Computopia Revisited: Yoneji Masuda's Realistic Utopianism

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Introduction

Utopianism has always had a bad press. The whole genre, not least classics such as Thomas More's *Utopia* (More, 1516), Robert Owen's *New View of Society* (Owen, 1813), and William Morris's *News From Nowhere* (Morris, 1891), has allegedly been shot through with fatal weaknesses. Determinism, impossibilism, perfectionism, simplisticism, and even totalitarianism, it is an extensive indictment. Indeed, some of the most influential modern political thought had utopianism as its special target, George Orwell's dystopia, *1984* (Orwell, 1949), being perhaps the most illustrious example. When the twentieth century ended, under the sway of global neoliberalism, even the modest Scandinavian "utopia" of social welfare had begun to look fanciful (Hinde, 2016). So we inherit in the new millennium a "supposedly 'post-utopian' here-and-now of capital and state" (Bell, 2017: 9).

Actually, that is a misleading picture. Although extreme forms of utopianism have been widely rejected, a more modest, chastened approach has begun to emerge. It can claim numerous exponents (e.g. Bregman, 2017; Levitas, 2013; Sargent, 2010; Sargisson, 2012), among them important public intellectuals (Azuma, 2014; Walzer, 2012; Wright, 2010). These latter-day utopians uphold the continuing value of the genre; together their work amounts to a sophisticated case for the proposition that there can be a utopianism that is *not guilty* of the standard charges. At the very least, their scholarship, each in its own distinctive way, suggests that we must be wary of what Robert Estlund calls "utophobia," a prejudicial fear or dislike of utopianism (Estlund, 2014) (see also Weber & Vallier, 2017). The present article was generated in that optimistic spirit.

Our focus is technological utopianism, defined by the founder of social informatics as "analyses in which the use of specific technologies plays a key role in shaping a utopian social vision, in which their use easily makes life enchanting and liberating for nearly everyone" (Kling, 1996: 43). We will argue that this kind of utopianism is not just worth discussing today but increasingly plausible. Specifically,

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we contend that a utopianism based on information and communication technology (ICT) remains an entirely viable enterprise for the present epoch, the so-called Information Age. A particular construction of ICT-based utopianism, namely, "computopia," will be examined. Combining "computer" and "utopia," "computopia" was the title given by the late Japanese thinker Yoneji Masuda to his vision of an advanced information society. Our thesis is that Masuda supplied a powerful example of what has since become known as "realistic utopianism," a term which, despite sounding like an oxymoron, purports to denote a feasible future society. We shall attempt to demonstrate that computopia, notwithstanding its vintage and garish label, delineates a realistic social model which, suitably updated for the third millennium, ought to be pursued with the utmost seriousness by policymakers the world over.

Yoneji Masuda: Japanese Visionary

Yoneji Masuda was one of the most internationally prominent Japanese thinkers of the second half of the twentieth century. His main English-language book, *The Information Society as Post-Industrial Society* (Masuda,1980),¹ is still often mentioned; it can currently boast over 2000 citations, according to Google Scholar, a rare score for an Asian scholar. Nevertheless, little is really known about Masuda outside his own country, so we must begin with some biographical details before seeking to expound and evaluate his work.

Born in Tokyo in 1905, Masuda moved to China and studied at Tung Wen College, a Japanese university established in Shanghai in 1901. Given that China represented at the time a "frontier" for his country, this early career of Masuda indicates that he was probably a patriotic and ambitious youth, traits that he certainly retained. After graduating, he stayed there working for research institutes associated with Manchuria Railways and the Japanese intelligence services. When the Second World War ended, he returned to Tokyo and was employed by the Ministry of Labor. In 1956 he became deputy-director of the Research Institute of Productivity at the Japan Productivity Center. Then in 1961 he was invited to become head of the department of management engineering at the Aichi Institute of Technology in Nagoya.

In 1962 his department decided to install a computer, but Masuda had almost no knowledge of the new technology. So he devoted himself to the study of computers and especially their social implications. According to his own account, his two main influences were Japanese translations of works by American authors such as Gilbert Burck and Edmund Berkeley (Masuda, 1976a: 323-324). In 1967 he had his own book on the subject published, *Kompyutopia* (Masuda, 1967), basically a synthesis of his insights as an experienced bureaucrat and the theoretical knowledge absorbed from the abundant literature collected during this period. The book, which remains untranslated, was almost certainly the first in the world to use the word "computopia." The following year saw the publication of another piece of groundwork by Masuda, *Joho Shakai Nyuumon* (Introduction to the Information Society) (Masuda, 1968), which also remains untranslated.

Meanwhile, in 1965 Masuda established the Japan Computer Usage Development Institute (JACUDI) in Tokyo and became its director. This institute in 1967 organized a group tour to the United States to study state-of-the-art usage of computers in management. Leaders of many major information corporations joined the tour, which contributed on their return to a management information systems boom in Japan.

Masuda coined the English language term "information society" as a direct translation of the Japanese term *joho shakai*, created in Japan in 1964 (Ito, 1991: 8). Masuda not only coined the Japanese-English "information society," but also contributed a great deal to the diffusion of the concept outside Japan. The Japan Computer Usage Development Institute (JACUDI) of which Masuda was president, published in 1972 a very ambitious plan The Plan for an Information Society: Toward a new National Goal. Masuda travelled around the world with this plan and attracted the interest of many experts and policy makers. Masuda was invited to Canada, Sweden, France and the Organization for Economic Cooperation and Development (OECD) and advised these countries' policymakers (Masuda, 1976: 330-332). JACUDI's Plan was translated into English in 1973 (Japan Computer Usage Development Institute, 1972=1973²). It was also translated into Italian and published in Italy (Masuda, 1976: 331). As a result of these activities by Masuda and other Japanese experts, the English words "information society" created by Masuda steadily gained usage among non-Japanese experts. According to our survey, the first written use of the term by a non-Japanese was in "Network for an Information Society" published by Edwin Parker (Parker, 1975).

Simon Nora and Alain Minc, French government officials, visited Japan to investigate the *Plan for an Information Society* mentioned above and wrote in their preface to the Japanese edition as follows:

By reading the JACUDI report, we were motivated to explore a probable revolution. We wanted to explore the revolution not after it has already taken place but when it is about to emerge. (Nora and Minc, 1978=1980³, III)

In 1976, Alois Osterwalder, director of the Ostasien [East Asian] Institute in Bonn was also interested in the Japanese information society boom and proposed that his institute and the Research Institute of Telecommunications and Economics (RITE) in Tokyo should launch a joint research project on information societies. He made the same proposal to the Institute for Future Technologies (IFTEC) in Tokyo. RITE and IFTEC both agreed to this proposal and these three organizations launched a combined research project. They also set up a bi-annual symposium located in Germany and Japan, starting with Bonn in 1977. (The second author participated in many of these meetings). Since the third symposium held in Tokyo, Muenchener Kreis, a research institute for telecommunication policies at the University of Munich, also joined this project and the project continued until 1991 (Komatsubara, 1989).

In 1977, the University of Washington in Seattle, U.S.A., held an international symposium entitled "Information Societies: Comparing the Japanese and American Experiences," inviting many experts (including the second author) from Japan and the United States.⁴ The papers submitted to this conference were published as a book entitled *Information Societies: Comparing the Japanese and American Experiences* (Edelstein, Bowes, and Harsel, 1978). This book is the first English language book in the world that has "information society" in a title.

In Japan, informatization eventually became a national goal, championed for example in Prime Minister Nakasone's speech at the opening of the parliamentary session in 1984 (Morris-Suzuki, 1988: 28). Although Japan was already an advanced industrial country in the early 1980s, it continued to achieve high economic growth at that time and its per capita GDP surpassed those of major advanced industrial countries including the U.S., the U.K., France, and Germany, reaching the second highest in the world in 2000 (after Luxemburg). In the same year, the amount of Japan's foreign aid was the largest in the world (larger than that of the United States). Unfortunately, Japan could not keep this position for long for several reasons including strong, somewhat unreasonable pressures from the U.S. (the same kind of pressures that the U.S. is now imposing on China) and large-scale "brain drain" and technological transfer from Japan to South Korea, Hong Kong, and Taiwan.

Alain Marc Rieu, a professor of philosophy at Lyon University in France, published in 2001 an ambitious and voluminous book in which he discussed how Japanese intellectuals have tackled subjects such as Westernization, modernization, tradition, and identity as well as discrepancies or contradictions among them since as far back as the middle of the 18th century up to the present (Rieu, 2001=2013⁵). What is relevant to this paper is what he writes about Japan after the 1960s. According to him, Japanese intellectuals' traditional problem of "Westernization versus modernization" began to be completely resolved in the 1980s when major Western European countries such as France, Germany, and the U.K. tried to learn from Japan in search for their future directions, specifically, the ideas of informatization and information society. Thus, Rieu concludes that Japan's modernization was completed by the end of the 20th century. Japanese intellectuals, if not the whole nation, identified Japan in the 1970s and 1980s as a prototype information society, which formed a part of Japanese national identity (Rieu, 2001=2013: 263).

Japan's sudden and remarkable thrust or bulge in the 1980s and 1990s as well as the philosophical or historical implications as Rieu pointed out above, owe much to the national plans and policies to which Masuda contributed a great deal. Also, Masuda must indeed be given a share of credit for the real-world success of global technology brands like Fujitsu, NEC, and Toshiba, hence for having been instrumental in Japan's rise as an economic superpower (West, 1996). When he died in Tokyo in 1995, the large turnout at his funeral (including a co-author of the present article) seemed to confirm his practical contribution to his country's development. It may be worth pointing out now that the fact that not only Masuda's books but also the respected reports produced under his direction expressly promoted "computopia," surely counts against those who ridicule anything associated with utopianism.

It is much easier to summarize Masuda's biography than to situate him as a scholar or thinker. We suspect that he might have self-identified as an economist. However, although he wrote often on economics, including a substantial treatise (Masuda, 1976a), he earns only a passing mention in *A History of Japanese Economic Thought* (Morris-Suzuki, 1989: 160), and he was not noticed by western economists. It would probably be fair to say that his work lacked both the background scholarship and the mathematical rigor expected in the modern discipline.

Masuda was not a sociologist in any conventional sense either. He did not position himself inside any tradition of social theory, or seek to validate his claims with programs of empirical fieldwork. Masuda's work does have marked similarities with that of the post-Marxist sociologist Daniel Bell, famous author of *The Coming of Post-Industrial Society* (Bell, 1973). Since Bell had started circulating his epochdefining concept of post-industrialism as early as 1959 (Waters, 1996: 106), it is probable—their books' titles alone appear to confirm as much—that Masuda had been exposed to the Bellian schema by the time he wrote *Information Society as Post-Industrial Society*. However, in other respects Masuda was very different from Bell, being much less of a social scientist, much more the normative, policy-oriented thinker, as we shall observe.

Masuda certainly dipped into an assortment of classic western sources, including Adam Smith, Abraham Maslow, and Walt Rostow. However, we believe that in essence he must be reported as part of the home-grown Japanese "information society" tradition, alongside other pioneers such as Tadao Umesao and Yujiro Hayashi. Too much of the glory for invention of the information society has always gone to Bell and other westerners. As has been shown elsewhere (e.g. Duff, 2000; Ito, 1981; Ito, 1991; Kumon, 2008; Low, 1996), a "made in Japan" interdisciplinary research front on the information society, sparked off by anthropologist Umesao's ideas on information industries, made great strides in the 1960s and 1970s. The Japanese were indeed not only the first in the world to use the term "information society"—"joho shakai"—they were the first to popularize it and also the first to apply it properly to national economic and social policy. Masuda must be placed at, or at least near, the center of this impressive narrative.

More particularly, we wish to position Masuda as a utopian in the best sense of that controversial word. Admittedly, he does not figure in scholarship on Japan's modest indigenous tradition of utopian speculation (see, e.g., Dutton, 2010; Moichi, 1999). Nor has he been favored with space in English-language profiles such as Boris Frankel's The Post-Industrial Utopians (Frankel, 1987). Yet that is precisely what Masuda was: a post-industrial, information-society utopian. His work may not have met the stern entrance-requirements of academic economics or sociology, but he was nevertheless an important interdisciplinary explorer ranging across those fields and others, and one who understood far better than most the potential for good of the paradigm shift brought by informatization. He made it his business to articulate and disseminate a computer-enabled social ideal, "a vision of an information Utopia" (Morris-Suzuki, 1988: 18). Rather like Alvin Toffler in the United States, Masuda was a futuristic thinker operating self-consciously on an epic scale, and one confident enough in his own ideas to want to directly influence government policy; not just to interpret the world but to change it. We will flesh out his vision shortly, but first it is necessary to prepare the way by securing the parameters of realistic utopianism.

Realistic Utopianism

At its best, utopianism performs two useful roles. It throws into relief what is wrong with the status quo; and it can also constitute a "road map" to guide societal reform in the near or distant future. Utopianism is good at doing both because it offers a more or less complete description of an alternative society. It provides a "total, global" view instead of the "more partial, schematic views proffered by political theory" (Goodwin & Taylor, 1982: 207); not just a set of moral and political principles, valuable though these are, but also an "instantiation" of them, detailing how they might play out in practice (Stillman, 2000: 12). By the same token, however, if utopianism is fantastical, it is doubly pernicious, both causing unfair criticism of present society and leading politicians to pursue futile policies. What is needed, then, is not an unworkable template which can only confuse and mislead, but one which is actually attainable. That is what *realistic* utopianism is all about.

As intimated already, there has been a ferment of recent activity broadly serving to rehabilitate utopianism by shaping it into realistic forms. We wish to rescue Masuda's vision of computopia by demonstrating that it too can be embraced as realistic utopianism. Our objective now is to ascertain the conditions of realistic utopianism laid down in the work of one leading exponent, John Rawls. The justification for this selection is Rawls's standing as one of the definitive political thinkers of the twentieth century. At any rate, such has long been majority opinion among western philosophers. In *Anarchy, State and Utopia*, for example, Robert Nozick bluntly advised that "political philosophers now must either work within

Rawls's theory or explain why not" (Nozick, 1974: 183). This is a high bar: Masuda was not a professional philosopher any more than he was an economist or sociologist, but our premise is that if his position can meet Rawlsian standards, then it may fairly be considered viable.

In his monumental *A Theory of Justice* (Rawls, 1971), Rawls developed a highly original and influential version of the liberal ideal of the social contract. Deducing a set of fundamental principles of justice, he proceeded to describe a range of social institutions capable of instantiating those principles. The theory built thereby a detailed model of an ideal society, but its design also took into consideration the "circumstances of justice," i.e. the realities of social life, both physical and psychological (Rawls, 1971: 128). In *Justice as Fairness: A Restatement*, Rawls confirmed his understanding of political philosophy as "realistically utopian: that is, as probing the limits of practicable political possibility" (Rawls, 2001: 4). Relevant materials can also be found in his *Law of Peoples* and other later works (Rawls, 1999). Our exposition will now paraphrase the whole oeuvre; for we accede to commentator Samuel Freeman's ruling that "all along he [Rawls] has sought to work out a realistic ideal of justice (a 'realistic utopia')" (Freeman, 2003: 2).

There are three main conditions for a Rawlsian realistic utopia. The first is moderate scarcity. That is to say, while it is not necessary to assume a catastrophic level of scarcity of resources, such as famine conditions, one must build societal models in which there is potential competition for at least some key resources. The rationale for this stipulation is obvious: the natural world is no longer an Eden of effortless plenty, and to theorize as though it were is folly. Utopias such as Charles Fourier's, where the sun is always shining and the oceans turn to lemonade, are thus immediately disqualified (Taylor, 1982: 100).

The second condition is similar, except that it refers to the human world. Rawls argued that we must also assume limited altruism. While rejecting the doctrine of total depravity, the claim that human beings are wholly selfish, the light of reason extinguished, Rawls repudiated at the same time social visions predicated on the opposite error: the dogma that everyone can be transformed into utterly selfless, angelic beings. Under no conceivable circumstances, the second condition stipulates, will that happen—thus also ruling out utopians, such as Owen, who held all evil to be socially determined (Taylor, 1982: 200). Instead, according to Rawls, we must work with the actual stuff of humanity, often self-seeking, sometimes downright predatory, but possessed withal of moral personality and a sense of justice.

To qualify, finally, as a realistic utopia, models must assume the fact of reasonable pluralism. It is a permanent feature, Rawls said, of mature societies that equally rational and reasonable people subscribe to widely divergent worldviews. Some thinking people are religious fundamentalists—of mutually incompatible kinds—others atheists or humanists or whatever. This reality needs to be factored

into all utopianism. It does not entail, however, that social cohesion and a just society are impossible. It is reasonable to plan on the premise that people can find common ground about the basic rules of social cooperation, that they can despite their personal worldviews share broadly the same civic and political values. The possibility of this overlapping consensus makes political idealism possible. However, the fact of reasonable pluralism annuls a great proportion of the classical utopian tradition, where, as in George Bellamy's *Looking Backward* (Bellamy, 1897), ideological conformity is assumed. Such visions are unrealistic, not to mention totalitarian. Utopianism—all idealism—must talk in terms of an *achievable* social world.

Rawls's realistic utopianism thus represents a judicious combination of realism and utopianism. We can agree with Benjamin McKean that "utopian thinking can and should aim at developing orientations that both facilitate a realistic power analysis of existing institutions and attend to the utopian paths made possible by those institutions' partial and deeply imperfect instantiations of values like equality, freedom, and human rights" (McKean, 2016: 887). "If political thinking and political action are to be productively linked," he correctly infers, "both realism and utopia are essential today" (McKean, 2016: 887). However, McKean himself refuses blueprints, plans or anything more content-heavy than "orientations." Such a restriction is too pessimistic, and hardly true to utopianism, which since More has always sought to spell out its visions. We will now demonstrate that Masuda's technological utopianism specified a set of concrete institutions as being constitutive of a future good society. And we will try to show that its key characteristics are both More-utopian and Rawls-realistic, or at least that they can be reconstructed to become so.

Key Characteristics of Computopia

"The information society," Masuda declares on the opening page of *The Information Society as Post-Industrial Society*, "will be a new type of human society, completely different from the present industrial society. Unlike the vague term 'post-industrial society,' the term 'information society' as used here will describe in concrete terms the characteristics and the structure of this future society" (Masuda, 1990a: 3). From the start, then, Masuda's vision of the future appears designed to provoke the usual utophobic reactions. Once properly unpacked, however, it turns out to be surprisingly sober. As will be seen, Masuda's ideas are not necessarily unique and some of them now need adjustment or further development, but they are basically very good ideas; and together they yield a compelling and serviceable synthesis. The following account departs, therefore, from the sceptical readings of Masuda prevalent in English-language scholarship (e.g. Bryant, 1988; May, 2002; Morris-Suzuki, 1988). It is based mainly on the 1990

edition of *The Information Society as Post-Industrial Society*, which went out under the very different title, *Managing in the Information Society: Releasing Synergy Japanese Style* (Masuda, 1990a). Since we do not rate Masuda's claims about "synergy," we will retain the original title. The key characteristics of computopia will be taken one by one.

1. Comprehensive Computerization

Comprehensive computerization is the cornerstone upon which future society will be constructed. Industrial society, Masuda explains, was powered by steam engines, its technology geared to amplifying and substituting for human physical strength. "In the information society," on the other hand, "computer technology" will be the innovational technology that will constitute the developmental core, and its fundamental function will be to *substitute and amplify the mental labour of man*"; the computer, he continues, will "make possible *the mass production of cognitive, systematized information, technology and knowledge*" (Masuda, 1990a: 4, italics in original).

Computerization will be an evolutionary process, beginning with mainframe computers confined to large organizations, and culminating eventually in personal computers in the home, interconnected by telecommunications. This was a prophetic view. Opining at the same time, Ken Olsen, founder of Digital Equipment Corporation, famously saw "no reason anyone would want a computer in their home" (cited in Strohmeyer, 2008). The fact that Masuda was accurate about this particular technological trajectory should elicit a measure of confidence in his other predictions. As Takehiko Daikoku points out, whatever one's evaluation of Masuda as a scholar might be, nobody can deny his remarkable "senken no mei," that is, his ability to accurately foresee the future (Daikoku, 2010: 8). Of course, mobile handsets have now largely replaced home computers, but no prophet is perfect.

It is that final stage of personal computing that Masuda designates "computopia." A little further clarification is needed about the genesis of this word. Masuda claims that his book *Kompyutopia*, "published in Tokyo in 1966," invented the term (Masuda, 1981: 141). However, as far as we can ascertain, *Kompyutopia* was actually first published in May, 1967. If this is correct, then Masuda was narrowly beaten by the inaugural issue of a monthly magazine of the same title, published by the Computer Age Company in March, 1967 (it would run until November, 2005). To add an American twist to the tale, Rand economist Egon Neuberger had already deployed the term in an article "Libermanism, Computopia, and Visible Hand: The Question of Informational Efficiency," which appeared in early 1966 in the internationally circulated journal *American Economic Review* (Neuberger, 1966).

Nevertheless, as our biographical section indicated, Masuda may legitimately claim to have written the first actual book on computopia. Much more importantly,

he can be credited with the development and establishment of the concept. Neuberger used it only in a limited and negative sense, as a pejorative for the Soviet Union's ongoing attempts to execute a centralized, cybernetic approach to the economy. For Masuda, by contrast, computopia was a "hooray" word; it was the confident, colorful label of an economy, and also a polity and culture, destined to be far superior to those on show in both the communist and the capitalist poles. It is at least partly thanks to Masuda that the word *kompyutopia* has been included in most major Japanese dictionaries published during the past several decades, always with a positive meaning.

This is not to say that Masuda was blind to the potential dangers of comprehensive computerization. "*The computer as innovational technology is an ultimate science*," he asserted (Masuda, 1990a: 138), by which he meant that, like nuclear power, computers have the potential to either emancipate or eliminate the human race. In particular, he was aware of what has become the information society's principal threat, erosion of human privacy. Yet he speculated that in the none-too-distant future people will *want* to share most of their personal information, in order to create synergies and solve social problems. Thus he thought that the desire for privacy will eventually disappear; the world will undergo nothing less than "a Copernican turn in privacy" (Masuda, 1990a: 90-99; see also Masuda, 1976b). It was a striking projection, but one that subsequent events have already begun to vindicate. We have been duly notified by Facebook's co-founder that "privacy is no longer a social norm" (Johnson, 2010). Whether this is right or wrong is not the issue here: Masuda's point was that computerization would make it happen anyway. He was just being realistic.

2. Post-Materialism

Comprehensive computerization is the central material plank of Masuda's platform. Equally fundamental to computopia, however, is a post-materialism that sets it apart from industrial society. "The production of information values and not material values will be the driving force behind the formation and development of society," he states (Masuda, 1990a: 3). Post-materialism involves a *psychic* paradigm shift, a graduation to a higher stage of civilization, where people become more interested in developing their mental capacities than in consuming physical products. This is not to say that industrial production will have ceased; it still goes on, but productivity will be high enough to provide for everyone, so people will be able to turn away from a preoccupation with material values. We will engage in intellectual and artistic pursuits, cultivate our talents, build up our knowledge, converse with one another; and we will thereby achieve "self-actualization" (Masuda, 1990a: 8).

Declining materialism is a classic utopian goal. It runs through most of the utopian socialists, such as Fourier and Owen. It is visible also in the picture of future society sketched by Marx and Engels, themselves so critical of other utopian socialists. It is there too in progressive thinkers well outside the utopian and socialist traditions. For example, the British philosopher T.H. Green, writing in 1883 from a liberal and Christian orientation, believed that he was already observing the "gradual spiritualisation or dematerialisation" of people's conception of the good (Green, 1907: 290). Today, over a century later, this process has obviously not been completed, yet post-materialism is surely now, as a social ideal, mainstream. No one in 2019 in their right mind would deny that it is the general direction in which the world is, or at least should be, traveling. Even those who are suspicious of environmentalism grasp that current mindsets need to shift, extravagant lifestyles change, consumption decrease, if the planet is to flourish. Such is hardly utopianism in any preposterous sense; on the contrary, it is common sense.

Moreover, Masuda incorporates a hard proposal that makes his postmaterialism even more credible: population control. He was adamant that the then five-billion world population should not be allowed to increase (Masuda, 1990a: 128-129). When he was writing in the 1960s and 1970s, population control was a major theme on discussion and policy agendas, but it has since largely vanished; the very idea now appears to be judged "neo-Malthusian" or even "politically incorrect." However, just forty years after *The Information Society as Post-Industrial Society*, the real-world head count is already nearly eight billion, and it is projected to rise to eleven by the end of the century. By taking the position that population control is the sine qua non of the better world made possible by comprehensive computerization, Masuda at least showed himself Rawls-compliant as regards the moderate-scarcity stipulation.

Indeed, in this vital matter, Masuda was arguably rather more realistic than neoliberalism, the supposedly hard-headed economic philosophy that has done so much both to crush utopian aspirations and to let rip the population explosion. There might even be a case for refreshing today Masuda's bold call for the launch of a "zero population informational community" committed to a two-child-maximum for future families (Masuda, 1990a: 128). Rolled out across the world, such a norm could make more feasible the fulfilment of Adam Smith's "universal society of plenty" (cited in Masuda, 1990a: 131). At the very least, the population explosion desperately needs to be re-problematized from a moral and global point of view (e.g. Carter, 1999).

3. Information Utilities

Masuda understood that technology is only an instrumentality. His utopia is not really about computers or automation; it is about the information that machines process, and the human communication and development that good information can facilitate. A principal part of the furniture of computopia is therefore a new institution that he called the "information utility." The concept was a fairly familiar one at the time. William H. Dutton records that "visions of a public information utility were prominent in the late 1960s" (Dutton, 2013: 11). For example, Douglas Parkhill's influential *Challenge of the Computer Utility* was published in 1966 (Parkhill, 1966), and translated into Japanese in 1969. Masuda might have seen this edition, but in any case he had already himself floated the idea in *Kompyutopia*. Specifically, he predicted in that book the emergence of a "Japan Information Public Corporation" that would own and operate an "All-Japan Information Network System." This organization would be like an integration of NHK (Japan Broadcasting Corporation) and NTT (Japan Telegraph and Telephone Public Corporation), that is, a combination of state broadcaster and public telephone system (Masuda, 1967: 26-69).

In *The Information Society as Post-Industrial Society*, Masuda promotes the information utility as the core structure of post-industrial society. "In the information society," he writes, "*the information utility* (a computer-based public infrastructure), consisting of information networks and data banks, will replace the factory as *the societal symbol*, and become the production and distribution centre for information goods" (Masuda, 1990a: 4). "From these facilities," Masuda continues, "*anyone, anywhere, at any time, will be able easily, quickly and inexpensively to get any information which one requires*" (Masuda, 1990a: 53). Information utilities will eventually become global in scope, culminating in a network of national and regional facilities. The day will surely come, Masuda enthuses, when all the world's citizens will be able to access foreign news, comparative studies of income and pensions, pollution data, travel deals, and even to partake in international gameshows (Masuda, 1990a: 63).

As regards political economy, Masuda prescribes mixed ownership of the utilities, according to information type. Statistical and other categories of hard information should be the responsibility of the state. News-information and gaming can be privately owned. However, many utilities should be controlled directly by citizen groups (Masuda, 1990a: 59). The latter is the optimal form, since it is best suited to the nature of information itself, as a non-alienable, non-rivalrous and expansive substance; citizen management, Masuda deduces, "will raise the macro-cumulative effect of information utilities to the highest level" (Masuda, 1990a: 61; see also Masuda, 1975). At one point Masuda even asserts that "information utilities should be *completely controlled and managed autonomously by citizens*" (Masuda, 1990a: 96).

It is surprising and regrettable that, like population control, the information utility theme has subsequently lost so much ground. Instead we have gigantic information corporations, such as Google, Facebook and Twitter, barely dented by worthy but unpopular "open source" movements. Global information corporations were not foreseen by Masuda, nor anybody else, but it is unlikely that he would have endorsed them. They are not true information utilities in his sense. While admittedly accessible to many people nowadays, they are not reservoirs of pure information, they are not organized democratically, and they are hardly operated in the public interest. On the contrary, they are increasingly sources of misinformation and "fake news," not to mention other profound ethical shortcomings. There is thus still an urgent need for real information utilities, after the manner of tap-water or electricity, with quality assured, governance transparent, and availability guaranteed as a matter of social right. In this too, then, we hold that Masuda was a genuine prophet, and we are not alone (e.g. Kumon, 2011; Splichal, 2007). Collectivist approaches to infrastructure have proven far more durable than neoliberalism's fragile market solutions.

4. Time-Value

Masuda also had original and beneficial ideas about time and its relationship to human flourishing in an advanced information society. He argued that automation was bringing out the importance of time as a factor in production, enabling it to be more effectively utilized in vital processes, by means, for example, of proper forecasting. Even more importantly, he thought, informatization frees up leisure time. The prospect is exciting:

Possibly by the end of the first half of the twenty-first century we will be completely liberated from work for production, and necessary working hours will be greatly reduced. A four-day working week and a two-month annual vacation system, and even employment forms such as a system of six months work and six months free time will be widely established. (Masuda, 1990a: 153)

The lengthening of leisure time has as a matter of fact been central to progressive thought in many of its forms. A shorter working week was seized upon by Marx himself as the "basic prerequisite of the realm of freedom" (quoted in Dyer-Witheford, 1999: 194). Left-liberals such as John Stuart Mill also advocated it in the nineteenth century, as did John Maynard Keynes and other leading lights of the twentieth. However, Masuda brought something new. He realized that if the extension of leisure is to be an effective cause, slogans are not enough. So he outlined in addition a novel axiological doctrine, namely, "time-value," one that he propagated as nothing less than a replacement for the material values underpinning industrial society.

Time-value, Masuda explains, is "the value which man creates in the purposeful use of future time. Put in more picturesque terms, man designs a goal on the invisible canvas of his future, and goes on to attain it" (Masuda, 1990a: 49). Thus time released by automation will not be wasted but used for healthy private, communal, and public activities. "People," he wrote in a subsequent elaboration, "are placing more value on time than on objects, as their desire to consume and accumulate material goods is substantially satisfied"; and Japan, with its people's renowned longevity, presents a natural testbed for the new approach (Masuda, 1990b: 8). While Masuda only offered rudiments of a theory, we believe that the doctrine of timevalue is of tremendous significance; that if developed properly it can reorientate the whole direction of policy in post-industrial society, while still meeting the Rawlsian condition of moderate scarcity.

Time-value, Masuda saw, is part of the logic of informatization. Yet its essential promise has long been forgotten. The world has instead been racing in the opposite direction, toward more work and less leisure. For this Silicon Valley must bear a large share of the blame. Apple Computer staff were notorious in the early days for sporting T-shirts that read "Working 90 hours a week and loving it!" (Bregman, 2017: 141). Now the situation is even worse. For all their idealistic rhetoric, the leading web 2.0 corporations have by and large betrayed the information revolution, overworking their own docile staff while exporting to the rest of the world the technology and culture of 24/7/365, a formula invented for computer servers, not human beings (Duff, 2016).

Thankfully, some thinkers have been drawing attention to this problem. In treatises such as *Critique of Economic Reason*, for example, Andre Gorz insisted that post-industrial utopia should be based on the reduction of work in its paid form, with a correlative increase in free time (Gorz, 1989). More recently, Srnicek and Williams's *Inventing the Future: Postcapitalism and a World without Work* makes a similar case (Srnicek & Williams, 2015). It should be noted that Masuda himself was not demanding work's total abolition. He sensed (as Sigmund Freud had proven) that most people cannot be happy without some work (and love). But the situation today is that there is simply too much work for many people, a crisis that ICT makes completely avoidable. Time-value—recasting leisure as a positive social value—is the only permanent antidote. And it must go far beyond contemporary Silicon Valley "tech humanism," such as Zuckerberg's belated admission that Facebook should concentrate on "time well spent" instead of maximizing user time on the platform (Tarnoff, 2018: 10).

5. Voluntary Communities

We move now to two other prescriptions for computopia which, while also broadly correct, need adjustment if they are to pass the test of realistic utopianism. "In the information society," according to Masuda, "the most important subject of social activity will be *the voluntary community*, a socio-economic group that can be broadly divided into local communities and informational communities" (Masuda, 1990a: 5). These include civic associations, such as neighbours clubbing together to build cycle paths, as well as permanent communities of like-minded persons living together. He envisages massive voluntary contributions to traditional public utilities, such as schools, with only part of the resources provided by the state. However, what is really innovative about computopia is that many communities will not be face-toface. Computer networks will allow people with common ideas and goals to cooperate across long distances, even globally, and such informational communities will become highly influential in shaping culture and policy at all levels.

To his credit, then, Masuda was clearly anticipating digital social networks; he was forecasting nothing less than the rise of our "network society." As Manuel Castells has since definitively rendered it, network society features a surge of grassroots social movements, pursuing everything from environmentalism and feminism to ethnic nationalism and religious fundamentalism, operating both offline and online, but increasingly the latter (Castells, 2000). This process is now well-advanced. Indeed, digital social networks are without question the hallmark of our era.

The voluntary principle has always been a staple of utopianism. It was there in most of the nineteenth-century masters, for example in Owen's experiment in New Lanark, Scotland, and in Marxism's expectation of the withering away of the state; Japan witnessed a similar effort called the Atarashiki-mura (New Village) Project, launched in 1918. Voluntarism is an important and laudable principle, but it must stay within the confines of realistic utopianism. This is not to say that it is not the general direction in which society should, and under favorable conditions will, move. It is only to acknowledge that any future society must be built securely on the principle of limited altruism.

Masuda himself criticized the "hippie" communes of his own day for being impractical, but he argued that this was because they went against the competitive grain of industrialism, whereas his own scheme should work because post-industrial conditions will be different (Masuda, 1990a: 124). However, while people might indeed become more inclined to combine with others to promote the common good, and to do their civic duty less from compulsion and more from community spirit, the underlying necessity for an extensive public authority will not necessarily thereby cease. This element of Masuda's idealism should therefore be welcomed, while being treated with some caution.

6. Globalism: A Cosmopolitan Consciousness

Finally, there is the question of the philosophical basis of this better world. *Kompyutopia* (Masuda, 1967) sidestepped the issue. However, by the time of *Information Society as Post-Industrial Society* Masuda was ready with a complete answer, namely, the "rebirth of theological synergism," that is, propagation of a new religion of globalism, with humanity and nature at its center (Masuda, 1990a: 130). Although he is vague about details, what he—perhaps influenced by the Japanese tradition of Shintoism—seems to have been envisaging was a new form of pantheism. It is emphatically not any kind of supernaturalism or fundamentalism. "God," we are informed, "does not refer to a god in the remote heavens; it [*sic*, although the word might equally have been translated 'him' or 'her'] refers to nature with which we live our daily lives" (Masuda, 1990a: 140). Masuda's rationale is

obvious: if humankind drops divisive religious beliefs and instead signs up en masse to a broad and not very religiously-demanding doctrine of planetary harmony, the future of all of us will be bright. "This [theological synergism]," he announces, "can be called the ultimate goal of Computopia" (Masuda, 1990a: 139).

Masuda was both right and wrong on this most momentous of questions. He was right that there needs to be a universal conception of right to sustain civilized behavior in a globally connected information society. He was also correct to see religion having a strong future in the new millennium, and to claim that it will remain as a prime source of moral values. Bell was simultaneously making a comparable case for the "return of the sacred" as a central feature of post-industrial society (Bell, 1977). However, Masuda was mistaken in promoting a single set of beliefs, no matter how well-meaning and content-light. He does not appear to have fully grasped the fact of reasonable pluralism. There is a better way: as noted above, Rawls's realistic utopianism registered the inevitable survival of diverse belief systems, while also explaining how these can all coexist through an overlapping consensus around such core values as reciprocity, the rule of law, and human rights.

ICT entails that we will regard ourselves more and more as members of a great cosmopolis, but the path to this destiny will never be through uniformity. In Wells's *Modern Utopia* (Wells, 1905), one of the main characters protests that nowhere could ever be a utopia for him in the absence of dogs. But for others, of course, omnipresent cats or performing seals would be far more congenial. The serious point is that Christians and Muslims, Jews and Shintoists, humanists and atheists will always entertain radically different ideas of a perfect society. The implication for progressive thinking is unavoidable. The twenty-first century information society must be designed around a social framework permitting all religions and none to be freely practised, across innumerable voluntary communities, public authorities and probably even nation-states, yet held together by a shared civic consciousness anchored in the concept of right. That, we believe, is well within the capability of "homo intelligens" (Masuda, 1985). At any rate, it is the only realistic *postmodern* utopia.

Conclusion

We have argued that the Japanese thinker Yoneji Masuda was a bona fide visionary who outlined what is in essence an achievable social world, a "realistic utopianism" in Rawls's strict sense. Masuda's work, especially his magnum opus, *The Information Society as Post-Industrial Society*, has been shown to contain prescient and important ideas, the lineaments of an information-communication social ideal. Some of them now need development or adjustment. However, broadly speaking, they all remain sound propositions. The future will be comprehensively computerized, that we know, and the human requirements of the nascent global

information society are precisely what Masuda enthused about: post-materialism, information utilities, voluntary communities, time-value, and a global civic consciousness. Each of these goals is highly desirable in its own right, and could and should be sought independently. When packaged together, they display, in glorious technicolor (as it were), what the pursuit of the good society means in the twenty-first century. Why *not* call it computopia?

NOTES

- 1. This work attracted international attention and was quickly republished by the World Future Institute in the United States (Masuda, 1981); a second edition with a new final chapter was issued a decade after the first (Masuda, 1990a). The book was published in numerous languages, although, somewhat ironically, it did not become available in Japanese until 1985, in a translation from the 1980 English version.
- 2. 1972 is the publication year of the Japanese original and 1973 is its English translation.
- 3. 1978 is the publication year of the French original and 1980 is its Japanese translation.
- 4. Ithiel de Sola Pool, a renowned American political scientist, joined this conference and learned about the Japanese "information flow census." He used the method and quantified the amount of information flows in the United States and Japan. The result was published not only as a book (Pool, Inose, Takasaki & Hurwitz, 1984 but also as an article in Science (Pool, 1983).
- 5.2001 is the publication year of the French original and 2013 is its Japanese translation.

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