robert m ochshorn, "tools for thought," recurse center, 2016-03-19

#### intro

In correspondence with <u>Michael</u> and <u>Joe</u> leading up to this event, I started latching onto the term "intimacy" from an <u>interview</u> that Michael sent with mathematician Alain Connes, where he said, in reference to a very hairy mathematical situation:

We first went back to check again these terms and realized after a while that the reason why their signs were wrong was quite subtle: we had made a conceptual mistake in doing the computation and had forgotten some crucial terms in the differential operators below the sub-principal symbol! At that point I convinced myself that we could never find this subtle correction without the intimate knowledge of all the terms of the formula which only the slow computation "by hand" could give us... (emph mine)

#### I wrote:

I believe that intimacy is vital to all manner of human endeavors, and that a crucial and deficient element of human activity in the 21st century is to shape our intimacies, and, paradoxically, by doing so to shape ourselves. Choosing, as <u>Feynman</u> and Connes do, to cultivate an intimacy with numbers means acknowledging that "there is more than just 0 and 1"—that the principles alone will not suffice, and that the details, the specific, hold all meaning.

Joe encouraged me to develop the concept of intimacy in interface further, so I will try to do so today: first, by pitting it against some forms of abstraction and externalization; second, by holding some of my projects up to the standards of an intimate interface; and finally by sharing four qualities I have identified in intimate interface. The first and last section will be bare of media, while the middle will be explosively packed with it.

# against abstraction

Abstraction is a technique to help us forget.

There are many reasons we would want to forget a good many things.

We use terms like "generalization," "higher level," "don't repeat yourself," "encapsulation," "business logic," and "eliminating boilerplate" when what we mean is that we don't want to concern ourselves with the intimate details of a task at hand.

This would imply that we think of our lives as a dependency graph of **tasks** to be completed, but I would claim that creative and intellectual work is closer to speaking a **language** than processing a workflow. Nothing is stable, definitions are circular, every utterance rewrites its every word, insight is a simultaneity of meaning, and profundity comes through the temporal sequence of process rather than the compilation and execution of result.

Generalization is the loss of the individual to the collective, the instance to the class, the particular to the composite. Statistics and surveillance are together entwined—from Sir Francis Galton's photographic <u>composites</u> to the MIT Media Lab's <u>Eigenfaces</u>—in an aesthetic blurring of sublime truth and raw bigotry.

Externalization is a method to replace knowing with seeing, a methodology more amenable to *oversight* than *insight*.

Consider the hollowness of learning the periodic table without having a deep relationship to its elements. When connected to the depth of particulars, Mendeleev's table can be understood as a *poem*, as Primo Levi <u>puts it</u>. But without the concrete, it becomes a smokescreen, a barrier to insight, a dangerous surrogate.

### A short history of my work, which I will divide into three phases:

- 1. compression and immersion
- made interfaces to build my own intuition with then-complex concepts like fft -<u>phasor</u> / <u>sublimation</u>
- spend a lot of time staring at renderings to understand what i can see in them chewing / live zoom
- for the sort of work that i do, wireframes—even still images—are useless godard GOD / montage interdit
- 2. control and illusion
- ZKM video spreadsheet / hilbert video
- gentle
- augmented augmented human intellect
- 3. virtual and physical
- "writing" is a core "technology" i've been investigating hyperopia
- "un-designed" interactions hugely valuable video binder / blue book silver book
- "computation," essentially, is not happening in a computer -<u>americanah cards</u>

### stabs at intimacy

- intimate interfaces cannot be "wireframed" or otherwise faked. they are a *lens* more than a *frame*.
- repetition can lead to new discoveries. use is not "monotonous" and therefore automation is never the goal.
- meaning "passes through" the system. "the answer" is never directly modeled, but occurs in the heads of humans.

- programming intimate interfaces is more intimate than using them. and since this intimacy is fundamentally *lingual*, it is a non-intuitive process poorly served by "end user" tooling.

## conclusion

Search, and re-search, must be processes of acquiring intimacy not abstracting to an outline or de-skilling to a workflow.