

**Box 1**—by juxtaposing a diagram (foldout of a disdyakis tricontahedron—polyhedron with 120 sides) with the photo of a pair of hands, an act of portraiture (the hands) and the logic of the diagram starts operating as a map: the act of portraiture and diagramming combined makes the rather complex diagram affordable, because it can be organised perceptually as a pair of hands: two palms and 10 crooked fingers. It features one dimension of modelling: one occurring in 2D as montage (in the filmic sense).

At the outset it would seem ludicrous to hold that there is a relationship between the proliferation of polarised view—the wars waged by Nation-states in a global society—with a flaw in our current usership of numbers (its acceleration by digital technology). But let us not forget that digital technology is fundamentally a numeric technology (which it is called in French usage [technologies numériques]). But if we consider the constant shift of what is counted in number, the existence of computers and the consistency of ordinal vs. cardinal number is difficult/impossible to sustain.

This is the trouble: if we match what we *plan* (the distribution of steps [ordinal number]) against what we *find* (the harvest of unexpected data [cardinal number]) this ratio is constantly shifting as we engage online computers. The basic move of the computer—which in French is called an *ordinateur*—is to include what we have found in-to our steps onwards. It is, in this sense, *cumulative*.



**Box 2**—Here, the disdyakis tricontahedron is mounted into a polyhedron, which has 54/108 new links that are difficult to anticipate in the flat version above. The number is 54/108 because it makes a difference whether the elements that come together along the equator are naively counted, or whether they are combinations of ordinal and cardinal counts. At each juncture they could be both ordinal or both cardinal, or one cardinal and the other ordinal (complexity). Note the rotation from the hands above, to the work of the hands featuring the environment.

What we do not account for is that the layout of steps [ordinal] and their per-formative enactment [cardinal] are only partly the same: while other parts are different.

This is because the connectivity of *execution* is greater, and ontologically different, than the connectivity of the *design*. Much of which is found actually lies in the execution. Which may be one background for Per Bak's puzzling intervention, when he asked his eminent colleagues at the [Santa Fe Institute](#), *if they knew what they were talking about?* It seems he was asking as an empirical researcher in Seismology, what his colleagues were hoping to find out through computer simulation. The more insidious question is how we can investigate different ways of docking our computers to our field-research. By executing the above series steps, practitioners are finding out a *good deal more* than what comes back to them displayed on the screen, but what also from what comes out of the conjunction between digital usership and the environmental interaction.

At the brink, as it were, between the ordinal

procedures of the computer and the cardinal events of field-operations, alongside one another: contingent, alongside and touching. How do we count that? Do we make the difference? Are we able to canalise it generatively in some way? Perhaps it can be generative, but then we would need a model. Without it we are alternately blind and para-lysed. The model I have been working on so far is *visual* (topological) and conceptually founded by my academic mentor Fredrik Barth (no relation) in his interest with [disordered systems](#). Patterns co-generated from two disordered parts.

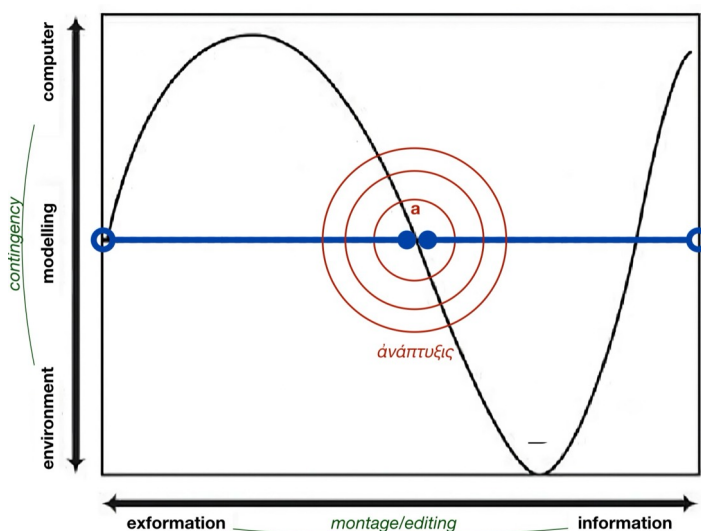
Let us start with the visual and then proceed to disorder: the active relation between the *computer* and the *environment* (**Box 3**), compares with (and can be modelled by) the relation between an unfolded polyhedron (computer) and a mounted polyhedron (environment)... one linked to *ordinal* procedures (the computer) and the other to *cardinal* events (the environment). Their *modi operandi* are divergent but interfering with one another because *contingent*. While the computer-screen views combine by *montage*—in the filmic sense—the environmental operations are *embodied*.

Here, embodiment must be brought onwards from a phenomenological notion to a model-understanding of *screening*, *interception* and *framing* in field-operations: i.e. it must relate to information and not only to the philosophical analysis of how the body appears on an horizon, and the particularities of the body, on such terms, in relation to objects in general. One quickly runs into problems here, because bodies have historically not only determined biological bodies, but also celestial bodies and/or vessels. Embodiment is phenomenologically limited to a way of appearing.

What are considered objects today have a history of being considered as bodies: our *range* of bodies has shrunk (which unavoidably indicates a change of how we live, act and perceive our environment). However, embodiment is also a category of *information* processing linked up with *short-term* memory and leaving a *long-term* memory trace (that records and replays). So, it is a category of *montage* in its own right. So, *computing* is something we do. *Embodiment* is something we do. They features two different modes of montage, interfering co-generatively.

This co-generative process is what we call *anaptúxis* (**a**): with the polyhedron foldout as a tier modelling computing and the mounted polyhedron modelling embodiment. They are connected by a [shifter](#) called hyper-dimensional rotation (since we move between 2D and 3D). In art history this corresponds to Marcel Duchamp's idea of the *infrathin* (*inframince*). So, we are not simply alternating between a flat- and a volume-montage, but we are also rotating between the computer (the *kinaesthesia* of our hands) and the environment (the *proprioception* of our bodies). 180°.

What happens when we *don't* have a model? Well the cross-agency of computing and embodying form the counterposed shaping factors co-generative of a disordered system, is expressed in *anaptúxis* (**a**). There are two directions: **1**) ubiquitous computer-business masquerading as environmental unavailability [too *busy* to meet or respond]; **2**) bastions of basic assumptions



**Box 3**—In the learning theatre, the editing/montage of emergent contents takes place in the continuum between information and exformation, and is based on two principles: sequential montage in 2D (in the filmic sense) and embodiment (as a kind of montage in 3D). *Anaptúxis* (ἀνάπτυξις) means growth, development, explanation and is a kind of flowering in meantime (the area of possibility) between information and exformation, with modelling as a necessary condition: that is, without modelling *anaptúxis* will not flower. And will instead shrink and eventually collapse. All dictatorships are based on the latter option. All democracies should be based on the former.

leading to polarising agglomerations. In sum, being at war with the environment (or, perhaps lately, simply being at war).

The *existence* of a model, I therefore conceive as the condition for systemic features to emerge from disorder. So the role of an active visual model is not only to monitor, but to manage. Not to be directive, but to make editorial processing a standard operating procedure; with the sole purpose of maintaining a systemic meta-stability, needed for emergent contents to reveal in the suggested complement to information processing which is exformation-editing.

Exformation is less-known elements causing attention, it is also the removal of information to create readability, and also to model for improved cogency, and the flowering of *anaptúxis*.