## **Short term planner**

## By Professor Jan Willem de Graaf

Professor of Brain and Technology, Saxion University of Applied Sciences, Deventer, Netherlands

umanity is estimated to have existed for about 300,000 years. One of the most striking features is a slow reproductive rate (long gestation period and usually only one child per litter). In addition, and unlike the other great apes, humans have little or no body hair and relatively little muscle strength. This results in a relatively small natural biotope; it should be warm enough for the "naked" monkey and there should be little or no natural predators. This is exactly why the predecessors of Homo Sapiens invented technology, with three basic techniques: 1. language (religion, signal, drawing, writing, logic, maths and code) 2. lever/mechanics (spear, hammer, wheel, pulley, pistons) and 3. fire/energy (and water & steam power, magnetism, electricity, atomic power). By combining the 3 basic techniques, we have been able to colonize the whole world. Evolutionary adjustments became obsolete (hairy skin, tusks, etc.). In fact, we have outsourced various processes necessary for survival to technological equipment: digestion (pre-cooking) on the pans and the fire in our kitchen, keeping warm on animal furs, wool, plastics and heaters, and memory and thought processes on cave drawings, notebooks, books and now also smart devices.

Despite our naturally limited biotope, we rule the entire planet through technology, almost without evolutionary adaptation. A qualitative species (slow reproduction rate in need of an exclusive natural habitat) that became numerous and quantitative (large-scale) through technology, and thus lost its exclusivity and could live everywhere. Technology has side-lined biology/evolution. Evolutionary adaptations are very minimal (a little more or less pigment in response to the conditions of the sunlight), resulting in really only one human race. Therefore, racial discrimination is actually cultural discrimination. To understand human behaviour and its motives, we need psychology instead of biology, because human cognition / emotion has not really changed in the few hundred thousand years of our existence. By nature, we had to divide tasks into caring for the children/community and providing food. There were times of scarcity and abundance. We were constantly on the guard for dangers lurking everywhere. In times of plenty, much was eaten and converted into body fat, because times of scarcity are always lurking.

Collaboration (looking for partners), caring for each other, hunting, suspicion and short-term planning are psychological fundamentals that are deeply rooted in our genome. However, in our large-scale organized technological world, our biological 'shortcomings' are compensated. Machined predictability has replaced uncertainty, while we did not change psychologically. We still make up for our insecurity through suspicion and friendship, and especially through consumption in times of abundance. But now, in the rich world, there is a constant abundance of food, information, and partners that make us obese or anorexic. Short-term gratification is an ancient psychological mechanism that remains visible in our modern existence. Obesity in the mechanized world and hunger in the non-mechanized world, which moreover has to contend with the dire consequences of our global colonization that place a heavy burden on the planet and the environment.

Biodiversity is declining, environmental disasters are common and our (grand) children will have a very difficult time keeping the inherited world liveable. We won't get a healthier planet with lifestyle programmes and new technologies if we don't understand the psychological mechanisms behind overconsumption. I want it now, while I still can! Today there is food and Netflix, tomorrow is uncertain. Politicians let companies invest in smart technology, smart houses, robotics, AI, so that we can even more easily compensate for our human shortages. A technocratic (robotized) world evokes a lack of recognition and an experience of meaninglessness. Meaninglessness increases insecurity and thus causes more overconsumption, which in turn calls for new control technologies. This is a vicious circle, which ultimately threatens our very survival. Policy makers, it is up to you to step over our few hundred thousand year old shadow of short term gratification! Almost impossible, but exactly why we really need politicians now!