

Filling holes with holes

By Professor Jan Willem de Graaf

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

For what Big Tech companies are praised, psychologists/psychiatrists would end up in jail. If they don't want to end up behind bars, politicians must also have a very good story if they carry out an operation in which thousands of people lose their jobs, with all the social and psychological consequences that entails. Disruption should never be an end in itself for them either. To disrupt means to dislocate, unhinge, disorganize, disjoint, put out. However, major tech companies and, among many others, futurologists are heralding disruptive technologies as the rescue that will help us take the next step towards a technological utopia, where no one has to work or put in any effort at all. For everything that is really important to us, we must make an effort. Psychologically, we attribute success internally, such as to our efforts and talents, and failure to bad circumstances (external factors). No effort, no internally attributed success, or put it bluntly, no guts, no glory!

If one practices long enough, he/she can learn to sing with perfect pitch and add extra expressiveness with very small "deviations". In 1997 a disruptive technology - autotune - brought the ability to transform any melody that was (slightly) out of tune in real time to the nearest perfect pitch, so anyone could sing in tune effortlessly! Nowadays in pop music we only hear vocal recordings edited by autotune, so singers who add structural "impurities" in function of the expression are less accepted. Gone craftsmanship. Also, in pop music, small fluctuations in tempo and rhythm are no longer acceptable, as audio-quantize algorithms have become commonplace, which "improve" (quantize) rhythm and tempo along one metronome rate per song. Bye Bye human measure - literally -, long live dullness.

Just like in a mechanized world, in an computerized world it is humans who have to adapt. If a pop musician plays as tightly as possible on one metronome setting per song, the "machine" can remove the small impurities and rhythmic timing fluctuations and then bring them back through a "tried-and-true" algorithm (humanize), exactly according to what people are continuously presented with and have come to experience, as correct. It's not necessarily the case that people don't need to be able to play, or sing, to score a hit. Just as a motorist is "machined" by roads, wheels, and a steering wheel, a pop musician is "machined" by autotune, quantization, and humanization algorithms. While driving, we don't see the natural beauty we see on our biological scale when we can easily jump over a hedge, or a ditch (which is never possible with wheels). We don't go slow enough to literally stop to look at that beautiful beetle. In the car we pass the sorrow and happiness of fellow human beings with seven-mile boots. We love our cars, but she's kidnapping us, as is the computer, our smart devices, and social media. Stockholm syndrome; we love our hostage takers, as they push our human condition further out of sight.

If craftsmen everywhere are replaced by smart production systems, we will have to express humanity in a different way. Remarkably, this is virtually beyond the interest and scope of any scientific research! Effortless is good, cheap is better - notorious laziness - and boredom is just boring. Disruptive technology escapes ethical, scientific and political scrutiny, and its consequences are truly undemocratic. Due to the rise of ICT technology, you may have already lost your job a few times (for example in the graphics sector). In some other fields, you can probably last a few hundred years. For example gardeners, and carpenters are highly wanted!

Paradoxically, new disruptive techniques in a boring existence due to disruptive techniques are often a temporary variation/change, just like an accident, or a flood, or sometimes even a war. It's terrible, but we're a little drawn to that sometimes. Disruptive technology makes victims ... because we fill holes with holes.