreases, job losses, and impacts on work quality still remained unaddressed. Instead, digital technologies continued to be portrayed as only beneficial. The fact that the distribution of economic benefits is a genuinely political and not a technological question continues to be obscured.

3.3 *Remote Work*

The ability to work remotely[7] is one of the most immediate changes to work engendered by digital technologies. Many benefits come to mind, such as the liberation from often toxic workplaces, reduction of commuting times,

7 In this article, the terms "telework" and "remote work" are used interchangeably.

and the possibility to reconcile work with family obligations or even holidays (*workcation*).[8] It is notable that after experiencing telework on a mass scale during the pandemic, Japanese workers, as elsewhere, want to keep working remotely in addition to on-site work (Magnier-Watanabe and Magnier-Watanabe 2023).

Prior to the pandemic, dissemination of telework in Japan has remained well below OECD (Organization for Economic Cooperation and Development) average (13.3 per cent of employees in 2016). Hindrances were the wariness of businesses (Magnier-Watanabe and Magnier-Watanabe 2023: 2), a work ethos based on effort, loyalty, and self-sacrifice, as well as the reliance on outdated work methods, such as use of hand-carved *hanko* 判子 seals,[9] paper documents, and fax machines. Even during the pandemic, the share of office workers working remotely remained as low as 26.8 per cent (Watanabe 2022: 41).

Telework is attractive to many workers, but possible issues go far beyond the slow and incomplete dissemination of this working modality. As discussed above, digital technologies tend to have complex and ambivalent types of impact on people's lives. Whether individuals benefit depends on gender, form of employment, firm size, and location. If not implemented properly, telework can exacerbate these digital divides. Currently, remote work is often only available to privileged, "regular" workers. In the case of "irregular" employees, being allowed to work from home this can lead to additional burdens, for instance, when the costs to create and maintain a suitable work environment is passed on to them. In addition, lower-income households in Japan often deal with crammed housing conditions that are not conducive to working from home. Other risks are increased workloads, for example, when telework is (mis-)used to complete tasks at home that could not be finished within regular working hours (Sato 2021: 9).

In the corpus, telework first appears in 2013 when Abe mentioned it as one of the "IT technologies that could revolutionise society" (Abe 2013). However, in the following years, it was portrayed as a modality relevant only for certain demographics, most notably women, but also young people, the elderly, sick, and handicapped persons (LDP 2014: 16; 2016: 19; 2017: 21). In the 2014 platform, the topic was exclusively discussed in the context of female labour: "We will hasten the implementation and development of telework as a means to guarantee to women the type of employment they desire" (LDP 2014: 16). The reason why women were primarily addressed was their assumed roles as mothers and caregivers, while fatherhood and the family obligations of men were

8 For an analysis of the *workcation* phenomenon in Japan, see Matsushita 2022.

9 *Hanko* are personalised seals that are used in lieu of signatures.

ignored. Needless to say, this traditional view on gender roles was not easy to reconcile with the stated aim to make women "shine" at workplaces.[10] In this way, telework was portrayed as a "retro-tech" that guarantees that women will take up their proper place in the household despite their inclusion into the labour market.

From 2016 onwards, "telework" was half-heartedly connected to the so-called *Work Style Reform* (*hataraki-kata kaikaku* 働き方改革), an agenda to reduce (unpaid) overtime and create more flexible arrangements for workers (LDP 2016: 9; 19; 2017: 2). Remote work, however, played only a minor role in this and no concrete measures or policy goals were stated. Abe avoided the topic in all but one (2018a) of his policy speeches after 2013. The reason for this was perhaps big business influence and the exclusion of organised labour in carving out the *Working Style Reform* agenda which in general brought about little if any benefits for workers (Kojima, North, and Weathers 2017).

The dual change brought about by the pandemic and the transition of LDP leadership in 2020 have, as mentioned above, resulted in a new discursive structure foregrounding the use of digital technologies specifically in rural communities. Accordingly, telework has since been primarily localised in rural areas (Suga 2020; Kishida 2021a; 2021b).

The aspect of rural-urban inequality and the digital divide in particular have been voiced first by short-term leader Suga in his 2020 policy speech: "Even if one lives on the countryside one can do the same work as in the cities" (2020). He further singled out the *hanko* seals as a hindrance to remote work: "Seals for applications to the administration will be completely abolished in principle as they are a hindrance for telework" (ibid.). Suga also pushed for a more thorough dissemination of remote work in general, but much of this was in the immediate context of the pandemic, for instance, when he mentioned the target goal of seventy per cent of workers working remotely (2021).

After Suga, however, the push for abolishing *hanko* seals and a more thorough implementation of remote work has weakened considerably. Since Kishida became prime minister, the *hanko* issue has remained completely unmentioned, possibly due to resistance by the *hanko* industry, which is backed by an influential Diet member lobby group, the "Parliamentary group for the preservation of the Japanese sealing system and culture" (*Nihon no inshō seido, bunka o mamoru giin renmei* 日本の印章制度・文化を守る議員連盟), which notably included technology minister Takemoto Naokazu (Watanabe 2021: 54).

10 Similar gender roles can be identified in Innovation 25 PR material of 2007, notably in a narrative about the daily lives of a fictional family in 2025 (Eguchi 2007). For an in-depth analysis, see Robertson 2018: 50–62.

Following the new *Digital Garden City* agenda, telework has been placed almost entirely in the context of rural revitalisation under Kishida (Kishida 2021a; 2021b). It was further mentioned as a tool to fight the pandemic but also as a problem for small dry-cleaning businesses (another lobby group of the LDP), as working from homes means less need for business outfits (Kishida 2021a). The 2021 platform stated:

> By "provision of telework sites [*terewāku kyoten* テレワーク拠点]" and "use of abandoned houses [*akiya* 空き家] and public housing" [...] we will create more "places on the countryside where flexible working styles are possible and which fit the lifestyles of inhabitants in different life stages" (LDP 2021: 24).

This suggests that, much like in the Abe era, telework was portrayed as a valuable innovation which is, however, useful in certain contexts only, such as during a crisis or to further a broader policy goal – notably, rural revitalisation. Moreover, telework on the countryside is imagined taking place in "sites" rather than private homes, reflecting wariness to leave workers unsupervised. Therefore, the wording "flexible work styles" is rather ironic. Needless to say, telework in special sites nullifies potential synergies with domestic (care) work and hints at a realisation of telework in a rather limited scope.

4 Digitalisation as a Panacea for Social Issues

While mainly portrayed as a tool for economic growth, digitalisation has also been discussed throughout the corpus as both a remedy to various social issues and a technology to improve people's lives: "We will connect the creation of new business models and industries with the solution of social issues" (LDP 2017: 20). In his 2019 speech, Abe gave the following outlook: "Through new innovations [*sic*], we will solve diverse societal problems and will make our lives safer, richer and full of possibilities" (Abe 2019a).

4.1 *Benefits for the Elderly*

In the Abe era, elderly people were presented as the main beneficiaries, for example, when automated driving was presented as a safe and convenient means of transportation specifically for them (Abe 2019a; 2020), or when digital healthcare was discussed (Abe 2019a). There is no doubt that digitalisation has the potential to support older people's health and assist with their mobility. Arguably, however, the real issue is not the dissemination of these

technologies per se but the question of (equal) access. As technical innovations tend to be costly, pre-existing inequalities might become exacerbated. With regard to healthcare, it is notable that digital innovations have hitherto been implemented primarily with the aim to cut costs and navigate labour shortages (Wright 2019). The high degree of privatisation of the Japanese medical system might be especially problematic in view of equal access,[11] making it uncertain whether the benefits of digital diagnosis and treatment will be equally available to everyone.

Worse outcomes for many older people might not be limited to mobility and healthcare. As digital technologies become disseminated in both the workplace and social life, there is the risk that older people might find it difficult to adapt. The Japanese case of the "grey digital divide" has been investigated by Rogerson et al. (2021) who showed that older people were less inclined to use digital technologies during the pandemic due to lower proficiency. In their conclusion, the authors urge to "halt the grey digital divide becoming a digital chasm" (ibid.: 1).

This blind spot is even more problematic as older people are imagined and addressed throughout the corpus as (potential) workers, with slogans like "One Hundred Year Lifetime" or "100 million – all active."[12] Although digital modalities can facilitate work,[13] for instance, telework and robots, this is mentioned only twice in the corpus (Abe 2019a; Suga 2021) but not with regard to elderly workers. That work facilitation for older people is still a missing piece is revealed by Kishida's explanation of the four "pillars" of the *New Capitalism*. Although he discussed digitalisation in the context of growth (first pillar) and rural revitalisation (second pillar), it is not discussed in the segment on the "100 Year Life" (fourth pillar) – only "diverse and flexible work styles" are mentioned, but without any reference to digitalisation (Kishida 2021a). In light of prior results, this is perhaps not surprising as the influence of digitalisation on work – with the exception of telework – is unaddressed throughout the discourse.

11 The risks associated with a largely privatised medical system became obvious during the pandemic when Japanese hospitals turned down COVID-19 patients or accepted only those with mild symptoms for financial reasons (Asahi Shimbun 2021).

12 Slogans with four *kanji* containing the phrase *ichioku* 一億 (one hundred million) are common in Japanese conservative politics and refer to the Japanese population size. Their origin lies in war-time propaganda, such as the encouragement for mass-suicide *ichioku gyokusai* 一億玉砕 (one hundred million shattering like jewels).

13 The facilitation of work, however, has its own rather ironic problems. Historically, making work easier has often led to increased workloads, thereby offsetting the effect of reduced strain. As famously observed by John Stuart Mill, it is "questionable if all the [...] inventions yet made have lightened the day's toil of any human being" (Mill 1909 [1848]: 751).

4.2 *Digitalisation and Rural Revitalisation*

The idea of rural revitalisation by digitalisation was first brought up by Abe who mentioned this repeatedly without however making it a central argument for the *Society 5.0* agenda (LDP 2016: 13; 2017: 24; 2019: 23). The most specific articulation of this is contained in the 2019 platform: "Together with creating a flow of people into the rural areas, we will develop automated driving, tele medicine and drone delivery starting in the rural areas and will promote local innovation" (LDP 2019: 13). In his 2020 speech, Abe framed automated driving as a convenient mode of transportation "for everyone in secluded mountain areas" rather than a promising new industry of national interest (Abe 2020). AI, IoT, and robots were also mentioned as technologies that can help to recover Fukushima prefecture after the March 11 triple disaster (Abe 2018b; 2020). While this pertained to rural urban equality, this was only made explicit by Suga in 2020:

> You can carry out various procedures without going to a government office. By using telework you can do the same work as city dwellers do. You can get the same medical care and education as in the city. We will realise such a society (Suga 2020).

Under Kishida's new slogan *A Nation of Digital Garden Cities* (Kishida 2021a; 2021b; LDP 2021: 23), rural revitalisation became the main selling point of digitalisation. The exact meaning of *Digital Garden Cities*, however, remains vague – especially given that the term "garden city" usually refers to suburban spaces, whereas Kishida's policies seem to refer to rural if not secluded areas. The idea of garden cities (*den'en toshi* 田園都市) actually goes back to urban planning during the 1910s and 1920s, when Japanese artists and elites sought to combine urbanity with a romanticised life in the countryside. Originally a Western concept, the idea was influential in the construction of residential areas such as Den'en Chōfu 田園調布 or Sakura Shinmachi 桜新町 and also inspired the later development of the so-called "New Towns" satellite cities (Yiu 2006).

The term "Digital Garden City" was likely chosen by the LDP to capitalise on the modern and chic connotations of this concept. When it was mentioned in the 2021 platform, the goal to use digitalisation to "strengthen the flow of people into the regions" (LDP 2021: 24) was repeated and rural telework "sites" were mentioned. In his 2022 policy speech, the following plans were stated:

> In the regions facing ageing and depopulation specifically, we will plan and implement 5G, data centres and fibreoptics so that digital services

> such as online medical care, GIGA schools, smart agriculture and fisheries and others can be used [...] by various methods we will instigate private investments and we will establish infrastructure that will sustain services such as automatic driving, dynamic traffic regulation and drones (Kishida 2022).

In his October 2021 and 2022 policy speeches, Kishida again mentions the infrastructure 5G, data centres, fibre optics, and "digital services" such as medical care, "GIGA schools"[14] with digital and remote schooling, "automated delivery" – probably by drones or automated vehicles – and the use of digital technologies in agriculture and tourism (Kishida 2021a; 2022). Even combinations of these services are evoked, such as "services that bring you to your care support location by automated driving" (Kishida 2022).

What is missing, however, from these statements is the crucial aspect of whether (or, to what degree) digital services such as GIGA schools will replace analogue, on-site services. As pointed out above, digital services are often implemented in order to cut costs, and the replacement of real-life services could result in a deepening of the rural-urban divide rather than a revitalisation of rural regions. It is also somewhat contradictory to the prospect that there will be a "flow [of people] into the countryside" engendered by the establishment of "telework sites."

It is also notable that "telework sites" are nothing new; they have been established previously, albeit in a limited scale. I had the chance to visit an early-stage "satellite office" project in Tokushima prefecture with some colleagues ten years ago and I remember the doubts of locals about the success of the project (Fleischer et al. 2013). While the number of these offices has been continuously growing ever since, the most recent yearly addition still amounts to only around 500 offices (Statista 2022). It remains to be seen whether local communities will be the primary beneficiaries of this development or the local construction companies instead – another group of long-term allies of the LDP – that renovate the abandoned houses selected to become "satellite offices."

This sheds new light on the larger concept of "Digital Garden Cities." With the exception of Hokkaidō and Okinawa, rural regions – such as Shikoku – are traditionally the most important pillar for LDP dominance, often being referred to as "conservative kingdoms" (*hoshu ōkoku* 保守王国). The role of organised votes from these regions might be especially important for the LDP

14 GIGA stands for "Global and Innovation Gateway for All," which signifies a plan to modernise schools with digital technologies.

in the post-Abe era, as Kishida is relatively unpopular and less able to attract swing voters in urban parts of the country. This naturally shifts the electoral focus to the mobilisation of the LDP's clientele and voter base in the countryside. As the *Garden City* agenda paints a bright picture of modern and lively rural communities and promises big investments, this is likely to be attractive to rural voters.

5 Results

Analysis of the corpus of LDP election platforms and prime ministerial speeches revealed that digitalisation has become a major issue in the last ten years but is still presented as a cross-cutting issue rather than a topic in its own right that is, for example, treated in an independent chapter of an election platform. Whereas digitalisation was tightly connected to the economic discourse under Abe, a more balanced, tripartite discursive structure has emerged in the Kishida era whereby the issues of digitalisation, economic growth, and rural revitalisation are entangled. The growth-oriented paradigm of neoliberalism informed most of the Abe discourse, but there has been a marked shift away from growth, productivity, and deregulation recently. Digital technologies have since been localised in the countryside specifically and have been portrayed as public infrastructure and services. However, the various policies of the *Digital Garden Cities* agenda, such as digital GIGA schools, raise questions whether these investments are really intended to improve public services in rural areas or they are replacements for uneconomic analogue services instead. What remains unchanged throughout the discourse is the message that digital technologies are only beneficial, destined to play a major role in the economic and societal recovery of Japan.

The various risks of digitalisation for workers and the labour market, such as wage stagnation/decreases, job loss, and issues of work quality, were equally glossed over. In the Abe era, digital technologies were flatly portrayed as productivity-boosting technologies that would increase incomes as part of the Abenomics agenda to which digitalisation was added retrospectively. This dethematisation of risks was complemented by the discursive strategy to equate LDP initiatives with the national interest and the deliberate creation of vagueness. Both strategies serve to prevent criticism of the LDP's digitalisation policies.

The complex and overlapping effects of digitalisation on equality between men and women, age groups, and regular/irregular workers have largely been ignored. The gap between rural and urban regions was the only digital divide

addressed in the corpus, and it is perhaps not coincidental that this is also the one that is crucial for LDP dominance as many rural regions are conservative strongholds. It is, therefore, unclear whether "digitalisation for rural revitalisation" is a genuine attempt to reduce inequality in a sustainable way or the newest iteration of pork-barrel politics that the LDP has utilised for decades to cement its dominant position in Japan's "democracy without competition" (Scheiner 2006).

Although remote work was experienced on a massive scale during the pandemic (albeit to a lesser degree than in many other countries) this has only been a major issue for a very limited time (i.e., the Suga administration). Prior to the pandemic, remote work has been downplayed as a work style only suitable for irregular workers, whereas in the current post-pandemic Kishida era telework is only imagined in special sites in the countryside in order to foster rural revitalisation. Pledges to end the use of *hanko* seals as major obstacle for telework have come to a sudden halt. This is not only unfortunate for Japanese workers but is likely to deter much-needed foreign labour to join the Japanese labour market, as workers increasingly expect to be free to work remotely.

Finally, the sudden abandonment of the *Society 5.0* agenda and its replacement with the *Digital Garden City* one reflects the relatively new leadership role of the prime minister in Japanese politics (e.g., Inoguchi and Jain 2011; Mulgan 2020) and the expectation that prime ministers carve out innovative policy visions. This seems to make policy goals even more fluctuating, and it might contribute to the LDP's failure to reach the goal of digital competitiveness – let alone digital world leadership.

Abbreviations

AI	Artificial Intelligence
CNC	Computer Numerical Control
DPP	Democratic People's Party
IMD	International Institute for Management Development
IoT	Internet of Things
IT	Information Technology
JEMA	Japan Electronic Manufacturers' Association
LDP	Liberal Democratic Party
MIC	Ministry of Internal Affairs and Communications
NC	Numerical Control
OECD	Organization for Economic Cooperation and Development
PR	Public Relations

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Appendix

No.	Prime minister	Date	Discourse fragment	Type	Abbreviations referenced	Link
1	Abe	November 2012	"Taking back Japan. Main policies 2012." (Lower House election)	Election platform	LDP 2012	https://www.jimin.jp/news/press/129588.html
2	Abe	February 2013	Policy Speech by Prime Minister Abe Shinzo to the 183th Session of the Diet	Policy speech	Abe 2013	https://www.kantei.go.jp/jp/headline/183shiseihoushin.html
3	Abe	October 2013	Policy Speech by Prime Minister Abe Shinzo to the 185th Session of the Diet	Policy speech		https://www.rw.emb-japan.go.jp/speech%20of%20Prime%20Minister%20Abe%202013.10.15.pdf
4	Abe	January 2014	Policy Speech by Prime Minister Abe Shinzo to the 186th Session of the Diet	Policy speech		https://www.jimin.jp/news/policy/124839.html
5	Abe	September 2014	Policy Speech by Prime Minister Abe Shinzo to the 187th Session of the Diet	Policy speech	Abe 2014	https://www.jimin.jp/news/policy/126065.html

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No.	Prime minister	Date	Discourse fragment	Type	Abbreviations referenced	Link
6	Abe	November 2014	"Economic recovery. There is only this way. Main policy collection 2014." (Lower House election)	Election platform	LDP 2014	https://www.nikkei.com/edit/2014shuin/pdf/jimin.pdf
7	Abe	December 2015	Policy Speech by Prime Minister Abe Shinzo to the 189th Session of the Diet	Policy speech		https://www.jimin.jp/news/policy/127056.html
8	Abe	January 2016	Policy Speech by Prime Minister Abe Shinzo to the 190th Session of the Diet	Policy speech		https://www.jimin.jp/news/policy/131251.html
9	Abe	June 2016	"This way forward, strongly. Upper House Election Platform 2016."	Election platform	LDP 2016	https://www.jimin.jp/election/results/sen_san24/political_promise/
10	Abe	September 2016	Policy Speech by Prime Minister Abe Shinzo to the 192nd Session of the Diet	Policy speech	Abe 2016	https://www.jimin.jp/news/policy/133177.html

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No.	Prime minister	Date	Discourse fragment	Type	Abbreviations referenced	Link
11	Abe	January 2017	Policy Speech by Prime Minister Abe Shinzo to the 193rd Session of the Diet	Policy speech		https://www.jimin.jp/news/policy/134040.html
12	Abe	October 2017	"Protecting this country all the way. Election Platform for the Liberal Democratic Party 2017." (Lower House election)	Election platform	LDP 2017	https://storage.jimin.jp/pdf/manifest/20171010_manifest.pdf
13	Abe	November 2017	Policy Speech by Prime Minister Abe Shinzo to the 195th Session of the Diet	Policy speech	Abe 2017	https://www.kantei.go.jp/jp/98_abe/statement2/20171117shoshinhyomei.html
14	Abe	January 2018	Policy Speech by Prime Minister Abe Shinzo to the 196th Session of the Diet	Policy speech	Abe 2018a	https://www.kantei.go.jp/jp/98_abe/statement2/20180122siseihousin.html
15	Abe	October 2018	Policy Speech by Prime Minister Abe Shinzo to the 197th Session of the Diet	Policy speech	Abe 2018b	https://www.kantei.go.jp/jp/98_abe/statement2/20181024shoshinhyomei.html

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No.	Prime minister	Date	Discourse fragment	Type	Abbreviations referenced	Link
16	Abe	January 2019	Policy Speech by Prime Minister Abe Shinzo to the 198th Session of the Diet	Policy speech	Abe 2019a	https://www.kantei.go.jp/jp/98_abe/actions/201901/28shu_san_honkaigi.html
17	Abe	June 2019	"Opening Up Japan's Future. Reiwa 1 Upper House election platform."	Election platform	LDP 2019	https://storage.jimin.jp/pdf/pamphlet/20190607_pamphlet.pdf
18	Abe	October 2019	Policy Speech by Prime Minister Abe Shinzo to the 200th Session of the Diet	Policy speech		https://www.kantei.go.jp/jp/98_abe/statement/2019/1004shoshinhyomei.html
19	Abe	January 2020	Policy Speech by Prime Minister Abe Shinzo to the 201st Session of the Diet	Policy speech	Abe 2020	https://www.kantei.go.jp/jp/98_abe/statement/2020/0120shiseihoushin.html
20	Suga	October 2020	Policy Speech by Prime Minister Abe Shinzo to the 203rd Session of the Diet	Policy speech	Suga 2020	https://www.kantei.go.jp/jp/99_suga/statement/2020/1026shoshinhyomei.html
21	Suga	January 2021	Policy Speech by Prime Minister Abe Shinzo to the 204th Session of the Diet	Policy speech	Suga 2021	https://www.kantei.go.jp/jp/99_suga/statement/2021/0118shoshinhyomei.html

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No.	Prime minister	Date	Discourse fragment	Type	Abbreviations referenced	Link
22	Kishida	October 2021	Policy Speech by Prime Minister Abe Shinzo to the 205th Session of the Diet	Policy speech	Kishida 2021a	https://www.kantei.go.jp/jp/100_kishida/statement/2021/1008shoshinhyomei.html
23	Kishida	October 2021	"Together towards a new era. Reiwa 3. Policy pamphlet" (Lower House election)	Election platform	LDP 2021	https://storage.jimin.jp/pdf/manifest/20211018_manifest.pdf
24	Kishida	December 2021	Policy Speech by Prime Minister Abe Shinzo to the 207th Session of the Diet	Policy speech	Kishida 2021b	https://www.kantei.go.jp/jp/101_kishida/statement/2021/1206shoshinhyomei.html