## Abusing technology like an artist

Rui Penha, 2020[1]

It is very fashionable to talk about the relationship between art and technology. Artists are often seen as a source of latent creativity just waiting to be put to good use, and technology is widely touted as the ideal ground to seize the benefits from that surplus of disruption. A significant part of these discourses seem to be oblivious, however, of two very simple facts: (1) that art and technology have been indissociable allies for as long as they both exist and (2) that artists often need to abuse technology in order for new art to emerge. Let us start with the first one.

Becoming an artist often encompasses learning how to use a given technology. In order to *become* a musician, for example, we usually start by learning how to master a piece of technology called a musical instrument. Even if we aim to sing, we do so by learning — either formally in school or informally through the examples of others — a skill that allows us to use our voice *as* a musical instrument. It is this skill that can bring forward the musician: one does not become a pianist merely by acquiring a piano, but by acquiring the skills to be able to make music with — or through — the piano. Musicians, and other artists and artisans alike, establish with their tools a profound re-

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lationship, and it is that relationship that allows them to seize opportunities for new art to emerge.

Those opportunities often come from a novel way of using old technologies. And whenever these new ways come around, they might seem, to the untrained eye, indistinguishable from simple misuses of the technology. But are they really *misuses*? Take the pianist that places screws between the strings: that certainly strikes us as a misuse if the goal is to use the piano as a bed of screws, or if it is done in order to subsequently play a classical piano sonata. But when that act gives rise to Cage's Sonatas and Interludes it is obviously not a *misuse*, even if it challenges the "proper" way of using the piano. Quite the contrary, it is the very step of preparing the piano that enables the unveiling of new musical possibilities, ones that would remain hidden if we kept on using the piano strictly in a "proper" way.

Nonetheless, without the reification of these possibilities *as* music, the screws between the strings would remain a simple misuse of the piano. Since that reification can only happen *after* the act of placing the screws, does that mean that the artistic process somehow started as a misuse? Not quite, since the artist is not blindly trying out every possible misuse in search of something that we can then collectively call music. What the artist is doing is to actively follow the clues towards the unveiling of new musical possibilities, embryos that she is able to identify precisely because of the skill she acquired through her — likely much more "proper" — use of the technology. She is not *misusing* a technology that she does not know how to use properly insomuch as she is *abusing* the technology that she masters with the specific purpose of extracting new music from it.

Fortunately, we do not need to become proficient in giving birth to new music to be able to appreciate the music that others bring into the world. But there is a striking contrast between the path towards musicianship and the path towards becoming a music listener, even if we also need technologies like the record player or the smartphone to do so. If we wanted to use the record player *as* an instrument, we would need to go through a learning path as challenging as with the voice or the piano. And we certainly need highly skilled people to design a smartphone, or to play and record the music in the first place. Nonetheless, to become a *consumer* of music, we do not need to master any particular technique: we just need to buy the technology, bring it home and trust it to deliver its promise. Even if only until some new technology comes along promising *easier*, *bigger* and *newer*: in a word, *better*.

That is the pledge of our contemporary society: to infinitely amplify our power over the world whilst minimizing our effort and discomfort in grasping it. All of our contemporary collective efforts are geared to what, at first glance, seems like a benign empowerment of the individual: you do not need to learn how to play an instrument in order to enjoy good music, you just need to buy access to seemingly unlimited supplies of recordings of highly specialized people that do it for you; you do not need to learn how to cook in order to enjoy good meals, you just need to buy a set of machines and processed ingredients that do it for you, delivering perfect and consistent results regardless of your skill. Whilst you are encouraged to acquire at least one profitable skill — something that qualifies you as a *human resource* —, you need to do so mostly in order to gain the financial means to buy into the promise of a better life as a consumer. The promised land is one of end-

less comfort, for as long as you play by the rules. Whilst nobody will accuse you of dishonesty for serving your dinner guests a meal made by a robotic chef, you might face persecution if you download the robot's recipe through improper channels: you can cheat as a cook, but *not* as a consumer.

There is, nonetheless, a great difference between learning how to *play* an instrument and learning how to *use* a robotic chef. In the first case, you are putting effort into acquiring a skill, a *know-how* that empowers you with the ability to see the world through a lens that is only available to those who share the same skill: the world of the musician, the world of the carpenter, the world of the cook. In the second case, you are acquiring the means to bring something of your choosing into your life — music, furniture, food —, all without conquering the ability to question how it is done or even to foresee opportunities for novel endeavours. A cook can certainly use the aide of a robot in cooking — as a musician can use the record player as an instrument —, but the simple act of buying and using a robotic chef will not turn anyone into a cook, as buying a record player does not turn anyone into a musician. Whilst technology allows the musician and the cook to fulfill their goal of bringing novelty into the world, it is the consumer who allows the technology to fulfill the goal it was designed to pursue. The musician and the cook use technology as an instrument, while the consumer becomes the instrument of technology.

As with many other issues, I am convinced that it was the infamous philosopher Martin Heidegger who better understood our entanglement with technology. He does precisely that in a lesson entitled *The Question Concerning Technology*, from 1949, a text that I find both insightful and use-

ful as a guide to the contemporary world, namely because he raises the question of technology in order to lay the groundwork for an unshackled relationship with it. In this text, Heidegger calls into our attention the fact that we live bound to technology — in fact much more today than we did seventy years ago —, and that we do so whether we have an uncritical acceptance of it, a belief in its salvific powers or even a total rejection of it. Our contemporary worldview *is* technological, and the risks of that worldview are particularly threatening when we ignore that fact, or when we embrace the naive — and wrong — idea that technology is *in itself* neutral. For as long as the essence of technology remains hidden to us, we will wholeheartedly believe that by improving technology (i.e., making it able to do more things more efficiently) we will solve the very problems that were created by previous technologies. The essence of technology thus lies in the very inexorability of the ideal of efficiency, on a worldview that regards everything as a collection of resources merely waiting to be optimized. It is this worldview that leads us to the permanent will to generalize solutions to problems and towards the desire of making our actions less dependent on our capacity to read the peculiarities of each situation. So what is wrong with that?

Let us use MDF as an example. MDF stands for Medium-Density Fiberboard, which is basically a technological version of wood, over which it has many advantages. MDF boards are built to a standard and thus each board is, within the specifications of the manufacturing process, "exactly the same as all the others." It is precisely this predictability — a Holy Grail of the technological world — that allows for a construction process that is less dependent on the particular conditions of each assembly, which include the skill of the humans involved in the process. We no longer need, for example,

to be able to *read* the idiosyncrasies of natural wood like only an experienced carpenter can, as all the information we need is conveniently — and, most importantly, dependably — provided by the manufacturer in the form of a specification sheet.

Choosing MDF (or other kind of technological wood) over natural wood allows for much greater efficiency in the production of anything, ranging from furniture to musical instruments. Let us imagine that the specifications of MDF boards are "technically better" for the production of acoustic guitars than the average specifications of boards of a given type of natural wood. Even if this was demonstrably true, I highly doubt that any skilled guitar player would happily choose to play with a randomly chosen industrially-produced MDF guitar rather than spending years visiting accomplished luthiers in search for *that* special guitar. As a pianist will always prefer an acoustic piano, made and maintained by skilled artisans, to the best, most trustworthy digital piano that anyone can ever build, now or in the future.

And why is that? Is it simply by pretentiousness, or by a peculiar fondness of anachronic manufacturing? I do not think so. I believe it is because each instrument built by an artisan is *unique*, in the sense that it embodies the result of a singular and inimitable compromise. This uniqueness, as revealed by the knowing hands of the skilled musician, is brought to life via the profound vision and wisdom that the artisan expresses precisely *through* her involvement with the tools and materials that she uses to build the guitar. It is thus an exceptional instrument not because it is expensive or merely because it has a singular material existence — as every instrument does —,

but because the decisions that brought it into existence are reified by the music that emerges from that particular combination of wood, artisanship and musicianship. The skilled artisan sees each particular piece of wood *as* a musical instrument even before it becomes one, a vision that no recipe nor any specification sheet will ever be able to provide us. Each instrument that she builds will be unique, as unique as each piece of wood used in its construction.

There will never be any "perfect properties" for wood, because the division in different measurable properties ignores the fact that properties are not divisible without changing the quality of the whole: the red of a fluffy toy will never be the same red of a smooth shiny car, even if under normalized conditions a spectrometer can identify the same wavelength in both. It is only through the uniqueness of a given piece of wood that a great guitar can emerge from the hands of a luthier, as it is only through the uniqueness of a given guitar that great music can emerge from the hands of a musician. This does not mean that a great musician needs a great instrument to make music, but it means that she needs to be able to understand the uniqueness of each instrument *in order to* release the music that best suits that singularity. A music that, to a greater or lesser degree, would never see the light of day without that particular combination of instrument and musician (and audience, and room, etc.). Even if each industrial guitar is, strictly speaking, *unique* as an object, it is so *despite* the way it was made and not *because* of it. Its idiosyncrasies are the result of random factors that escape the quality control, not the consequence of insightful decisions. The MDF is *consumed* to make a guitar, whilst there is a strong sense in which we can say that the luthier *released* the guitar that was contained in the wood, just like John

Cage *released* the prepared piano that was contained in the regular piano. Even if one lacking their skills would never be able to foresee those possibilities before their respective unveiling.

If we use the MDF as it is supposed to be used — as a technological, dependable wood —, we will never *free* a guitar from it, even if we can *impose* the form of a guitar over it. That is the ambivalence that simultaneously constitutes the promise and the danger of technology: by enhancing our capability to mass-produce technological guitars, it saves each one of us from the need to acquire the skill and expertise — as well as to devote the time and the effort — required to know how to unveil guitars from particular pieces of wood. But, in doing so, it also prevents us from acquiring the ability to see the world as a *unique-guitars-waiting-to-be-unveiled*. The technological worldview leads us to value the properties of materials above their qualities, to value the success in imposing a preexisting and standardized form over matter as opposed to the skill to seize the peculiarities of the matter that surrounds us as an artist or artisan does. And, most dangerously, it leads us to the temptation of optimizing the people around us, who are increasingly pushed to focus their effort in the acquisition and display of properties that define them — at the same time making them replaceable by someone who embodies similar or better properties —, as opposed to qualities that make them unique and effectively irreplaceable. It is not an accident that the era of great technological development towards an ever more comfortable consumer life is also the era of a general sense of meaninglessness in the personal human experience: what at first sight might seem like a victory of humanity is, in fact, a coward capitulation of the very thing that makes us human.

The *proper* use of technology is simply the use for which that technology was built. Since each new technology proposes a generalized solution to an idealized problem — as, by definition, we cannot generalize solutions for concrete problems — the *better* technology is the one that is less dependent on the particular circumstances of use, the one that is able to achieve similar results coming from a wide variety of different circumstances. Since a big part of those circumstances is determined by the end user of the technology, the less dependent the results are on the skills of this end user, the *better* the technology is. It thus comes as little surprise that technology developers devote great efforts into making technology *easier* to use, effectively reducing the consumer to the role of an user who is increasingly denied real access to the technology behind what she buys. The user is not in control of the technology she uses insomuch as it is the potential *of* the technology what becomes real through its use by the user. It is the user who becomes controlled by the technology, the user who — through the very use that gives her that name — becomes a foot soldier of the technological revolution. As any soldier, she is not called into questioning the aim of the technology that she is serving. In fact, and for as long as she does not develop an involvement with the world that enables her to see beyond the problems a given technology promises to solve, she will not gain any insight into its inadequacies. Until, that is, a new technology comes along promising to solve those.

The problem of the overtechnologization of the world, like many others we face today, is one which we do not need to solve insomuch as we need to *dissolve* it. We do not need to *create* solutions for it, we need to *get rid* of the conditions that make the problem emerge in the first place. This does not

mean that we should get rid of technology *per se*, going back to an idealised primordial way of being. Instead, it means that we should get rid of the idea that every problem has a technological solution, or that the *more efficient* solution is always the *better* one. Yes: technology solves problems. But it always does so by creating new, and largely unanticipated, ones. And for as long as we are focused on technology as a *solution*, we will remain oblivious to its harmful sway over us. When artists abuse a given technology, they are not simply misusing it: they are neutralizing its power over them by freeing it from its "correct" use. That is why we do not really need more technology *for* the arts, or more artists *endorsing* new technologies. That is why we have little to gain from the simple *misuse* or even the *neglect* of technology. But that is also why we desperately need artists *abusing* technology — and for all of us to learn how to *abuse technology like an artist* — so that our worldview can be released from its shackles.