

Imagination lost: crossing the third watershed

by Neto Leão

Preamble

Ivan Illich is a classic. We often approach great thinkers of the past from two opposite yet related roads: assuming they are either determined by their historical period and therefore outdated, or as timeless geniuses. Both approaches, however, are blind to what are a classic and an oeuvre. A classic has something to always tell us because they respond to fundamental questions. A classic also teaches coming generations to raise the meaningful question of their own.

Illich's thoughts are neither old nor timeless. I suggest that Ivan Illich's oeuvre corresponds to a classic because it opens a new field of ideas in which we can find paths of our inquiries. By reading Illich, I have been learning the rigorous craft of raising good questions and how to confront my own time. I believe he is as current as he once was because many of his questions have not been widely confronted and some have been completely ignored, though most of his arguments are still potent provocations to radical thinking that is unafraid to go to the root of things.

My reading of Illich has taken me on a journey of listening to his words and engaging deeply with what he has to say. This intimate relation has crafted the feeling of visiting the interior of his speech that has still something to say despite its distance from my time. But it is this very historical distance that, little by little, allows me the exercise of reflection, from which emerge questions and propositions that are not those of the author. It is precisely at this moment of clear

distance that his voice finds a greater strength and is capable of evoking new questions that are now mine.

Among his oeuvre, *Tools for Conviviality* (1973) is perhaps the book, or pamphlet as Illich called it¹, most known to the public. It is the one with the highest number of publications in other languages (including Portuguese, my mother tongue, which is a language yet unknown to most of Illich's works). *Tools for Conviviality* is a classic. Fifty years after its debut, it still has something to tell us.

The 1970's are over. Many if not most of Illich's propositions in *Tools* had their place, a proper *topos* at that time. Today, they would mostly be misplaced. Politics, dialectics, and large scale social-ecological changes do not ink any of the pages of Illich's works after the 1980's. Illich himself stated, in a conversation with David Cayley, that "in *Tools for Conviviality* I came as close as I could to establishing some principles for possible political action around 1972. Do I expect to do better today [1992]? No. I then believed in the possibility of a true flipping in consciousness, of which I spoke at the end of *Tools for Conviviality*. Today I fear that many of the things which made me believe in this have changed."²

According to Illich himself, *Tools* can no longer establish some principles for political action. Yet, I argue that it has something to tell us, which I hope to demonstrate in this paper. I take the opportunity of the fiftieth anniversary of *Tools for Conviviality* neither to celebrate a brilliant book nor to romanticize a brilliant mind. I do not intend to lament the loss of its power to change society, or to elaborate a "solution" to the current crises, but to help us see how deeply technology

1 "I first wrote on a general theory of tools in a pamphlet, an essay. I wanted to revive the art of pamphleteering on the intellectual level. I didn't want to write social criticism or philosophical reflections. From the beginning, I said I wanted to write a pamphlet which would make people discuss the question. So I wrote *Tools for Conviviality*." (David Cayley, Ivan Illich in Conversation, Anansi Press, 1992), p.108

2 *Ivan Illich in Conversation* (p.115).

can shape our minds, souls, and bodies. And maybe, and this is a big maybe, to find room to regain an imaginary space for thinking, that ultimately shapes our way of living.

It had something to say

During the late 1960s, Illich's seminars at CIDOC were centered on educational devices. They were critical studies of the radical monopoly exercised by the industrial mode of production. By 1970, they found that universal education through compulsory schooling is not possible; that mass education is the large-scale conditioning of consumers and workers fitted for modern societies; and thus, only a society highly committed to levels of shared learning and critical personal commitment could set pedagogical limits on industrial growth.

Accordingly, his analysis of schooling and mass production of education – a service commodity organized as public utility and thus defined as a basic necessity – became the paradigm for other industrial enterprises. General analyses both then and now has well-formulated limits to the industrial growth of commodities but has been mostly blind to the industrialization of services and its destructive side effects. In contrast, Illich's pamphlets (*Deschooling Society*, *Tools for Conviviality, Energy, and Equity* and *Medical Nemesis: the expropriation of health*) not only show the catastrophic side effects of the industrialization of services but also called for political engagement with technology by setting limits to it. Only when the production of goods and services are jointly analyzed is it possible to clarify the limits to industrial growth.

His analysis is founded on an alternative concept that Illich called multidimensional balance, the framework for evaluating man's relation to his tools. When tools—whether medicines or machines—grow beyond a certain scale, they frustrate the end for which they were initially designed. Take

the example of cars in big cities. Although designed to increase mobility, most idle for hours in unavoidable traffic jams. Illich proposed two fundamental criteria for such analysis: identification of the natural thresholds and their social limits within which human life remains viable.

When Illich published *Tools for Conviviality*, he noted that two-thirds of humanity could still avoid passing through the industrial age if they had directly chosen postindustrial balance in their mode of production. In the early 1970s, Illich was aware that hyper-industrial nations would be forced to choose such postindustrial balance as an alternative to social/environmental chaos. He was writing it during a time of the energy crisis—a term he seemed to have coined in *Energy and Equity*. It was clear to him that further growth of mass-produced services and goods would make the human milieu hostile to its flourishing. Such accelerated growth inflicts social and natural changes at a rate that destroys cultures, renders political precedents powerless, and damages the physical milieu of man. In the social sphere, it means, for instance, extinguishing the unrestricted use of natural abilities. The ability to walk is given naturally by the form of our bodies. The growth of industrialized transportation not only pushes the walker off the streets but, in most cases, also makes it impossible for her to walk safely. In this way, locomotion becomes a scarce resource, a paid public or private mode of transport.

In this sense, it is entirely irrelevant whether an enterprise which produces such destruction is public or private, cooperative, or communal. In other words, it is not a question of ownership or of style of management. Market economies or planned economies, for instance, under such monopoly mode of production, generate similar levels of social and ecological degradation. Illich's theory argues for restraining the power of tools whenever they tend to overwhelm human activity.





p. 144, 155 | Andre Barone
Untitled (after drawing by Ernesto Bonato), photography, 2023
29 x 16,3 cm, 21,6 x 14,2 cm

In this sense, empowerment comes from understanding that beyond certain natural scales and limits, machines lead to a new kind of serfdom, whereby humans serve their machines. I believe that such a 'General Theory of Industrialization' is a milestone in the analysis of late modernity.

The challenge at that point was to recover one's imagination and fathom a modern yet industrially balanced society. In Illich's words, "our vision of the possible and the feasible is so restricted by industrial expectations that any alternative to more mass production sounds like a return to past oppression or like a utopian design for noble savages". Against such conditions, Illich formulated his concept of counterproductivity, composed of three dimensions: technical, structural, and symbolic. For example, the technical one implies that a car made for transportation cannot move due to congestion – overwhelmingly high numbers of the same tool sharing a limited space. When I am pushed off the streets to the extent of literally having no way to walk from one place to other marks the condition of structural counterproductivity. The deformation of self-perception as a *homo transportandus*, a being who needs locomotion, marks the third and most damaging consequence of the radical monopoly imposed by transportation. Understanding oneself in the light of what dominant tools says of oneself is its most degrading effect.

How to feasibly think of a theory of society that is both very modern yet not dominated by industry? That was the central question of Illich's critical research of modernity. The answer connects the social to the environmental, perhaps what is now known as environmental sociology *avant la lettre*.

In 1973, Illich's answer to this question came from an understanding that humanity had been facing a crisis, a moment of pivotal decision. Either the extraordinary scientific discoveries of the last decades would narrow and domesticate people's activities into the specialization of functions, or

a possible and feasible alternative would enlarge the range of each person's competence. The first defines industrial society for Illich: the institutionalization of values and centralization of power, and people are mere accessories of bureaucracies. The second inverts the first structure into what Illich named a 'convivial society.'

Above all, a convivial society is formed by the shape of tools that are in accord with natural thresholds. For Illich, dominant technologies are outsized and serve the purposes of managers in an industrial society. A society gradually becomes convivial when politically interrelated individuals set limits to the use of outsized tools. In this sense, "convivial is a technical term to designate a modern society of responsibly limited tools." That is why the term is applied to tools rather than to people. Therefore, a shared house, is not necessarily convivial, although people are 'living with' one another. What determines a convivial society is the relation between people and their tools and the extent to which this relation sprouts new communities.

Illich retraced a classical way to understand interrelated individuals acting together in pursuing a balanced society: Aristotle's *eutrapelia* and Aquinas' *austerity*. The first could be understood as 'pleasantness in conversation' while the second as 'discipline and creative playfulness.' These are the foundations of friendship. When we hear of austerity, however, we think of a neoclassical political-economic fiscal policy defined by 'responsible' spending cuts of government expenditures. Austerity has vanished as "the fruit of an apprehension that things or tools could destroy rather than enhance *eutrapelia* in personal relations." Both virtues do not exclude all enjoyments, but "only those which are distracting from or destructive of personal relatedness." Each society must find and set the limits to meet the appropriate balance that avoids destroying what creates the condition to encounter the other.

Illich's radical critique of modernity included the loss of pleasant conversation because of both the social and environmental degradation in an industrial society. He was looking at not only the biological or social degradation caused by dominant tools but also the conditions needed to regain the fabric of the community in relation to its milieu through disciplined and creative personal engagement or friendship.

The crossing of two watersheds

In modern industrial societies of the 20th century, Illich argued for identifying two watersheds in advance of new technologies. The first occurs when a new tool enables many people to access, use, retain or enjoy its effects and new possibilities. The second occurs when this new technology grows beyond social and natural limits to create new problems it initially intended to solve. In other words, the scale of the tool disables the abilities once enabled by it.

Let us take the example of cars once again. In the late 1920s, a car mechanic and general Mr. Fix it named Mario Fava, a former inhabitant of Pederneiras (a town 50 km from my village), left his mother on a journey to which he had just been invited (he was chatting with two military officials, who had been abandoned by their mechanic while fixing their Model T). They left the State of São Paulo carrying the travel permissions from the Brazilian government, crossed 15 countries of the three Americas, helped to construct significant sections of the Pan-American Road, traveled a total of 27,631 km, and arrived at the Oval Office, Washington DC ten years, one month, and nine days after they began their journey.

In 1940, when Mario Fava returned to his mother's doorsteps, while the world was being shaped by this new technology, she was flabbergasted by his presence. Her first words: 'what took you so long?' His answer, which names one of the

books dedicated to his adventure, was, “I did not know it was so far away.” Mario Fava also did not know that he was witness to a period in history in which cars, the new tool for human locomotion, were about to cross the second watershed.

Cars, along with the transportation industry more generally, had rapidly reached a scale that produced the very disease they were supposed to cure. Work, social life, politics, learning, healing, and leisure were pushed off the reach of one’s feet. A person’s ability to move was disabled by the environment created for and shaped by the transportation industry. In this way, professional transportation became a significant threat to transit.

To live constantly within the second threshold generates such a level of disability that people become immersed in frustrations. Illich thought that such frustration would prompt fresh perspectives. To end the frustration, we must first destroy illusions. Crossing the second watershed results from a society sustained and infected by the growth mania. When the sense of proportion is destroyed by the ever ‘more’ and the ‘never enough,’ people become blind to a solution rooted in communally established limits and confuse the idea of ceilings to industrial growth with a return to pre-industrial oppressive society. For this reason, Illich proposed a convivial reconstruction to reverse the primary trend of the 1970s so that modern science and technology could be used to “endow human activity with unprecedented effectiveness.”

The relationship between what people can do by themselves and what they need to obtain ready-made is perturbed by what Illich calls over-efficient tools, which ultimately destroys the balance between the active man and the passive consumer. The crossing of the second watershed, therefore, produces what Illich calls radical monopoly.

Let us take the example of transportation once again. Cars can monopolize traffic by shaping the cities into their

image and ruling out locomotion on foot or by bicycle. Built in the late 1950s, Brazil's recent capital, Brasília, is the ideal type of a city shaped by gasoline-fueled vehicles. Although located in a vast flat territory, no lines of the original drawings of the urbanist Lucio Costa and architect Oscar Niemeyer were meant for people on foot or by bicycle. The large blocks and long high-speed highways were designed for cars. There are no sidewalks in most parts of the city. Transportation not only becomes dangerous and costly, but such overland radical monopoly also creates long distances which only cars can reach (slowly). The space becomes scarce, and the environment is unavailable for persons' innate mobility. "Green" buses and "green" cars, and "green" constructions, under these conditions, produce the same result and effect.

Therefore, a radical monopoly exists when a significant tool rules out natural competence, imposes compulsory standardized consumption, and restricts personal autonomy. People's native capacity to do by and for themselves and others – moving, healing, consoling, building, burying their dead – are made scarce.

The radical monopoly of large-scale tools produces two cardinal social effects: social polarization and obsolescence. In the first, people are systematically excluded from industrial inputs and outputs, while in the second, life becomes intolerable even when people are not directly excluded from them. Progress is grounded in one fundamental idea: innovation of never-ending and progressive consumption (of products and services). New necessities always endow new scarcities. What is new translates into an important privilege.

Peasants in my village are being pushed out of the paths their horses trot on by tar pavement built for big trucks. Only very few privileged men are driving through these new roads with their new trucks. The villagers do not wish to own a truck—their lives, memories, and perception are strictly re-

lated to those paths taken at a different pace. When anything new is proven to be “better,” the social grading of individuals is based on the age of the things they use. To ride a horse becomes the symbol of a new mark of “poverty.” The commitment to the paved road and its monster trucks makes horse riding impossible, and the benefit of a few men devours the milieu that once carried the marks and memories of several people. The accelerating change of progressive new models drains the waters of memories, rips out the shared roots of *savoir-faire* (know-how), and upsets the balance of tradition. Ultimately, it teaches that “the better replaces the good as the fundamental normative concept.” A society caught up by the spell of ‘better’ perceives any invitation to celebrate life within limits as a threat.

The third watershed: it has still something to say

When Ivan Illich recognized the existence of two watersheds that every tool crosses within a society, he was aiming for the flourishing of convivial societies. Aware that natural thresholds are generally crossed after social limits are breached, he identified two watersheds: the first watershed is crossed when new tools enlarge people’s welfare in an efficacious way, while the second is crossed when some tools grow beyond a certain scale and begin to act against the very purposes they were meant to achieve.

Illich referred to the double phenomenon of social-environmental degradation with the term counterproductivity. As abovementioned, counterproductivity is of three kinds: technical, structural, and symbolic. Ultimately, the three dimensions of counterproductivity increase uninterruptedly. In such circumstances, frustration rapidly transforms into madness (Hades ultimate punishment); our modern industrialized societies perform the labor of Sisyphus with the lunatic and futile expectation of regaining the lost balance by rolling

different boulders through the same path. To believe that, for instance, electric cars are a solution to the current social-environmental degradation is to engage in a Sisyphean task.

Sisyphean modernity is generated by symbolic counterproductivity which refers to the phenomenon of self-perception or understanding generated by long exposure to outsized technologies. People habituated to sitting in cars, for example, think of themselves as beings who need to be moved, as *homo-transportandus*. It means that our imaginary space has been utterly shaped by dominant technologies and systems to the extent in which we lose our imagination to fathom alternatives.

I suggest the notion of a third watershed as the point at which symbolic counterproductivity becomes so entrenched that it can no longer be perceived as such. Overusing a tool designed to ignore natural thresholds cements the symbolic counterproductivity to the extent that it becomes the object of veneration. In other words, the damages caused by excessive technology are sought to be remedied by more technology. It is a sign of crossing the third watershed when society believes that electrifying the means of mass transportation is a solution to the problem of too much transit.

The symbolic dimension of counterproductivity entails the loss of the imaginary space and, consequently, the capacity to imagine alternatives to technological excess. After decades of living under symbolic counterproductivity, the third watershed becomes the “new normal”. That electric cars are thought a solution to climate change occurs only after walking is understood as a mode of transportation. Instead of politically addressing the issue of too much energy, sustainable development seeks solutions in living under the same power dependence (no limits to energy or tools) while expecting solar energy, for instance, to save us from both limits and ecological devastation. Ozzie Zehner has shown that shifting

from fossil fuels to the chimera of clean energy is a result of what I am calling the crossing of the third watershed, when the tool becomes a system. Suppose every country, above all the ones that pollute the most, agrees on shifting to clean energy starting today without any commitment to setting limits to energy consumption: “a global solar program would cost roughly \$1.4 quadrillion, about one hundred times the United States GDP. Mining, smelting, processing, shipping, and fabricating the panels and their associated hardware would yield about 149,100 megatons of CO₂.”³

Solar energy can only become a genuine alternative when it is framed by conviviality. To promote a planetary shift to solar panels under the sustainable development rubric is to insist on unlimited growth. Sustainability is the engine that confirms that societies are crossing the third watershed. In this third watershed, tools become systems that cannot be shut down. In Illich’s words, a system is “an extraordinary complex arrangement of feedback loops. The fundamental characteristic of a system is to seek survival by maintaining an informational balance which keeps it viable.”⁴ The fact that we cannot fathom a society living within limits to energy and instead have been committed, for the last thirty years, to sustainable development, that is, to have unlimited but cleaner energy, exemplifies the inability to put down our tools. We cannot conceive ourselves separated from the electric current.

In the 1980s, Illich had already seen the shift from the Age of Tools to the Age of Systems. He identified the Age of Tools as one of the *causa instrumentalis* – an unintentional cause – a subcategory of the Aristotelian notion of the *causa efficiens*. Such notions compose the clear separation between

3 Ozzie Zehner, *Green Illusions: The Dirty Secrets of Clean Energy and the Future of Environmentalism* (University of Nebraska Press, 2012), p.9.

4 David Cayley, *Rivers North of the Future: the testament of Ivan Illich* (Toronto: Anansi Press, 2005), p.204.

the user and their tool (to better express human intentions). To this clear separation, Illich gave the name of distality. In other words, a tool is something one can only conceive apart from oneself, something one can or cannot use.⁵ When I take melatonin as a sleep aid to combat the exhaustion from hours of writing in front of the computer, I act from what I feel. But when I take Prozac to shut down my system because of the risk of compromising my immune system, I act as a sub-system within a system. In this frame of thinking, there is no possibility of doing or not doing something.

Crossing the third watershed is reflected by the age of systems when our imaginary space has been shaped by counterproductivity to such an extent that we cannot see alternatives to social and ecological degradation outside unlimited tools, unlimited scarcity, and unlimited property because we are incorporated into systems. Renouncing the system and regaining conviviality is a far more radical political task than any political proposal agreed by nations at the last thirty years of environmental summits. How to regain an imaginary space? *Eutrapelia* and austerity, Illich's core principles for a convivial society, remain as current as they once were. That probably means we will not save the world, but we might regain the art of living together.

5 *Rivers North of the Future*, p.158.