



Editorial – Issue 26 – April 2017

Disobedience. A word that brings up the idea of infringement, because in common sense, its meaning seems to have been restricted to the social aspect, that is, it means civil disobedience. This meaning must therefore have been assimilated by our mind in such a way that its mere mention predisposes it to regard all that concerns it as illicitness. Etymologically, the word "obedience" comes from Latin and means "to listen carefully" according to Wikipedia. The opposite meaning, assuming that "disobedience" is the opposite of "obedience", has therefore no connection with the unlawfulness aspect, bringing up solely the sense of inattention or, more precisely, the sense of lack of attention.

If we follow this reasoning, we can draw a parallel between disobedience and innovation, not only in the technological sense, but in the most diverse aspects possible, in academia, in science, in companies, in organizations, in government, in society and so forth. If obedience were ubiquitous, there would be no innovation. Why? Simply because when one listens carefully, that is, when there is full alignment with the existing thinking, there will be no thinking about alternatives, no looking for improvements, and therefore no innovating. When everybody "listens attentively", there will be full convergence, and therefore exemption of questioning. When something must be obeyed, the mindset is such that that should not be questioned, for this would be a daring worthy of punishment.

As we can see, as we get rid of preconceived meanings, disobedience is fundamental to the advancement of society. Innovative entrepreneurs are by nature disobedient, for their mind is always ready to question. Actually, their mind is systematically in a state of questioning. It is this questioning that leads us to improvement, perfection, excellence. If everyone thinks that the *status quo* is satisfactory and does not need to be changed, there would be no evolution. The attitude of questioning should be praised not only by its nature, that is, not only by the advances that it can cause, but mainly because of its detachment. Innovators are systematically punished, precisely because they do not "listen carefully", and are not always in convergence with the situations with which they coexist. They are disobedient.

We often find ourselves imprisoned by our own converging thoughts. At this point comes to my mind a well-known challenge (should I say puzzle?), in which one must, with only four connected strokes, pass through all nine points of a matrix three by three. If you, dear reader, do not know this challenge, take the time to try it, before continuing reading, since I will reveal it in the sequence. We can only overcome this challenge when we get rid of the mental prison that makes us restrict the space available to that delimited by the points themselves. When we get free, the solution comes up. Generally, the situation becomes a little worse when there already is a standard solution to the problem, because in this case there is no need to find an alternative. The ones who do that are those people who are always questioning, the disobedient kind of people.

Disobedience can also make us think, as we have seen in the line of thought developed so far, of divergence. Divergent thoughts are those that provoke innovation and, generally speaking, the evolution of the world. The divergence causes a temporary turbulence, which will attract to itself, in an inherent way, several opposing forces. If it succeeds in its innovative purposes, only after balance has been restored will it become evident that this temporary turbulence was only the beginning of a chain of events that would culminate in a rupture with the past, with the purpose of provoking a better future.

Rules and customs often need to be questioned to give rise to innovations which may provide a significant improvement in the desired results, of whatever nature. The question then is no longer whether we should or not be disobedient, but rather when and in what context we should be disobedient.

To talk about disobedience is per se a disobedience. The great catalyst for this reflection was a programme recently launched by the Media Lab, of the Massachusetts Institute of Technology (MIT), called the MIT Media Lab Disobedience Award, worth US\$ 250,000. The programme aims at highlighting effective, responsible and ethical disobedience across disciplines, and around the world. Its objectives are to *build awareness and support of disobedience-robust work being done, as well as to promote role models for young people*. Information can be obtained at "<https://www.media.mit.edu/disobedience/>".



This issue of Espaço Energia presents a few papers related to alternative sources of energy, also passing through urban energy matrix and materials. We are grateful for the authors' interest in publishing in this journal, as well as their commitment to the process of improving the work based on the excellent evaluations of the editorial board. Espaço Energia would not exist if it were not for the permanent contribution of the members of the editorial board, to whom I leave my thanks and admiration for their expertise. I also wish to thank all the collaborators as well as Copel, the company that sponsors the journal in an exempt manner, respecting the scientific process irreproachably. We wish everyone a very good reading, and may we be able to become ethically, effectively, and responsibly disobedient to what imprisons our minds.

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