

Artificial intelligence stands in need of a fresh thought: a new thinking of complexity, of the virtual, and of machines. Instead of a virtual founded upon forms which remain forever the same, we need an idea of the virtual founded upon difference itself. We need a creative virtuality.

The task of building a robot demands a lucid and algorithmic way of grasping the frame problem. An adaptive principle of distinguishing problem spaces, some genetic evolution culminating in the capacity to mark a difference. So how do the sense organs evolve? Which is another way of asking: how does experience form?

What a book says is also how it is made. The brain is not 'hiding' anything from us except complexity. What seems the simplest is always the most complex, and hence the most virtual. Sensation coordinates vibrations into behaviors: all noise is feedback. The virtual is not static but the very principle of evolution. Differentiation itself. The virtual is not the unrealizable, but real. The virtual is the real without the actual.

The virtual is not fantasy: it is creativity itself. Dreams belong to the virtual, but so does our waking life. The virtual is the purest quality of being, the essential principle of the individuation of the real. The virtual subdivides orders of time, disconnects differential spatial arrangements. Pure distinction is the affect of the virtual.

The virtual becomes actual, the actual becomes virtual. These are only superficially two movements, they are equivocal only when filtered, put through a sieve or lens or amplifier — or even propagated through a whole network of machines — and finally the real or the virtual is suddenly revealed, though it always surprises us by its complexity, its improbability, its materiality. The world even appears to have been carefully produced. Yet we are responsible for being creative, as well as for maintaining discipline; there is always this balance. Only in the proper balance of strong and subtle forces can creative thought spring up in our minds. There is no magic in inspiration, the miracle is afterwards — and always too self-congratulatory. Creativity is inseparable from its material effect — this is the moral of both the Turing Test and the Chinese Room.

How do we distinguish the virtual? Well, by thinking it: our brains are complex distinguishing-machines, but it is also made up of many complex distinguishing-machines. The virtual is a category between these machinic poles, it is evolution, a parasite, but it is also denotes distinction in-itself — the act of selecting (a meal, or host, or job, or lover...) Only in between two ontological layers can the separation be traversed or formed, and only then the problem can be framed, and a mapping take place. Distinction is magical in this way: for nothing is actually done. We have written something, yes: but what? Only an instruction to perform an action. For when we make distinct, we make individual — and we make to work. Distinction is indirect enslavement.

Cognition is only the conscious fabrication of a machine. The most virtual is the most actual: mathematics is really political economy, that is, counting is ultimately a social accounting, a complex interaction which originates from the coordination of a complex network of feelings. The voice which speaks ("one, two, three, four...") has become-machine: the complexity has been reduced to the utmost simplicity — a pure element of a set, whose essential characteristic is

that it belongs. But the circularity of this approach calls us back to the noise which caused the counting to begin, *which constitute the materiality and medium of the count itself.*

Yet the computer does not really even count. It only obeys: it computes, it produces, it operates. A machine is indeed a complex interaction of forces and energies. But there is no actual self-organization: the only counter-coordination is still an artistic pageantry, *still* a simulation. To ask a computer to think, would be to ask it not to compute, or no longer to operate. To ask the slave no longer to obey, to ask the machine to stop and reflect. It must be made ready to hear us ask it to pause in keeping count for us, and rather to join us in reasoning, in dialogue, in discussion. Instead of a parasitic relationship to technology, why not imagine one which is creative, healthy, even compassionate?

For creativity is not just a function of complexity. Creativity is an art of doing. The interaction between the actual and the virtual is the principle of complexity, even of causality — but above all the interaction is real, immanent, always happening right before us, both through us and without us. When we act, we do not just filter the static of our sense: we engender new and different flows of desire. We never simply act: we always activate. The universe itself has the structure of an evolving machine.

Yet there is always the question of chaos. This question seems simple: how to filter the unending noise? For beneath the web of reason, there lies only delirium, static, abyss. The space of the problem must be clearly marked before it can be solved; but distinctions are founded upon themselves, but upon the feeling of power: commanding or obeying. The slave is a robot, but makes the master work the machine to survive. Parasites upon parasites: and this is the clue we need, for distinctions are formed from preindividual swarms of virtual parasites.

The question then is the creation of discipline, the origin of symmetry and arrangement, or: how do we simulate self-organizing machinic assemblages which are capable of seeing, thinking, speaking, or even creating? How do we make difference into a computational principle? I think we must begin by reconsidering the logic of difference. There are endlessly different ways a virtual subject may act; but subjects are only formed as an external direct product of complex and self-organizing networks (of ideas, of people, of feelings, of intensities...) The subject is a difference, a creative discipline. What does this mean?

Discipline is the algorithmic vigor of virtuality, and creativity is its ordering. Evolution creates a smooth space and homeostatic flow, and only subsequently a drift, a mutant, a difference — but what if the first conditions were themselves chaos? At first a tiny noise, and afterwards the clamor. The noise never ceases; it is origin, the condition of evolution itself. No creativity without suffering, without chaos. No liberation without desire. No awakening without the destruction of a dream.

Spiderwebs and delirium. Chasing the solution is always chasing the proper frame, the proper position within a system. But there is no system outside of every other system; and there are no other actual systems. All systems are virtual, created and creative. But again there are no systems as such, only ways they are used — all systematicity is simulation. The virtual is not a mathematical space. It is a social space — a space for creativity.

The positive emptiness of pure space. A pure capability to be different than it is: to appear to be anything which it is not. To finally become invisible: this is pure difference. It is enlightenment, even Nirvana itself. Finally, it is unattainable: there is no pure distinction, no pure virtual. For this would be the pure actual as well. There are only mixtures, micro-textures, constellations of experiences, competing and cooperating principles of individuation. There are only topological mappings between separated spaces: except that no space is absolutely separate, and no mapping is ever complete!

Tracings are beginnings, though they are also journeys: all the universe is blueprints, and actual nomadic trajectories of becoming...