| same | similar | different | other |

Fig. 1—The exposition of the Dunkedunk research project '[Re] Mapping of Being – Landscape/Cavescape/Humanscape', VIS - Nordic Journal for Artistic Research, 9 (2023), includes a page called POST. Here the variations of *bimodal* readability that Nataliia Korotkova and Nina Tsy/bolskaia are using are view in their "stage-book" aspect (see below).

The complex sense of *homomorphism* that we have developed for *cartographic* purposes—a device to learn, move and act *in situ*—rounds up in the existence of a map, as a boundary object: it is a crossroads between expert- and lay view (Starr & Griesemer, 1989). A map, in this sense, is a scenographic arrangement for a *learning theatre*. Analytically the map features specific results from which it is possible to draw a variety of consequences: that is, to move from trouble to problem and to solve it. It is a specific homomorphism that layers *auto-*, *endo-*, *iso-* and *exo*-morphism.

At this juncture, an *ethical* question is hatched from the dependency on the integration of exo-morphism for homomorphism to achieve closure (i.e. it becomes complex [rather than being held by the dialectics of complication and chaos]). If homomorphism is dedicated to the *fulfilment* of suboptimal conditions, then its *integration* will relate to ethics (in the root-sense of Aristotles): partaking of the life in the city, where the root of individual fulfilment lies in collective happiness. When the collective *levels up* the individual is justified in making compromises. This is ethics.

The question is then: *when* does the collective level up? Or, how can we tell? A difference that makes a difference is the sense that *homomorphism*—in the cartographic sense—forms a *group*: a learning theatre. In practical terms, this happens when it becomes a *stage* on which learning, moving and acting can take place. Where *behaviours* become self-explanatory when: **(a)** the *utility* of their consequences are in terms of *values* held by the actors, and **(b)** the *awareness* on the part of the actors connects the actions with their specific results. We can act suboptimally, in concert.

The work of homomorphism lies here, because we do not act *in concert* in the sense of "in symphony" but in the sense of: in compromise on account of a collective *level up* that can be intercepted (in terms of its specific results) and perceived (in terms of the utility of its consequences). So, homomorphism is a key to the reformulation of *transaction*: a transaction of a different kind, that does not follow the minimax pattern, but that a kind of good where individual optima are exchanged for a collective benefit: whether these are professional, economic or political.
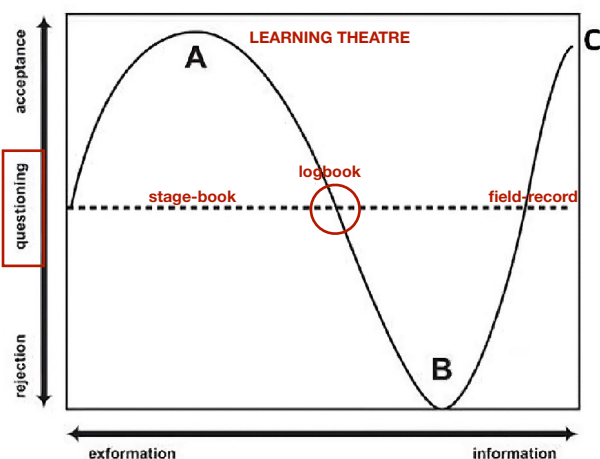

Fig. 2—this curve is retrieved from Marc Lissack's exposition on *Truthies, Sloppy Science, Small Samples, and the Dangers They Pose to Public Health*, my reds.

The *learning theatre* is dedicated to achieving completeness in learning, under suboptimal conditions: preventing compromises from resulting in mediocrity. Entering the learning theatre is a *decision*: not only in the sense that it requires a decision, but in revealing the nature and structure of decision through the *learning-outcome* in this theatre. Through the successive transformations that take place in it, when a logbook features as the *stage* of a learning-theatre (or, alternatively, as a *stage-book*, when the learning theatre operates as a stricture, or a discipline, within a larger *field* of investigation).

In the learning theatre, the logbook has the dual function of *field-record* and a *stage-book*. In log-books that jointly *articulate* these two functions—which they will in the learning theatre (by defini-

tion)—the variety of materials included will read as transformations: to a qualified viewer they start to *map* unto each other, if only by being juxtaposed in the same spread (or, a cluster of adjacent spreads). Which is why the systematic approach to mapping in homomorphism is relevant: **1)** in its *analytic* application in the *stage-book* function, and **2)** its *synthetic* application as a *field-record*.

Spelled out at the *stage-book* level: **a)** *automorphism*—each of the elements included into an entry will serve to *identify* one another [since experimentally changing one will change all the others]; **b)** *endomorphism*—as the dated entries multiply a *subgroup* will form in which one may follow a development [i.e. the similarities needed to pick up a *narrative*]; **c)** *isomorphism*—two/more *different* narratives begin mapping unto each other *reversibly* [now we have different *groups*]; **d)** *exomorphism*—as the stage-book becomes a *lens* to what is beyond it [summons a leap of faith].

Now we look at it as a *field-record*. Here, the logbook—though we still speak of *entries*—features an *exit*-procedure (which is a term from operations-analysis). The logbook is here a way of *logging off* from the field. It does something that is not done in the field, which is to compress. Which means that a series of curatorial decisions are made about which elements include, and which specific ones to select. This selection will carry the trace of what is excluded: it features in a share/ratio of information and exformation. So, the logbook features conjointly content *and* expression.

That is, the *selection* is expressive of the material *not*-included, *as* it gives access to *contents* featuring in the constellation of elements that henceforth *belong* to the logbook: featuring a specific share of what belongs to the logbook and what is not-included (as the *material content* and *-expression* in *extensional* semiotics; which is, the cartographic level of signification). The contents *and* expression *conjointly*—produced by the requirement of *compression*—give rise to a *new layer* of *data*, that readily hatch programming in real time: that is, determining the next steps. *Deciding*.

It is when the stage-book and field-record functions *combine* that can look unto how assemblages, multiples, rhizomes and collectives *can* level up! If the field-record function will serve to unfold *suboptimal* conditions, the stage-book embeds a criterion of *completeness*. Which means that it offers *the possibility of achieving completeness under suboptimal conditions*. To be acceptable—beyond a "creative accountability" trick—the stage-book must somehow be obligated to the *real*. Which the stage-book has by virtue of offering precisely a *fictional* transposition of the real.

Our task with the stage-book—in critical and cogenerative relation to the field-record—is to separate between illusion and fiction: when the logbook (in its stage-book function) ventures to pose as *a world unto itself*, that *contains its own reality*, it is an illusion (and *not* a fiction). The fictional project that results from the stage-book function being worked out, is such that it will be *marked* by the real (because the stage-book is also, and conjointly, a field-record). Where there is illusion, it proceeds by simulation, substitution and erasure; where there is fiction, it proceeds by *screening*, *interception* and *framing*. It is "on the air".
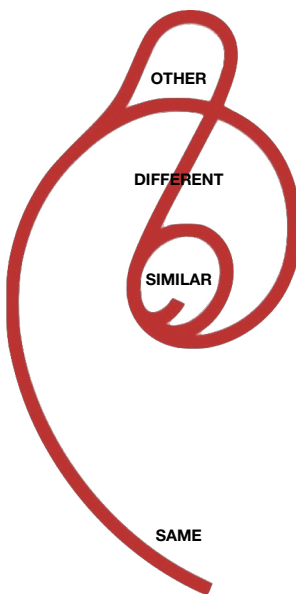
This theory of the logbook, is also a theory of the learning theatre. While logbooks are typically associated with the care of individuals/small groups (or, teams), *a variety* of logbooks are typically associated with *class*-situations at art-school, or *archives* (especially, with the diversification of apps that currently is coming with computer-applicability to archives). The previous paragraphs show how and why they are *cartographic* by their extensional semiotics. The readability of maps linked to material contents and expression as *signs*. The conjoint work of *homomorphism* (stage-book) and *compression* (field-record) offers a general methodology to *level up* suboptimal conditions in collective processes (away from mediocrity).

What completion has to offer is therefore, more than peace of mind and embodied comfort, but offers a new foundation for *value creation*, in an ecologic sense. That is, the core outcome from this handout: a notion and practice of value creating in which what is suboptimal from a human vantage point, is acceptable if it levels up the environmental conditions. Thereby conceiving design as a practice working for a *happier* reality.

Fig. 3—SWIRL (signature): featuring the 1) SAME, 2) SIMILAR, 3) DIFFERENT; 4) OTHER in the kind of relationship they feature, when they form a group. Which they do in the cartographic concept of homomorphism discussed here.