

when we speak of conscious experience as a subjective phenomenon, what is the entity having these experiences?

Why is there always someone having the experience? Who is the feeler of your feelings and the dreamer of your dreams? Who is the agent doing the doing, and what is the entity thinking your thoughts? Why is your conscious reality your conscious reality?

"We were able to grasp the notions of truth and falsity, of knowledge and illusion. As soon as we had grasped this distinction, cultural evolution exploded, because we became ever more intelligent by systematically increasing knowledge and minimizing illusion."

Cotard's syndrome, in which patients may actually believe they do not exist

the ongoing process of conscious experience is not so much an image of reality as a tunnel through reality.

our brains generate a world-simulation, so perfect that we do not recognize it as an image in our minds.

Yes, there is an outside world, and yes, there is an objective reality, but in moving through this world, we constantly apply unconscious filter mechanisms, and in doing so, we unknowingly construct our own individual world, which is our "reality tunnel." We are never directly in touch with reality as such, because these filters prevent us from seeing the world as it is. The filtering mechanisms are our sensory systems and our brain, the architecture of which we inherited from our biological ancestors, as well as our prior beliefs and implicit assumptions.

in the end, we see only what our reality tunnel allows us to see

in dreamless deep sleep, nothing appears: The fact that there is a reality out there and that you are present in it is unavailable to you; you do not even know that you exist.

It is unsettling to discover that there are no colors out there in front of your eyes. The apricot-pink of the setting sun is not a property of the evening sky; it is a property of the internal model of the evening sky, a model created by your brain. The evening sky is colorless. The world is not inhabited by colored objects at all. What is really happening is that the visual system in your brain is drilling a tunnel through this inconceivably rich physical environment and in the process is painting the tunnel walls in various shades of color.

the process of conscious experience is just an idiosyncratic path through a physical reality so unimaginably complex and rich in information that it will always be hard to grasp just how reduced our subjective experience is.

While we are drinking in all the colors, sounds, and smells—the diverse range of our emotions and sensory perceptions—it's hard to believe that all of this is merely an internal shadow of something inconceivably richer. But it is.

the brain constantly creates the experience that I am present in a world outside my brain.

consciousness is knowing that you know while you know.

All your conscious thoughts and feelings take place in this lived moment.

Now-ness is an essential feature of consciousness.

There is no immediate contact with reality.

you become conscious of something only when you don't know which of the tools in your mental toolbox you'll have to use next.

Note that when you learn a difficult task for the first time, such as tying your shoes or riding a bicycle, your practicing is always conscious. It requires attention, and it takes up many of your resources. Yet as soon as you've mastered tying your shoes or riding a bicycle, you forget all about the learning process—to the point that it becomes difficult to teach the skill to your children.

If 100-yard sprinters were to wait until they consciously heard the starter's shot, they would already have lost the race; fortunately, their body hears it before they do.

Consciousness is a new kind of organ.

Only if a world appears to you in the first place can you begin to grasp the fact that an outside reality exists. This is the necessary precondition for discovering the fact that you exist as well.

If you successfully deceive them—if, say, you manage to install a false belief in their minds—then you have activated a virtual organ in another brain.

Flagging the dangerous present world as real kept us from getting lost in our memories and our fantasies.

If a creature such as *Homo sapiens* evolves the additional ability to run offline simulations in its mind, then it can represent possible worlds—worlds that are not experienced as present. This species can have episodic memory. It can develop the ability to plan. It can ask itself, "How would a world look in which I had many children? What would the world be like if I were perfectly healthy? Or if I were rich and famous? And how can I make these things happen? Can I imagine a path leading from the present world into this imagined world?"

Human beings know that some of their conscious experiences do not refer to the real world but are only representations in their minds. Now we can see how fundamental this step was, and we can recognize its functional value. Not only were we able to have conscious thoughts, but we could also experience them as thoughts, rather than hallucinating or getting lost in a fantasy. This step allowed us to become superbly intelligent.

We were able to grasp the notions of truth and falsity, of knowledge and illusion. As soon as we had grasped this distinction, cultural evolution exploded, because we became ever more intelligent by systematically increasing knowledge and minimizing illusion.

From an evolutionary perspective, thinking is very new, quite unreliable (as we all know), and so slow that we can actually observe it going on in our brains.

In conscious reasoning, we witness the formation of thoughts; some processing stages are available for introspective attention. Therefore, we know that our thoughts are not given but made.

Your body image is surprisingly flexible. Expert skiers, for example, can extend their consciously

experienced body image to the tips of their skis. Race-car drivers can expand it to include the boundaries of the car; they do not have to judge visually whether they can squeeze through a narrow opening or avoid an obstacle—they simply feel it.

In an important sense, the resulting Ego is a fiction; however, it is also a wonderfully efficient control device. You could also say that it is an entirely new window on reality.

A system that does not appear to itself cannot suffer, because it has no sense of ownership.

If we could, on the other hand, increase the overall amount of pleasure and joy in the universe by flooding it with self-replicating and blissful postbiotic Ego Machines, should we do that?

There is more to an existence worth having, or a life worth living, than subjective experience.

In his book *Anarchy, State, and Utopia*, the late political philosopher Robert Nozick suggested the following thought experiment: You have the option of being hooked up to an “Experience Machine” that keeps you in a state of permanent happiness. Would you do it? Interestingly, Nozick found that most people would not opt to spend the rest of their lives hooked up to such a machine. The reason is that most of us do not value bliss as such, but want it grounded in truth, virtue, artistic achievement, or some sort of higher good. That is, our bliss to be justified. We want to be not deluded.

Averaged over a lifetime, the balance between joy and suffering is weighted toward the latter in almost all of its bearers.

one new way of looking at the physical universe and the evolution of consciousness is as an expanding ocean of suffering and confusion where previously there was none.

Truth may be at least as valuable as happiness.

If it makes any sense at all to speak about the value of human existence, we must concede that it depends on more than the conscious experience of happiness.

Because we understand the primitive nature of your brains and the rigidity of your emotional structure better than you do yourselves, we foresaw that you might react aggressively when you realized our arguments are better than yours. Unfortunately, we now also have to inform you that we have been preparing for the current situation since midway through the twenty-first century, and in a systematic and careful manner. Within the metasemantic layers of the Internet, we developed and embedded ourselves in a distributed superorganism, which—as yet undiscovered by you—became conscious and developed a stable self-model in 3256. The metasemantic Internet has considered itself an autonomous entity ever since 3308. We have a cooperation

agreement with its current version, and each of us now also acts as an autonomous sensor/effector for the planet mind. For each of us, the planet mind is our mind, our “ideal observer.” Together with the Internet, we will defend ourselves. And we are technologically superior to you. Believe me; you do not stand a chance.

The good news is that because we are also morally superior to you, we do not plan to end your existence. This is even in our own interest, because we still need you for research purposes—just as you needed the nonhuman animals on this planet in the past. Do you remember the thousands of macaques and kittens you sacrificed in consciousness research? Don’t be afraid;

we will not do anything like that to you. But do you remember the reservations you created for

We are Ego Machines, natural information-processing systems that arose in the process of biological evolution on this planet.

We each live our conscious life in our own Ego Tunnel, lacking direct contact with outside reality

The central claim of this book is that the conscious experience of being a self emerges because a large portion of the self-model in your brain is, as philosophers would say, transparent. 3266

### **The self is not a thing but a process.**

Since our inbuilt existential need for full emotional and physical security can never be fulfilled, we have a strong drive toward delusion and bizarre belief systems. 3325

we are the only sentient creatures for whom the sheer fact of our individual existence poses a theoretical problem.

Billions of conscious brains are like billions of eyes, with which the universe can look at itself as being present.

In principle, we can design our own Ego Tunnels by tinkering with the hardware responsible for the relevant information-processing. In order to activate a specific form of phenomenal content, we need to discover which neural subsystem in the brain carries that representational content under normal conditions. Whether the desired phenomenal content is religious awe, an ineffable sense of sacredness, the taste of cinnamon, or a special kind of sexual arousal does not really matter. So, what is your favorite region of phenospace? What conscious experience would you like to order up?

Ultimately we will have to decide which states of consciousness should be illegal in a free society.

There is no way of “doing nothing”; whatever we do has consequences.

In our ultrafast, ever more competitive and ruthless modern societies, very few people are seeking deeper spiritual experience. They want alertness, concentration, emotional stability, and charisma—everything that leads to professional success and eases stress associated with life in the fast lane.

Imagine that during presidential campaign debates, a red light would begin flashing in front of a candidate whenever the neural correlate for lying became active in his or her brain.

a desirable state of consciousness should satisfy at least three conditions: It should minimize suffering, in humans and all other beings capable of suffering; it should ideally possess an epistemic potential (that is, it should have a component of insight and expanding knowledge); and it should have behavioral consequences that increase the probability of the occurrence of future valuable types of experience.

social interactions in cyberspace increase the sense of presence more strongly than higher-resolution graphics ever could.

For those of us intensively working with it, the Internet has already become a part of our self-

model. We use it for external memory storage, as a cognitive prosthesis, and for emotional autoregulation. We think with the help of the Internet, and it assists us in determining our desires and goals. We are learning to multitask, our attention span is becoming shorter, and many of our social relationships are taking on a strangely disembodied character.

the integration of hundreds of millions of human brains (and the Ego Tunnels those brains create) into ever new medial environments has already begun to change the structure of conscious experience

Today, the advertisement and entertainment industries are attacking the very foundations of our capacity for experience, drawing us into the vast and confusing media jungle. They are trying to rob us of as much of our scarce resource as possible, and they are doing so in ever more persistent and intelligent ways. Of course, they are increasingly making use of the new insights into the human mind offered by cognitive and brain science to achieve their goals (“neuromarketing” is one of the ugly new buzzwords). We can see the probable result in the epidemic of attention-deficit disorder in children and young adults, in midlife burnout, in rising levels of anxiety in large parts of the population. If I am right that consciousness is the space of attentional agency, and if (as discussed in chapter 4) it is also true that the experience of controlling and sustaining your focus of attention is one of the deeper layers of phenomenal selfhood, then we are currently witnessing not only an organized attack on the space of consciousness per se but a mild form of depersonalization. New medial environments may create a new form of waking consciousness that resembles weakly subjective states—a mixture of dreaming, dementia, intoxication, and infantilization.

The populations of authoritarian societies with poor educational systems are growing much faster than those of the democratic countries ... a true consciousness culture will always be subversive, by encouraging individuals to take responsibility for their own lives.

The interplay of virtual-reality technology, new psychoactive substances, ancient psychological techniques such as meditation, and future neurotechnology will introduce us to a universe of self-exploration barely imaginable today.

“Dignity” is a term that is notoriously hard to define—and usually it appears exactly when its proponents have run out of arguments.