

Future Workshops as Postdigital Research Method

Juha Suoranta, Tampere University, Tampere, Finland, ORCID <https://orcid.org/0000-0002-5206-0115>, juha.suoranta@tuni.fi, & Marko Teräs, Tampere University, Tampere, Finland, <https://orcid.org/0000-0002-6888-969X>, marko.teras@tuni.fi

Abstract

After the Second World War, many social critics thought technology had taken over all forms of modern thought and activity. To these thinkers, the arms industry, the cold war, nuclear threat, atomic science, overpopulation, lonely crowds, computing, famine, and ecological catastrophe were signs of technological determinism. The critics were utterly worried about the state of democracy in a technological world. The postdigital era faces similar challenges and even more pressing problems with the progress and inventions in digitalization. German-born Robert Jungk and Norbert Müllert addressed these problems from the 1960s onwards and wanted to search for solutions to technological determinism. Their answer was to invent a future workshop method that allowed ordinary people to participate in imagining the future and solve small and large-scale social problems. This chapter describes the future workshop as a viable postdigital research method that allows scholars methodological experimentation and switch from what is to what is not yet, but what could be.

Keywords: future workshop, imagination, postdigital research, Robert Jungk, social science, qualitative methods, technological determinism

World Gone Mad

After the Second World War, a diverse and unrelated group of social scientists and philosophers noticed that technological advantages did not serve the good life of all people. Quite the reverse. In the 1930s and 1940s, critical theorists of the Frankfurt School described the flipside of modern progress leading to human alienation, loss of agency, and eventual submission to authoritarianism. Thinkers as diverse as Martin Heidegger, Herbert Marcuse, Jacques Ellul, Lewis Mumford, Hannah Arendt – and even Marshall McLuhan – were sceptical of the possibilities of technological ‘solutions’ to the problems of the post-war world (see Andersson 2018; Feenberg 1999; 2002; Kaiserfeld 2015; Winner 1978). In their view, technology dominated all forms of modern thought and activity.

John Kenneth Galbraith, the leading economist of his time, stated ‘that we are becoming the servants in thought, as in action, of the machine we have created to serve us’ (1972: 27). The postdigital era faces similar challenges and even more pressing problems with the advancements of digitalization, such as digital surveillance and algorithmic control affecting different areas of life, from military and war to health care, democracy, and education (Aitken 2021; Jandrić 2022; Knox 2019; Lacković 2021; Mirrlees 2009).

Sociologist C. Wright Mills was among the critics of modern industrial technostructure and social engineering. In his 1950s book, *The Power Elite* (2000a), Mills analysed how ordinary people were catapulted into the modern era without the possibility of making up their minds. They had to adapt to the ready-made social conditions and learn to behave as ‘cheerful robots’. There was, however, a group that made big decisions and changed the world: the power elite.

Many other thinkers thought the idea of a technology-driven future had become hollow. In Andersson’s words (2018: 1), the views of the future ‘born in an interwar romance with machines, science, and technology had developed into the ideology of totalitarianism, the totalizing nature of which lay precisely in its grasp on the human future’. To these thinkers, the arms industry, the cold war, nuclear threat, atomic science, overpopulation, lonely crowds, computing, famine, and ecological catastrophe were signs of technological determinism that

eventually led to the extinction of the human species and the end of the world. The critics were utterly worried about the state of democracy as a method of political governance, deliberation, and a way of life.

German-born Robert Jungk, a pioneer of future studies, and his colleague Norbert Müllert, addressed these problems from the 1960s onward. They wanted to search for solutions to technological modernity's blind alleys and claimed that technologically advanced societies suffer not only information and power privileges but also imaginative and planning privileges (Jungk and Müllert 1987). Like Mills, they thought those privileges were owned and availed of by the influential political and business elite with the help of an expert army. The elite is small in numbers but makes far-reaching decisions for the people's majority.

Therefore, Jungk and Müllert (1987) stressed the essential role of ordinary people's creative imagination in creating a sustainable future democracy. At that time, it was generally believed that, as Andersson (2018: 159) puts it, 'art, phantasy, and imagination could bring about a new 'state of mind' capable of conjuring a different future'. The North American pragmatist John Dewey had already earlier developed these same ideas of living and participatory democracy. His philosophy emphasized democracy as a radical way of life (Putnam and Putnam 2017). In 1939, Dewey stated that democracy is more than a fossilized system or automatic political mechanism. It is 'a way of personal life controlled not merely by faith in human nature in general but by faith in the capacity of human beings for intelligent judgment and action if proper conditions are furnished' (Dewey 1988: 228).

Dewey also pointed out that, fundamentally, democracy 'springs from a living faith in our common human nature and in the power of voluntary action based upon public collective intelligence' (Dewey 1987: 300). In sum, Deweyan idea of democracy is 'a never-ending process where the conditions for democracy have continuously to be exercised and refined' (Bartenberger 2015: 5; see also Eskelinen 2020).

These are the foundations of the democratic belief that we should consider in looking for those research methods and methodologies that respect social scientists' and ordinary people's wit, abilities, and imaginations to provide solutions to small and large-scale social problems.

Towards Imaginative Methodologies

Unfortunately, the capitalist university and its neoliberal management have forced many social scientists into the role of reliable producers who deliver education and knowledge, whereas ordinary people have adopted the positions of cheerful consumerists and passive recipients of higher commands. Social scientists feel that the university administration no longer treats them as critical and creative world-makers who contribute to changing the world using their imagination, as Jungk and Müllert (1987) hoped they would. Instead, they feel that they operate only as extensions of a global business elite and the rule of money that emphasizes technical rationality and favors quick research outputs (Back and Puwar 2012b) in the name of global competitiveness in the knowledge economy (Poutanen 2022). In this respect, in the last few decades, universities have not been the best places for using imagination.

Under the circumstances, it has been possible to forget, as Graeber (2010: 47) put it, that the world 'is something that we make, and could just as easily make differently' and by using the human imagination, we can find alternatives to how things are and how to change them. Still, many scholars would like to be ethically engaged, to represent people's lived experiences, and their problems and to make them public issues – to act as public sociologists (Burawoy 2005; Brewer 2013) and follow Mills' (2000a: 6) maxim 'to grasp history and biography and the relations between the two within society'.

Imagination is a human characteristic that even dire social conditions cannot destroy entirely (Graeber 2015). As an individual capacity and collaborative tool to plan and foresee,

imagination is necessary for grasping history and biography and their oft-complicated relations. For the social sciences, the original idea for what the imagination is, or can be understood as, came from Marx (1887: 127), who wrote that ‘what distinguishes the worst architect from the best of bees is this, that the architect raises his structure in imagination before he erects it in reality’. Naturally, we cannot thoroughly know how bees construct architecture in imagination. Still, we know we can foresight our plans and actions as human beings.

For their part, Jungk and Müllert (1987) argued that imagination is humanity’s most untapped energy source. Yet, technological society and educational institutions restrict the scope for imagination and hope and replace them with consumerism. Imagining the future appears reserved for the well-off and well-educated who have access to resources and opportunities to explore their imagination. To ordinary citizens, the elite’s technologically managed society seems openly hostile: they are not allowed to use their capacity to imagine and voice their hopes and dreams. Jungk and Müllert aspired to change that with their method of future workshops.

A prominent proponent of imagination’s power in the social sciences was C. Wright Mills, who believed that imagination is a quality of mind needed by researchers (Mills 2000a). Along with Mills, many other social theorists and philosophers have applied and developed the concept and the use of imagination (e.g., Appadurai 2000; Bloch 1995; Castoriadis 1987; Eskola 1987; Freire 2005; Fromm 1968; Graeber 2007; Jandrić and McLaren 2020; Mills 2000; Rorty 1999; Stetsenko 2020). There has also been a growing movement in developing imaginative and creative methodologies (see, e.g., Back and Puwar 2012a; Gergen and Gergen 2012; Jacobsen et al. 2016; Elliott and Culhane 2017; Kara 2015; Lackey 1994; Ross 2023).

The common feature in these methodological developments has been a search for new ways to approach changing social reality. The authors have claimed that traditional methods cannot capture the new multiple worlds. Social scientists must reach beyond their disciplinary boundaries and find creative branches of social investigations. In addition, they need to invent methodological practices to replace the old ones. As Gergen puts it,

in a world of rapid and unpredictable flux, the focus on what is the case has limited potential. The challenge is that of rapidly synthesizing multiple sources of information, and moving improvisationally in a context of ambiguity. Required is a more fully developed account of education as a continuous enrichment in capacities for skillful innovation, not in the service of adaptation, but in terms of bringing about a viable future. (Gergen 2015: 14)

These developments are part of the methodological continuum from Mills and the 1960s critical wildcat sociology. Through various methodological turns such as discursive-linguistic-rhetorical, pragmatic-critical, and participatory-action, the social sciences have entered the current era, which Lincoln and Denzin (2005) describe as fragmented. Lincoln and Denzin also predicted that social scientists would divide into two ‘tribes’ regarding research methodologies. One tribe will conduct its research with quasi-experimental setups and sophisticated statistical analysis. The other tribe will pursue ‘a socially and culturally responsive, communitarian, justice-oriented set of studies’ (Lincoln and Denzin 2005: 1123).

In the latter tribe’s work, as Alvesson (2013: ix–x) has argued, social critique and critical insights are among the most valuable contributions, ‘in particular when problems are deeply embedded in culture, and there are no easy policy or technical fixes’. Therefore, there is a critical edge in justice-oriented social research that calls to ‘change the world and to change it in ways that resist injustice while celebrating freedom and full, inclusive, participatory democracy’ (Denzin 2017: 9).

As we write this chapter in late 2022, fragmentation seems to be amplified even more. The profit-making, speeded-up competitive university demands fast-track publishing using statistics and mainstreamed publishing standards. On the other hand, there are pockets of methodological resistance, where scholars develop inventive ways to study social reality in its diversity (Denzin and Giardina 2022). In the task of methodological invention, it might be helpful to think as Robert Nisbet, who suggested long ago that social sciences arise from ‘precisely the same kinds of creative imagination which are to be found in such areas as music, painting, poetry, the novel, and drama’ (Nisbet 1976: 9).

In what follows, we join Lincoln and Denzin’s (2005) latter tribe by emphasizing the need to develop new research methods, especially *research collaboration with the people* that fit the experimental postdigital research agenda. In this task, the concepts of sociological and methodological imagination are fundamental. We are convinced that the social scientist of the future will find the real Holy Grail of their work in collaboration with various groups of people. Thus, in collaborative social research, we need to join with those people’s experiences, conceptions, and reflections who make and remake everyday postdigital worlds.

In various postdigital practices, e.g., in the digitalization of higher education (Ball and Savin-Baden 2022; Lamb et al. 2022), digitalization can be taken for granted. Higher education management may assume that digital tools are necessary without further inspection, requesting employees’ approval, or engaging their experience. Similar to the remarks by Jüngk and Müllert (1987) on the rising wave of information technology, today’s technological experts tend to ignore people who use digital technologies. It is as if digitalization would be a wonder cure that somehow works outside people’s social milieu or the social construction of their work culture.

Therefore, in what follows, we introduce a method called *Future Workshops* as an appropriate means for imaginative and collaborative social research, or what Paavola and Hakkarainen (2005) have termed ‘knowledge-creating learning’. The focus is not on individuals or their interaction but on their collaboration and development of mediating objects and artifacts and generating new ideas and insights. In the latter respect, the method of future workshops shares the aim of democratization of social research (Edwards and Brannelly 2017).

Future Workshop, or ‘Turning the Affected into the Involved’

In this section, we will introduce the intellectual roots of the future workshops as a postdigital research method that ‘can turn the affected into the involved’, as the founder of the approach, Robert Jungk, called it (Spielmann n.d.). Jungk introduced the method in *Zukunftswerkstätten* (1981), which he co-authored with Norbert Müllert. A few years later, the book was translated into English as *Future Workshops* (1987).

During his life, Robert Jungk experienced much of the period Eric Hobsbawm (1994) named the Age of Extremes.

When Hitler came to power Bob Jungk was a nineteen-year-old student in Berlin. Following the Reichstag fire he was arrested for anti-Nazi activities and deprived of his citizenship. With luck and the help of friends he was released, went to the Sorbonne in Paris, but later returned illegally to Germany to work for a subversive press-service. Before long he was forced to flee to Czechoslovakia. The fall of Prague took him to Paris and the fall of Paris to Switzerland. Even here he was again jailed for his outspoken condemnation of the Nazis. After the war he returned to Germany, took a degree at Zurich and travelled widely. (Slaughter 2010)

Jungk’s adversities in Nazi Germany taught him to fight against oppression, the arms race, and the use of advanced technology in the arms and nuclear industry. He published books on the

dangers of nuclear armament, atomic science, and the possibilities of peace (Jungk 1954, 1958, 1976, 1979); was active in the international anti-nuclear weapons campaign, and eventually became an icon of the West European peace movement (Nehring 2004; Andersson 2012, 2018). Jungk feared that the US-led military-industrial complex would create a monstrous future dominated by technology, eventually leading to omnicide.

Jungk was not alone in his fear. The political philosopher Hannah Arendt suspected in her 1958 book *The Human Condition* whether technology and ‘machines still serve the world and its things, or if, on the contrary, they and the automatic motion of their processes have begun to rule and even destroy the world and things’ (Arendt 1998: 151). Andersson summarizes Arendt’s thinking as follows:

This empty future was the starkest sign, to Arendt, of a pervasive crisis of Man. In its magnanimous belief in science and technology, humanity had replaced all eschatological and moral notions with the totalizing idea of constant progress. In such a futuristic world, no future was possible ... humanity existed in a void. This void was a gulf created by two opposing forces: on the one hand, the extension of the reach of instrumentalist human rationality, and on the other, the diminishing moral capacities of human beings to control their actions over time. (Andersson 2018: 1, 30)

Perhaps humanity stood on the brink of an abyss. Nevertheless, Jungk wanted to find a way to activate people to imagine an alternative future for atomic warfare and nuclear catastrophe and found inspiration in two separate sources.

First, for ideas of democratic participation and non-hierarchical and collective decision-making that did not reflect the power elite’s repressive and mind-numbing methods, Jungk drew from anarchist socialist groups he had worked with as a filmmaker during the Spanish Civil War. These ideas also included the importance of critique (thus, the method consists of a critical phase). Secondly, Jungk had come across Alex Osborne’s work on creative problem-solving. Osborne had invented a well-known brainstorming technique from which Jungk developed another phase for the future workshop, namely the fantasy phase. In this phase, Jungk assumed, it was possible to activate people’s intuition and find their synergies and critical potentials to generate alternatives (Vidal 2005: 3).

Jungk thought that future workshops could counter the catastrophic politics of the power elite and the military-industrial complex: ‘they would evoke peoples’ self-confidence and create a source for the support of citizens’ initiatives, actions, and broad involvement in the transformation of society’ (Robert-Jungk-Bibliothek für Zukunftsfragen 2022). Jungk had a keen interest in futurology and developed his idea in the radical atmosphere of the 1960s.

The radicalized climate had an impact on futurology which took the form of a humanist critique of modernity and of the existing technological-economic basis of futurology. The critique was based on the social sciences, philosophy, and history, and

it contained a strong critique of the prevalent concept of progress and of historicist narratives of change as a linear development over time. Instead, it emphasized the question of choice and change. ... The technologies and methods of futurology, and its bias towards industrial and military interests, were accused of anti-democratic tendencies, technological determinism, and the unproblematized extrapolation of trends from present conditions. Its dystopic elements were said to create self-fulfilling prophecies and feelings of helplessness by presenting the future as a paved road to destruction. (Andersson 2006: 281)

The method of the future workshops belongs to the family of methods that cherishes human imagination, people's togetherness, and the idea of collective world-making. It has a family resemblance with Freirean pedagogy of the oppressed (Freire 2005), participatory action research (Kemmis et al. 2014), C. Wright Mills's critical sociology (Mills 1959/2000), Fromm's sociological and sociopsychological analysis (Fromm 1968, 1994; see also Fuchs 2020), and other critical theorists of the Frankfurt School. It has been used in various academic fields such as adult education and training (Nielsen et al. 1996), peacebuilding (Boulding 1988, 2000), computer science and system design (Kensing and Halskov Madsen 1991; Kensing 1987), future studies (Inayatullah 2013), and youth studies (Alminde and Warming 2020).

The future workshop allows participants to unleash their imagination and create possible future scenarios concerning any area of their life; that is, to construct, in the imagination, a model or blueprint of their lives or some aspect of it. Ideally, it can open eyes to 'the real possibilities we have in this world, but which can only be foreseen by the power of imagination and be carried into effect through action' (Eskola 1988: 256–261).

The future workshops in the 1950s aimed to activate ordinary citizens to critique prevailing societal conditions and to plan suggestions for a desirable future (Jungk and Müllert 1987). Hence, the workshops were about promoting and reviving grassroots democracy, inspiring people for social innovations, and making political initiatives instead of submitting to experts' and politicians' decisions. Jungk and Müllert (1987) meant the future workshops to battle alienation and restore hope and human agency. Furthermore, one of the critical aims was to encourage those who do not have the language to speak about the theme at hand.

The first documented workshop was held at a music festival in Klagenfurt, and concerned how music could be given a transformative role in capitalist society. From 1968 on, Jungk held workshops with his protesting students in the sit-ins at Freie Universität in Berlin, and Zukunftswerkstätten then became a veritable social movement of their own in Austria and Germany, as Jungk led workshops for employees of large companies, habitants of areas targeted by urban regeneration, hospital patients, etc. From the 1970s on, Jungk clearly thought that he had invented a technology that could solve key problems of participatory democracy and visited not only RAND, but also the research department at IBM in order to tie the future workshop to emerging information communication technologies. (Andersson 2018: 180–181.)¹

Among other early examples are workshops in Nordrhein-Westfalen, Germany, in which some 500 people participated to pursue ideas for the design of human-friendly information and communication technologies (Vidal 2005: 3).

Jungk's thinking highlighted his general care for the future world. Jungk was confident that everyone could contribute to the future's democratization. It was not enough to only leave the world's future to the experts and policymakers; Jungk believed that every person could be part of co-creating the future. Other cornerstones of democracy were social criticism and public debate; only they could guarantee a healthy social environment for all and formation of lively togetherness (Spielmann, n.d.).

Jungk criticized the power of the scientific and military complex and its technological utopias, particularly in nuclear- and biotechnology. In his evaluation, they limit people's self-determination and cause a significant threat to the future of humankind and the planet. Therefore, independent media, scientific research, and well-informed citizens should offer

¹ RAND is an American nonprofit global policy think tank created in 1948 by Douglas Aircraft Company to offer research and analysis to the United States Armed Forces. See <https://www.rand.org/>. Accessed 22 November 2022.

countermeasures. They should control technological apparatus and contribute to serving the interests of the powerless and the oppressed (Spielmann, n.d.).

Jungk was also committed to saving the Earth as a living planet. He believed that the solution was not technological but social. People needed places to use their social imagination and creativity to develop sustainable living conditions. New informal and social cooperation methods in living, culture, work and leisure should develop and improve in dialogues and Future Workshops. Artists had a unique role in these creative processes, but Jungk thought every adult possessed creative potential. The future workshops were a method to awaken this potential (Spielmann, n.d.).

The method of future workshops combines people's creativity with future research for emancipatory aims. The method connects to futurology, which already lends a specific ethical stance to it, i.e., the purpose of removing war, hunger, and exploitation of humans and nature from the world. The basic argument is that the future is not a prediction question but of making. Therefore, future workshops are also about inducing hope and are part of utopian objectives and methods (e.g., Bloch 2000; Levitas 2013).

Jungk and Müllert (1987) summarize the main problem with experts' visioning of the future: projects that concern people's future do not engage people in the actual planning of their future. Still, people are told about their future when the plans are already underway, or experts can hear them. Information technologies are a case in point. They appear in organizations like ghost ships from the fog, without one or only a few knowing where they come from and why. Still, people have to deal with them and submit to their use.

As Jungk and Müllert (1987) write, the people affected by these decisions are usually only involved after politicians have already made the decision and when it is too late to affect the course of action or invent alternatives. The majority's role is to react to reforms and innovations, but they are not part of preparing them. As such, what was just one possibility yesterday, is a necessity today. Therefore, those excluded from initial planning processes must develop futures that can compete with or at least contrast the dominant future visions.

The Method of Future Workshop

In its basic form, the future workshop has four phases (Jungk and Müllert 1987; Kensing and Halskov Madsen 1991; Lauttamäki 2014): *preparation*, *critique*, *fantasy*, and *implementation*. The object of future workshops is usually a shared question or a problem. However, no one should decide on the theme in advance, for it is the participants' task to discuss and choose it. The world is increasingly global, and those forces affect local contexts. Still, future workshops are usually used 'by local groups to deal with local problems and find alternative solutions to the one proposed by the establishment' (Vidal 2005). These are more concrete and can set free social imagination to develop alternative local futures.

The preparation phase introduces the workshop method and its rules. During the preparation phase, participants decide on the theme and prepare the workshop space with tools such as pens, paper, pinboards, and flip charts to draft and jot down ideas. Tables that separate the participants from one another are put aside so that the participants will sit in an open circle to interact and use the pinboards comfortably (Apel 2004).

The critique phase introduces the problem and the problematic aspects of the theme, which participants then criticize. If the group is large, they can form smaller groups to brainstorm their ideas, then come together, write all the criticism down, and organize it into topics or clusters. In the group work, one rule applies, according to Apel:

no excessive discussions, associative linking to ideas already existent, no "killer phrases," quantity has priority (collecting), etc. ... Occasionally, it is also useful to intensify the collection of critique points in a second phase. Here, a change of method

is possible, so that also a reflective discussion can be performed, but as well with the obligation to visualize the results in the end. (Apel 2004)

The fantasy phase directs the participants to respond to the critique with their hopes, dreams, and alternative ideas (of the future). Jungk and Müllert (1987) write about the hindrances of imagining the future, which could be summarized as the ‘totalitarianism of facts’. It means that, too often, the establishment – ‘the captains of destiny’ – convinces people that the chosen political decisions are based on facts and ‘reality’ and that there are no alternatives. Thus, it is essential in social research to check these ‘facts’ provided by the all-mighty and powerful, reveal their ideological biases, and search for alternatives.

The first lesson in the critical path is to realize that elite does not seek the common good but, through its mythmaking, tries to guarantee its privileges (Freire 2002). Thus, as Chomsky (2011: 107–108) advises, social scientists and intellectuals need ‘to join with the kind of people who are willing to commit themselves to overthrow power, and listen to them. They often know more than we do’. At the same time, it is necessary not to mix authentic, just, and humane alternatives to change the world for the better (or proven facts) with so-called alternative facts, fake news, or outright lies (MacKenzie and Bhatt 2020).

In the fantasy phase, the participants should not be tied down by ‘obvious facts’ but should draw from their frustrations and experience. They should try to think the impossible and leave their assumptions behind, to be curious, wild, and responsive to the unknown. The aim is to ask, e.g., ‘what if the workplace could be organized differently?’ (Kensing and Halskov Madsen 1991: 157), despite the ‘known’ and ‘existing’ reality. After drafting the ideas, the participants will select the most exciting ones and formulate them as suggestions for further development. Participants should be as relaxed as possible, ‘free from inherent necessities and may use brainstorming techniques and creative games to find and reflect utopian solutions’ (Apel 2004). Ideally, the way they present their findings (fantasies) should differ from rationally oriented problem-solving:

All ideas are collected and put into an ‘idea store,’ regardless of their practicability. In a second step (which can also be performed later in the implementation phase), all those ideas have to be ‘transformed’, that is, they must be reduced to a practical and realizable core. According to Robert Jungk, the social fantasy of the participants is developed in this phase. Or, to be more pragmatic, it is the point to alienate a problem solution and to present it in ‘false,’ ‘untypical’ and not strictly rational forms and/or texts like, e.g., painting, role plays, sketches, reports, and so on. This has a creativity-promoting effect, because here, in a very relaxed atmosphere, far away from the stress of everyday life and profession, expression forms can be found, and things and ideas may outcrop which could possibly not be figured out by using a direct and ‘rational’ approach. (Apel 2004)

Finally, participants return to the present social order and its power relations and structures in the implementation phase to critically determine possible obstacles and required actions for the desired future. At this phase, each group presents their ‘utopia’ and, if possible, more detailed plans. If the previous phases emphasize the free play of fancy and not holding back ideas, the implementation phase requires the participants to evaluate the practicality of their ideas (Apel 2004).

Future workshops is not necessarily an easy method to use. There may be practical problems, such as people’s willingness to participate in a future workshop. If they do participate, it can be challenging to get them to speak and voice their views in the first place (Jungk and Müllert 1987). The method is also rather time-consuming, and people’s

unwillingness to participate can be due to the pressures in the work-life or everyday life's overall rush.

Those participating may feel that the method needs to be simplified and cannot imagine alternatives (see Markham 2021). They can suffer from a lack of imagination and feel helpless. This was the case in Markham's participatory intervention, in which she noticed that even though people could develop a critical stand towards digital platforms, they could not imagine alternatives. It was as if they felt that certain developments were inevitable (Markham 2021: 382). However, imagining can be re-engaged. People only 'have to be encouraged to image, taught to exercise a capacity they are unaccustomed to using in a disciplined way' (Boulding 1988: 21).

Conclusion

Social scientists' task is to use their social imaginations and invent new social imaginaries of the postdigital with others. The concept of postdigital is far from clear (Jandrić et al. 2018). Still, as such, it provides a fruitful opportunity for scholars to use their creative imagination for methodological experimentation. As 'postdigital theory understands knowledge as socially constructed, contextual, always in flux' (Jandrić 2022: 204), it offers a conceptual platform for scholars to switch from what is to what is not yet, but what could be. Our aim 'is not to keep a mirror in front of people's faces and show them how they look, but to explore ideas and thinking' (Eskola 1984: 29). Alternatively, in Gergen's (2015: 294) words, '[t]he aim of research would not be to illuminate *what is*, but to create *what is to become*. Herein lies the essence of a future forming orientation to research' (emphasis from the original.)

Future forming research aims to explore ideas, think, and act with people. Furthermore, it is to invent practical research methods that researchers and people can use to bring up their personal and communal problems, connect them with more significant structural and sociopolitical issues, and find solutions. Collaborative methodological work can lead to what Gergen (1973) has called *enlightenment effects*: through collaborative research processes, people learn to 'read' the world and act in the world in fresh ways. Social scientists cannot leave the university, or any other social institution, in the hands of elites and bureaucrats and follow their (neoliberal) orders simply because it would be stupid and even lethal to the world. As Graeber aptly puts it:

At a moment when the capitalists' collective refusal to even consider rethinking any of their basic assumptions about the world might well mean not just the death of capitalism, but of almost everything else, our only real choice is do it ourselves – to begin to create a new language, a new common sense, about what people basically are and what it is reasonable for them to expect from the world, and from each other. A case could well be made that the fate of the world depends on it. (Graeber 2010: 10)

At best, social scientists can serve as *curators* and *inventors* of the lived experience and not-yet-lived worlds, searching for alternatives with interest groups. One way to do this is to invent new imaginative research methods which, in the spirit of Jungk, Müllert and C. Wright Mills, nurture social scientists and the general public's imagination and allow them to outline alternatives to the current mindset, politics, and practices.

As we have outlined, the future workshop belongs to the methodological family of collaborative methods. It fulfils at least the following aspects of future-transforming research methods: it permits 'real-time' and 'live' investigation, develops participants' capacities to see the whole without a totalizing perspective, produces thinking and action, and affects and reactions that re-invent our relations to the social and environmental spheres, and engages

‘political and ethical issues without arrogance or the drum roll of political piety’ (Back and Puwar 2012b).

The future workshop is a research method and a pedagogical technique based on radical democracy; everyone’s equal access to participation aims for the emancipation of all, social innovations, and social transformations. The method of future workshops is a systematic attempt to restore peoples’ small margin of freedom and to build proper conditions for creative democracy, which is disobedient to the tyranny of the markets, authoritarian regimes, and technological determinism. It is the one Jungk and Müllert, Hannah Arendt, C. Wright Mills, John Dewey, and many others before and after them have long sought.

References

- Aitken, G. A. (2021). Postdigital Exploration of Online Postgraduate Learning in Healthcare Professionals: A Horizontal Conception. *Postdigital Science and Education*, 3(1), 181–197. <https://doi.org/10.1007/s42438-020-00103-w>.
- Alminde, S., & Warming, H. (2020). Future workshops as a means to democratic, inclusive and empowering research with children, young people and others. *Qualitative Research*, 20(4), 432–448. <https://doi.org/10.1177/1468794119863165>.
- Alvesson, M. (2013). *The Triumph of Emptiness*. Oxford: Oxford University Press.
- Andersson, J. (2006). Choosing Futures: Alva Myrdal and the Construction of Swedish Futures Studies, 1967–1972. *International Review of Social History*, 51(2), 277–295. <http://www.jstor.com/stable/44582951>.
- Andersson, J. (2012). The Great Future Debate and the Struggle for the World. *American Historical Review*, 5(117), 1411–1430. <https://doi.org/10.1093/ahr/117.5.1411>.
- Andersson, J. (2018). *The Future of the World. Futurology, Futurists, and the Struggle for the Post-Cold War Imagination*. Oxford: Oxford University Press.
- Apel, H. (2004). The Future Workshop. Bonn: Deutschen Instituts für Erwachsenenbildung. http://www.die-bonn.de/esprid/dokumente/doc-2004/apel04_02.pdf. Accessed 22 November 2022.
- Arendt, H. (1958). *The Human Condition*. Chicago, IL and London, UK: The University of Chicago Press.
- Back, L., & Puwar, N. (2012a). *Live Methods*. Cambridge: Wiley-Blackwell.
- Back, L., & Puwar, N. (2012b). A Manifesto for Live Methods: Provocations and Capacities. *The Sociological Review*, 60(S1), 6–17. <https://doi.org/10.1111/j.1467-954X.2012.02114.x>.
- Ball, J., & Savin-Baden, M. (2022). Postdigital Learning for a Changing Higher Education. *Postdigital Science and Education*, 4(3), 753–771. <https://doi.org/10.1007/s42438-022-00307-2>.
- Bartenberger, M. (2015). John Dewey and David Graeber. Elements of Radical Democracy in Pragmatist and Anarchist Thinking. *Politix*, 37, 4–9. <https://dx.doi.org/10.2139/ssrn.2408571>.
- Boulding, E. (1988). Image and Action in Peace Building. *Journal of Social Issues*, 44(2), 17–37. <https://psycnet.apa.org/doi/10.1111/j.1540-4560.1988.tb02061.x>.
- Boulding, E. (2000). Designing Future Workshops as a Tool for Peacebuilding. In L. Reyhler & T. Paffenholz (Eds.), *Peacebuilding. A Field Guide*. Boulder, CO: Lynne Rienner.
- Brewer, J. (2013). *The Public Value of the Social Sciences*. London: Bloomsbury.
- Burawoy, M. (2005). For Public Sociology. *American Sociological Review*, 70, 4–28. <https://doi.org/10.1177/000312240507000102>.
- Chomsky, N. (2011). *Power and Terror. Conflict, Hegemony, and the Rule of Force*. Boulder, CO and London, UK: Paradigm. Publishers.

- Denzin, N. (2017). Critical Qualitative Inquiry. *Qualitative Inquiry*, 23(1), 8–16. <https://doi.org/10.1177/1077800416681864>
- Denzin, N., & Giardina, M. (Eds.). (2022). *Transformative Visions for Qualitative Inquiry*. New York and London: Routledge.
- Dewey, J. (1987). Democracy is Radical. *The Collected Works of John Dewey, 1882-1953. (2nd Release). Electronic Edition. The Later Works of John Dewey, 1925-1953. Volume 11: 1935-1937, Essays, Liberalism and Social Action*. Carbondale and Edwardsville, IL: Southern Illinois University Press.
- Dubin, E., & Prins, E. (2011). Blueprinting a Freirean Pedagogy of Imagination: Hope, untested feasibility, and the dialogic person. *Journal of Adult and Continuing Education*, 17(1), 23–39. <https://doi.org/10.7227/JACE.17.1.4>.
- Edwards, R., & Brannelly, T. (2017). Approaches to democratising qualitative research methods. *Qualitative Research*, 17(3), 271–277. <https://doi.org/10.1177/1468794117706869>.
- Elliott, D., & Culhane, D. (2017) (Eds.). *A Different Kind of Ethnography. Imaginative Practices and Creative Methodologies*. Toronto: Toronto University Press.
- Eskelinen, T. (Ed.). (2020). *The Revival of Political Imagination: Utopia as Methodology*. London: Zed Books.
- Eskola, A. (1984). *Uhka, toivo ja vastarinta* [Risk, hope and resistance]. Helsinki: Kirjayhtymä.
- Eskola, A. (1988). *Blind Alleys in Social Psychology*. Amsterdam: North-Holland.
- Fay, B. (1975). *Social Theory and Political Practice*. London: Allen and Unwin.
- Feenberg, A. (1999). *Questioning Technology*. London and New York: Routledge.
- Feenberg, A. (2002). *Transforming Technology*. Oxford: Oxford University Press.
- Freire, P. (2002). *Education for Critical Consciousness*. New York: Continuum.
- Freire, P. (2005). *Pedagogy of the Oppressed*. New York: Bloomsbury.
- Fromm, E. (1968). *The Revolution of Hope: Toward a Humanized Technology*. New York: Harper and Row.
- Fromm, E. (1994). *Escape from Freedom*. New York: Henry Holt.
- Fuchs, C. (2020). Erich Fromm and the Critical Theory of Communication. *Humanity & Society*, 44(3), 298–325. <https://doi.org/10.1177/0160597620930157>.
- Galbraith, J. K. (1972). *The New Industrial State*. London: Penguin.
- Gergen, K. (1973). Social Psychology as History. *Journal of Personality and Social Psychology*, 26(2), 309–320. <http://dx.doi.org/10.1037/h0034436>.
- Gergen, K. (2015). From Mirroring to World-Making: Research as Future Forming. *Journal for the Theory of Social Behaviour*, 45(3), 287–310. <https://doi.org/10.1111/jtsb.12075>.
- Gergen, M., & Gergen, K. (2012). *Playing with Purpose. Adventures in Performative Social Science*. London and New York: Routledge.
- Graeber, D. (2010). *Revolution in Reverse*. Brooklyn, NY: Minor Compositions.
- Graeber, D. (2015). *The Utopia of Rules*. London: Melville House.
- Inayatullah, S. (2013). Learnings From Futures Studies: Learnings From Dator. *Journal of Futures Studies*, 18(2), 1–10.
- Jacobsen, M., Drake, M., & Petersen, A. (Eds.). (2016). *Imaginative Methodologies in the Social Sciences. Creativity, Poetics, and Rhetoric in Social Research*. Abingdon and New York: Routledge.
- Jandrić, P. (2022). Postdigital Warfare: A Plea for Dialogue. *Postdigital Science and Education*, 4(1), 201–206. <https://doi.org/10.1007/s42438-022-00301-8>.
- Jandrić, P., & McLaren, P. (2020). Postdigital Cross Border Reflections on Critical Utopia. *Educational Philosophy and Theory*, 52(4), 1470–1482. <https://doi.org/10.1080/00131857.2020.1731687>.

- Jandrić, P., Knox, J., Besley, T., Ryberg, T., Suoranta, J., & Hayes, S. (2018). Postdigital science and education. *Educational Philosophy and Theory*, 50(10), 893–899. <https://doi.org/10.1080/00131857.2018.1454000>.
- Jungk, R. (1954). *Tomorrow is Already Here: Scenes from a Man-Made World*. London: Rupert Hart-Davis.
- Jungk, R. (1958). *Brighter than a Thousand Suns*. New York: Harcourt Brace.
- Jungk, R. (1961). *Children of the Ashes*. New York: Harcourt, Brace and World.
- Jungk, R. (1976). *The Everyman Project*. London: Thames and Hudson.
- Jungk, R. (1979). *The New Tyranny*. New York: Warner.
- Jungk, R., & Müllert, N. (1987). *Future workshops: How to create desirable futures*. London: Institute for Social Inventions.
- Kaiserfeld, T. (2015). *Beyond Innovation: Technology, Institution and Change as Categories for Social Analysis*. London: Palgrave Pivot.
- Kara, H. (2015). *Creative Research Methods in the Social Sciences: A Practical Guide*. Bristol: Bristol University Press.
- Keat, R. (1981). *The Politics of Social Theory: Habermas, Freud and the Critique of Positivism*. London: Basil Blackwell.
- Kemmis, S., McTaggart, R., & Nixon, R. (2014). *The Action Research Planner. Doing Critical Participatory Action Research*. Singapore: Springer. <https://doi.org/10.1007/978-981-4560-67-2>.
- Kensing, F. (1987). Generation of visions in systems development. In P. Docherty, K. Fuchs-Kittowski, P. Kolm, & L. Mathiassen (Eds.), *Systems design for human and productivity Participation and beyond* (pp. 285–301). Amsterdam: North-Holland.
- Kensing, F., & Halskov Madsen, K. (1991). Generating Visions: Future Workshops and Metaphorical Design. In J. Greenbaum & M. Kyng (Eds.), *Design at Work* (pp. 155–168). Boca Raton, FL: CRC Press.
- Knox, J. (2019). What Does the ‘Postdigital’ Mean for Education? Three Critical Perspectives on the Digital, with Implications for Educational Research and Practice. *Postdigital Science and Education*, 1(2), 357–370. <https://doi.org/10.1007/s42438-019-00045-y>.
- Lackey, C. (1994). Social Science Fiction: Writing Sociological Short Stories to Learn about Social Issues. *Teaching Sociology*, 22(2), 166. <https://doi.org/10.2307/1318562>.
- Lacković, N. (2021). Postdigital Living and Algorithms of Desire. *Postdigital Science and Education*, 3(2), 280–282. <https://doi.org/10.1007/s42438-020-00141-4>.
- Lamb, J., Carvalho, L., Gallagher, M., & Knox, J. (2022). The Postdigital Learning Spaces of Higher Education. *Postdigital Science and Education*, 4(1), 1–12. <https://doi.org/10.1007/s42438-021-00279-9>.
- Lauttamäki, V. (2014). Practical guide for facilitating a futures workshop. Turku: Finland Futures Research Centre. https://www.utu.fi/sites/default/files/public://media/file/Ville-Lauttamaki_futures-workshops.pdf. Accessed 22 November 2022.
- Lincoln, Y., & Denzin, N. (2005). Epilogue. The Eight and Ninth Moments—Qualitative Research in/and the Fractured Future. In N. Denzin & Y. Lincoln (Eds.), *The Sage Handbook of Qualitative Research*. 3rd Ed. (pp. 1115–1126). Thousand Oaks, CA: Sage.
- MacKenzie, A., & Bhatt, I. (2020). Opposing the Power of Lies, Bullshit and Fake News: The Value of Truth. *Postdigital Science and Education*, 2(1), 217–232. <https://doi.org/10.1007/s42438-019-00087-2>.
- Markham, A. (2021). The limits of the imaginary: Challenges to intervening in future speculations of memory, data, and algorithms. *New Media & Society*, 23(2), 382–405. <https://doi.org/10.1177/1461444820929322>.

- Mills, C. W. (2000a). *Sociological Imagination*. Oxford: Oxford University Press.
- Mills, C. W. (2000b). *The Power Elite*. Oxford: Oxford University Press
- Mirrlees, T. (2009). Digital Militainment by Design: producing and playing SOCOM: U.S. Navy SEALs. *International Journal of Media and Cultural Politics*, 5(3), 161–181. http://dx.doi.org/10.1386/macp.5.3.161_1.
- Nehring, H. (2004). Cold War, Apocalypse and Peaceful Atoms. Interpretations of Nuclear Energy in the British and West German Anti-Nuclear Weapons Movements, 1955–1964. *Historical Social Research / Historische Sozialforschung*, 29(3), 150–170. <https://doi.org/10.12759/hsr.29.2004.3.150-170>.
- Nielsen, B., Nielsen, K., & Olsén, P. (1996). 'Industry and Happiness.' Social Imagination as the Basis of Democratic Innovation Society. In H. Olesen & P. Rasmussen (Eds.), *Theoretical Issues in Adult Education* (pp. 41–64). Roskilde: Roskilde University Press.
- Nisbet, R. (1976). *Sociology as an Art Form*. London: Oxford University Press.
- Paavola, S., & Hakkarainen, K. (2005). The Knowledge Creation Metaphor – An Emergent Epistemological Approach to Learning. *Science & Education*, 14, 535–557. <https://doi.org/10.1007/s11191-004-5157-0>.
- Poutanen, M. (2022). Competitive knowledge-economies driving new logics in higher education – reflections from a Finnish university merger. *Critical Policy Studies*. <https://doi.org/10.1080/19460171.2022.2124429>.
- Putnam, H., & Putnam, R. (2017). *Pragmatism as a Way of Life. The Lasting Legacy of William James and John Dewey*. Cambridge, MA and London, UK: Harvard University Press.
- Robert-Jungk-Bibliothek für Zukunftsfragen (2022). Salzburg: Robert-Jungk-Bibliothek für Zukunftsfragen. <https://jungk-bibliothek.org/future-workshops/>. Accessed 22 November 2022.
- Ross, J. (2023). *Digital Futures for Learning: Speculative Methods and Pedagogies*. New York: Routledge.
- Slaughter, R. (2010). Robert Jungk: one man revolution. https://foresightinternational.com.au/wp-content/uploads/2015/04/RJ_One_Man_Revolution_1992.pdf. Accessed 10 November 2022.
- Spielmann, W. (n.d.). Some Key Theses of Robert Jungk's Work. <https://jungk-bibliothek.org/some-key-theses-of-robert-jungks-work/>. Accessed 23 September 2022.
- Vidal, R. (2005). The Future Workshop: Democratic problem-solving. Informatics and Mathematical Modelling. Lyngby: Technical University of Denmark. <http://www2.imm.dtu.dk/pubdb/edoc/imm4095.pdf>. Accessed 10 November 2022.
- Winner, L. (1978). *Autonomous Technology. Technics-out-of-Control as a Theme in Political Thought*. Cambridge, MA: MIT Press.
- Žižek, S. (2009). *First as Tragedy, Then as Farce*. London: Verso.