

Seizing the Potentialities of Open Science: From a Community to a Platform Journal

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The adventure of the Research Group on Collaborative Spaces (RGCS)² started in March 2014. At that time, our network was not an association. It was a Working Group settled in France, in the UK and in Canada gathering researchers and practitioners interested in topics of new collaborative work and collaborative spaces³. Quickly came on the way the issue of Open Science (OS) and Citizen Sciences. To develop knowledge commons (for society and organizations) and to explore impactful, inclusive, responsible, resonant new practices, methods and concepts about and for collaborative practices, OS appeared quickly as a promising space.

Our network thus started to co-produce its own knowledge commons. Topics such as “new (open) research methods” for social sciences and humanities (Aubouin et al, 2018), new (open) academic events and new academic practices (de Vaujany et al, 2018), “open education” and “open university” (Aroles et al, 2020; de Vaujany, Bohas and Irrmann, 2019), third-places and their role in our cities (Bohas et al, 2017) or new democratic practices (Bohas et al, 2016 ; de Vaujany, 2021) paved the way of our documented and shared discussions. In particular, the practice of “walking ethnographies” and “collaborative learning expeditions” (see the OWEE⁴ protocol co-produced by the network in the spirit of a knowledge commons, Aubouin et al, 2018; de Vaujany and Vitaud, 2017) became a central part of our co-production of a knowledge commons. RGCS organized more than 32 OWEE experimentations in more than 20 countries with no other resources than enthusiasm and the affordances of open science. All these discussions have for sure strong continuities with past discussions about “actionable knowledge” (Argyris, 1996) or “practitioners'-academic' collaborations” (Carton and Ungureanu, 2017), but they also involve discontinuities because of the standards, connectivity and political philosophies at stake in open science and citizen science (Frieske et al, 2015; Fuller, 1999; Gieryn, 2006; Herther, 2012).

In 2019, we felt that the time had come to offer a more lasting landmark to all people interested in OS in the context of social studies at large, and in Management and Organization Studies, in particular, with a stress on

methodological issues (how to do collectively open science?) and philosophical debates (what is the meaning of open science, with which political implications for our societies and organizations)? Philosophers and sociologists of science have demystified the image of ‘normal’ sciences which they opposed to a practice-based and culture-imbued view which strives to investigate not only what scientists formally think but also what they do and how knowledge arises out of mundane academic practices such as conducting laboratory research, collaborating, writing up scientific theories or disseminating findings (see Knorr-Cetina et al., 2001), suggesting that the real, pulsating, mundane life of science often disattends the idealistic image of normal science as universal, objective, impersonal and based on illimited doubt (see also Hacket et al., 2008; Latour, 2002; Lynch, 1997). Yet, while much of what we know is related to what science is not, there is still much we must learn about the boundaries between new and old social practices of science making, including where they currently stand and what they may become in the future (Collins & Evans, 2002; Gieryn, 1995; Ungureanu & Bertolotti, 2020). We here argue, thus, that OS would very much benefit from the use of the theoretical lenses and ethnographic tools employed by the pioneers of sociology of science. Indeed, Open Science stakes are at the intersection of three realms: techniques, theories and research methods (see figure 1 below) (see Mirowski, 2018; Banks et al, 2019).

Open science practices often regard a shared “access to” something (1), or “opening” data such as surveys, interviews, measures or field notes. Various protocols, norms, licenses and infrastructures of the last decades have made real-time accessibility and collaboration within our reach. More and more, OS promoters realize that there is a mismatch between the model that they propose and the state of the academic fields which seek adoption, such that the theoretical lenses and concepts they use need to be aligned with the openness philosophy itself (2) (see Leone, Mantere and Faraj, 2021). OS thus may gradually be faced with the need to conceptualize a broader, non-dualistic process including both data collection, data diffusion and recursive and inclusive

¹ In the order of appearance: DISMI - University of Modena and Reggio Emilia, Bayes Business School - City University of London, DRM - Université Paris Dauphine-PSL.

² See <http://rgcs-owee.org/> and @collspaces for more information.

³ Acronym in French : NETC which stood for Nouveau Envronnement de Travail Collaboratif, i.e. new collaborative work environment.

⁴ OWEE (i.e. Open Walked Events-Based Experimentations) is a collective walk in a city, mixing local people with new comers, partly improvised, and aiming at offering a co-produced narrative and inquiry about a local territory and its problems. It is inspired namely by Debord (1958) famous “derive” and American Pragmatism and its theory of inquiry (see Dewey, 1938).

communication. In turn, these theoretical issues trigger reflections on methodological issues (3). Part of the traditional research methods do not fit with the objectives of OS (de Vaujany et al, 2018). And the problem is not just about opening as much as possible traditional spaces of academic discussions. Beyond spatial issues, at the heart of the discussion are new ways of co-narrating knowledge, new research temporalities (de Vaujany et al, 2018), new philosophies⁵ which go beyond the closeness of the finite and the final, a paper which 'dies' as soon as it reaches destination in the academic journal⁶.

Research designs can flourish where diversity becomes a priority. When observations fall outside the purview of existing theory, researchers are encouraged to intensify data gathering and employ various research designs to synthesize the observations and build or extend theory (von Krogh et al., 2012). Phenomena-driven approaches thus cover a middle ground between data and theory, where general theories need to account for phenomena (Bogen and Woodward, 1988). In Management and Organization Studies, phenomena inspire theorization and what was a novel discovery enters the canon of general understanding over time (von Krogh et al., 2012). For instance, communities online where hackers build Free and Open Source software used to puzzle economists and organization scholars (Lerner and Tirole, 2002) and, as research proceeded, these organizations became the site of further studies that take their organization for granted (see e.g. Rullani and Haefliger, 2013).

The diversity of research approaches and designs can lend critical perspectives a voice as well as break established wisdom. It is noteworthy that the phenomenon of openness has had multiple declinations in the last decades, and that we are still very much in need of comparisons across paradigms, practices and processes of openness. We know that the discovery of openness followed a similar path from subverting established paradigms of building software (Kelty, 2001; Moody, 2009) to breaking established ways of describing job roles (Alexy et al., 2013) all the way to questioning strategy making (Luedicke et al., 2017), and new forms of organizing for public governance (Erikson, 2012; Macintosh & White, 2008; Skelcher et al., 2005). However, more research into what differs and what stays the same across different phenomena of openness would be benefic to making openness a distinct, consistent and integrated field of research. Research designs addressing openness may include nethnographies and questionnaires,

online observations and conversations, video and multimodal research, experiments and simulations, testing prior work as well as grounded theorizing about what openness means in specific contexts or across different contexts.

The Journal of Open Commons & Organizing (JOCO) aims at being a forum among others, a journal-platform. We will collect and select papers and other contributions all year long and valorize them in an annual issue. It will include three sections: an edited section (publishing research notes and white papers issues by RGCS during the year), an open reviewed section and a platform section (including a "paradise of lost papers" and a social network likely to help open researchers interested in social studies to identify each other). Beyond publication and diffusion, it will be combined with social network, open infrastructures and events (e.g. OWEEs and open seminars) likely to foster new kind of approaches to our practices. Each publication will stay 'alive' thanks to open panels (fishbowl panels), specific open seminars and new research material provided continuously by publishing researchers.

Based on the arguments above, the explored topics will be old and new ways of working (in corporate, scientific and activist worlds) or living and their relationships with new (open) modes of management, new ways of organizing and alternative forms of society. More precisely, we would expect contributions about:

- History of work and management in an open world;
- Changing nature of work: New ways of working, of managing and organizing in an open world;
- Understanding change in professions and expertise in an increasingly open and interconnected society;
- The blurring of work and leisure categories in the context of new ways of working;
- Collaborative entrepreneurship and coworking;
- Hackers and makers movements;
- Hackerspaces, makerspaces, FabLabs, biohackerspaces, third-places;
- Open Innovation;
- New practices and cultures of participation in technology and knowledge communities (crowdfunding, crowdsourcing, participation in open source technologies and decentralized technologies such as blockchains);
- New forms of collaboration, partnerships and participation in addressing grand challenges at the societal level (e.g., SDGs);

⁵ With promising discussions around American Pragmatism (Lorino, 2018; de Vaujany, 2021), knowledge anarchism (de Monthoux, 1983) or post-Marxism (Therborn, 2018).

⁶ See also this RGCS open seminar organized in July 2020 and entitled : "Re-inventing academic events: how to co-produce different conferences, workshops and seminars?": <https://www.youtube.com/watch?v=nDhGBwaalo4>.

- Open strategy;
- Open policies;
- Open sciences and citizen sciences;
- Collaborative ethnography;
- Crowd research and new research practices exploring the crowd;
- Knowledge and digital commons;
- Theories of commons and communities;
- Communalizations practices and societies;
- Philosophies of commons and communities (e.g. based on phenomenology, sensible ontologies, pragmatism, Marxism, post-Marxism, critical perspectives...);
- Public policies devoted to commons, common good and communities;
- Education to openness, open knowledge and common good;
- Learning processes of openness and common good;
- New research methods devoted to openness, commons and common good;
- Open data based research.

Articles involving researchers, but also practitioners, artists, activists, are welcome. We expect in particular contributions likely to leverage the organizational and political potential of commons and OS for our societies. Looking forward to reading your propositions (collaborativespaces@gmail.com)!

References

- Adler, P.S.; Kwon, S.W., & Heckscher, C. (2008). Professional Work: The Emergence of Collaborative Community. *Organization Science*, 19 (2), 359–376
- Albornoz, D., & Chan, L. (2018). Power and Inequality in Open Science Discourses. *IRIS - Revista de Informação, Memória e Tecnologia*, 4(1), 70–79.
- Alexy, O., Henkel, J., & Wallin, M. W. (2013). From closed to open: Job role changes, individual predispositions, and the adoption of commercial open source software development. *Research Policy*, 42(8), 1325–1340.
- Argyris, C. (1996) Actionable knowledge: Design causality in the service of consequential theory. *The Journal of applied behavioral science* 32.4, 390–406.
- Aroles, J., Vallat, D., & de Vaujany, F. X. (2020). L'éducation supérieure dans un monde post-covid: propositions pour une université ouverte, Note de recherche RGCS, available here : <https://hal.archives-ouvertes.fr/hal-02925628/document>
- Aubouin, N. et al (2018). Walking the Commons: Drifting Together in the City (Doctoral dissertation, RGCS (Research Group on Collaborative Spaces), RGCS White Paper, available here: <https://halshs.archives-ouvertes.fr/halshs-01907637/document>
- Avison, D., Malaurent, J., & Eynaud, P. (2017). A narrative approach to publishing information systems research: inspiration from the French New Novel tradition. *European Journal of Information Systems*, 26(3), 260–273.
- Banks, G. C., Field, J. G., Oswald, F. L., O'Boyle, E. H., Landis, R. S., Rupp, D. E., & Rogelberg, S. G. (2019). Answers to 18 Questions About Open Science Practices. *Journal of Business and Psychology*, 34(3), 257–270.
- Banks, G., Field, J., Landis, R.S., O'Boyle, E., Oswald, F.L. & Rogelberg, S. (2017). Multiple Perspectives on Open Science Practices: Myths, Urban Legends, and Realities. *Academy of Management Proceedings*. Vol. 2017, No. 1.
- Bogen, J., & Woodward, J. (1988). Saving the phenomena. *The philosophical review*, 97(3), 303–352.
- Bohas, A. et al (2016). Coworkers, Makers and Hackers in the city : Reinventing policies, Corporate strategies and Citizenship ?, RGCS White Paper, Iss 1, available here: https://www.researchgate.net/publication/349098930_Coworkers_Makers_and_Hackers_in_the_city_Reinventing_policies_Corporate_strategies_and_Citizenship
- Bohas, A., Faure, S. and de Vaujany, F.X. (2017). Tiers-lieux et espaces collaboratifs : laboratoires et révélateurs des nouvelles pratiques de travail ?, note de recherche RGCS, available here : https://www.researchgate.net/publication/320566450_Tiers-lieux_et_espaces_collaboratifs_laboratoires_et_revelateurs_des_nouvelles_pratiques_de_travail
- Carton, G., & Ungureanu, P. (2018). Bridging the Research–Practice Divide: A Study of Scholar-Practitioners' Multiple Role Management Strategies and Knowledge Spillovers Across Roles. *Journal of Management Inquiry*, 27 (4), 436–453.
- Collins, H. M., & Evans, R. (2002). The third wave of science studies: Studies of expertise and experience. *Social studies of science*, 32(2), 235–296.
- Chan, L., & Loizides, F. (2017). Expanding Perspectives on Open Science: Communities, Cultures, and Diversity in Concepts and Practices. In *Proceedings of the 21st International Conference on Electronic Publishing*. p. 328. <https://pdfs.semanticscholar.org/7316/2187274e15ae3633b7a6050a46d01b838216.pdf>
- de Vaujany, F. X., & Vitaud, L. (2017). Re-inventing management research with learning expeditions. *LSE business review*, available here: <http://eprints.lse.ac.uk/83242/1/LSE%20Business%20Review%20%E2%80%93%20Re-inventing%20management%20research%20with%20learning%20expeditions.pdf>
- de Vaujany, F. X., Dandoy, A., Grandazzi, A., & Clegg, S. R. (2018, July). Breaking the waves: Practicing phenomenologically simultaneity in management research. In *Academy of Management Proceedings* (Vol. 2018, No. 1, p. 14336). Briarcliff Manor, NY 10510: Academy of Management.
- de Vaujany, F. X., Bohas, A., & Irrmann, O. (2019). Vers une éducation ouverte: Faire, réflexivité et culture pour une éducation-recherche, Note de recherche RGCS, numèra 4, available here : http://rgcs-owee.org/wp-content/uploads/2019/06/Note4_RGCS_2019_VFFF.pdf
- De Monthoux, P. G. (1983). *Action and existence*. New York, NY: John Wiley and Sons.
- Eriksson, K. (2012). Self-service society: Participative politics and new forms of governance. *Public Administration*, 90(3), 685–698.
- Fecher, B., & Friesike, S. (2014). Open Science: One Term, Five Schools of Thought. In S. Bartling & S. Friesike (Ed.), *Opening Science: The Evolving Guide on How the Internet is Changing Research, Collaboration and Scholarly Publishing* (p. 17–47).
- Frankenhuis, W. E., & Nettle, D. (2018). Open science is liberating and can foster creativity. *Perspectives on Psychological Science*, 13(4), 439–447.
- Friesike, S., Widenmayer, B., Gassmann, O., & Schildhauer, T. (2015). Opening science: towards an agenda of open science in academia and industry. *The journal of technology transfer*, 40(4), 581–601.
- Fuller, S. (1999). *Governance of science: Ideology and the future of the open society*. McGraw-Hill Education (UK).
- Gieryn, Thomas F. "Boundaries of science." In *Science and the Quest for Reality*, pp. 293–332. Palgrave Macmillan, London, 1995.

- Gieryn, T. F. (2006). City as truth-spot: Laboratories and field-sites in urban studies. *Social studies of science*, 36(1), 5-38.
- Hackett, E. J., Amsterdamska, O., Lynch, M., & Wajcman, J. (2008). *The handbook of science and technology studies*. MIT Press.
- Haefliger, S., Von Krogh, G., & Spaeth, S. (2008). Code reuse in open source software. *Management science*, 54(1), 180-193.
- Herther, N. K. (2012). 21st-century science: Citizen science and science 2.0. *Online*, 36(6), 15-22.
- Husted, E., & Plesner, U. (2017). Spaces of open-source politics: Physical and digital conditions for political organization. *Organization*, 24(5), 648-670.
- Kelty, C. M. (2001). Free software/free science.
- Knorr-Cetina, K., Schatzki, T. R., & Von Savigny, E. (Eds.). (2005). *The practice turn in contemporary theory*. Routledge.
- Lakomý, M., Hlavová, R., & Machackova, H. (2019). Open Science and the Science-Society Relationship. *Society*, 56(3).
- Langlois, R. N., & Garzarelli, G. (2008). Of hackers and hairdressers: Modularity and the organizational economics of open-source collaboration. *Industry and Innovation*, 15(2), 125-143.
- Latour, B. (2000). When things strike back: a possible contribution of 'science studies' to the social sciences. *The British journal of sociology*, 51(1), 107-123.
- Leone, P.V., Mantere, S. and Faraj, S. (2021). Open theorizing in management and organization studies, *Academy of Management Review*, in press.
- Lerner, J., & Tirole, J. (2002). Some simple economics of open source. *The journal of industrial economics*, 50(2), 197-234.
- Levine, S. S., & Prietula, M. J. (2014). Open Collaboration for Innovation: Principles and Performance. *Organization Science*, 25(5), 1414-1433.
- Lorino, P. (2018). *Pragmatism and organization studies*. London: Oxford University Press.
- Lucas, M., & Wright, A. (2015). Organizing spaces: photography and the visual production of space-texts in organizational ethnography. Presented at APROS Colloquium 2015, December 9. Sub-theme 12, UTS. Sydney, Australia. <http://oro.open.ac.uk/45947/>
- Luedicke, M. K., Husemann, K. C., Furnari, S., & Ladstaetter, F. (2017). Radically open strategizing: how the premium cola collective takes open strategy to the extreme. *Long Range Planning*, 50(3), 371-384.
- Lynch, M. (1997). *Scientific practice and ordinary action: Ethnomethodology and social studies of science*. Cambridge University Press.
- MacIntosh, R., Beech, N., Bartunek, J., Mason, K., Cooke, B., & Denyer, D. (2017). Impact and management research: Exploring relationships between temporality, dialogue, reflexivity and praxis. *British Journal of Management*, 28(1), 3-13.
- Macintosh, A., & Whyte, A. (2008). Towards an evaluation framework for eParticipation. *Transforming government: People, process and policy*.
- Martiny, K., David B. Pedersen, and Alfred Birkegaard. "Open media science." *Journal of Science Communication*. 15.6 (2016): Ao2.
- McCormick, S. (2009). From "politico-scientists" to democratizing science movements: The changing climate of citizens and science. *Organization & Environment*, 22(1), 34.
- Mirowski, P. (2018). The future(s) of Open Science. *Social Studies of Science*, 48(2), 171-203.
- Moody, G. (2009). *Rebel code: Linux and the open source revolution*. Hachette UK.
- Nenonen, S., Brodie, R. J., Storbacka, K., & Peters, L. (2017). Theorizing with managers: how to achieve both academic rigor and practical relevance? *European Journal of Marketing*, 51(7/8).
- Nosek, B., Alter, G., Banks, G., Borsboom, D., Bowman, S., & Breckler, S. (2015). Promoting an open research culture. *Science*, 348(6242), 1422-1425.
- Peters, M. A. ; Roberts, P. (2016). *The Virtues of Openness*. (Routledge, Ed.). Routledge.
- Peters, M. A. (2010). Openness, Web 2.0 technology, and open science. *Policy futures in education*. 8.5, 567-574.
- Rullani, F., & Haefliger, S. (2013). The periphery on stage: The intra-organizational dynamics in online communities of creation. *Research Policy*, 42(4), 941-953.
- Rynes, S. L., Bartunek, J. M., & Daft, R. L. (2001). Across the great divide: Knowledge creation and transfer between practitioners and academics. *Academy of Management Journal*, 44(2), pp. 340-355.
- Skelcher, C., Mathur, N., & Smith, M. (2005). The public governance of collaborative spaces: Discourse, design and democracy. *Public administration*, 83(3), 573-596.
- Therborn, G. (2018). *From Marxism to Post-Marxism?*. Verso Books.
- Ungureanu, P., & Bertolotti, F. (2020). From gaps to tangles: A relational framework for the future of the theory-practice debate. *Futures*, 118, 102532.
- Von Krogh, G., Rossi-Lamastra, C., & Haefliger, S. (2012). Phenomenon-based research in management and organisation science: When is it rigorous and does it matter?. *Long Range Planning*, 45(4), 277-298.