THE DIGITALIZATION OF THE MAKING PROCESS

Digital techniques are getting more and more involved with the designing and production process in art and design. The laser cutter and 3D printer are already renowned production methods and at the same time the real handiwork becomes a smaller part of this process. The digital designs have a lot of benefits versus the analog design. The distribution of a computer file is a lot faster, easier and cheaper compared with a real object, but also the process of producing is faster and cheaper and therefore advantageous. But there is also a down side; because of the evenness of the machinery the product becomes always exactly the same. Authenticity is making place for equality and monotonous. Is handcrafting part of the past and are digital techniques the future?

A craftsman back in the days was an artist who could practice a craft or technique and those required years and years of dedication, a lot of exercise and knowledge. The workmanship desirers perfection but because of the making process is mostly done by hand, there arise imperfections that show the object is made by hand. Those imperfections are the result of someone investing time and energy in making the object. You can literally see the artist's handwrite. But that unevenness doesn't only show the artist's afford put in the design. Its also tells you something about the process of making and the genesis of the object. And that can be a very interesting indication.

In my optics the concept, material and the process of making are always inextricably connected and I find it important that the finished result is a part of that whole. The process of making is always part of my work, not only because it formed the work. And there is a problem, because in newer technologies most of the time the product is so flawless and equal that you can't retrieve how it's be breed. Of course there are some exceptions. Even Dries Verbruggen from Unfold said, at the digital craft debate, that the flaws in the 3D printed ceramics vase are very interesting and actually the most beautiful part of the vase. The flaws underline the way of making and remind us of the unevenness of handcraft.
Also artist Matthew Plummer-Fernandez tells in a Glamcult interview: "I like the contradiction of advanced technology and primitive outcomes. I'm most comfortable when I treat new technology as a failure or forgivable for being in a prototype stage. I think you can really discover new aesthetic affordances not seen before in al those unwanted errors. And those unwanted errors can be extraordinarily beautiful."

Big white pot, Hella Jongerius
Vase with visible burrs of the mold

L'Artisan Electronique, Unfold / Tim Knapen / RepRap Community 3D printed vase with flaws

The origin is part of the end result, and those two are always connected and referring to each other. With a computer file you'll never see the invested time so clearly as by a handcrafted object, and you'll not realize how much work and afford someone put in the design or drawing.

When you invest time in an object, the object gets more value. For me that's definitely true, and I cant attaches to a computer file. A 3D printer is most of the time a hatch; it does what you designed and nothing more. It's not a tool but a method. The design can be mass-produced, becomes more general and looses value. The young designer Joong Han Lee created a human 3D printer, the Haptic Intelligensia, the printer follows the boundaries of the digital design but the human hand has influence in the thickness of the material and therefore in the end result of the design. In this way the 3D printer is not a

method, but a tool. You can influence the design after the computer file design is completed, and no object will be the same anymore.

Haptic Intelligensia, Joong Han Lee
Vase made with the human 3D printer

The imperfections in design are most of the time designed and controlled, exactly the way de designer want to. Ellen Rutte explains why in her essay ‘imperfection is sexy’, ”Even when book printing was invented, critics called it superficial and unauthentic. The publishers reacted with an even simple as effective method by experimenting with apparent handwritten fonts. (...) In the following centuries the search for authenticity in technical perfection repeats. (...) In our history, technical innovations increases our existential desire for non-perfection and in periods of drastic technologic improvement creative professionals use imperfection to convince the audience of their sincerity and authenticity.”

I thought I was sort of against technical (re)produced object, but I realized I find objects more attractive when the making process is visible. It can be produced by hand or digital, but the end result, tactility, material and making process are a whole and need to be shown or refer to each other. For the consistency I took vases as examples, but this is an overall statement. Handcrafted and digital fabricated can increase their power to work together and make beautiful and meaningful things.