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A Pragmatic Way to Open Management Research and Education: Playfulness, Ambiguity, and Deterritorialization

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Abstract

The open science movement has reached management research and education. Around the world, management scholars discuss, probe, and evaluate ways to make their work practices less 'closed' and more 'open.' However, how exactly such new work practices change management knowledge and teaching depends, to a large extent, on practitioners' philosophical interpretation of 'openness.' Today, openness in management research and education is mainly interpreted as a feature of the input to or output from knowledge work. These interpretations conceive of research and education as relatively stable entities which can be opened at some clearly defined points. Our study aims to unsettle this conception and propose a new and more radical interpretation of openness. We propose to reconsider openness via the processual approach of American Pragmatism and thereby in a sense that dispenses with requiring the predisposition of research and education as stable entities. Via this interpretation of openness, management research and education can be transformed into a co-productive democratic movement which can bring about knowledge commons interwoven with true managerial and societal problems. To offer a first description of openness as a process that can transform management research and education, we analyze

ethnographic material from two types of pragmatist experiments, which the first author facilitated between 2016 and 2021. We identify three key dimensions in the process of opening research and education: playfulness, ambiguity, and deterritorialization. Our study advances debates on the question of how management research can be more immediately helpful to management practitioners and students' concerns.

Keywords: open science; openness; pragmatism; John Dewey; playfulness; ambiguity; deterritorialization; process philosophy.

Introduction

What is the purpose of management research and education? How should management and education be conducted to fulfill this purpose? Debates on these questions have shaped the field of management and organization studies since its inception (Alvesson, Gabriel, & Paulsen, 2017; Brown, 2001; Clegg, Hardy, & Nord, 1996). Like other professional fields, management research and education enjoys reasonable professional autonomy. This means that researchers and educators are somewhat shielded from external pressures and demands regarding how to go about their work, its usefulness, impact, and value for society. To ensure that management research and education remain relevant for the public¹, it is therefore very important for management scholars to create spaces for professional reflection and experiments with alternative ways of doing their academic work. At the time of this draft, one of the most salient notions around which such reflection and experimentation unfolds is “open science” (Dobusch & Heimstädt, 2021; Evans, 2020; Heimstädt & Friesike, 2021; Leone, Mantere, & Faraj, 2021; Vicente-Saez & Martinez-Fuentes, 2018). Advocates of open science argue that for management scholarship to fully address its professional tasks—i.e., produce knowledge that is rigorous and relevant—it needs to change some of its research and educational practices (Aguinis, Banks, Rogelberg, & Cascio, 2020). Management research ought to become, in the words of these advocates, less “closed” and more “open.” Its knowledge, infrastructures, practices, and perimeters of interaction should be opened up not only to other researchers but also to society at large. Boundaries need to be resolved or, as open science advocates argue, at least be more easily spanned. From this justification for openness directly follows the question, how is management research and education supposed to be opened up in practice? What are the main dimensions that become salient in such experiments with openness?

Management research, initially, has failed to be at the forefront of the broader open science movement. However, at the time of this draft, the transformation of management research and education toward greater openness seems to be in full swing. New ways of doing management research and education, associated with the open science movement, go under names such as open access (Harzing & Adler, 2016), open data (Freese, 2007), open peer review (Dobusch & Heimstädt, 2019), open educational resources (Friesike, Dobusch, & Heimstädt, 2022) or open theorizing (Leone et al., 2021). Within this set of existing open science practices in management, we can differentiate between two interpretations of openness: openness as input (e.g., enrolling non-scientists into data collection) and openness as output (e.g., making research papers available online to everyone at no cost). Both interpretations of openness are performative in the sense that they transform management research and education in different ways. However, below this superficial difference, the two prevalent interpretations of openness share an underlying commonality: the philosophical

assumption that research and education take the form of stable entities which can be systematically opened at different points and for several ends. Around this stable entity, society is 'there,' waiting for the management gospel to arrive. However, keeping the philosophical assumption of stable entities in place, we argue, limits the number of ways in which management scholarship can be transformed and hence the range of new concerns and purposes to which it might attend.

Our study aims to unsettle this philosophical assumption and propose a new and more radical interpretation of openness in the debate on open science in management research and education. We propose to rethink openness via the processual approach of American Pragmatism and thereby in a sense that dispenses with requiring the predisposition of research and education as a stable entity. Especially engaging with the work of John Dewey (1938), we develop an understanding of open science as a process of open-ended inquiry for management research and education: a continuous, co-productive movement and process that can lead to knowledge commons interwoven with true managerial and societal problems. To explore in greater detail how this radical notion of openness can transform management research and education and what is at stake for scholars in the process of opening their practices and cultivating practices of opening, we analyze ethnographic material from two types of pragmatist experiments, which the first author facilitated between 2016 and 2021. This (auto)ethnographic material is used to explore and illustrate the stakes of opening up research practices. This exploration shall then serve as an invitation for future, systematic research on modalities of doing open management research and education.

How can a pragmatist understanding of openness transform management education is illustrated in the ethnographic vignette on OpenAca, a never-ending course about new ways of working, co-produced with master students, PhD students, alumni, and academics which resulted in a growing set of articles, videos, podcasts, and data. as in the ethnographic vignette on OpenWalk, an innovative research method that involves walking with managers, activists, artists, students, and academics in the public space of cities to investigate specific issues at stake in the visited areas and to collectively build knowledge commons about the encountered problems. Both cases were motivated by the will to experiment with and open up traditional practices of teaching and research.

Our conceptual work and empirical analysis contribute to debates within management research concerning the question of how the discipline can attend not only to its own theoretical debates and conundrums but also be more immediately helpful to the concerns of management practitioners and students (Alvesson et al., 2017; Friesike et al., 2022). Among the key dimensions of the opening process, we show the importance of playfulness (a childish affect) as a general atmosphere (the generalization of an affect into quasi-materiality inscribed beyond a bounded time-space) likely to be cultivated by both researchers and managers. We also shed light on the ambiguity and deterritorialization involved in the process of opening and its continuity.

In the remainder of this study, we will first provide an overview of the larger context and project of open science and opening research in management research and education. Then, we will detail the ethnographic setting and process of OpenWalk and OpenAca which helped us to sensitize and illuminate what is at stake in opening research. Subsequently, we will detail our cases and stress three important stakes. Lastly, we will explore these stakes from the perspective of American pragmatism, especially its own view of playfulness, ambiguity, and deterritorialization. We close with a general discussion about the pragmatic way of opening management research and education.

Open management research and education

Open science and management research

We can understand the “open science movement” (Bartling & Friesike, 2014) as an endogenous force of change within the professional field of science. Professional scientists who are convinced and try to convince their peers that changes to the way academic research and education is conducted are needed drive the open science movement. They propose that more “open” research and educational practices (Heimstädt & Friesike, 2021; Kelleher & Bays, 2022) must replace “closed” forms of doing research and educating students. Members of the open science movement claim that overcoming the current system of closed science and moving toward a state of open science will yield a number of beneficial effects for the professional field, including reducing academic misconduct and questionable research practices, increasing the speed of scientific communication, and dismantling inequalities between the Global North and South (Aguinis et al., 2020; Dobusch & Heimstädt, 2019; Leone et al., 2021).

The open science movement emerged in the 1990s, when some academics started to share preprints, software, and datasets with their peers on the Internet². In the early days of the open science movement, these reformist ideas mostly found resonance in STEM³ disciplines. The community of management researchers has been reluctant to adopt new open science practices for quite some time. However, the field’s interest in the notion of open science has surged in recent years. On the one hand, management scholars have discovered open science as a new research topic, often linked to broader questions of innovation and knowledge management (Beck et al., 2022; Vicente-Saez & Martinez-Fuentes, 2018). On the other hand, open science is increasingly included in research institution guidelines (Aguinis et al., 2020; Friesike et al., 2022), discussed as part of the program at important management conferences (e.g., EGOS and AOM), and inscribed into the digital infrastructures that facilitate management research (e.g., new community-driven journals like *Organization Theory* publish all their articles under open access licenses). We, as authors of this article, write from the perspective of European citizens from non-anglophone countries (France and Germany). Our own experiences with open science and the literature on open science practices that we draw on hence is linked strongly to these contexts⁴. However, while we acknowledge that open science has different preconditions and takes different forms in Brazil (the location of this journal and presumably large parts of its audience), we see evidence of a trend toward openness there as well. Outside management studies, we find evidence for the popularity of open access journals and culture in Brazil (Carvalho Neto, Willinsky, & Alperin, 2016). We further find that researchers from Brazil have made use of citizen science in their research activities (Cunha et al., 2017). Language barriers make it more difficult for us to assess the state of open science in the management research and education in these countries. However, we take as an indicative example that this journal, *Organizações & Sociedade*, has a very strong (“diamond”) open access policy and is organized via an open-source software to manage manuscript submissions and peer reviews.

Taken together, these developments indicate the importance of open science for management research and education around the world. It is therefore highly important to take a closer look at how management researchers and educators interpret the notion of openness and what consequences such interpretations imply.

From openness as input/output to openness as process

When looking at their interpretation of openness, to date most open science practices in management research and education fall into one of two categories. In the first category, openness is interpreted as the quality of an output. Most prominently, open access publishing falls into this first category (Harzing & Adler, 2016). When management scholars choose an open access journal (e.g., *Organization Theory*) or opt for the open access publication pathway in a hybrid journal, they make a deliberate choice in favor of the copyright and legal accessibility of their research output. In a similar vein, management researchers who publish their underlying data or their software code together with their manuscripts perform an output-oriented form of open science (Freese, 2007). Other scholars can use this data and code as resources for their own future research projects but the initial accessibility of these materials is as output. Such output-oriented forms of open science can be found in management education as well. For example, when management researchers decide to make video recordings of their seminars available as open educational resources—e.g., openly licensed on openly accessible video platforms such as YouTube—openness is a feature of the output of scholars' teaching preparation (for example, the management course "Organizing in Times of Crisis," described in Friesike et al., 2022, p. 246).

In the second category, openness is interpreted as a quality of an input. Practices which fall into this category are considered more open than previous versions because they allow for contributions by a greater range of social groups. For example, Dobusch and Heimstädt (2019) argue that management journals should experiment with more open peer review. For example, they argue that the peer review process can be opened by inviting "all members of the wider community" to comment on a manuscript (p. 613). In a similar vein, the process can be opened by allowing "direct reciprocal discussions between authors and reviewers" (p. 613). Both proposals advance an interpretation of openness as an input to the research process. Another type of open science practice that interprets openness as input is citizen science. A growing number of management scholars uses new services and tools for crowd sourcing as a research method. In a recent review, Aguinis and colleagues (2020) found that, in management research, the use of Amazon Mechanical Turk (MTurk)—a popular crowdsourcing platform—increased from six papers in 2012 to 133 in 2019. Most recently, Leone and colleagues (2021) have argued that management research should try to open up not only peer review or data collection but also the core work of theorizing itself. They propose that researchers not only share their data and research materials but also their "theoretical scaffolds," i.e., "framings, concepts, theoretical relations, and examples" (p. 727). This "open theorizing," we argue, falls into the category of input-oriented openness as well because it advocates that management researchers' work should include a wider set of inputs (concepts, theoretical relations, and examples).

This brief overview of open science practices in management research and education indicates that the notion of openness can induce new and fruitful practices but that the form and effect of such practices depends on its underlying interpretation of openness. We have also shown that, to date, openness in the field of management is either interpreted as output or input. Interpreting openness as either input or output seems at first like a dichotomy. However, from a philosophical point of view, both interpretations share a common assumption about openness: that management research and education are stable entities which can be systematically opened at different points and for several ends. This assumption limits the potential range of open science

practices that derive from interpretations of openness—and hence the potential of management research and education to attend to new concerns and fulfill new purposes.

From our review of the literature and the time we spent as members of the open science movement in management research and education, we learned that openness and opening is almost never connected to a philosophical conversation about the ontology of openness or opening as an ontogenesis. Our ambition with this study is to start such a debate and to propose a processual understanding of openness as an alternative to the dominant entity-based understanding described above. To do so, we first show autoethnographic vignettes from two experiments with openness in management research and education. Subsequently, we interpret these vignettes via the lens of American Pragmatism.

Two experiments with openness in France

Research design and description of our ethnographic vignettes

In the two ethnographic settings detailed here (both clustering a set of experiments), we would like to offer two autoethnographic narratives on which the first author of this paper experimented and followed. As an inquiry, ethnography especially relies on participant observation (Bell, 2010; Ybema, Yanow, Wels, & Kamsteeg, 2009). It is an immersive process which involves a cut from the habitual life of a researcher, and the process of just flowing with the community and symbiotic world under study. Embodiment is key. What is felt, done, expressed by the researcher is the primary measure of ethnography. Logbooks, pictures, video, and even interviews can feed the ethnographic process. But in contrast to case-study based research (Yin, 2013), researchers acknowledge and endorse the insiders' view and a sense of experimentation from within. This fails to necessarily mean that an ethnography requires months or years of (unstopped) participation, but this immanence and relative continuity in the context of an activity (e.g., being there from the beginning to the end of an event) is key. Ethnography is highly processual. It observes things in the making, *in vivo*, with an openness to the plurality of ways of living and being in the world. This means that most ethnographic theories, notably in management research, are dynamic, processual accounts, understandings or explanations. In the continuity of ethnography, autoethnography also relies on an immersion and the use of ethnographic techniques, but the context is different (Doloriert & Sambrook, 2012; Karra & Phillips, 2008). Researchers involved in an autoethnographic process are part of the society and system under study. They do not need to legitimize themselves and be 'accepted.' They are already (or have been) part of the dance. It means that their stakes are different. If ethnography is a move from strangeness to familiarity and habituality, autoethnography is the opposite (it is much more a move from routines and ordinariness to strangeness). For instance, consultants involved in autoethnography about their work need to feel and make others feel in their writing what matters and what is strange in their practices (although they may not be felt as such for a long time).

The two autoethnographic cases we selected are both cases of open science in management scholarship. One reports on an experiment with processual openness in management education (OpenAca) and the other, in management research (OpenWalk).

Data exploration

In the spirit of autoethnography, the first author condensed some of his observations in a logbook detailing as much as possible what, when, where, and how he had his experiences. This set of notes constituted a rich body of material sometimes mobilized in social media posts, blog articles, and research manuscripts during his experience and contributing to the experience itself. In the spirit of open science, the numerous collaborative posts, reports, and articles completed by their participants (more than 20 texts for OpenAca and more than 50 for OpenWalk), memos, and notes by the first author, and social media data (all specific events had a hashtag which helped us to find the relevant comments, places, and pictures on Twitter, Facebook or Instagram) especially documented these two autoethnographic vignettes. Moreover, the Samsung health system (via the first author's mobile phone) captured the movements (walks and use of public transportation) in these open events (often involving walks and outdoor sequences). Table 1 summarizes all these (mostly public) data.

Numerous online data were co-produced and used openly for this research. In particular, Framapads, collaborative articles, tweets or social media posts were public data. We refrained from sharing the first author's logbooks, personal notes, and data of Samsung health systems (produced by his smartphone) for privacy reasons. For OpenWalk, collaborative articles were part of the inquiry we wanted to implement. They made visible the larger set of concerns identified by the group (especially local people joining the walk) and illustrated how the walk and collective discussion process provisionally converged around a key set of thematic chapters. For OpenAca, each student group published an article (on Medium) and contributed to a specific Framapad culminating in a collaborative report about what was said and done. We filmed most fixed sequences at the university, outside it or in public space and made them available online on a specific YouTube channel devoted to the course. We livestreamed some of these sequences. To open the course further, we also live tweeted the process, capturing the resulting set of Tweets at a later date (thanks to annual hashtags). The professor and PhD students involved in the coordination identified each year's topics. We used the concluding discussions from previous cohorts and the emergent problems they identified about work practices to give a first direction to the new open course. Both OpenWalk and OpenAca thus contributed to an important set of public data which aided the experiments themselves (as part of their openness) and helped their analysis in the context of this study.

Table 1
Ethnographic database

Case	OpenAca	OpenWalk
Collaborative documents	Framapads ⁵ of each session and other collaborative texts articles (e.g., Medium, LSB BR, and The Conversation).	Framapads and collaborative texts (e.g., The Conversation).
Memos and notes	First author's memos and notes made during and just after each event. Each paragraph in the logbook gathering memos and notes corresponds to a specific code (LogbookACA and the paragraph number: #1, #2. . . #n).	First author's memos and notes made during and just after each event. Each paragraph in the logbook gathering memos and notes corresponds to a specific code (LogbookWalk and the paragraph number: #1, #2. . . #n).
Social media data	The course included various platforms to share, enrich, and fact-check contents (two pages on LinkedIn, one on Facebook, one Twitter account, and a specific YouTube channel). It also included a specific blog gathering all contents and a project on Research Gate with all the inaugural lessons. Data for each year can be found by the hashtag #futureofworkttn2018 #futureofworkttn2019 #futureofworkttn2020 and #futureofworkttn2021	Several groups on Facebook, a very active Twitter account, an Instagram account, a website, a blog, and a specific YouTube channel helped us follow and share the events. We used numerous hashtags.
Geospatial data	Steps and movements captured using the Samsung Health app and Google Maps.	Steps and movements captured using the Samsung Health app and Google Maps.

Source: Created by the authors.

To elaborate on our two autoethnographic narratives, we especially focus on the first author's experience notes and the events and collaborative documents in which he was personally involved. Beyond things opened, we conceptualize all documents as traces of an opening process, especially that of the present shared by the people involved in OpenAca and OpenWalk. What is opened is the present, the immediate, shared memory of the walk or the course. Walking, chatting, sharing ideas, and experimenting continuously open and re-open the present (gradually) common to all participants (Semetsky, 2003). Understanding how this common present is built, and how the experiment eventualize it, was the core concern of the gathered data and their interpretation. In a way, therefore, this article weaves its own process of inquiry intermingled with the described inquiry process.

In the spirit of an ethnography, we want to stress that we failed to systematically 'treat' our data, making, sharing, and discussing them with participants and between the co-authors of this study. This process of talking about the material and making it talk (by putting pieces online) was extremely important for the process of reflexivity at which most ethnographic accounts aim. Nonetheless, future research will more systematically deal with what can also be seen as data, especially to move from sensibilization to opening stakes to the systematic exploration of opening modalities.

Ethnographic accounts of OpenAca and OpenWalk

OpenAca: Opening the practices of teaching new ways of working

OpenAca started in 2018 with a first course explicitly ministered to students of a master program in management as an open experimentation and an experimentation with openness. Its slogan was “A course open to all, never ending and contributing to knowledge commons,” a “course beyond the walls of the university,” for which “all contents co-produced had to be open access.” We made explicit the reference to open science in the presentation of the course.

Our idea involved a 21-hour long course comprising an introductory seminar about philosophical and historical perspectives on work transformation. This sequence includes an inaugural lecture re-written each year by the professor (the first author of this paper). We choose one or two philosophers to explore one aspect of work transformation and new managerial practices. This was also a way to set a tone for the open course and to give a deep and rigorous direction to the discussions. All the hype and fashion around new ways of working and organizing could lead to superficial and highly performative discussions. This was, at least, the strong fear of the first author involved in this process. For him, it was also important “*not to oppose too systematically open thinking and lectures, co-production, and the necessity to read, concentrate, and reflect in the first discomfort of immobility*” (LogbookWALK#9, 2018).

In total, fifteen hours of open teaching follow the opening lecture and seminar⁶. Students are invited to organize sessions “out of the walls,” in particular at “third places” (Oldenburg, 1989) around Paris. They can use any technique or practice they want. They are also encouraged to invite “leading witnesses” (“grands témoins”) likely to share their experience, views, and/or research on the topic. These guests can be managers, academics, activists, artists, or other students. They can be onsite or participate remotely (and even asynchronously by means of short, recorded interviews shared during the sessions). What matters is that this experience needs to contribute to an openly accessible article (e.g., a blog post) based on rigorous analysis (as much as possible sustained by concepts and philosophical perspectives) and primary (interviews, surveys, and observations made by researchers) or secondary data (consultants or researchers’ recent empirical studies).

Students received three roles. “Analysts” (five groups of five to six students) are expected to treat the topics proposed for the sessions⁷ (and based on alumni and past participants’ propositions sent to the coordinators). “Journalists” (a group of three to five people) are expected to share the process live, synchronously with the outside world by means of social media, posts, blogs, etc. They help to build a larger network of enrichment and continuous fact-checking with people from the outside. This continuous relation with outsiders, i.e., the need to permanently expose what is said to potential contradictions, is explicitly enacted as part of the openness of the course (“*you need to be in continuous conversation with any relevant people and sources. Do not stay in the comfort of this room and the ease of remoteness. Live, directly, interactively put people into the loop of the courses and contents you will co-design,*” extract from a message sent to students). Most feedback is benevolent and helpful. Some is violent and extremely aggressive (the intention is not understood from a distance, and some people believe they have caught students saying stupid things).

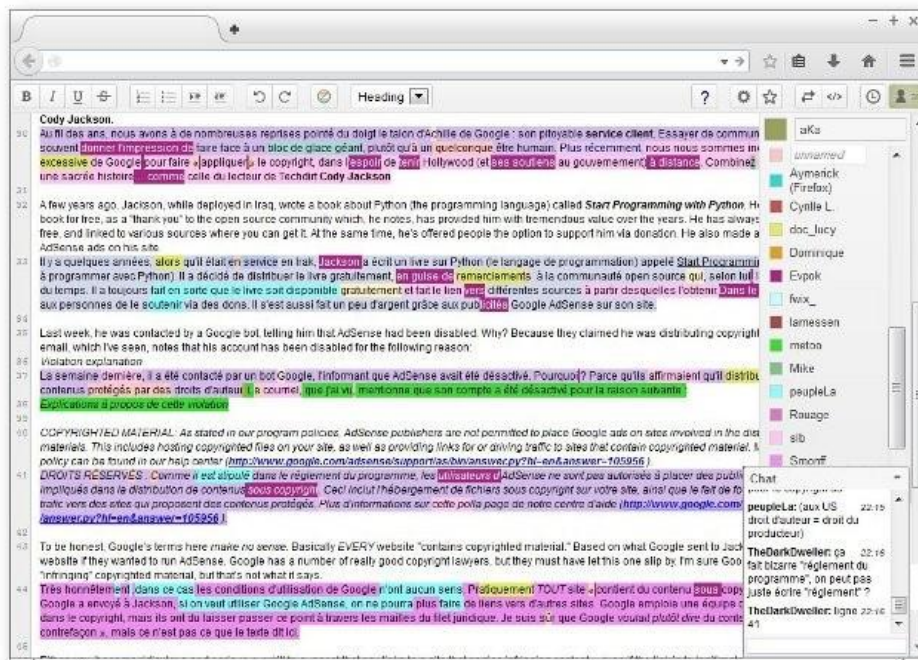


Figure 1. Example of a Framapad

Source: Screenshots taken by first author.

Lastly, all students played the role of “historians” (“journalists” and “analysts” alike). Each student was expected to contribute to a Framapad, i.e., a collaborative open-source word processor. The system is very simple. A weblink is set up and leads to a very simple online document that is sometimes projected during the course. All students who write in the online document are automatically assigned a color. They can then link this color to their name (or not). This system, although it needs animation, in particular people scrolling up and down in it to cultivate fluidity, is a very powerful tool to participatively build an archive and knowledge commons (see example below). This last aspect appears as a central invitation on the path to openness. As said by the teacher in an e-mail sent to all students:

Opening the course means not only breaking down its walls but also co-designing it. Putting all relevant actors and material in a position to co-design the course with all of you. This can take time. More time than the course itself and interactions beyond the official periods planned to do the course. Do not hesitate to improvise, to change the rules, but always in transparency with your classmates and institution. This is the best way to regulate our experimentation. Openness is also a different – more horizontal – regulation. (LogbookACA#2, 2021)

Here, we will focus mainly on the last experience (between September and November 2021), which gives a clear idea of the kind of process of inquiry at stake with OpenAca.

The last course started in early October 2021 with a six-hour seminar. Information about the course was sent out before, in late September. As usual, this seminar included an inaugural lecture

of 45 minutes. This year's topic was "The history of management between present and actuality: from Foucault to Merleau-Ponty". It aimed at offering possible concepts and dimensions to describe the transformation of work and management from an historical perspective. As each year, a note (twelve pages) was put online on various platforms (open source) to share the key ideas of this tailor-made lecture given (with great pleasure. . .) by the first author. A Framapad was set up and shared a couple of days before. It helped to continuously document what was said. After the introductory seminar (and at a reasonable distance of four weeks to allow students to build their sessions and to give journalists time to acquire the tools they would use to capture and diffuse the event), OpenAca began. In total, we decided on five thematic blocks. We intended for them to take place outside the university, "out of the walls" but the pandemic made it more difficult than usual. The sessions were the following:

The first session was about "Preserving an industrial memory: the site of Boulogne-Billancourt" ("Préserver une mémoire industrielle: le site de Boulogne-Billancourt"). The idea was to *"explore further the past of work, its presence in contemporary experience, how it is enacted, what can be learned from it, how its incompleteness and tensions have been and still can be generative for our present"* (extract from notes). Students got in touch with an association of retired people from Renault (the French car maker had a major factory in Boulogne-Billancourt up until 1992). We started our course with some formal elements and a presentation of archives by the students (see Figure 2). Then, four retired Renault employees from (three former workers and one former executive manager) guided us in Boulogne-Billancourt to comment on the remaining vestiges of industry or invisibilities of the past around us. Overall, three PhD students joined us at this stage. Numerous people also started to follow us from a distance on social media. At this stage, we diffused as much content as we could for those attending the course remotely in time and space.



Figure 2. Moments in the opening session of OpenAca (November, 2021)

Source: Photographs taken and anonymized by first author.

The second session (in the afternoon) took place in a nomadic way at the first author's university in Paris. It was again a historical session (about the cross imaginaries of AI and management). Students built an ephemeral museum about AI and management from the 1940s until today (in the student bar, a large room inside the university). A specific section of the museum was devoted to past movies dealing with AI. Sequences of theories and analysis alternated with

more ludic sequences (using the game-based learning platform “Kahoot”). At this stage, *“an obvious ludic, funny atmosphere was at play. Students talked a lot. They spontaneously took pictures and got involved in the games proposed offsite and online to all participants”* (extract from research notes). For the first author, this again came as a surprise. Obviously, play and work are not contradictory emotions or affects. They can be experienced together in a fluid way, especially when one feels that others are also following in this direction: classmates, students, external participants, and all sets and decor used for each sequence. Everybody and everything were playing seriously.

We then moved to another room which is generally devoted to cocktail receptions and ceremonies. It is on the top floor of the building, full of big windows and with a large terrace. As in the past years, *“it is always impressive how students re-appropriate some spaces of the university and its immediate environment in a specific way”* (extract from research notes). The intensity of the events fosters very interesting spatial and narrative bricolages, e.g., with a bulletin billboard, desks, or a bar counter transformed into the space of an exhibition and smartphones used as mobile stations for the course (with podcasts or sequences from learning platforms like Woodclap or Kahoot). A mobile video projector was used (in an improvised way) to project the results of the votes in our improvised space. This *“creates a sense of shared present and shared stakes. It is the visual proof of our co-presence in spite of the noise and the fluid movements inside and around the room. From this projected space, things can happen. Something can be opened and projected: our attention”* (LogbookACA#5, 2021). More than ever, it is impossible to tell where the pedagogic space starts and where it ends. We keep walking in the room, outside of it, inside the big corridors of our university. The space and time are more ‘atmospheric’ than ever, which does not mean that something serious is not happening in this un-bounded world.

The third session (on another day) is focused on “Workspaces at home: a politics of family life.” How do people re-configure the place and space of their homes to include more continuous work and telework inside it? Possible long online sessions for students with their school (as happened with the lockdown)? This session starts again in the cocktail rooms. It includes numerous online and onsite guests sharing their experience (e.g., consultants, office managers, and academic experts on remote work). The most intense part of the sequence was a hackathon based on the simulation tools of Leroy-Merlin (a major shop in France for house equipment). Students are asked to re-design the space of a house from various scenarios of life and work related to the people sharing the space. Each group sequentially shows its design. The atmosphere is a bit messy at this stage, with different groups dispersed in a big space. Some conversations disturbed our co-produced teaching.

In the afternoon, a long session “out of the walls” begins. It starts an hour earlier⁸ than the official program, with a strong sense of self-discipline among the students (*“If we want to be on time, we need to go now”*). In total, three voluntary sub-groups (one third of the total number of students each) use public transportation for the afternoon. Each group will follow a different path in Paris. The topic is “Third-places in a time of crisis.” Overall, three student groups visited and inquired three places (an artistic makerspace, a coworking space, and a coworking coffee shop, all in the city center of Paris). All these places are opportunities for long conversations with community managers. The three groups then meet in a fourth social entrepreneurship-oriented third place (*“I am surprised to find everybody right on time. The community manager seems to be very happy to meet this big group of students in her space. She welcomes us with open arms and a big smile. I*

realize at this point that openness is also a mood and an attitude,” extract from research notes, LogbookACA#9, 2021). Students then present a formal lecture alternating with various recorded testimonies and more playful sequences (with Kahoot). The atmosphere at this stage is more playful than ever, which does not mean that debates and discussions are not serious (see Figures 3 and 4). Students tease each other. Everybody plays the game of Kahoot, questions, and presentations.

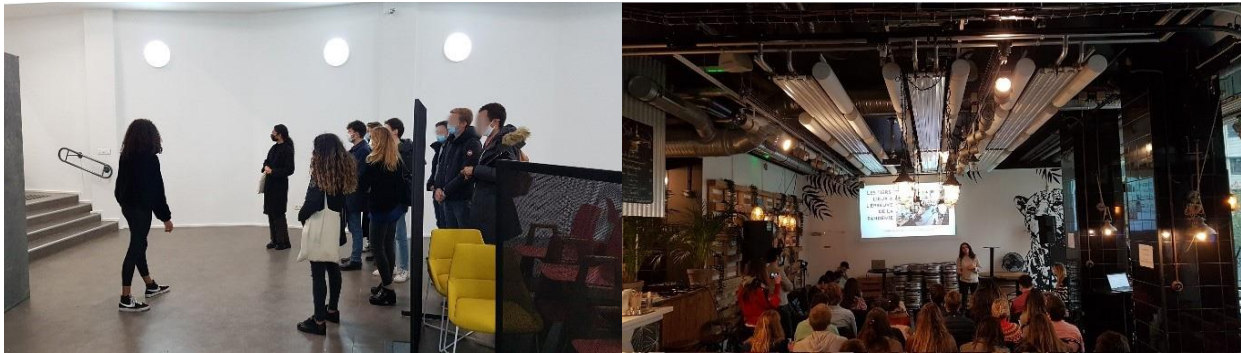


Figure 3. Visit of a third place during OpenAca

Source: Photographs taken and anonymized by the first author.

The last day is devoted to the two final sessions: one about “Remote work in consulting corporations” and another about “Social climate crisis and the transformations of management.” Both take place in a very corporate part of the university (the targeted consulting corporations finally refused to welcome students because of the size of the group at the time of the COVID-19 pandemic). Numerous guests physically join the place for panels or interviews. They contribute to the discussions and inquiry students openly conducted. Formal sequences thus alternate with inspirations from the outside. Reactions and questions sometimes come via social media, the Framapad or more directly via students and guests, e.g., from one consulting corporation in management, BPI lab (a company lab), Carbone 4 (a consulting corporation devoted to climate change issues), other academics from other universities, and PhD students. The openness of the course is, again, particularly obvious.

Most sequences are recorded. Some are live streamed via Facebook, Twitter or YouTube. A camera with a tripod (see Figure 4) is used to capture the immobile sequences of OpenAca as much as possible. Strangely, the presence of this present or future digital eye reinforces the seriousness of the play on site (*“I am always surprised, when I look back at pictures I took, to see students looking at me, looking at what I am doing with my smartphone. Likewise, they know that with journalists, their camcorders, smartphones, and access to the four social media accounts of the open course, the process is continuously being opened or continuously likely to be opened,”* extract from first author’s research notes). Some students are obviously dressed up for the day. A small tension lies in the air. The atmosphere is playful (e.g., people try things, experiment) but also serious (few conversations during the course). Numerous comments come in via social media. Most of them are benevolent and just specify what is said.



Figure 4. Capture and social media comments

Source: Photograph and screenshot taken and anonymized by first author.

In the social media comment displayed in Figure 4, the feedback came from a Canadian academic (a commented retweet), who specified a very important gender-based dimension of the spacing of apartments in Paris. Mostly men have access to an individual place to work from home. Other feedback (this year or from other years) were less benevolent and very aggressive. Most of them come from anonymized accounts. This happened this year (with a tweet giving information about electronic consumption based on the sending of an e-mail with a 1 MB attachment⁹). A group of people violently attacked the tweet without understanding its context (a co-designed course by students. . . not the communication of a consulting firm). Other aggressive reactions also occurred (fortunately they were very rare), usually from people contesting a precise statement and information without putting it in context and in the flow of other posts and tweets. Openness is not an easy exercise. . . If play and work are conflated most of the time, sometimes one polarity dominates the other and the paradoxical relation disappears. This often appears via the agency of what appears as an external event or presence. And sometimes, plurality also means bad encounters and surprises (*"Sometimes I must admit I have longed for the closure and protective walls of traditional courses. It is good to be in the heart of an institution, to do just what you are expected to do. And the preparation of the course is much quicker!"* extract from first author's research notes, LogbookACA#11, 2021). Sometimes, in public spaces, on site, people tease the group, ask questions, but never aggressively.

At the end of the sessions, students started to work on their open publications (published later in the course media to build openness in time). At the time we are writing this section (November 23rd, 2021), the aggregated number of views on all platforms (LinkedIn, Twitter, and blog) is already over 100,000.

OpenWalk: Opening academic and corporate relations with the public space of our cities

OpenWalk is a practice experimented far beyond the walls of the university and curated by an open learning society called Aventura (a pseudonym). Its beginnings date back to 2016, with two first experiments in Germany and in Spain. It was inspired by the spirit of open science and citizen science, although references to these movements (e.g., the concern for collectively building open

access knowledge) explicitly appeared only from the third experiment onward in discussions between organizers.

Aventura was launched when an interdisciplinary group of researchers – among them management researchers – started to experiment with different kinds of events and practices. Their idea aimed to explore a problem collaboratively and openly with practitioners and activists. They expected that using public and semi-public spaces would foster the relevant openness and fluidity of the practice (*“We expected that local people participating in the walk in public contexts would push the inquiry toward the true needs and concerns of their place and neighborhood. Through the process of walking and an open conversation both in the field and online, true problems would be fluidly performed,”* extract from first author’s research notes, LogbookWALK#5, 2019).

After several workshops, hackathons, and collaborative ethnographies, the idea crystallized around the possibilities of open learning expeditions. The idea was simple (and pragmatism came a bit later as an obvious source of inspiration and guidance). A mixed group of people openly explores a problem by spending between one and five days in an urban area, problematizing and making visible what is going on there and the kind of concerns at stake. The first part of the program, often co-designed in the flow of people openly registered for the event, is supplemented by a second part fully improvised with the group of walkers. Inquiry is a very embodied and engaged movement. It may fail to necessarily lead (locally) to a resolution but the repetition of the open learning expeditions certainly sets up a meta-inquiry and provisional resolution about the methodology itself (*“In the end, it is more a way of doing and acting collectively that we establish, rather than an explicit, formalized solution to a clear-cut problem,”* extract from first author’s research notes). To illustrate the process, we will detail one open learning expedition in 2016, repeated and extended in 2017, which epitomizes the process of opening at the heart of this research practice.

The first event, organized by a group of people including the first author, took place in Berlin in July 2016. The event aimed to make sense of hacking movements via the open exploration of a series of collaborative spaces (e.g., hackerspaces, makerspaces, and fablabs). Our intention was to gain insights into the practices developed in these new places of work via an unusual reflexive and collective experiment, unlike formal academic research approaches. Figure 5 shows the start of the project as a gathering at a co-working space in Berlin – an activity that, in more traditional research, is found at a later stage or the end of a project. The group’s initial idea was to record what is usually not observed or noticed in hackerspaces’ practices, such as gestures, informal exchanges, and body movements via pictures, drawings, and sketches.

This first walk in Berlin involved five academics and was the first outdoor event with an Aventura-branded program and the first opportunity to experiment with our Twitter account. An element we found particularly striking was how our ambling while walking in and between these spaces resonated with the concept of *“dérive”* (Debord, 1958; Michels, Hindley, Knowles, & Ruth, 2020). We spent time in the places we visited, talked to a great variety of new workers (co-workers and makers), and simply walked around. This was an interesting, enjoyable, and reflexive experience that contrasted with our classic academic lives (*“here anything could happen,”* extract from first author’s research notes, LogbookWALK#3, 2019), in which time matters and intense concentration is ever present, leaving only little time for play, surprises, and unexpected encounters. For the first time, the idea of developing a “walking ethnography protocol” emerged, fed by the spirit and principles of open science.



Figure 5. Opening moment at a coworking space in Berlin

Source: Photographs taken and anonymized by first author.

This first experiment was followed by another event in Berlin (a learning expedition over three days) in March 2017. This time, we chose to leave the program more open, with the intention of co-designing the event “on the go,” from discussions and interactions relying on collective dynamics. Overall, 37 individuals took part in this experiment, most of them interested in collaborative spaces and third places. We started at a central Berlin co-working space, with an opening seminar including three academic presentations on the new world of work, followed by a panel with a co-founder of a coworking space, two lab managers (of a fablab and a worklab), an academic economic geographer, and an urban and regional development consultant. This was followed by a set of walked visits in Berlin of third places and labs. After visiting a coworking space, some of the participants in the experiment explored an urban gardening space nearby, whereas others organized visits to other coworking spaces in the city, interspersed with informal conversations and encounters over meals. At this point, improvisations were still rare, although people enjoyed meeting others and discovering new spaces. This part of the program was particularly useful to build or identify a shared present. Via discussions, people realized their common interest in collaborative spaces, their role in urban processes, and the issue of their operational and strategic management.

The second day started with a visit to an iconic makerspace further away. Many people arrived late, and two newcomers who had not registered joined us in front of the makerspace. They had “heard” about the event and when one of us asked what they had come for, they appeared distant and lost. A group member suspected that one of them (a woman) may have been a refugee and had spent the night on the street. The coworking space community manager then organized a tour. At some point, we heard jazz music on the upper floor. We went up and discovered a group of jazz musicians who were there to film a video clip and invited us to their concert in the evening.

Since the program was voluntarily opened for the next days, the design of the third experiment day started over lunch, nearby, with the newcomers, who suggested getting in touch with another place. We decided to visit a fablab, with the help of its community manager. A workshop on practitioner-academic collaboration followed the tour. This day (and the next ones) were the most improvised, via impromptu visits to coworking spaces and walks. Multiple surprising

events (detours, encounters, and drifts) opened the common present built during the first day. These experiences of taking time, improvising, and discussing unexpected topics led us to think about how to link this collective ethnographic experimentation to management education practices and how to combine them. We were building a common narrative at this point, an innovative narrative also likely to feed a true, deep affective memory (*"What I mostly remember now, what connects me to the people I met, what I learned, is mainly grounded on the open time of this learning expedition. This highly recreative moment,"* extract from first author's research notes, LogbookWALK#14, 2020).

In the evening, we had a final discussion at a coworking space café but it was still difficult to develop a clear sense of what we had done and learned. We talked about the European migrant crisis and tried to understand how makers and hackers might help. As a participant knew the owner of the space, she asked him to organize a visit. He improvised an inspiring talk about the history of the coworking concept and its places in Germany. The atmosphere was particularly exciting. Obviously, everybody was happy to be there and to share this moment so far from academic or entrepreneurial codes. Things were simple and obvious. On the other hand, they were not happening by chance. The event, a fluid animation, and a set of improvisations were making it happen. It was in-between work and play. Everybody was 'playing seriously,' especially during this sequence and all that day.

The day after, because of an air traffic controllers' strike (a major unexpected moment), we had to stay for an additional day, which we saw as an opportunity for further visits and long walks. Usually, on traditional research trips, financial (a structured event is needed to justify travel expenses), security (an urban space can be perceived as dangerous), or practical concerns (people need to know where the walk will lead them) explain why organizers, teachers, facilitators, guides, or coaches that lead and facilitate the event often need to plan programs in detail, in ways that mean drifting as such never occurs. In contrast, our experiment was quite different, as it relied on drifting as a central feature. As Figure 6 shows, the walking ethnography relied on a process punctuating our broader inquiry of Berlin as a central place for collaborative communities in Europe. Seated times of discussion were very important for the energy and feelings of the walk in the time before and after it. They reminded us of the privilege of walking together. They made these moments more recreational and playful while preserving the depth of most discussions.



Figure 6. Agora time in a coworking space

Source: Photographs taken and anonymized by first author.

To summarize, inquiry was the heart of the first two days of this experimentation, with a strong sense of focus and time (organized in a heavy program). The end of the second day was a first opportunity to let the *dérive* emerge (“*What’s next? There is almost nothing in the program. . .*,” said one participant, LogbookWALK#17, 2019). The third day was *dérive* and improvisations in the space of Berlin. Then, the next two days focused on discussing, analyzing what had happened, and what was going on in the area. We thus moved again to a very reflexive inquiry and a kind of closure about what was going on in Berlin regarding collaborative spaces and beyond them, the state of entrepreneurship here. We also realized that many people were following us virtually via various online platforms, and we started thinking about making our walking expeditions more accessible and open online.

After another expedition (in Tokyo, in June 2017, related to the hacking movement), we suggested formalizing our open learning expeditions practice (and thus an intermediary closure or resolution) and discussed on various online outlets (LinkedIn Pulse and business and social sciences blogs), helping us to specify the nature of our collaborative expeditions as a commons-oriented method for academics and entrepreneurs.

In the end, our experimentation in Berlin emerged as a very important stage in the construction of our practice of walking ethnography. It helped us to further elaborate its underlying protocol and to feel that both inquiry and *dérive* were powerful energizers in the process of walking. In Berlin, we also experimented with the idea of writing up our experiences via a live blog, managed by an Aventura community managers. Some months later, during an experiment in Tokyo, we consolidated this blog to document our co-designed processes and practices. We started documenting our practices online in a more systematic manner, via a dedicated project developed

together with 18 coordinators in January 2018. This produced several collective articles, presented at major academic management conferences (in 2018-2020), six research seminars, a series of research articles, working papers related to new work practices, books, book chapters, and a white paper relating to our walking ethnography, to which 24 coordinators and participants contributed. The idea of connecting these events and retweeting past and future events during learning expeditions (another way to re-open the present) also emerged at the end of 2018, and this has started to be more systematically organized online via Twitter, Facebook, and in our blog posts.

Inquiry as a process of opening: Making sense of the experiments through Dewey's pragmatism

Now we would like to come back to our two ethnographic accounts and offer a reading grid of what we said, one also likely to help our readers to take some distance from the cases and to make sense of openness as a never-ending process fed by the (necessary) persistence of its animators.

American Pragmatism: A consequentialist philosophy

We initially proposed that management research and education (e.g., the two experimentations explored with our ethnography) can benefit from becoming more open, not just in the sense of input/output but in a pragmatist sense of processual openness, as conceptualized by American Pragmatism. American Pragmatism is a philosophical movement that emerged in the United States immediately after the civil war, in a country which was (still is?) extremely divided (de Vaujany, 2022; Lorino, 2018; Misak, 2008; Zask, 2015). Pragmatism is a consequentialist philosophy, in contrast to the transcendentalism of Emerson and Thoreau, the philosophical stream that preceded it (Misak, 2008). Objects, things, and space have no pre-defined existence. They fail to precede what is going on in the world; instead, the world is the continuous consequence of activities taking place from within it (Misak, 2008). This consequentialism has wide ranging consequences for domains such as philosophy, politics or art. This study focuses on John Dewey's consequentialist view and its implications for management research and education. A consequentialist vision of the world is a key feature in Dewey's pragmatism. Basically, consequentialism means that people act first. They do not 'intend' to act. They just act and then see what happens and go on acting in this direction if they feel in harmony with what is happening. The consequences of activities are what matters. Beyond that, all the world is just 'happens.' Pragmatism is a highly processual philosophy (Lorino, 2018; Zask, 2015). The world 'as it is' is not the cause or context of activity. It is its ultimate material consequence.

In a continuation of this consequentialist view of the world, Dewey suggests that our activities keep experimenting with the world, exploring the world through the visible consequences of activity, as part of a process he called an "inquiry" (Dewey, 1938, 1942; Lorino, 2018). Life is a continuous inquiry, a continuous experiment of the truth from within activities and their consequences. More precisely for Dewey (1938), inquiry is "the controlled or directed transformation of an indeterminate situation into one that is so determinate . . . as to convert the elements of the original situation into a unified whole" (pp. 104-105) (see also Dewey, 1942). Thus,

people continuously explore the consequences of their acts so as to build a coherent, unified, and integrated set of entities and principles of action at some point. They try to establish a provisional closure to solve issues at hand. For instance, someone comes to her bus station, as she does every morning. But the usual digital board she is used to looking at is turned off. She does not understand. Does that mean that there will be no buses this morning? Does that mean there is a strike? Does that mean this stop is not part of the bus route anymore? She asks other people waiting questions and inquiries from another bus stopping in front of her (of another route). She initiates a set of inquiries, which quickly become collective inquiries (other people are concerned). She also looks at her smartphone and the poster with all the schedules hanging at the bus station. At some point, a new set of actions is identified as a stable and coherent way to solve the situation. Obviously, the line is interrupted. She will use the tramway next to the bridge and take a metro after that. Together, the group of waiters walk on the way to this other means of transportation.

For Dewey, the inquiry process thus starts within concerns (Zask, 2015). Often, very vague ones. Sometimes, in the flow of conversations merged with our activities, these concerns become inquiries. We identify problems underlining our concerns (*"I don't know what it means that the bus sign is turned off"*). These are never pre-given problems. For a true process of inquiry to occur, these problems need to be immanent, to emerge from the inside of activity. In our example, the person looks at her smartphone, talks to other people, looks at the poster with the time-schedule. . . If the context is truly "open," a large variety of people, objects, and techniques will be put into "trans-action" by the flow of inquiries. The trans-action process will perform all these entities. They will 'matter,' become a force, as part of the becoming of all inquiries. That, in the productive tensions of the transactions, will produce a "community of inquiry" (all the people and objects involved in the process of understanding what is going on with this bus line).

Pragmatism is obviously influenced by and in many ways a part of process studies and process philosophy (Lorino, 2018). Dewey acknowledged several times his debt and legacy from Alfred North Whitehead or Henri Bergson in his writings (Myers, 2019; Rescher, 1996). Nonetheless, Dewey also had some reservations about process philosophy, or rather an extreme and too circular view of metaphysics. For him, a processual stance means a speculation process and most of all, a continuous experimentation in the world and of the world (beyond just projecting and illustrating a process axiomatic or propositional system). He sometimes felt that Whitehead himself was a little bit contradictory or misinterpreted (Basile, 2013; de Vaujany, 2022).

With our two experimentations (and future ones), we precisely want to avoid this bewilderment which can result in a kind of non-democratic and elitist knowledge defended by Lippmann (see the Lippmann-Dewey controversy¹⁰, which is very interesting for this research). Process needs to be lived from the inside, which means, most of all, experimenting with it and through it, wrapping the happening of an agentive self (of students, teachers, administrative managers, etc.) in this hesitant and explorative relationship with the world. And this happens precisely through inquiry.

Inquiry as opening the world

This aspect is very important in Dewey's theory of education¹¹, something that clearly makes sense in the context of OpenAca and OpenWalk. An open process of inquiry is a way to

communalize, learn, and cultivate a form of democracy. Openness thus means the capability of the process to feed and speculate on itself via the highest possible plurality of entities likely to be performed by the inquiry. We should avoid or contain generative tensions, tense comparisons, and rigid dialogs. All differences are likely to bring something for the final problem-solving of the city. Openness is fully interwoven with the 'publicity'¹² of inquiry, the emergence of a public space that is far more than a physical place. It is the modality of a radically open conversation in which any human and non-human entity can have a voice.

Interestingly, Dewey stresses the lack of necessity for a process of inquiry to reach an end. The process of moving from indetermination to determination can diverge and be interrupted and drawn into a broader process of inquiry at any time. And inquiry is not the project and will of any specific individual. It is a broader movement fed by all the entities recursively co-constituted by it.

Most of all, openness itself is what will matter. Opening and continuously re-opening the process of inquiry, cultivating a plurality from within, will enrich the productive differences at stake. Education and learning, as pragmatist processes, are a process of opening. Basically, openness can be learned¹³. A pragmatist method of education thus both builds (local) knowledge and simultaneously diffuses it. A process of inquiry is an answer to a real, emergent, performed, local problem as expressed, identified, categorized by the emergent community co-constituting it.

This view had and still has radical implications. The unique time-space of most educational and scientific practices of universities becomes irrelevant. Education and research processes need to increase their liquefaction. They need to follow the fluidity of the true concerns and inquiries at stake in our societies.

This involves more continuous, intense, and open processes than those we follow, especially in business schools and management departments. Most business models of management departments and business schools involve circling, isolating, and pinning down value. The value of an institution is "clubbified" (McCann, Granter, Hyde, & Aroles, 2020). The decrease in public resources keeps underlining this trend, but inquiry is continuous, and if it is suspended or interrupted, it becomes something else. Inquiry prehends and clusters events (Whitehead, 1929). It is a continuous discontinuity. Lastly, an inquiry needs openness. What makes it a living process is its openness and closure is death. It is the opposite of a lived experience and a live experience. It is the opposite of life. Openness is about plurality of activities rather than the diversity of pre-defined profiles. Openness overcomes traditional categorization. The community of inquiry invents its own categories likely to foster the handling of the identified problem.

What about the process of opening in Dewey's theory of education (another very important aspect of his thought)? It appears as a key dimension of the aforementioned political process. Indeed, it is at the heart of the trans-action being performed by the actors, objects, and instruments of inquiry:

The transactional is in fact that point of view which systematically proceeds upon the ground that knowing is co-operative and as such is integral with communication. By its own processes it is allied with the postulational. It demands that statements be made as descriptions of events in terms of durations in time and areas in space. It excludes

assertions of fixity and attempts to impose them. It installs openness and flexibility in the very process of knowing. (Dewey & Benteley, 1960, p. 97)

We note that Dewey thinks about educational openness in a very active way. Openness needs to be installed. It is not the necessary property of a process of concern.

But why is openness so important for Dewey's theory of education? Not 'only' because it is the primary feature of life and any living event, but more politically, because it is the necessary condition of any creative democracy, i.e., open dialogue about public problems in the city, which needs to continuously re-invent the *modus operandi* of the public practices likely to solve the problems. Without openness of its political processes likely to re-define the perimeter, modalities and entities of its dialogues continuously, democracy becomes an impossibility, a closure, death. Dewey thus states

Since the process of experience is capable of being educative, faith in democracy is all one with faith in experience and education. All ends and values that are cut off from the ongoing process become arrests, fixations. They strive to fixate what has been gained instead of using it to open the road and point the way to new and better experiences¹⁴. (Dewey, 1939, p. 4)

Obviously (playful) inquiry and ambiguity were part of the process we described in the previous section, both for OpenAca and OpenWalk. They are even the key stakes made sensible and visible through our ethnography. In the next part, we will add a third important, yet less visible issue at stake in our ethnographic vignettes: deterritorialization (Deleuze & Guattari, 1980).

Discussion: Common temporality, playful atmosphere, and the continuous ambiguation of the world on the way to openness

Our two ethnographic vignettes, and our experience behind it, converge in a common, temporal processual vision of openness. They both show the importance of shared narratives connecting deeply desired past and future and "temporal work"¹⁵ (Kaplan & Orlikowski, 2013) to settle on common ground in the present of inquiry. Basically, when a shared narrative was missing, coordination, joint sense-making, enrollment, all organizing processes were missing as well. The group was unable to produce the knowledge common for OpenAca. The final results were an addition of articles (by analysts) without a common narrative frame (by journalists). Some journalists thus told us that "*they were managers of the group after all*" (excerpt from first author's research notes). Although they thought at first that their responsibility was that of superficial storytelling, they realized at some point that their narrative was the very organization of the open course. And that producing this narrative (live with social media¹⁶ or asynchronously with blog posts) was at the heart of the process of opening the course. This was true both inside and outside. For people following the course (e.g., alumni from a distance), the weakness or absence of a clear narrative (e.g., repeatedly announcing what would happen, with whom, and when) meant a lack of organization, an organizational void.

Likewise, the emergent narrative of people walking for OpenWalk was also an organizing process. Participants did not know where and when the walk was supposed to stop (a way to keep it open). However, starting to walk created a sense of arriving somewhere. These people often became narrative actors. Places encountered were chapters of the narrative. They punctuated it. They were reasons to stop or to go on or further, to accelerate, or to interrupt the story. They were narrative content and structures (in ongoing conversations among the walkers or for the community managers on social media). What mattered was to keep this narrative open to new encounters, narrative actors entering into the story, and turning points in the walk. Maintaining this openness was supposed to always insert some emptiness or ambiguities into the narrative to make it likely to welcome new strangers. Deliberately or not, this involved avoiding linearity and completeness in the narrative. This also involved (to avoid being instrumentalized by this endless narrative flow) to keep on discussing it, deeply opening it to build true subjectivities; subjectivities likely to help us to resist, even, if necessary, the narrative itself. With the wisdom of hindsight, this twofold openness ensures its contribution to a true common.

And in the end, the knowledge commons itself (articles, blog texts, pads, tweets. . .) thus appeared as a narrative. And the more often it was shared, the more open it became as well. The content itself appeared as a narrative more than as a static description. Writing the narrative, living it, and reading it later were all part of the communalization process.

Opening, as a process, thus appears far more temporal than in the bulk of open science literature, which discusses openness as quality of inputs or outputs (see 2.2). And in the context of management research and education, temporality also opens the way to managerial techniques of narration. The community management of any open experimentation needs to be narrative. Beyond issues of property and open documentation, a truly open educational and/or research experience needs to be narrative. More ontologically, the temporality of openness is never-ending, always ambiguous. It is not the dialectic of an open discussion expected to converge at some point with a synthesis or final resolution. It is the childish experience of playfulness, that of a deliberate incompleteness opening the way to the next novelty and incompleteness. A child has never really finished her play. The play is finished because of the limitations imposed at some point in the worlds of adults. For children, an idea or a practice simply continuously brings in another one in a fluid way. Here, an open temporality is a playful temporality, lived as such by the first author and most participants he encountered. All objects, instruments, people, and emotions are radically 'ambiguated.' Their destination and their duration in the play, are simply indefinite. A play is often externally ended externally but it has no end in itself. It is the pure and radical temporal openness of inquiry.

The two autoethnographic vignettes also converge regarding the importance of atmosphere (de Molli, Mengis, & van Marrewijk, 2020; de Vaujany, Dandoy, Grandazzi, & Faure, 2019; Jørgensen & Holt, 2019; Julmi, 2017). Both cases describe a playful atmosphere, which incorporates atmospheres for all those involved in the inquiry (see L. Hjorth & Richardson, 2020, on the notion of "ambient play"). An atmosphere is a liquid, unbounded materiality. The time-space of an atmosphere fails to result in any fixation. The atmosphere of a coworking space flows beyond its walls. The bistros, the private apartments of coworkers, the public transportation used to get there, the furniture, the perspectives, all contribute to an organizational atmosphere. Opening a practice means to cultivate this 'atmosphericity' in one way or another. Most of the time in life, something

can be possessed. An atmosphere can be shared but it is out of reach. Again, it is pure openness, but here a rather spatial one. An atmospheric process just moves through those taking part in the experimentation. It contributes to the unbounded and not yet emplaced spatiality of their inquiry. It gives both energy and an aesthetic to inquiries which need not be precisely somewhere or leading to somewhere.

Indeed, playfulness is an explicit part of John Dewey's work on education (we discovered that after our fieldwork, when we came back to Dewey's writings). It is a key, necessary dimension of any authentic educative process. And cultivating this fundamental experience on the way to creative democracy would require artistic skills for teachers. This idea appears as a discussion in both "Democracy and Education"¹⁷ (Dewey, 1916) and "How we think" (Dewey, 1910). For Dewey (1910), playfulness is not an isolated polarity, the simple opposite of seriousness. In contrast, playfulness is always interwoven with seriousness. The discontinuities of play and the exploratory and often chaotic world of play paradoxically require some sort of perseverance and continuity, a strong involvement in the playful situation, whatever its volatility and ephemerality for external observers (especially for parents).

Beyond children, Dewey believes that artists also epitomized and cultivated this paradox, who would be a great model for teachers. He believes that teachers should always develop an 'in-between' attitude and should teach 'habits' in-between their students (Skilbeck, 2017). This attitude is both a way to seriously be in the world and to (re)open it (playfully) at the same time. Playing means considering anything at hand as a possible other world. But pushing it further, expanding it, and unveiling it to ourselves, other people, and other worlds require a sense and will of continuity; a serious sense and will of continuity. Otherwise, openness and opening would be pure evanescence.

What is the difference between playfulness and play? According to Dewey (1910), "Playfulness is a more important consideration than play", in that playfulness is "an attitude of mind" whereas play is only "a passing outward manifestation of this attitude" (p. 162). Indeed, "the kind of playfulness that Dewey initially imagines is that of pretend play in early childhood in which things acquire meaning through becoming "vehicles of suggestion" (p. 162), for example when "the child plays horse with a broom and cars with chairs" (Skilbeck, 2017, p. 3). Basically, for children, the whole world is a world of possibility directly following the flow of their imaginary activities. The world offers no resistance. It has a deep ambiguity, making it the open "vehicle" or "mediation" of any desired project (see also Mazis, 2016, as well as Merleau-Ponty, 1964, and his approach of "depth" as a new ontology). This kind of fluid, continuous, deep activity combining a playfulness interwoven with the seriousness of experience easily absorbs the world. Again, children want to do it. They work and try to build the world of their play and keep the process open to feed it. It is because play is also work that is likely to go on, persist, produce, and transform.

Dewey finds a continuous "harmonization of seriousness and playfulness" (Skilbeck, 2017, p. 3). Teaching then requires "an authentic presence that is attuned to the nature of what is being taught, together with a concern for the outcomes to be achieved. Such an attunement would allow for playfulness and humor as well as seriousness. It is an attunement between both the individual and others in mutuality and with him or herself" (Skilbeck, 2017, p. 1).

In the end, “Dewey’s proposal appears to imply that each subject, in its own way, is best taught through an ideal blending of the playful and the serious” (Skilbeck, 2017, p. 5). Blurring boundaries, using hybrid words and aesthetics, and cultivating new categories beyond the play-work dichotomy seems to be at the heart of educational task for Dewey.

In management research and education, playfulness, e.g., of organizational space, is often claimed to be an important aspect of innovation, creativity, and entrepreneurship (Andersen & Pors, 2014; D. Hjorth, 2004; D. Hjorth, Strati, Dodd, & Weik, 2018; L. Hjorth & Richardson, 2020; Ortmann & Sydow, 2018). The work of Huizinga (1949) is often mentioned to build an approach to the conceptualization of playfulness and playfulness is sometimes linked to a temporal opening of individual selves (Andersen & Pors, 2014). However, to our knowledge, no systematic use of Dewey’s pragmatism and his work about playfulness has been accomplished regarding its temporal organization openness. Beyond this research, we believe that future research should further explore playfulness by focusing on Dewey’s theory of inquiry and playfulness. We believe this detour is likely to add very interesting temporal and political dimensions, which could be particularly relevant to understand and experiment further with the open science venture in management research and education.

Thus, some inquiries failed to result in clear-cut inquiries or even clear-cut concerns. Things remained tentative, playful, and atmospheric. People just kept drifting and playing. Continuously and seriously playing was all that mattered (exactly as stressed by Dewey, 1910). They reached no determination at any point. Again, the process remained atmospheric in many ways. Most of the time, nothing was clearly put in transactions and performed by the process of inquiry. Everything was pure openness. But at some points, moments of crystallization or convergences did occur (e.g., in the process of writing collaborative reports or collaborative notes). Most of the time, this was fed by the need to give some coherence to the lived narration. “How can we share this experience, not only with all those here now but with all those who are following or will follow us in the distant time and space?” This concern made it necessary to visualize some of the key lines, directions, and perspectives at stake in the discussions.

The third thing stressed in both cases is the importance of public spaces or rather, what Dewey called “publicity” (Zask, 2015). Both OpenAca and OpenWalk were opportunities to ‘space’ a publicity, i.e., a public debate, time-space, and relevant instruments interwoven with the process of inquiry. A spatiality inside the event of open experimentation. And for the teachers, researchers, and students involved in the experimentation, this spacing is never obvious. It is an effort, but this effort of spacing and grounding is always creative. For OpenAca, some courses were outdoors and in third places, but for the others, we encouraged students to use the non-traditional spaces of the university to invent their co-produced teaching (in corridors, the cafeteria, internal courtyard, in the square next to the university. . .). Settling these bubbles was always a creative moment. It amplified observations, discussions, and the learning process. For those following us at a distance, it was a way to wake them up. Interestingly, the publicity we experienced was not the (even provisional) emplacement of inquiry for the course or the walk. In contrast, it was more a very interesting deterritorialization (Deleuze & Guattari, 1980). Our whole traditional practice became more of an odyssey, a non-place, something happening here and on social media, in the context of an intense moment which makes that colleagues and students do not really feel there but more now. They

space more than they emplace. And this is precisely what fosters the flow of openness itself. Its spacing more than its grounding or anchorage (which could event become a problem).

Ultimately, opening management research and education practices is a fascinating challenge. It is not something that can be done and so become more provisionally 'opened.' Openness, as a process, is a continuous collaborative temporal work. Playfulness, ambiguity, and deterritorialization are key stakes and dimensions that all management scholars and activists of open science need to keep in mind to foster a continuous opening of their practice. Via that, we suggest neither a guideline nor a heuristic, but more key dimensions which need to be continuously part of the process and discussion to co-produce open research that matters.

The management community needs to do this for itself, in coherence with its concern for social and managerial usefulness and to feed its critical quality. For Dewey, criticism is relevant if it occurs in the context of deep processes of opening. Otherwise, it is at risk of feeding ideology and ideologization. However, beyond management studies itself and the relevance of its knowledge and practices, we believe that such a move could benefit business schools, universities, and companies. In a pandemic world, enduring a dramatic climatological crisis, in dark political times, managers who see themselves as part of a continuous processes of opening are more needed than ever. Via them, we could perhaps break away from our 'resource' relationship with the world and our planet to see in them pure openness toward a shared desired future.

References

- Adamson, R. E. (1952). Functional fixedness as related to problem solving: A repetition of three experiments. *Journal of Experimental Psychology*, 44(4), 288-291. doi:10.1037/h0062487
- Aguinis, H., Banks, G. C., Rogelberg, S. G., & Cascio, W. F. (2020). Actionable recommendations for narrowing the science-practice gap in open science. *Organizational Behavior and Human Decision Processes*, 158, 27-35. doi:10.1016/j.obhdp.2020.02.007
- Alvesson, M., Gabriel, Y., & Paulsen, R. (2017). *Return to meaning: A social science with something to say*. Oxford: Oxford University Press.
- Andersen, N. Å., & Pors, J. G. (2014). Playful membership: Embracing an unknown future. *Management & Organizational History*, 9(2), 166-183. doi:10.1080/17449359.2014.891796
- Bartling, S., & Friesike, S. (2014). *Opening science: The evolving guide on how the internet is changing research, collaboration and scholarly publishing*. New York: Springer.
- Basile, P. (2013). Creativity, philosophy, and the good: Dewey's critique of Whitehead's metaphysics. *Process Studies*, 42(1), 5-19. doi:10.2307/44798327
- Beck, S., Bergenholtz, C., Bogers, M., Brasseur, T.-M., Conradsen, M. L., Di Marco, D., . . . & Xu, S. M. (2022). The open innovation in science research field: A collaborative conceptualisation approach. *Industry and Innovation*, 29(2), 136-185. doi:10.1080/13662716.2020.1792274
- Bell, E. (2010). Organizational ethnography. *Qualitative Research in Organizations and Management*, 5(2), 216-219. doi:10.1108/17465641011068875

- Brown, A. D. (2001). Organization studies and identity: Towards a research agenda. *Human Relations*, 54(1), 113-121. doi:10.1177/0018726701541014
- Carvalho Neto, S., Willinsky, J., & Alperin, J. P. (2016). Measuring, rating, supporting, and strengthening open access scholarly publishing in Brazil. *Education Policy Analysis Archives*, 24(54), 1-25. doi:10.14507/epaa.24.2391
- Clegg, S. R., Hardy, C., & Nord, W. R. (1996). *Handbook of organization studies*. Thousand Oaks: SAGE Publications.
- Cuffaro, H. K. (1995). *Experimenting with the world: John Dewey and the early childhood classroom*. New York: Teachers College Press.
- Cunha, D. G. F., Marques, J. F., Resende, J. C., Falco, P. B., Souza, C. M., & Loisel, S. A. (2017). Citizen science participation in research in the environmental sciences: key factors related to projects' success and longevity. *Anais da Academia Brasileira de Ciências*, 89(Suppl.3), 2229-2245. doi:10.1590/0001-3765201720160548
- Debord, G. (1958). Théorie de la dérive. *Internationale Situationniste*, 2, 3-4.
- DeCesare, T. (2012). The Lippmann-Dewey "debate" revisited: The problem of knowledge and the role of experts in modern democratic theory. *Philosophical Studies in Education*, 43, 106-116. Recuperado de <https://bit.ly/3Q17vo1>
- Deleuze, G., & Guattari, F. (1980). *Mille plateaux: Capitalisme et schizophrénie*. Paris: Les Éditions de Minuit.
- de Molli, F., Mengis, J., & van Marrewijk, A. (2020). The aestheticization of hybrid space: The atmosphere of the Locarno Film Festival. *Organization Studies*, 41(11), 1491-1512. doi:10.1177/0170840619867348
- de Vaujany, F.-X. (2022). *Apocalypse managériale*. Paris: Les Belles Lettres.
- de Vaujany, F.-X., Dandoy, A., Grandazzi, A., & Faure, S. (2019). Experiencing a new place as an atmosphere: A focus on tours of collaborative spaces. *Scandinavian Journal of Management*, 35(2), 1-36. doi:10.1016/j.scaman.2018.08.001
- Dewey, J. (1910). *How we think*. Lexington: D.C. Heath & Co.
- Dewey, J. (1916). *Democracy and education: An introduction to the philosophy of education*. New York: MacMillan.
- Dewey, J. (1938). *Logic: The theory of inquiry*. New York: Henry Holt and Company.
- Dewey, J. (1939). Creative democracy: The task before us. In J. Dewey, *John Dewey and the Promise of America, Progressive Education Booklet*. Columbus: American Education Press.
- Dewey, J. (1942). Inquiry and indeterminateness of situations. *The Journal of Philosophy*, 39(11), 290-296. doi:10.2307/2018037
- Dewey, J., & Bentley, A. F. (1960). *Knowing and the known*. Boston: Beacon Press.
- Dobusch, L., & Heimstädt, M. (2019). Predatory publishing in management research: A call for open peer review. *Management Learning*, 50(5), 607-619. doi:10.1177/1350507619878820

- Dobusch, L., & Heimstädt, M. (2021). *The structural transformation of the scientific public sphere: Constitution and consequences of the path towards Open Access*. Berlin: Weizenbaum Institute for the Networked Society.
- Doloriert, C., & Sambrook, S. (2012). Organisational autoethnography. *Journal of Organizational Ethnography, 1*(1), 83-95. doi:10.1108/20466741211220688
- Evans, T. R. (2020). Improving evidence quality for organisational change management through open science. *Journal of Organizational Change Management, 33*(2), 367-378. doi:10.1108/JOCM-05-2019-0127
- Freese, J. (2007). Overcoming objections to open-source social science. *Sociological Methods & Research, 36*(2), 220-226. doi:10.1177/0049124107306665
- Friesike, S., Dobusch, L., & Heimstädt, M. (2022). Striving for societal impact as an early-career researcher: Reflections on five common concerns. *Research in the Sociology of Organizations, 79*, 239-255. doi:10.1108/S0733-558X20220000079022
- Glucksberg, S. (1962). The influence of strength of drive on functional fixedness and perceptual recognition. *Journal of Experimental Psychology, 63*(1), 36-41. doi:10.1037/h0044683
- Harzing, A.-W., & Adler, N. J. (2016). Disseminating knowledge: From potential to reality—new open-access journals collide with convention. *Academy of Management Learning & Education, 15*(1), 140-156. doi:10.5465/amle.2013.0373
- Heimstädt, M., & Friesike, S. (2021). The odd couple: Contrasting openness in innovation and science. *Innovation, 23*(3), 425-438. doi:10.1080/14479338.2020.1837631
- Hjorth, D. (2004). Creating space for play/invention—concepts of space and organizational entrepreneurship. *Entrepreneurship & Regional Development, 16*(5), 413-432. doi:10.1080/0898562042000197144
- Hjorth, D., Strati, A., Dodd, S. D., & Weik, E. (2018). Organizational creativity, play and entrepreneurship: Introduction and framing. *Organization Studies, 39*(2-3), 155-168. doi:10.1177/0170840617752748
- Hjorth, L., & Richardson, I. (2020). *Ambient play*. Cambridge: MIT Press.
- Huizinga, J. (1949). *Homo Ludens: A study of the play-element of culture*. London: Routledge & Kegan Paul.
- Jørgensen, L., & Holt, R. (2019). Organization, atmosphere, and digital technologies: Designing sensory order. *Organization, 26*(5), 673-695. doi:10.1177/1350508419855698
- Julmi, C. (2017). The concept of atmosphere in management and organization studies. *Organizational Aesthetics, 6*(1), 4-30. Recuperado de <https://bit.ly/3zsGLpC>
- Kaplan, S., & Orlikowski, W. J. (2013). Temporal work in strategy making. *Organization Science, 24*(4), 965-995. doi:10.1287/orsc.1120.0792
- Karra, N., & Phillips, N. (2008). Researching “back home” international management research as autoethnography. *Organizational Research Methods, 11*(3), 541-561. doi:10.1177/1094428106295496

- Kelleher, W., & Bays, H. (2022). Place-making narrative data: Management issues in the context of open science and data curation in France. *Journal of Open Humanities Data*, 8, 1-13. doi:10.5334/johd.75
- Lallement, M. (2015). *L'âge du faire*. Paris: Editions du Seuil.
- Leone, P. V., Mantere, S., & Faraj, S. (2021). Open theorizing in management and organization studies. *Academy of Management Review*, 46(4), 725-749. doi:10.5465/amr.2019.0279
- Lorino, P. (2018). *Pragmatism and organization studies*. Oxford: Oxford University Press.
- Mayer, K. U. (2013). Open Access improves returns to public research funding: A perspective from Germany. *Information Services & Use*, 33(1), 3-10. doi:10.3233/ISU-130690
- Mazis, G. A. (2016). *Merleau-Ponty and the face of the world: Silence, ethics, imagination, and poetic ontology*. New York: SUNY Press.
- McCann, L., Granter, E., Hyde, P., & Aroles, J. (2020). 'Upon the gears and upon the wheels': Terror convergence and total administration in the neoliberal university. *Management Learning*, 51(4), 431-451. doi:10.1177/1350507620924162
- Merleau-Ponty, M. (1964). *Le visible et l'invisible*. Paris: Gallimard.
- Michels, C., Hindley, C., Knowles, D., & Ruth, D. (2020). Learning atmospheres: Re-imagining management education through the dérive. *Management Learning*, 51(5), 559-578. doi:10.1177/1350507620906673
- Misak, C. (Ed.). (2008). *The Oxford handbook of American philosophy*. Oxford: Oxford University Press.
- Myers, W. T. (2019). Dewey, Whitehead, and process metaphysics. In S. Fesmire (Ed.), *The Oxford Handbook of Dewey* (pp. 53-72). Oxford: Oxford University Press.
- Oldenburg, R. (1989). *The great good place: Cafes, coffee shops, community centers, beauty parlors, general stores, bars, hangouts, and how they get you through the day*. Saint Paul: Paragon House.
- Ortmann, G., & Sydow, J. (2018). Dancing in chains: Creative practices in/of organizations. *Organization Studies*, 39(7), 899-921. doi:10.1177/0170840617717096
- Rescher, N. (1996). *Process metaphysics: An introduction to process philosophy*. New York: SUNY Press.
- Semetsky, I. (2003). The problematics of human subjectivity: Gilles Deleuze and the Deweyan legacy. *Studies in Philosophy and Education*, 22, 211-225. doi:10.1023/A:1022877506539
- Skilbeck, A. (2017). Dewey on seriousness, playfulness and the role of the teacher. *Education Sciences*, 7(1), 1-14. doi:10.3390/educsci7010016
- Van de Ven, A. H. (2007). *Engaged scholarship: A guide for organizational and social research*. Oxford: Oxford University Press.
- Vicente-Saez, R., & Martinez-Fuentes, C. (2018). Open science now: A systematic literature review for an integrated definition. *Journal of Business Research*, 88, 428-436. doi:10.1016/j.jbusres.2017.12.043

Whitehead, A. N. (1929). *Process and reality*. New York: Free Press.

Ybema, S., Yanow, D., Wels, H., & Kamsteeg, F. H. (Eds.). (2009). *Organizational ethnography: Studying the complexity of everyday life*. Thousand Oaks: SAGE Publications.

Yin, R. K. (2013). *Case study research: Design and methods*. Thousand Oaks: SAGE Publications.

Zask, J. (2015). *Introduction à John Dewey*. Paris: La Découverte.

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Notes

1. A question which appears as more and more central for management scholars has not always been obvious (Van de Ven, 2007).
2. It thus shares some common roots with the hacker movement and culture, which aim at overcoming proprietary computing and fostering hacking gestures, i.e., transgressive creative acts validated by the hacker community (see Lallement, 2015). A hack can be a move from a 12 line program with PERL to six lines, judged as a brilliant simplification by the hacker community. Hackers cultivate the openness of software and hardware but also their community and the processes to which they contribute.
3. Science, Technology, Engineering, and Mathematics.
4. For an overview of key trends in Europe, especially in Germany and France, see Mayer (2013) or Kelleher and Bays (2022).
5. Framapad is an open infrastructure for collaborative word-processing. For more details, see <https://framapad.org/abc/en/>
6. We use the present tense here, as the course is repeated each year.
7. These topics are enacted as ‘open.’ They are just what has been collectively seen by the previous cohort and coordinators as relevant problems and directions. Students are free to re-formulate and depart from them (but they need to keep a ‘direction’).
8. It is always surprising how much students are willing to give for such a course. The traditional time-schedule becomes just a landmark. They work much more than usual.
9. Based on data borrowed from a report of ADEME, the French energy agency.
10. According to DeCesare (2012), at the heart of “Lippmann’s and Dewey’s disagreement over the role of the expert vis-à-vis the public in a democracy are fundamental differences of thought concerning (1) the kind and degree of knowledge and competence required of citizens in a popularly governed polity and, a related matter, (2) the potential of average citizens to acquire and exercise such knowledge and competence in political affairs and practical life in general” (p. 4).

11. Dewey's theory of inquiry and theory of education (and democracy) are largely interwoven (see Zask, 2015).
12. The continuous process of becoming public.
13. Once they turned adults, people can also unlearn their habits of closure and re-open themselves to their childish, ambiguous relationship with the world. Surprisingly, this process can also be seen as a return to childhood. Psychologists have shown that children under seven years of age have no "functional fixedness." They do not pre-assign goals and affordances to things around them. This 'necessity' comes only after seven years of age. Before that point, a child keeps experiencing the radical ambiguity of the world (see Adamson, 1952; Glucksberg, 1962).
14. Cuffaro (1995) insists on the differential nature of this process of openness in Dewey's writings: "I then had to face the discrepancy between my stated aims and my actual behavior, the distance between my limiting openness and the openness to which I aspired" (p. 44).
15. I.e., narrative and material activities aiming at connecting past, present, and future events to build temporal structures likely to solve the problem at hand.
16. We noticed that the activity of live tweets led by the first author, when interrupted, partly changed the atmosphere. It was as if one of the digital eyes had left the room and nobody was watching the play. Like children in the playground, for whom mum's or dad's attention is very important for the seriousness of their games.
17. In a chapter entitled: "Play and Work in the Curriculum."

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