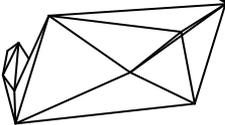


# PRO FITABLE GEMS

Michael Schwab

with

Florian Dombois  
Einar Torfi Einarsson  
Miguel Figueira  
Taslim Martin



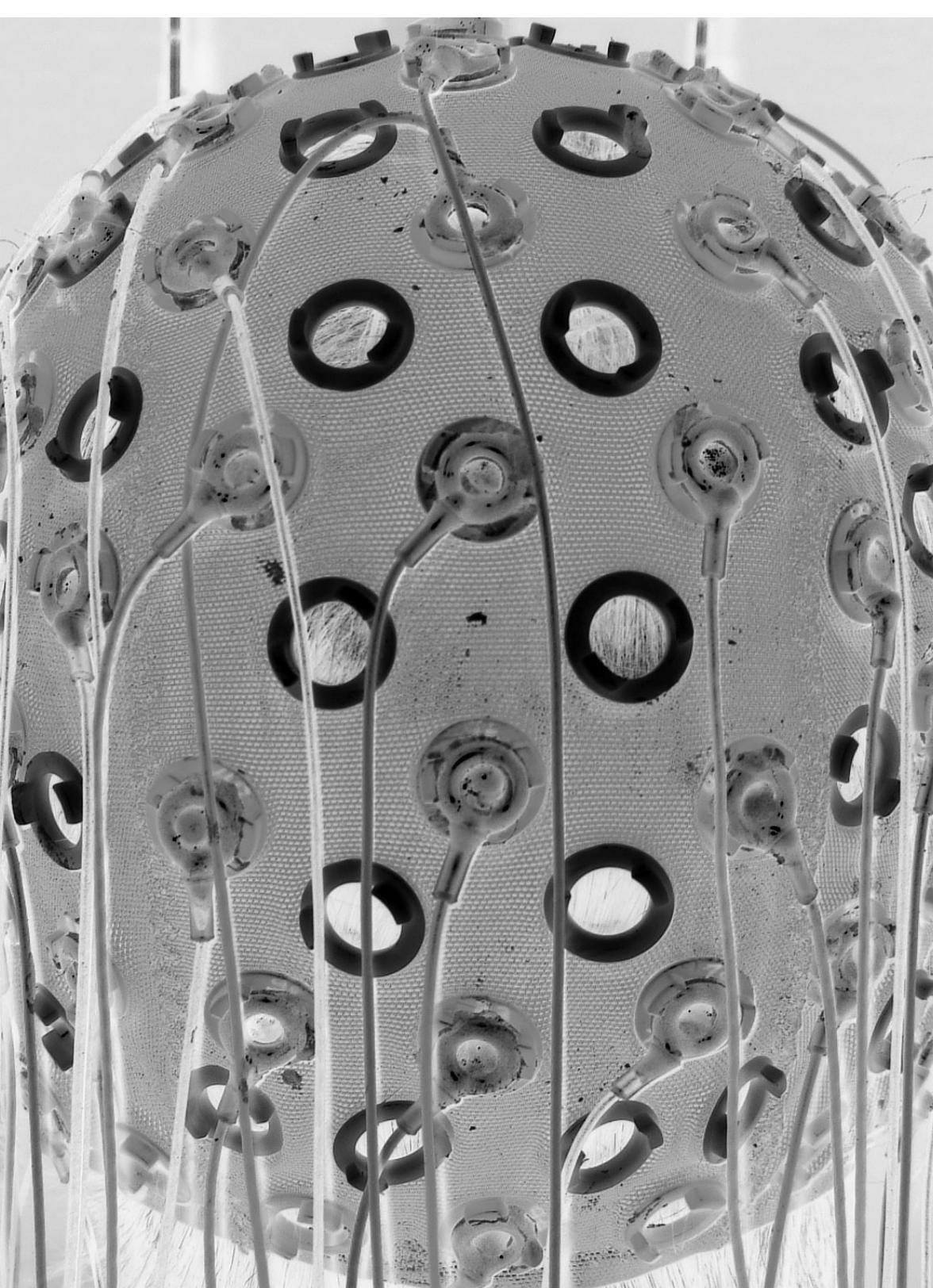


**PROTO - OBJECTS**

**Michael Schwab**

**with**

**Florian Dombois  
Einar Torfi Einarsson  
Miguel Figueira  
Taslim Martin**



# Proto-objects

Michael Schwab

Proto-objects are embryonic epistemic artefacts. Their root is in what Hans-Jörg Rheinberger (1997) calls 'epistemic things'; that is, epistemically underdetermined material traces emergent in otherwise well-controlled set-ups or 'experimental systems'. Rheinberger's investigation into twentieth-century empirical science suggests that experimental systems operate across two different spaces: the graphematic space of research and the representational space of science. Knowledge is gained as epistemic things become better understood to the degree that they can be deployed as 'technical objects' in the same or alternative experimental systems set up to trace further epistemic things. However, in experimental systems, technical objects may operate as epistemic things again should new questions arise. Hence, the difference between epistemic things and technical objects is functional, not material.

This functional characterisation lends a hybrid material status to those epistemic things that can be technical objects (and vice versa). To highlight its hybridity, Bruno Latour (1993) following Michel Serres (1982) settles the notion of 'quasi-object'. They use this term to stress that quasi-objects only sometimes operate as proper objects while, at other times, their being-object seems suspended as the focus of the action moves on. For Latour, being prolific is one of the key

properties of these quasi-objects, which is the reason why he refers to them also as 'monsters', ultimately collapsing Rheinberger's distinctly separate spaces – a distinction or, rather, a 'purification' that for Latour exists only from a modernist vantage point.

Proto-objects are too graphematic to register as quasi-objects, a graphematicity that is artistically developed and often poetically protected. In other words, while proto-objects like all epistemic things may suggest meaning, this meaning is sought in the imaginary as speculation not as direct action in the world. Although proto-objects cannot be protected from becoming quasi-objects or even proper objects, many artists seek strategically to delay this process. Therefore, proto-objects, although artistically informed, do not appear as works of art.

I first used the term 'proto-object' in a 2012 book chapter (Schwab 2012) that utilises Hans-Jörg Rheinberger's research on 'experimental systems' for possible epistemologies and methodologies of artistic research. It was developed from my artistic investigation into my own brain activity, which was recorded as I was exposed to a succession of one hundred pictures, randomly chosen from the history of art (from 1420 to 1912). The initial EEG scan took place as part of the research project 'Wissen im Selbstversuch / Knowledge through Self-Experimentation' (2009–10, PI: Yeboaa Ofosu) at the Hochschule der Künste Bern (CH) and was carried out by Dr. Thomas Koenig at the Universitätsklinik für Psychiatrie und Psychotherapie Bern (CH). The raw EEG data was statistically analysed and geometrically transformed with the help of Pádraig Coogan, Leon Williams (both Royal College of Art, London, UK), Michael Klein (Universität Heidelberg, D), and David Pirrò (Kunstuniversität Graz, AT). This work resulted in the construction of one hundred three-dimensional 'proto-objects', each corresponding to what was deemed significant in my cognitive response to each particular picture.

To enhance further the proto-objects I commissioned four independent collaborators to respond to my initial work. Einar Torfi Einarsson transformed the proto-objects into scores to be interpreted and played by any kind of instrument; the contemporary artist Florian Dombois has been using the one hundred proto-objects to develop a 'language of

things', in which he writes poetry; the architect Miguel Figueira modified Van Gogh's *Pont de Langlois* (1888) on the basis of the proto-object that corresponds to that painting; and Taslim Martin used one proto-object as the template for a creamer and sugar set. The multiplicity of the imaginary space opened up by those artists, who continue the real, poetic, and ironic play set in motion by the EEG scan, makes tangible how invested proto-objects are but also how removed they are from the proficiencies of quasi-objects. Better than any single representation of the three-dimensional coordinates of the proto-objects, their multiplicitous amplification helps further to destabilise any fixed representation while their graphematic potential is enjoyed.

Latour, Bruno. 1993. *We Have Never Been Modern*. Translated by Catherine Porter. Cambridge, MA: Harvard University Press.

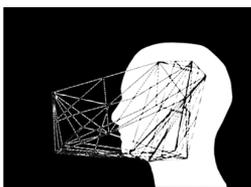
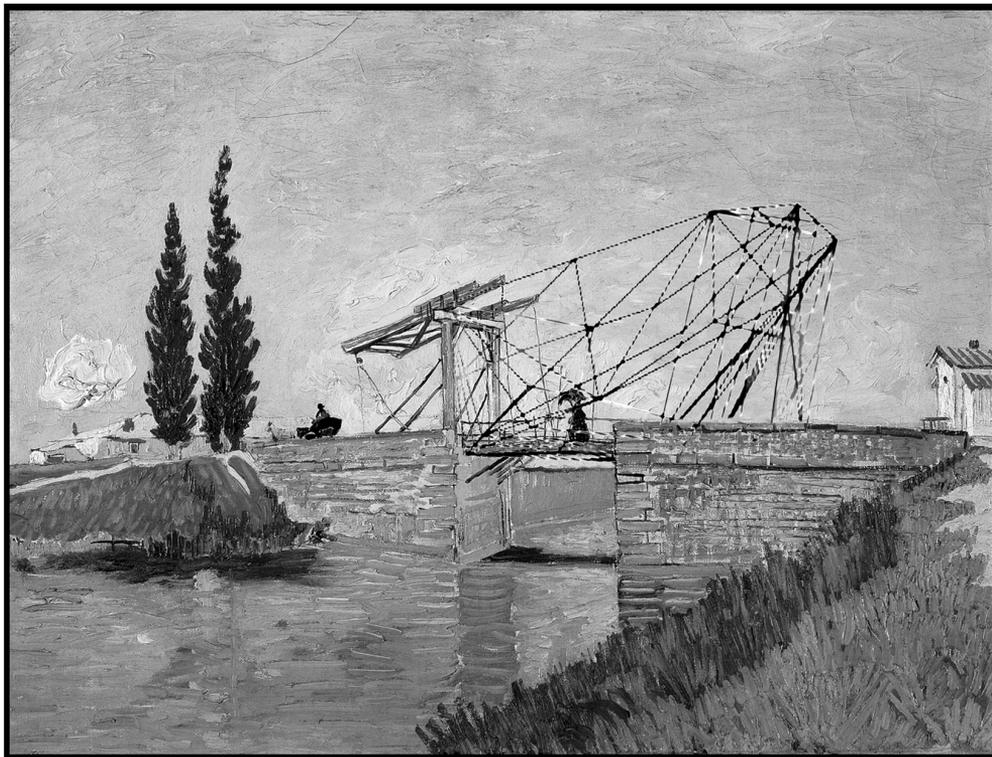
Rheinberger, Hans-Jörg. 1997. *Toward a History of Epistemic Things: Synthesizing Proteins in the Test Tube*. Stanford, CA: Stanford University Press.

Schwab, Michael. 2012. 'Between a Rock and a Hard Place'. In *Intellectual Birdhouse: Artistic Practice as Research*, edited by Florian Dombos, Ute Meta Bauer, Claudia Mareis, and Michael Schwab, 229–47. London: Koenig Books.

Serres, Michel. 1982. *Parasite*. Translated by Lawrence R. Schehr. Baltimore: Johns Hopkins University Press.



Michael Schwab (\* 1966), artist/artistic epistemologist (D/UK)  
Proto-objects since 2009  
Installation/art commission  
<http://www.researchcatalogue.net/view/186304/186305>



EEG



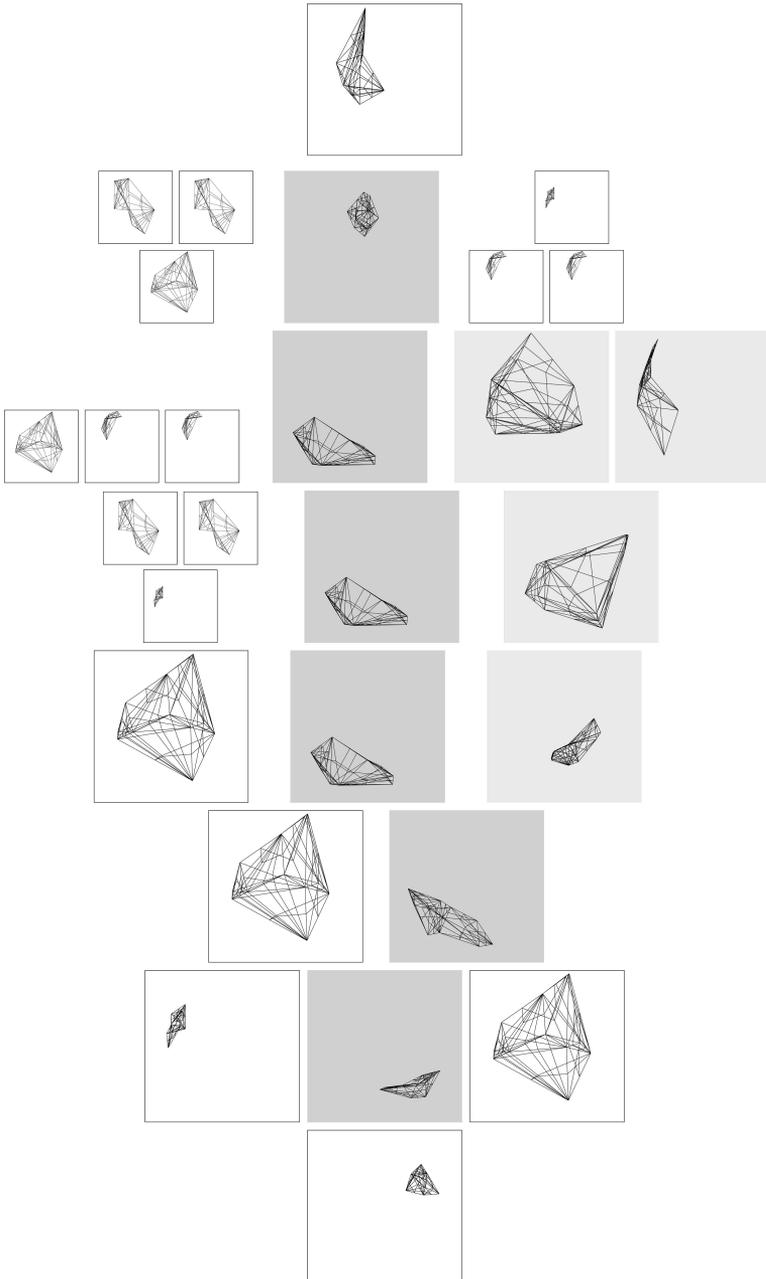
MX3D

99 (9503)  
Gogh, Vincent van  
Langlois Bridge at Arles, 1888

The virtual objects made by the EEG scan of mental responses may evolve through multiple-axis 3D metal printing and robot fabrication into large-scale steel architectures. This enables the construction of a full-size bridge complementing Langlois Bridge near Arles, which Van Gogh depicted in the image that triggered the mental response in the first place. In languages such as French and Portuguese, bridges are considered in engineering and architectural parlance "works of art". An architectural approach to the virtual objects may choose Van Gogh's bridge as a point of entry.

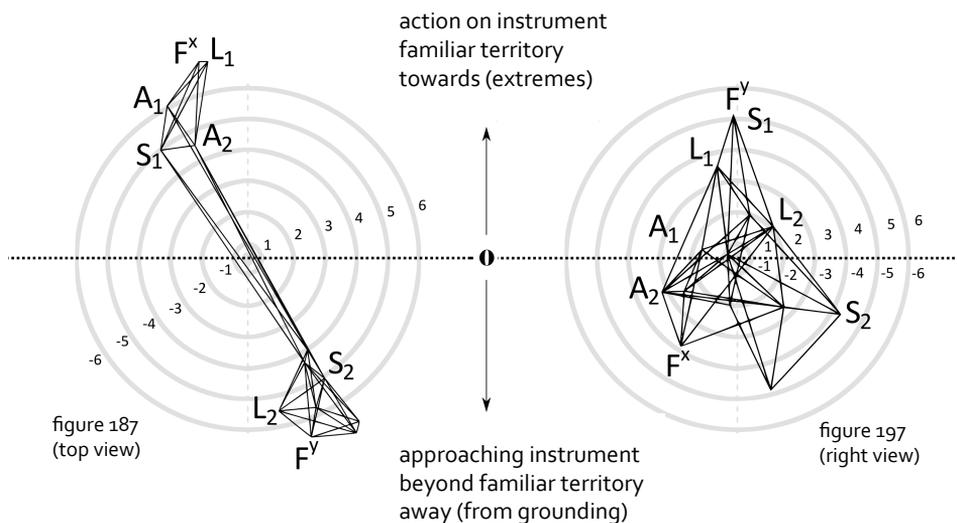


Miguel Figueira (\* 1969), architect (PT)  
a.k.a. *Van Gogh Bridge 2015*  
Bridge design/photomontage  
<http://www.researchcatalogue.net/view/186304/221228>



Florian Dombois (\* 1966), artist (D/CH)  
*Geometry/Love* from: *Language of Things*, 2015  
Poem  
<http://www.researchcatalogue.net/view/208382/208383>

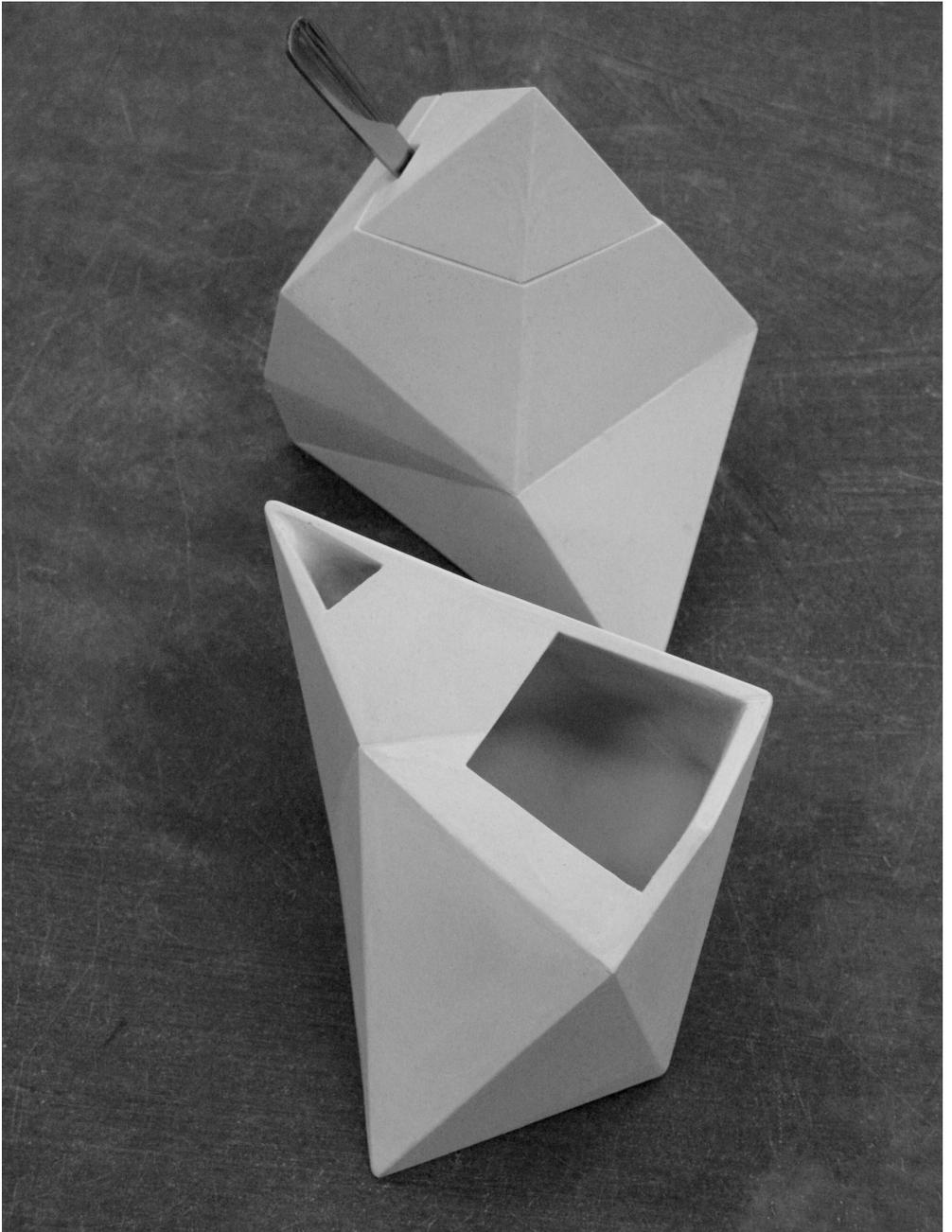
Figures become physical instructions for performance, instructions that are specific yet unpredictable in their potential cancellations and multiple pathways. An unstable musical object with a plurality of results emerges. Force of action or physical dynamics (F), the location of hands in relation to an instrument (L), and the amount of active fingers (A) and their individual as well as relative spread (S) form a parametric space approachable by any instrumentalist. Here, points equal postures and lines become paths, indicating physical and figmental actions and options.



Parametric indicators (F, L, A, S) are placed on each figure denoting starting points. Performers choose any path from these points to another nearby point. The resulting paths are a set of simultaneously performed changing values (-6 to +6). Negative numbers indicate how the performer approaches an action both mentally (imagining it) and physically (movement of hands and fingers close to the instrument), positive numbers indicate action on the instrument (e.g., where and how the instrument is played).



Einar Torfi Einarsson (\* 1980), composer (IS)  
*Underdetermined figures (for any combination and kind of instruments)* 2015  
 Score  
<http://www.researchcatalogue.net/view/186304/221229>



Taslim Martin (\* 1962), sculptor/designer (UK)

*The ambassador is spoiling us*, 2015

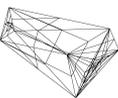
Porcelain

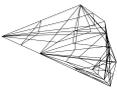
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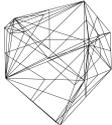
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This publication is part of the art installation 'Proto-objects' made for the conference 'The Dark Precursor. International Conference on Deleuze and Artistic Research 2015' 9-11 November 2015 in Ghent.

Layout and design: Lucia D'Errico | ME21

The research leading to these results has received funding from the European Union Seventh Framework Programme (FP7/2007-2013) under grant agreement no 313419. The initial EEG scan and data transformation was funded by Berner Fachhochschule (CH) as part of the research project 'Wissen im Selbstversuch' (2009-2010).

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