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Excavating multispecies landscapes: temporalities, materialities and the more-than-human Anthropocene Session organisers: Aurora Fredriksen (University of Manchester) and Charlotte Wrigley (Queen Mary, University of London)

Title: Watching pollution with sentinel species. How participative biomonitoring can become cosmopolitical experiments

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Abstract: Following a heated local controversy about the construction of a waste incinerator in the Fos-sur-Mer industrial area near Marseille (France), residents pointed to the lack of knowledge about the industry's cumulative impacts on their health and environment. With the help of some of their elected representatives, a citizen-based organization, IECP (or the Ecocitizen Institute for Knowing Pollution), were created. An Institute whose aim is to develop independent yet situated scientific research on the chronic effects of pollution. The objective of this communication is to examine the work accomplished by the IECP so that 'undone science' (Frickel et al. 2010) about pollution and its impacts gets done through taking care of the specificity of this highly industrialised place. We focus on two participatory biomonitoring experiments aiming at documenting atmospheric pollution (with lichens) and marine pollution (with conger fish) in the Fos-sur-Mer area. In these experiments, scientists working for the IECP negotiated together with committed residents and volunteers which species could give them the most accurate, also locally relevant, account of the state of their territory (Gramaglia, Dauphin 2017). Elaborating on actor-network theory, we discuss the abilities of previously "insignificant others" to become highly significant ones (Haraway 2008) as their skills in detecting of early sign of environmental damage are proven right. We argue that this constitutes a cosmopolitical experiment too (Stengers 2010) as humans' everyday experience and understanding of the world is transformed subsequently. We conclude on the need for further multispecies ethnography (Kirksey, Helmreich, 2010) to elaborate tactics to cope with pollution and elaborate "arts of living" in the anthropocene (Tsing et al. 2017).

Frickel, S., et al. (2010). "Undone Science: Charting Social Movement and Civil society Challenges to Research Agenda Setting." *Science, Technology & Human Values* 35(4): 444-473.

Gramaglia, C., Dauphin, C.E. (2017) « Toucher la pollution industrielle du doigt grâce aux lichens. Ethnographie d'une observation scientifique et citoyenne dans le golfe de Fos » *Techniques & culture* 2(68) supplément: 25: <https://journals.openedition.org/tc/8610>.

Haraway, D. J. (2008). *When Species Meet*. Minneapolis, University of Minnesota Press.

Kirksey, S. E. and S. Helmreich (2010). "The emergence of multispecies ethnography." *Cultural Anthropology* 25(4): 545-576.

Stengers, I. (2010). *Cosmopolitics*. Minneapolis, University of Minnesota Press.

Tsing, A., Swanson, H.A., Gan, E., Bubandt, N. eds (2017). *Arts of Living on a Damaged Planet*, University of Minnesota Press.