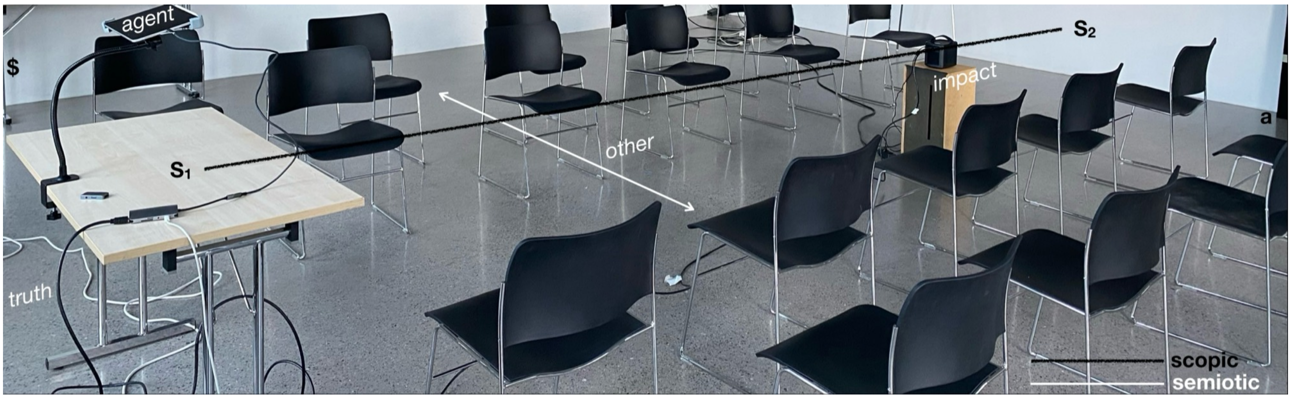

Fig. 1—in the basic setup of the learning theatre, the control-unit *(left*—iPAD docked to goose-neck) is separated from the display-unit (*right*—the projector directed to the wall). The two work-units (the table & the wall) are at the opposite ends of the space. The semiotic domain marks causal connections: **truth —> [agent —> other] —> impact**. The scopic domain marks sensorial connections: **$ —> [S_1 —> S_2]—> a** (**$** = subject; **$S_1$** & **$S_2$** = signifiers; **a** = punctum/exit is the desiring stop/final cause).

With the *learning theatre* as a home to the mapping between two associated domains—*operative* and *distributive*—the nomenclature from Jacques Lacan's *psychoanalysis* has proved to be agile and flexible in providing analytical *affordances*, outside the framework of psychoanalytic therapy: both in the sense of analysing the *assignments* in the learning theatre, and providing a didactic framework for their *application* beyond this delimited space. The learning theatre proposes to address the problem of situating the psychoanalytic cabinet as a locus of cultural entrepreneurship.

In effect, the learning theatre offers the spatiotemporal conditions for certain aspects of *transaction* to emerge: i.e., a kind of transaction that does not build on the assumption of individuals as isolates, but as value-creators under immersive conditions in which value is *not* dependent on scarcity but on *diversity*. From its explication in the *learning theatre*, we have found that Lacan's nomenclature invites a psychoanalytic comprehension of immersive space-time. Not by the assumption of a collective psychic mana, but simply by providing a unique framework for how learning *adds up*.

What is particularly clear in Lacan's *symbolic* nomenclature is that the operative and distributive domains of the learning theatre, do *not* add up in the same way. This is not necessarily evident in his nomenclature *per se*, but it emerges from how the *assignment* in the learning theatre, become *applicable* in fieldwork beyond this precinct. And it is in the specific relation between assignment and the application that a *richer* notion of transaction may be extracted. The reason is that the learning theatre offers a space in which *semiotics* is operational and *viewing* is distributive.

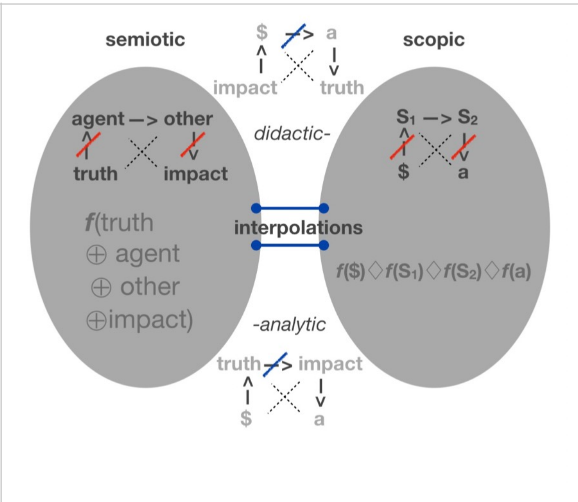

Fig. 2—in the semiotic domain, the parameters (truth, agent, other, impact) are functionally integrated (operative); while in the scopic domain, the parameters ($, S_1, S_2, a) are functionally disseminated (distributed). In the semiotic domain the **truth** and **impact** are unconscious. In the scopic domain it is the subject **$** and the desiring stop **a** that are unconscious. The two interpolations, didactic and analytic, result from that what is unconscious can turn to be emergent/subconscious: that is, the insight that the **impact** on the subject **$** may be *nested in* the causal trace of **a** in **truth** at the subconscious level (and is didactic insofar I can intercept it); and similarly the investment of the subject **$** in **truth**—"it is true because I feel it"—may be nested in the presence of the **impact** as a resident of **a** (and is analytic insofar I realise that *I am driving*). The two interpolations, didactic and analytic, determines the *mapping* as the contingency in this model conceived as a *homomorphism*.

The learning theatre is a machine which, when put to work, produces *signs*: which is what is meant here by assignment. Semiotics—as assignment—is *operative*. The application beyond the confines of the learning originates from the resident principles of viewing: these are distributive. The transactions between assignment and application is an affordance that owes its existence to the fact they add up differently: the sums made up from assignment are operative, the sums deriving from application are distributive. From which it follows that they cannot be conflated: on the contrary, the difference between them is what is generative in a sense of value creation. The monetary system of economics denies this difference, as it seeks to conflate them in the purchase of a single unit.

The monetary unit—i.e. money—defines as such by proposing a single unit to pay for work (operative) and pay for products (distributive); under a single measure of value (which is a floating signifier). The practical side of money—a single system to handle all transactions—makes us vulnerable to overlook an impact on value creation: namely, that it empties transactions from learning (which is separated and confined into educational institutions). Ultimately, this aspect of the system collapses when educational institutions become vending machines, and professors become service providers.

Seen in this scope, what is currently known as AI features a recognisable approach whereby intelligence—through its corporate appropriation (on par with natural resources and energy)—becomes part of the general trend of knowledge deflation. That is, if we by knowledge we determine something of intrinsic value, rather than measured by its value to money (i.e., that if it does not produce monetary value it is simply not knowledge). We are living in an era when a power of command exceeding state-leadership, will do away with democracy when it serves no purpose.

What the learning theatre may have within reach is a demonstration of a mathematics revealing the workings of value creation that the monetary system does *not* have. The success of the learning theatre within educational institutions, does not depend on this. But its success as a vehicle of political contestation that may be set up anywhere, will not have any impact beyond resistance, unless it also possesses this power of demonstration. Otherwise, it will be unable to account for itself (with a prognostic and diagnostic power that the monetary concept of economics lacks).

Reframing the computer as a machine supporting interpolation in transactions based on learning, is based on the idea of docking the computer in processes resulting from the cross-pressure between constraints of a similar nature as those we have determined in the learning theatre: that is, the constraints that are indigenous to it (operative) and those that are outside it (distributive). In this cross-pressure the computer becomes a symbolic agent with only one task: the task of alternating between two types of interpolation exploring/exploiting contingencies within & beyond.

That is, developing transactions between what lies within (indigenous), and what lies beyond (outside): with the possibility this offers to explore and exploit the different ways of adding up, the define and determine operative (within) and distributive domains (beyond). At the difference with the monetary system the kind of crossover managed by interpolation, is not assumed to be permanent, but fundamentally dependent on the temporary and specific nature of things assigned and applied. In brief, nothing is assumed. Everything is assigned and applied, *then* interpolated.

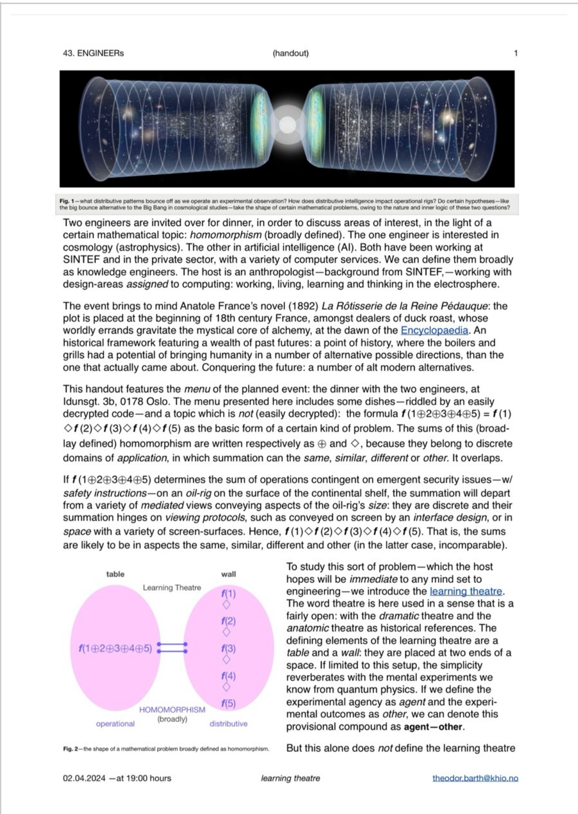
43. ENGINEERs (handout) 1

Fig. 1—what distributive patterns bounce off as we operate an experimental observation? How does distributive intelligence impact operational rigs? Do certain hypotheses—like the big bounce alternative to the Big Bang in cosmological studies—take the shape of certain mathematical problems, owing to the nature and inner logic of these two questions?

Two engineers are invited over for dinner, in order to discuss areas of interest, in the light of a certain mathematical topic: *homomorphism* (broadly defined). The one engineer is interested in cosmology (astrophysics). The other in artificial intelligence (AI). Both have been working at SINTEF and in the private sector, with a variety of computer services. We can define them broadly as knowledge engineers. The host is an anthropologist—background from SINTEF,—working with design-areas *assigned* to computing: working, living, learning and thinking in the electrosphere.

The event brings to mind Anatole France's novel (1892) *La Rôtisserie de la Reine Pédauque*: the plot is placed at the beginning of 18th century France, amongst dealers of duck roast, whose worldly errands gravitate the mystical core of alchemy, at the dawn of the Encyclopaedia. An historical framework featuring a wealth of past futures: a point of history, where the boilers and grills had a potential of bringing humanity in a number of alternative possible directions, than the one that actually came about. Conquering the future: a number of alt modern alternatives.

This handout features the *menu* of the planned event: the dinner with the two engineers, at Idunsgt. 3b, 0178 Oslo. The menu presented here includes some dishes—riddled by an easily decrypted code—and a topic which is *not* (easily decrypted): the formula $\boldsymbol{f}(1\oplus2\oplus3\oplus4\oplus5) = \boldsymbol{f}(1) \diamond \boldsymbol{f}(2) \diamond \boldsymbol{f}(3) \diamond \boldsymbol{f}(4) \diamond \boldsymbol{f}(5)$ as the basic form of a certain kind of problem. The sums of this (broad-lay defined) homomorphism are written respectively as $\oplus$ and $\diamond$, because they belong to discrete domains of *application*, in which summation can the *same*, *similar*, *different* or *other*. It overlaps.

If $\boldsymbol{f}(1\oplus2\oplus3\oplus4\oplus5)$ determines the sum of operations contingent on emergent security issues—w/ *safety instructions*—on an *oil-rig* on the surface of the continental shelf, the summation will depart from a variety of *mediated* views conveying aspects of the oil-rig's *size*: they are discrete and their summation hinges on *viewing protocols*, such as conveyed on screen by an *interface design*, or in *space* with a variety of screen-surfaces. Hence, $\boldsymbol{f}(1) \diamond \boldsymbol{f}(2) \diamond \boldsymbol{f}(3) \diamond \boldsymbol{f}(4) \diamond \boldsymbol{f}(5)$. That is, the sums are likely to be in aspects the same, similar, different and other (in the latter case, incomparable).

Fig. 2—the shape of a mathematical problem broadly defined as homomorphism.

To study this sort of problem—which the host hopes will be *immediate* to any mind set to engineering—we introduce the learning theatre. The word theatre is here used in a sense that is a fairly open: with the *dramatic* theatre and the *anatomic* theatre as historical references. The defining elements of the learning theatre are a *table* and a *wall*: they are placed at two ends of a space. If limited to this setup, the simplicity reverberates with the mental experiments we know from quantum physics. If we define the experimental agency as *agent* and the experimental outcomes as *other*, we can denote this provisional compound as **agent—other**.

But this alone does *not* define the learning theatre

02.04.2024 —at 19:00 hours *learning theatre* theodor.barth@khio.no

Fig. 3—The learning theatre features the principle of interpolation at a basic level: this is visible in the lower diagram in which the learning theatre is interpolated between the table and the wall. The dinner is also an interpolation.

The monetary system features major illusion: the illusion that everyone wants the same thing (money [techno-western culture]), or that the different things they want/live by is immaterial (for the system). Of course, it is immaterial neither for people nor the planet. But the system behaves and dictates as though it were immaterial. This system has evolved to be coercive and non-democratic. The Thatcherist motto "there is no alternative!" is supported by a syndrome of unwieldy complication following in the wake of any attempted alternative. So, it is this complication which should be our focus.

The relation between the restricted and expanded in the learning theatre—the operative and distributive—is not a matter of extension, but of *scale*. The field of operations is not simply sized up to yield the field of distribution. It is practiced in this way, but it is a *glitch*. Because it presupposes that the distributive field becomes the operational field: it is the logic of simulation, substitution and erasure. It is a clearly misconceived logic of appropriation. For the operative field to be mapped unto the distributive field, it requires a work of reception: screening, intercepting and framing—a didactic interpolation. Its image in the operative domain depends on an analytic interpolation.