[2ⁿᵈ Story of 0: delivered orally]

I thought that since we are going to talk about Jaron Lanier's book about VR, we should try to talk about the book from something that we are *inside*. Thinking that it would be inconsistent to speak of *immersive experience* from the 'outside the water'. So, I have tried to find a way of talking about the book from something that we are currently *inside*—like the fish in the water—and attempt to reflect the topics raised by Lanier in his book from there.

It is different approach from *taking one step back* to look at things, as though this granted us some form of objectivity. When you present the books that you have selected in class, your have to step *into* the pool. You cannot look at it from the outside. And in our course we have talked a bit about *equipment*. Big machines, industry and what it means. But then there is *scuba diving*. What is the connection with VR? Let's see what it is…

First of all, its from a video that Jaron Lanier included among his references, in order to make one of his major points. It is indirectly related to scuba-diving because the phenomenon he wanted to highlight with the video-example was observed by a *marine biologist* who—in a diving session—observed something quite surprising. I will turn to that. But not before I have said something about the equipment. *The mask and the suit*. This is something that ties diving to VR.

They are basically *similar* activities both *conceptually* and *experientially*. The suit, the goggles and the role of the *hands* in what is seen. In this case a video, under water, where the rules are different for how we move and what we see. But *then* what happens <… see video…>? Actually, it would be possible to talk about the entire book from this video clip alone. Because, the reason why Jaron Lanier wants to share the octopus with us, is that what it can do naturally he covets for himself.

That is, he dreams of a capacity similar to the octopus for us in VR. His core theoretical point is to distinguish between human language and what he calls *post*-symbolic communication. Personally, I would have preferred the term *non*-symbolic communication. It relates to the possibility of human being to communicate beyond language, which is symbolic. Which means that it is conveyed through symbols.

Words are symbols, so are gestures, and also writing—obviously. However, what Lanier is concerned with is that all categories of symbols derives from relations of dependency that we have as humans. Simply because we are born *without* the ability to fend for ourselves: we have to be fed, we cannot walk or move, and we have to learn most of what we know: to *speak*. Not once, but *several* times, because our bodies change, not only in size.

The *proportions* change. My example with board diving illustrates that (flyer #06). Gymnastics is similar. And dance. Perhaps football. Any activity in which the principle of motion depends on the *size* and *proportion* of the body. Swimming is not like this. We can stop swimming for years and still know how to swim. I think that downhill skiing also works in this way, at least for me. Know it, can do it. Even after many years long break.

So, this is Jaron Lanier's point with [neoteny](). The cephalopods—octopus—don't have it. They are born smaller than they are as adults, but fully functional and not in need of nurture. The octopus-parents can leave them to fend for themselves *as soon as they are born*. Which means that *when you meet an octopus* —which basically is a brain with elongated arms, eyes and a mouth—*you cannot have any idea of what it knows*. Unlike humans.

But, Lanier continues, there is a part of us which is like that, and that allows us to leap into worlds that are completely different from our current one, where we can do other things than we normally can, and change *not only* what we sense but also our *bodies*. And this is where he is particularly interested in cephalopods, because they can change the texture, colour of shapes of their bodies. When they know something they can shift.

They can shift to its shape and be that object without need of symbols or translation. What I find interesting—and actually a bit funny— with the movie is the invisible hand of video editing and the female voiceover explaining what is happening to us, and *why* it is interesting. It somehow becomes essential to us, in order to map what we see as knowledge. *We cannot simply look and learn*. We have to *do something* with the material.

Then it becomes knowledge, and we think that we have learned something. But for the octopus it is not like that: it takes a good look —or, whatever it is that it does—and then it knows. I am wondering whether this is a side of human potential that we are cultivating at art school. This ability to look, or sense, and know. *Directly*. If that is the case, what do we need theory for? Well it is a faculty that doesn't come on its own, it must be groomed.

Because, when we know things immediately we may be merely prejudiced (I don't know if it makes sense to speak of a prejudiced

octopus—it is somehow a scary idea!). How can we know things directly, but also *precisely*? This may be the right question to ask. Here we are getting to a layer of Jaron Lanier's book which has to do with equity and justice. This is the layer of his work that I will be turning to now. The cloud. Open source.

Jaron Lanier's points about the cloud, open source and hive intelligence we will notice today that are marked by the fact that the book was published in 2010. It is already 10 years ago. And many things have happened in the kinds of markets with very few enterprises, with a small number of employees, absolutely enormous business figures. He is critical of these—Google, Facebook, Apple—because the users are sort of like *worker bees*.

Users are absolutely essential to the development of artificial intelligence (AI) because they spent an enormous time of their lives producing *patterns*—or, metadata—that allows to move [Claude Shannon's paradigm of communication](#) target of *message accuracy*, which was the problem of telephone companies and in the post WWII era, unto the area of *user accuracy*: like what's the next move that you'll find in chess. [Deep Blue](#).

The famous IBM chess programme that in many ways constitutes the proof of the validity of AI as an approach to computing. But then chess, like key-board instruments and math entail a logic of *steps*—one separate from the other—that Jaron Lanier also finds in systems like UNIX, typewriters and MIDI (see flyer #06) that approximate *continuous* areas of play and experience, but will never fully succeed. Along the system's edge the *glitches will pile up*.

Take our linguistic abilities. They are not like stringed-up stepwise elements to start with (as they certainly are when type writing as here), but more like song lines, that Tim Ingold wrote about in his book (2007) *Lines: a brief history*. And still, while writing by hand, the continuous lines of drawing are still with us. Even when typing on my computer there is a steady trickle of that *continuous undercurrent*. But then comes spell-check: a form of AI.

In the alternatives to my own spelling that come up automatically on my iPAD while writing, they are more often irrelevant than useful. In fact, they are often *sensationally* irrelevant, and disrupt my flow (rather than assisting and supporting it). The alternatives are often funny, in a dark sort of way, but also deeply ideological revealing a computer that apes the language of our time, rather than comprehending it. Is this *intelligence*?

It certainly feels *artificial*, but in a *mechanic*—rather than intelligent—sort of way. Yet, we are perhaps already in the kind of society where decisions are made on this sort of platforms. amazon.com used AI to determine the characteristics of the strategic future employees. And guess what? They fitted the pattern of adult white males. So, this aspect of AI ties up with the tendency that Sarah Davies noted with Maker-spaces (last lecture).

So, when Jaron Lanier vouches for VR as an alternative path to AI, it is because it works in synergy with the human talent for the *continuous*—both as a player and an experiencer—with also talents for leaps that are creative, *rather* than reductive. But it is also because he doesn't believe in the festooning of [crowd-sourcing](#) inherent in concepts such as the hive, the cloud, open source. It isn't to the user's benefit, nor to the good of knowledge.

Consequently, he fears both for the user's decent income and for the quality of know-ledge in the future. Instead, he believes that to develop quality in business and knowledge we need to work in smaller groups, in periods alone, and crowdsourcing only in certain phases. For instance, such phases that have to do with public culture. *Politics, art and news*. But not when tinkering with nature, in phases where the consequences are unclear.

The example he Lanier uses is high precision technology in remote surgery, where VR—with its goggles and gloves—has enabled specialised *surgeons* to operate globally without moving away from their domestic hospital facilities. Digital technologies are multi-purpose assemblages that can support operations ranging from saving lives to waging wars. It also facilitates a continuous slide from gaming to real-time operations. Hence ethics.

We see it all over today: the need to articulate ethics is not limited to hindsight reflections of nuclear physicists who contributed to the development of the atomic bomb and to nuclear power plants. A responsibility beyond the scale of human history. But the [ubiquity](#) of digital technology places humanity in a situation where each one of us carry a similar ethical burden. Or, at least, so it seems. Jaron Lanier has been active on this arena.

This time, in Europe. In a report to the Europe-an Data Protection Supervisor a colleague of mine in Paris (James Peter Burgess) had Jaron Lanier on board, in a critical reflection in the ethics bordering to legislation that we find in the [GDPR](#) (General Data Protection Regulation) that is intended to protect personal data from commercial use and

surveillance, that basically reduces itself to us having to press a button to accept "cookies".

A choice appearing in the garb of the Oracle in the *Matrix* movie: a data-algorithm baking cookies. Who would not accept a cookie from someone with a friendly face? This is where we're at currently. The unintended effect of the legislation (GDPR) is turning users into *ethical subjects*, rather than *reflective agents* (which is the domain of ethics in philosophy, for instance). Again, we are in the are of Lanier's problem: the discrete vs. the continuous.

Because ethical legislation trickles down in the form of guidelines—featuring in *bullet-points*—for us to keep, whether as physical or legal persons, in order to *take responsibility for ourselves*. This will, paradoxically, reduce our ethical responsiveness in *concrete cases*—or, the real world—which draws on our ability to handle non-segmented experiences and agency. Or, if you will, the spontaneous adaptiveness of the Octopus to the world.

That is, the world *as it comes* (rather than the world as it is *prefigured*). The ability of responding to *contingencies* with the precision of *necessity*, which came on the modernist agenda in the art-world with the Surrealists; who saw the dream-world as historical necessity coming to our minds through desire (attempting thereby to join Marx and Freud, which we can follow these days in the current actuality of Franz Fanon).

This is documented in an art-magazine called Le Minotaure, which Margaret has looked at, and I have brought to class today. We must look for connections, always. *Because we are not alone. There are others there: people who have lived, and generations yet to come*. People outside the orbit of the discussions that we are having here. People at the rim of digitality: such as boat refugees, who may have made their way with broken mobiles.

I think it is relevant for us here to bear in mind the relevance of considering that the global access to mobile-phones has turned the privileged part of the world, into a *virtual reality experience* for the disadvantaged part of the world. In that perspective, it is really not so simple that VR has come to save the world —as a global panacea—because virtual immersion also yields changes in lifestyle. Lanier makes his own obesity a case in point.

A still recent Macedonian movie called Honey-land takes this from the other side. It contrasts the life of a lady, living in a stone house and what the land can give, along with her old mother, and who knows the art of *harvesting* from wild bees. One day, in comes a family

that appear to be cattle herders. They are not very successful in keeping cattle. And the want to learn from the bee-keeper, who lives a simple life with her *bee keeping as cash crop*.

But with a *shamanic* wisdom and lifestyle. To her living with nature is a two-way relation. The newcomers are in want of a middle-class standard and end up pressing both cattle and bees to the verge of disaster. A middleman goads them to this by seducing them with the "luxuries" from the cheap Sunday markets that one finds all over Southern Europe, and around the world. They end up moving on and leaving the ecological disaster behind.

They belong to a growing population of the world's disadvantaged who *no longer* have access to the survivor-skills of traditional life. This is not a critique of them, but a critique of the world of fabricated desires that currently is ravaging what we could call the world-system (Immanuel Wallerstein). Arguably, it is produced at the rim, or edge, of a contemporary discourse on digital comfort zones that is currently played out in our part of the world.

That is, the kind of *social distancing* that is developing in the wake of the demand for personal comfort zones: that are protected through the GDPR, ethical guidelines and blogging our *sensitivities*. It is the hallmark of present-day privilege to live and be protected like this. However, it is also clear that such claims for independence, are hinged to economic dependencies. If the system of privilege breaks down, so does autonomy.

We are behaving as though this is a universal —hence global—*birth-right*, which the current crisis shows that it is not. Then I am talking about *both* the boat refugee situation, and the current pandemic. Which may be one factor in what is currently stirring people to political action. The system of exploitation, constituting the backbone of privilege, can break down. And we will all pay that bill. Our current system is owing a debt to reality. *Rag-hills*.

Giorgio Agamben's call for taking stock of the political long-term effects of social distancing is relevant in this broad framework. However, it is specifically relevant to us because with the impetus of social distancing, the weaponising of the police, keeping the wheels of culture going is itself a political action. A form of political activism. Of keeping the school running, attending events, and supporting the commercial institutions keeping this up.

That is, those running the infrastructure of cultural life as the realm of free expression. At this point we should take this very seriously. So, keep up the work, organise events, and

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attend within the scope of the security regulations. Like the GDPR these are here to protect us, but also like the GDPR they can turn us in to *subjects* rather than reflective agents. So, the digital adventure, Lanier argues, has brought us some real challenges.

That is, the 360^0 kind of challenge. *Our whole life in a box*. Or, so it seems. Our while social life in a box, when we venture into the conferencing tools (Zoom) that we are currently using as a safety precaution in the pandemic. It has turned the tables of how we link up with technology: from being alone together, turning away from each other to technology, we are now turning to technology to be together.

While living more/less isolated, or at least distanced. It is a shift, as it were, *from being alone together, to being together alone*. During the lock-down the our social life became *virtual*, and our *actual* lives was isolated. Which means that the terms of what we learn directly and mediately was turned upside down. Our continuous repertoire was confined to isolation, while our discontinuous repertoire was the one to structure our social lives.

The one to state this problem, in its previous phase, was [Sherry Turkle](#) in her book *alone together*: like we have a tacit collective agreement that we are better off alone, with our smart phones, music lists, favourite news channels, blogs and social media. While being together alone, is our present reliance on video conferencing for real time interaction, while all our experiential sensitivities are isolated, distanced and regulated.

In his book, Jaron Lanier took interest in this aspect when he discussed the early days of VR, where social interaction was as interesting as being transported into an alternative reality, since the sensorial richness couldn't provide the main attraction, as the reduced information processing capacity of computers at that time. With time VR became wired to edutainment and individual experience. With Zoom we have been thrown back in time.

Sound and video quality is poor, and we have to concentrate on the *interactive qualities* to be on pitch with one another. Experience has proved that the attempts at enriching the technology sensorially, by the help of microphones, loud-speakers and projector is troublesome, and the tools does not help us in this direction. Moreover, Zoom has some other properties discussed by Lanier in the book, relating to the *uncanny*, close-to-real.

He observes that while we have a real knack of leaping into alternative realities, the close-to-reality virtual experiences often give birth to unpleasant reactions. Headaches, nausea, stress. Perhaps not immediately but after a while. Like in the Twin Peaks series: "The owls are not what they seem". This is the experience of the uncanny, at which David Lynch excels in all his movies. Not horror, but definitely out of the comfort zone. [Unhomely](#).

 The term he uses to cover this phenomenon is what he calls 'the valley of the uncanny'. Suggesting that there is a realm *between* the virtual and the actual—a "valley"—that we simply do not handle very well. My *stories of 0* are exactly like this. Not when I have worked them into story, so what I can tell them, but as they *happen* in real time. The point being perhaps that 'real time' is actual *and* virtual. And the real is where we renegotiate *ourselves*.

That is, the part of us in *direct/continuous ways of learning and knowing*—as, for instance, in art school—and the other part of us tied to *dependent/symbolic ways of learning* and *knowing*. Our embodied learning and knowledge is a compound between the two: a ratio between the two ways of learning/know-ing that we feel is more/less adequate. And that we have to change at critical points in our lives. That normally are *life-crises*.

By normal, I mean that such thresholds—[liminal phases](#) of passage—in the past have come a finite number of times in our lives. We can recollect these, and share them with people we trust. Under the present circumstances they appear to come more often. With each new phase of security measures, during the pandemic, we are faced with the challenge of 'regrouping our assets' and coming up with a new workable *ratio* between virtual & actual.

I am closing this point by asking the same question as Giorgio Agamben: *what if the state of exception becomes permanent?* That we have to re-/invent the ratio between virtual and actual *all the time*. How will we live with the *uncanny* if it becomes *permanent*? Which repertoires will hatch of such *acceptance*? Did the text-work on KHiO's staircase anticipate these developments? I want to finish with a point from U. Eco's Theory of Semiotics.

It is a point about *invention* in semiotics, and essentially relates to how we can produce *new* signs. Invention relates to the transmigration of contents, and has—in Eco's theory—two phases: **1)** *first phase*—transporting the content to a *material which is still unsegmented* for your *expressive purposes* [a common design problem]; **2)** *second phase*—once it works for you, to make the new expression socially acceptable, or *readable*. That is all from me today!