

REVIEW

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The future as aesthetic experience: imagination and engagement in future studies

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Abstract

In this paper, we examine the question how future studies can productively engage with the future by considering how art is engaging. This question is pertinent, as doubts about the future are increasingly urgent, while the need to engage with the future is not sufficiently addressed by the quantitative growth of future studies. In the case of climate change, for example, the future consequences of global temperature increase are well-known, but do not invoke action accordingly. While some see the use of art as an effective means to engage with the future, others criticise such usage as reducing art to an instrumental value, at the expense of aesthetic values. This raises fundamental questions about how art and imagination can be engaging and what this implies for future studies.

To address the issue, we resort to a pragmatist understanding of art. We present a reading of the work of John Dewey (1859–1952). In his *Art as Experience*, Dewey claimed that art can be seen as a “mode of prediction not found in charts and statistics”. He presents the experience of art as a reciprocal process that is imaginative: in our engagement with art, we experience the artwork, while the experience also produces us. The aesthetic experience is transformative. This mutual coming into existence is not a planned creation, but insinuates an open future as well as an open past.

As a next step, we review the production of futures in future studies, using Dewey’s understandings on how imagination and the future connect in the aesthetic experience. First, we look at methods to produce futures: extrapolations, Delphi Surveys, surveys, simulations and scenarios. Second, we evaluate how the produced futures engage their audience, distinguishing between narratives, symbols, graphs and images.

We conclude that while futures studies have been successful in showing routes to the future, they also have difficulties to relate to futures in a more open, imaginative and responsible way. They are informative but not transformative. The difficulty of future studies to engage, hinders responsible responses.

Keywords: Engagement, Future studies, Art theory, John Dewey, Aesthetics

Introduction

How to engage with the future? The field of future studies has an impressive record of accomplishment in the production of futures, but less so in the way these futures are taken up [17]. In the case of climate change, for example, the future consequences of global temperature increase are well-known, but do not invoke action accordingly [13, 22, 33]. This paper starts from the paradox that while the need to engage with the future is increasingly urgent, the

rising output of future studies does not seem to address this need [6, 12, 23]. More future studies might not be the answer, but maybe another form of engaging with the future, now missing in future studies.

In recent decades, the use of art is propagated as a means to engage with the future, which resonates with the traditional role of the arts to address the realm of the imagination. Others, however, criticise the employment of art, as this reduces art to an instrumental value, at the expense of aesthetic values. This raises fundamental questions about how art and imagination can be engaging and what this implies for future studies.

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To address the issue of engagement, we resort to a pragmatist understanding of art, where the aesthetic value and the everyday implications of art are not opposed, but seen as part of the same move. We present a reading of the work of John Dewey (1859–1952). In his *Art as Experience* (1934), Dewey claimed that art can be seen as a “mode of prediction not found in charts and statistics”. He presents the experience of art as a reciprocal process that is imaginative: in our engagement with art, we experience the artwork, while the experience also produces us. The aesthetic experience is transformative. This mutual coming into existence is not a planned creation, but insinuates an open future as well as an open past.

As a next step, we use Dewey’s understanding of the aesthetic experience to review how in future studies imaginations are mobilised in the production of futures and how engaging, or transformative, that can be. First, we look at methods to produce futures: extrapolations, Delphi Surveys, surveys, simulations and scenarios. Second, we evaluate how the produced futures themselves may engage their audience, distinguishing between narratives, symbols, graphs and images.

We conclude that while futures studies have been successful in offering accounts of the future, ranging from mechanically produced futures of extrapolations to the narratives that constitute scenarios, future studies also have difficulties to relate to futures in a more open, imaginative and responsible way. The difficulty to engage is a serious problem, given the urgency of societal concerns, such as the climate crises.

Using art to engage with the future

Since its start, future studies have emphasised the importance of engaging with the future to enhance control and to improve choices; nevertheless, this ambition to engage has always been a difficult task [1]. As a response, some suggested to resort to the arts to cope with the imaginative deficit of scientific representations of the future, and to offer new forms of engagement with it [18, 21, 26]. This ties in with a long tradition in which art and literature are said to be speculative and able to imagine possible worlds that are different from the everyday reality. In this perspective, art and literature are often presented as the domain of freedom where it is possible to explore the experiential dimensions of pressing societal transformations such as those related to climate change [7]. Cultural workers, artists among them, have been invited to help to solve the paradox that climate activist Bill McKibben phrased about climate change: “[...] oddly, though we know about it, we don’t know about it ... it isn’t part of our culture.” (cited in [18], p. 31). Responding to McKibben’s call upon artists to approach the problem with

their imagination, climate art has sought to contribute to rethinking the role of humans in altering the climate [19].

The rise of so-called climate change art has led to debates on its artistic quality and relevance. To some, it embodies a propagandistic or activist rather than an artistic practice. An example of this tension can be found in music. As a time-based art, music seems nicely fit to represent the temporality of data sets in climate science, in a more evocative way than the visual representations that dominate the public debate. St. George et.al [30]. have described the procedure they developed to transform more than a century of weather observations into compositions for cello and string quartet.¹ They argue that the transformation of data into acoustic signal that are input for musical compositions might make climate science more accessible by allowing to experience the immediacy of the issue. This claim is also made by Judy Twedt, who gave a TED talk which featured a pianist performing a composition in which chords in the right hand symbolised the regular recurrence of the four seasons, and the left hand played a slowly descending pattern signifying the decreasing ice mass in the Arctic region.² Critics of climate change music, however, have pointed out that although potentially effective in presenting data sets in a different medium, its structure and meaning are often too obvious to be musically interesting.

The debate on the musical merits of climate change music exemplifies fundamental assumptions about the autonomy of art [4]. When art merely repeats the structure of scientific data, it is no longer speculative and imaginative and cannot offer new forms of engaging with the issue. Therefore, it can no longer considered to be art. This reasoning belongs to a theory of art that foregrounds the necessity of its aesthetic and societal autonomy. Autonomy is here both a descriptive and a normative term. As a descriptive term, it analyses how the arts came to be seen as an autonomous sphere in society, and how artists became free to create what they want, not reacting to a specific demand or audience. As a normative term, it argues for a specific ontological status of artworks and a clearly demarcated position of art practice in society. Reasoning from this normative position, the arts should not be instrumentalised to achieve other goals than being art. Only in and through its aesthetic and societal autonomy it can be the domain of freedom that allows it to be truly critical, as Adorno and Bourdieu have argued [4]. Art becomes political in that it shows us that the world is not given, and could be otherwise.

¹ <https://www.co2.earth/global-warming-music-for-string-quartet>

² https://www.ted.com/talks/judy_twedt_connecting_to_climate_change_through_music

The first two rows in Table 1 summarise our argument on art, politics and engagement so far. When McKibben called upon artists to approach the climate problem with their imagination, he implicitly reproduced the idea that artists are free to use their imagination in order to produce art that allows us to rethink our role as humans. This could be seen as a form of outreach to engage the public with the results of (climate) future studies, instrumentalising art and reproducing a divide between art and science at the same time. Critical art theory looks beyond the current art world, and analyses how art supports the given order and reproduces the conditions of capitalism. Rather than stressing their autonomy and politically neutralising their art, artists should acknowledge that their work is the product of a society, yet also strive for new languages of art that are in a critical, or dialectical tension with this society. To move beyond the dualism of autonomy and instrumentalism, we want to explore in an alternative art theory (the third row in Table 1), one that allows a different understanding of how the arts may offer new ways of engaging with the future.

Below, we present a reading of the work of John Dewey on aesthetic experiences as a starting point to reflect on how future studies can engage.

Dewey on art: the transformative experience

The pragmatist American philosopher John Dewey (1859–1952) is famous for his studies on education and democracy, while he also made important contributions to the philosophy of art. He starts his argument in *Art as Experience* (1934) from the observation that works of art are usually understood in their external and physical existence, detached from the actual life-experience from which they emerge and in which they have consequences. This detachment is a fallacy, Dewey argues, which he calls the ‘museum conception of art.’ If we want to understand art we should not trace it back to an idiosyncratic experience that is disconnected from everyday experiences, but on the contrary show how it is rooted in these everyday experiences, in the same way as mountain peaks are an integral part of the landscape from which they rise

([3] [1934], p. 2). Dewey’s aesthetical theory starts from an ecological idea of the ‘live creature’ that does not live in its environment but in interaction with it. From these interactions, situations of stability and unrest emerge that alternate in rhythmic patterns (p. 15). A central aspect of Dewey’s argument is temporality. The live creature not only interacts with the environment, but it is also conscious of past, present and future: “What the live creature retains from the past and what it expects from the future operate as directions in the present. (...) The past absorbed into the present carries on; it presses forward.” (p. 17).

Experience is a continuous process because life is, Dewey claims, but this process is not uniform or uninterrupted but rhythmic and periodical. Some experiences may become an experience that has its own plot, it becomes a unity that can be told and re-told as a story (p. 37). As a story, an experience can be fraught with suspense and move towards its own consummation (p. 44). Interaction with the environment for Dewey takes the form of doing and undergoing, and he compares this to a painter who brings a painting into existence through the intermittent continuity of control (a brush stroke) and reflection (looking at the effects). Precisely this going together of doing and undergoing, of acting and reflecting, characterises the creative work of art. For Dewey, this work is never a matter of mechanically copying what went before, or simply realising a plan or design, rather it assumes the anticipation of new possibilities in the imagination.

Dewey claims that the concept of imagination is often misused in aesthetic theory, for example as relating to the genius or to specific individuals who bring the new into the world. For Dewey, imagination is not reserved for art: when old and familiar things are made new in experience, there is imagination. Every conscious experience has a degree of imagination, for if every experience arises from the interaction between live creature and environment, that experience only becomes conscious when it is imbued with meanings that arise from previous experiences. Imagination is the conscious adjustment of the

Table 1 Art, politics and engagement

Perspective	Engaging with futures	Criticism to considering art and engagement in this way
Art as autonomous domain, separated from politics, constituted by its own rules and values	Art as outreach strategy to engage the public in futures research	Reducing art to an instrument, denying its autonomy
Autonomous art as critical articulation of possible political positions and actions	Art as a source of alternative futures	Elitism: limiting art to museums and concert halls
Art as experience, radical democratisation	Art as experience transforms pasts and futures; beyond the disinterested bystander perspective.	Conceptualising art in this way is a radical redefinition

new and the old (p. 283). According to Dewey, imagination is opposed to habituation. Trains of thought are precisely that: too easy. Habituation has a constricting effect (p. 278).

That which is not directly present in the experience of the here and now can only be present in the imagination. Precisely the fact that the present is never a literal copy of the past, every conscious perception of the present presents us with a risk, a movement towards the unknown, and where the past merges into the present there is also a reconstruction of the that past. Dewey uses the term ‘mechanical’ as a quality that signifies moments when past and presence fit exactly together (p. 284). In that sense, a work of art is can never be mechanical. It not only is an outcome of imagination, but it operates imaginatively (p. 285).

In order to perceive something aesthetically, Dewey argues, implies that we integrate past experiences into new patterns (p. 144). Retelling the stories of our past experiences in the present to give them new meanings is what precludes their rigid predetermination. Precisely because the past is not stable and continuously rewritten, we can create new stories out of it. It is in this ‘consummatory phase of experience’ that something new is presented. “This fact sets the insuperable barrier between mechanical production and use and esthetic creation and perception. In the former there are no ends until the final end is reached. Then work tends to be labour and production to be drudgery. But there is no final term in appreciation of a work of art. It carries on and is, therefore, instrumental as well as final.” (p. 145) Important here is what Dewey says about instrumentalism. It is often used in a limited way, as a kind of utility such as an umbrella can be instrumental. Art is instrumental in a more comprehensive way, Dewey argues. It resonates in our lives even after the direct act of perception ends.

Like stories of the past need to be retold to give them meaning, stories of the future need to be told and retold. The ‘consummatory phase of experience’ allows futures to be new and open, it gives them meaning and embeds them in our understanding of the world and our horizons of actions. In the following, we investigate how the imagination is mobilised in stories told by future studies. We use Dewey’s distinction between the non-engaging mechanical reproduction and the engaging aesthetic creation to evaluate how engaging produced futures can be.

How future studies (do not) engage

Since the early days of the field, futures were produced to provide strategic knowledge for firms and policy-makers; it provided so-called strategic intelligence [29]. During the development of the field, a dual move was made. On the one hand, the idea of ‘prediction’ was

left; the new term ‘foresight’ stressed the explorative character of the exercise and acknowledged the complexities and uncertainties [28]. On the other hand, the production of futures tried to broaden its audience and tended to be more participatory [8].

In the meantime, the very nature of ‘future’ has changed. Richard Tutton [32], for instance, introduced the notion of ‘wicked futures’, in which we are immersed today. These contrasts with the early decades of the field of futures studies: “futurity looks very different to that of the 1960s: rather than a set of progressive futures, we live in a time of what I call wicked futures” (p.479). In his argument, Tutton follows a pioneer in future studies, Fred Polak [24], who pointed to the need of future studies to emancipate itself from the two dominant ideas of the future in European cultures during the last centuries. First, the eschatological idea of the end of the world as we know it, giving rise to a new divinely inspired order, like the ‘Kingdom of Heaven’; second, the utopian idea of a new order on earth, brought about by humanity itself. During the last centuries, both ideas of the future have been part of the collective hopes, dreams and fears, while their moral implications were clear, too. Since the scientific and industrial revolutions, the potential to act in and upon the world has grown dramatically—with the climate crisis as a dramatic culmination—yet, the knowledge how actions relate to effects has not grown in the same degree. The connection between the representations of the future and the possibility to act upon them has been weakened, Tutton argues, and, consequently, we now live amongst ‘wicked futures’.

The field has shown an impressive diversification of methods and approaches, resulting in various struggles to provide fitting classifications [15, 25, 35]. There are many ways to order the wide range of exercises to engage with the future. A classical classification given by Glenn and Gordon [9] is based on two oppositions: quantitative versus qualitative methods and normative versus exploratory aims. Poli [25] provides a useful overview of classification that have been proposed and used. For our purposes, we suggest to review the production of futures in two complementary ways: as a production process and as produced outcomes.

Clearly, futures can be produced in many ways. Extrapolations, for instance, produce futures by following a trend, either quantitatively or qualitatively. The movement of the past—represented in, say, a rising curve—is assumed to continue in the future: the curve will continue to rise. According to the mechanical versus aesthetic distinction, this may either result in massive truth that exists somewhere ‘out there’ and which renders the spectator of the curve helpless: what can you do? Or,

alternatively, the rising curve may invite detours from the solid path sketched by the curve.

In Delphi studies, futures are produced by following experts in several rounds of participation, articulation and reflection [29]. Typically, it involves a range of experts to sketch a future of a domain, a sector. Because it draws on ‘expert knowledge’, these futures highlight the distinction between those who can have a say and those who have not. This, in its turn, can be taken as a prompt to silence other ideas and hopes—and to mechanically follow the logic of the experts. Alternatively, the collective view of the expert may surprise and give rise to countervailing accounts.

Surveys come with their own mark of credibility. As they construe futures by following and ordering responses, the present a view not just of a future, but also of its inhabitants [29]. Often, the surveys do not just present the collective outcomes, but bring some distinctions in the populations: men versus women, rich versus poor, higher educated versus less educated, etcetera. Here, the spectator may feel alienated from the inner logics that apparently guide the displayed groupings, or, alternatively, identify with the responses, which, subsequently, may lead to a reshuffling of the future.

Instead of following people, futures can be produced by following mathematical models. Simulations bring together many variables and their relationships—derived from empirical research or stipulated when such evidence is lacking—to represent the present and construct a future [27]. As the mathematical infrastructure and the informed distribution of variables and values of the simulated future tends to be hidden, the outcome is manifested as factual: those are the numbers. It is an external world, finished, without the need of other engagements. Also, when more outcomes are given, for instance as an ‘optimistic’ or ‘pessimistic’

course of events, the future are to be observed only. When the futures prompt a retelling of the present and provide a surprising horizon of actions, simulations might also enable a future as aesthetic experience.

Scenarios typically come as multiple futures, as they are produced by following the logic of extreme oppositions [31]. The typical scenario method is to first collect the ‘drivers’, a set of relevant context factors. From this set, two drivers are selected, those that will have the most impact and are the most uncertain. The two drivers are taken as two axes, to create four quadrants and four opposing futures. The remaining drivers are used to create a narrative for each scenario, to bring them to life. The idea of crafting opposing futures is not to present a credible future, as each scenario is based on an extreme, but to test strategies. So, in principle, they invite to engage in different thought experiments. Yet, as the futures are based on extremes, they also appear as foreign worlds to be left as they are foreign.

Table 2 Summarises our review of ways to produce futures, evaluated by the mode of engaging that we derived from Dewey’s reflection on the nature of aesthetic experiences.

A second way to review how future studies may or may not engage, is to consider the ingredients of produced futures. Here we resort to the typology that Van Lente [34] introduced to discuss imaginaries in innovation. The basic idea is that futures provide storylines—with a beginning and an end, with a plot and a thrust, with protagonists in a setting—and that storylines are performative [10, 23]. Storylines circulate in organisations and by doing so, guide the actions and shape the movements of organisations [2, 20]. Likewise, storylines circulate in societies at large, framing public perceptions and public decision-making [5]. Futures, then, may provide a complete storyline, as in the case of scenarios, or only elements of a storyline, like a future event. Futures may

Table 2 Producing futures: mechanical versus aesthetical modes of engaging

Production type	Produced by following	Mechanical mode of engaging	Aesthetical mode of engaging
Extrapolations	Trends	A mechanical continuation brings a message of massive inevitability.	The suggestion of a clear path invites to speculate about detours and alternatives.
Delphi	Experts	The future comes from one corner only: experts. We are not expected to deviate.	The views of experts may be unexpected and surprising. It may prompt a counter-narrative.
Surveys	Responses	It presents how ‘everybody’ responds, in various categories. This can be alienating: looking at others, not me.	The responses may contrast with our views and reshuffle the futures that accompanied us thus far.
Simulations	Models	The models present outcomes as matters of fact, presenting an external world.	Models may express a variety of futures. So many possibilities!
Scenarios	Extremes	As scenarios are based on extremes, they appear as foreign worlds.	Scenarios provide a set of widely different directions, inviting novel narratives.

Table 3 Ingredients of futures

	Containing a storyline	Elements of a story-line
Text based	<i>Narrative</i> with plot, script, protagonist	<i>Symbol</i> shared representation of value and preferred directions
Object based	<i>Graph</i> connecting past, present and future (by extrapolation)	<i>Image</i> the design and staging of an artefact points to desired futures

Source: Van Lente [34]

also be presented and circulated as texts (documents, narratives, web pages, speeches) or as objects (graphs, pictures, prototypes). These two distinctions create four categories: narratives, symbols, graphs and images, see Table 3.

The first category of futures, *narratives*, can be engaging when they unsettle the reader and reshuffles his or her earlier narratives. Yet, when narratives are successful, that is, when they are used and accepted widely, they typically align with existing storylines—and are then less surprising [11]. Think about the Grand Challenges in EU science and innovation policy, which bring narratives (futures) of Europe competing with the USA and China, of an ageing population in Europa, about the need to have a sustainable agriculture. Such narratives are useful and they make sense, but they have been told and retold, and thus, according to Dewey’s notions of aesthetic experiences, will not be engaging.

The second category, *symbols*, refers to shared values and preferred directions. Symbols, like freedom or equality, may figure in storylines, but do not offer storylines themselves. Like successful narratives, they are readily available and easily recognised. For this reason, symbols are often mobilised in futures, but for the same reason, not likely to be engaging. When they relate to a personal storyline, about what the reader sees as a future for himself or herself, they are helpful in engaging.

Graphs, the third category, abound in futures studies and provide a complete storyline, too, by connecting

past, present and future. An example is the famous ‘hockey stick’ graph about global heating, bringing a storyline of human civilisation that prompts to actions [14]. Graphs, however, are lines, one dimensional, a thin representation of something ‘out there.’ It is not a story that easily includes the reader.

Images, finally, like that of the ‘blue earth,’ ‘the green city’ or ‘the monorail,’ also appear often in futures. They point to concerning or desirable solutions. When they circulate, they are used as shortcut for desirability or warnings. While they may work as shortcuts, in the same move they lose the ability to surprise and unsettle, hence the ability to provide an aesthetic experience. See Table 4.

Politisation, imagination and morality

The production of futures is important to make sense of the present and is thus never politically innocent. In general, social order can only exist through stories and, while doing so, contribute to stories [10, 20]. Yet, as our review has indicated, future studies often lack the ability to engage; it does not transform the reader, in the way Dewey has noted regarding the aesthetic experience. The produced futures studied tend to bring a representation of something ‘out there,’ detached from life experiences, and thus lacking urgency and consequences for action. In this sense, future studies also face a moral problem [16].

Here, it is useful to return to Dewey’s ideas on art and aesthetic experience. His notion of the future not only derives from the imagination, but also comes with a clear sense of moral responsibility towards actively engaging it. In the final chapter of his book, called ‘Art and Civilization,’ Dewey reiterates the assumptions that he developed in the first chapter: the material for the aesthetic experience—which consists in the interaction between live creature and environment—is social. Aesthetic experience is an expression of the life of a civilisation and ultimately a judgment of the quality of that civilisation. In this way, Dewey makes the move from an individual experience to a shared experience. This then raises the question of how experiences are shared and communicated, all the more so as this happens not only in the

Table 4 Ingredients of produced futures studies

Ingredient	Mode of prediction	Mechanical	Aesthetical
Narrative	Connection to the future with plot, script, protagonist	A successful narrative aligns with already existing storylines	Identification with the narrative may shock
Symbol	Shared value and preferred direction	A symbol summarises well-known positions	Symbols question values
Graph	Connecting past, present and future (by extrapolation)	An extrapolation is the continuation of a line, that is, a one-dimensional entity	A graph may lead to unexpected corners
Image	Images represent warnings or desirability	Circulating images readily become clichés of themselves	Images may bring novel, surprising perspectives

present between people, but also historically between ours and earlier civilisations. Communication presupposes a community of experience that we see in language, for example, and art is a more universal language than others, think of the example of music (p. 349). Dewey makes the comparison with how we understand someone in a friendship: we can know a lot about someone, but that knowledge only becomes friendship if it is the result of sympathy through the imagination (p. 350).

At the end of the chapter, Dewey makes important remarks about the relationship between morality and imagination. “The moral office and human function of art can be intelligently discussed only in the context of culture.” (p. 358). Science based on facts projects the regularity of that past into the future. “Factual science may collect statistics and make charts. But its predictions are, as has been well said, but past history reversed. Change in the climate of the imagination is the precursor of the changes that affect more details of life.” (p.360). Change that comes from imagination is of a very different nature.

The problem of the relationship between morality and art is often placed on the side of art: we could do without art, but not without morality. But that is not true, Dewey claims, imagination is the chief instrument of the good. Dewey identifies the problem as resulting from the compartmentalisation of morality and art in different ‘departments’, in different economic and political institutions. What is true of the individual is true of the whole system of morals in thought and action. Every sense of goal and purpose are of necessity imaginative. Yet, art is often distrusted, he suggests, because of its roots in imaginative creativity. And creativity and imagination are distrusted because they are by their very essence subversive; they represent a constant threat to the status quo. Art is thus in an important sense opposed to morals (or rather: moralities (p. 362)) for morals, according to Dewey, are by essence conservative; “they reflect the divisions embodied in economic and political institutions.” (p. 362). Dewey concludes that only art is capable of allowing us to conceive of a better future; and hence that with art is there any possibility of achieving such a future. Quoting Shelley: “A man to be greatly good must imagine intensely and comprehensively.”

“The first intimations of wide and large redirections of desire and purpose are of necessity imaginative. Art is a mode of prediction not found in charts and statistics, and it insinuates possibilities of human relations not to be found in rule and precept, admonition and administration.” (p.363) In these final words of the book, art has become the realm of the imagination and has thus also become the realm of freedom. But in order to arrive at this conclusion, contrary to aesthetic theories that assume art’s societal and aesthetic autonomy, for Dewey

art is not a domain, but an activity. His focus is not on the art work, but on the workings of art. To arrive at the future in first place, we have to work with our experiences in the present, be they artistic or not. This is what is summarised in the claim that Dewey formulates at the beginning of the book at the individual level on a societal level: “The past absorbed into the present carries on; it presses forward.”

The important implication for future studies is that reiterating the past under the conditions of the present leads to imagination, or in other words, an open future needs opening up the past as a resource of (aesthetic) experiences that help to shape new directions. The future as aesthetic experience thus also requires another version of the past.

To conclude

While futures studies have been successful in showing various routes to the future, ranging from the linear futures of extrapolations to the narrative futures of scenarios, they also have difficulties to relate to futures in a more open, imaginative and responsible way. In this paper, we reviewed the way imagination and engagement may figure in future studies. Occasionally, the arts are expected to bring imagination and engagement, for instance in ‘climate change art’, while there is also opposition to such instrumental use of the arts: it goes against their proclaimed autonomy. Such contestations about whether and how to mobilise the imaginative force of the arts are rooted in long standing discussions about the nature and value of art, which tend to get stuck in an opposition between art as an autonomous domain and art as an instrument for other (political) causes. To transcend the deadlock, we used the pragmatist philosophy of arts of John Dewey, which stresses the fully original and creative nature of the art experience. Dewey’s central notion of the ‘aesthetic experience’ points to a transformation when experiencing art: it invokes other stories of who we are and where we are going, novel stories of the past and the future. In this way, art is disruptive and creative. Dewey distinguishes between ‘mechanical’ modes of engaging, which build on existing patterns, and ‘aesthetic’ modes of engaging, which transform both futures and pasts. We used this distinction as a starting point to revisit the way imagination and engagement figure in future studies. We investigated both the production of futures—in extrapolations, Delphi Surveys, surveys, simulations and scenarios—and the ingredients of futures: narratives, symbols, graphs and images.

The futures produced by future studies, we conclude, tend to lack imagination, urgency and consequences for action. Instead of preparing for the future, they tend to continue the present. We found that the ways in which

futures are produced and the way they are presented brings along a spectator perspective and a detached position. While disinterestedness is a virtue in some settings, it also denies the intrinsic political character of any representation of the future. Future studies, we conclude, are informative and less transformative. Such a position is increasingly problematic and irresponsible, given the current pressing societal problems such as the climate crises. The difficulty of future studies to engage hinders responsible responses. The future is too important to remain something 'out there' and for others, it merits to be an aesthetic experience.

Authors' contributions

The author(s) read and approved the final manuscript.

Declarations

Competing interests

The authors declare that they have no competing interests.

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