## The influence of a 3D pen on the Art world (Part-1)

By Ruud Janssen – October 2014

The designers already have their trills with the 3D printers. Concepts they make on their computer can now be printed in plastic shapes, and a model is easily made these days. All kind of 3D printers emerged, printing Chocolate, even printing metal and concrete, and then suddenly on Kickstarter the idea of a 3D pen emerged. The 3D Doodler was one of the first, and actually was thought out for the hobby world, rather than the artists world. But when new tools come on the market, the intermedia artists always look for applications and functions that they bring.

So I ordered my first 3D pen with the first filament and gave it a start. From my background from Mail-Art I was used to networking and sending out mail all over the world. The first object I thought out to make was 'to write a letter', but take it literary.

The first one was the orange one. A small sized letter with 3 layers of plastic on to each other, which eventually got its own destination. It was first received by Litsa Spathi who read the letter with some Lemon Thea. The written letter becomes an object that can be used. But



besides using it can also be sent away. That was the next step. The Orange letter was sent to the moderator of an 'Orange Group', where artists have this colour chosen for influences on their art, and there it is now.



After that the letters I wrote got bigger and bigger, but still could fit into an paper envelope. I sent some out with an explanation written with it that I wrote the letter for the addressee. And also it mentioned I would like to receive a digital confirmation that someone received the letter.

Playing with the different media off course. A letter I write turns into an object that I can send, and then the postal system delivers the letter and the receiver can reply to the letter with a photo that he

send me digitally. It is always interesting to see how creative people react to new possibilities.

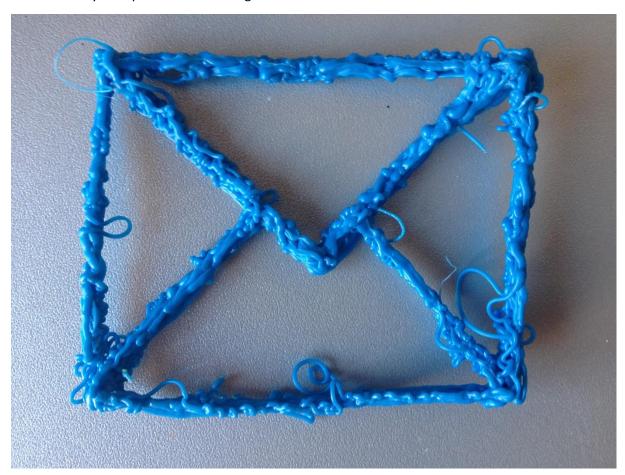
The reactions were divers. Holger Hertwig in Niedersacksen, Germany, even framed my letter to him and hung it to the wall and sent me a picture of that. Not by traditional paper letter of an e-mail, but just by placing the photo on a digital platform called Facebook and shared it with my profile. The new digital world interconnects fast and gives new impulses. I wrote him that after the writing of the

letters I now actually still was working on making the letters to write the words with that belong inside the letter.

Well, the production of the objects costs time. But eventually the process changes the attitude toward communication and the used of certain words connected to writing. A 3D pen is used for writing, but not letter on paper, it writes 3D objects, and that is the most important change in thinking. I write objects, and my hand controls the process. Unlike the 3D printer there isn't a computer placing the layers of plastic based on a complete digital image, I myself have the control and every small detail that comes out is the result of my writing.

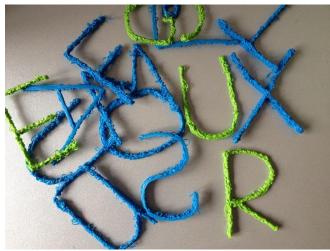


This becomes very clear when you look at one of the larger letters. For instance this blue letter where I was a bit tired and the plastic sometimes took its own path. It gives it such a human touch so unlike the way a 3D printed makes things.



So after the writing of letters, actually producing the envelopes is a symbolic way, the next step was to make multi-layered letter to form words with. Because my background where I did things like inventing Fluxus words (see: <a href="http://fluxuswords.blogspot.nl/">http://fluxuswords.blogspot.nl/</a>) it comes naturally to play with letters first. It is after all called a PEN, and even a 3D pen writes letters.

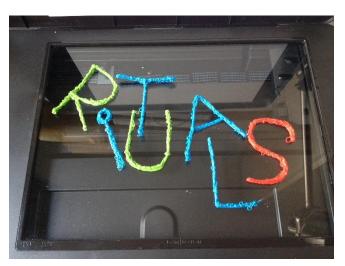
The 3D pen originally came with only little filament, so I had ordered already some extra roles in the colour blue and green. Later also red and white, but the white cam in the wrong size. That is another story. This pen doesn't need ink, it eats plastic. In the first week I ordered 4 kilo's and in the coming weeks I probably need more. Not that it eats that much, but I want to be flexible with colours, and when I want to send out these small objects, I need the material to do so.



The first green and blue letters were used to form words like, My own name, Fluxus and Mail-Art, IUOMA, and off course Litsa. The structures the letters have is always unique and the colour makes it very alive. I have used different sets of letters in my work a lot of times, but this is the first time I actually write the objects myself. It is a nice and new feeling.

I know I am still working in the 2D field now. Once I master the techniques well enough I already know the objects will get bigger and

special. Also the plastic can bind the smaller objects together since it acts like a glue pistol and binds objects very fast. But the glue itself isn't separate, it becomes part of the object. So in a way I feel I am producing something new. It also explains why I so much liked the idea of the 3D pen. It gives me



a new possibility to create. Not as a 'hobby' but in a conceptual way.

In the UK Rebeca was doing a project on Rituals, and I was just starting with the red letters as the information came to me. I explained her in a letter what I was working with and placed the results of 'my rituals' on the scanner in a mirror reversed way. Than made a copy of those tellers on paper and added some things to that as well. That became my contribution to her project. I believe I even added a small green plastic green envelope with it too.



It explains what I believe intermedia has gained, The bridge between writing on paper and the digital world is something we have to deal with in our daily life, and here I transform from the digital world into the analogue world and vice versa. It is a wonderful feeling to be able to do all that. I have never seen the computer as a normal instrument but always as an instrument that has hidden functions.

The results were sent out and will be shown in Edinburgh (UK) end of November. Also

funny to know, that what I think out and produce in my tiny work room ends up in some Gallery and others will watch it and wonder what the process is all about.

Besides experimenting with this new tool I also document the things I think and do in varied media. I document the results with Photos on the social media. I send them into my traditional mail-art network with artists and non-artists. I even document it with this document I started to write only a week after the experimenting started to get a grip on what I am doing and document it for later.



The pen I am using now is a simple one. It works with ABS plastic 1,75 mm thick. You have to read about the technical specifications and how to use the pen, but it actually is quite simple and even made for children (8+) to work with. So not such a high challenge as the 3D printed we have at out college, where you need more technical skills to work with that. Working with the pen is easy once you see the restrictions. You have to adjust you speed of writing to the speed the plastic comes out, although that is adjustable, but mostly a slow tempo. Also the power and the plastic hang behind the pen, so you are not completely free in your movements.

I took part in a new Kickstarter project that is developing a smaller and better pen. But that only comes out in January 2015. I couldn't wait for that, and decided to buy this 'made in China' pen that is designed by an Australian company,

The new pen promises to be a better one. Not plastic but aluminium. Not only power, but also USB connection, and hopefully a higher speed and the same possibilities of sorts of plastics.



The pen I use now only works with ABS, and the newer ones also van work with PLA, which some say is better for the environment. For the feel, ABS works just fine for me though. (see: <a href="https://www.kickstarter.com/projects/lix3d/lix-the-smallest-3d-printing-pen-in-the-world">https://www.kickstarter.com/projects/lix3d/lix-the-smallest-3d-printing-pen-in-the-world</a>)

On Facebook and other platforms I work on I get various reactions. Seems that I am the first to explore the use of this pen in 'my network'. I know that a lot of others are starting with exploring the pen too, but mostly as a creative tool just to produce objects. A group on Kickstarter even is trying to produce a book with these first attempts to document it on paper. I think I will need to have that book just as a reference (see: <a href="https://www.kickstarter.com/projects/1794375019/master-your-3d-pen-tips-techniques-and-inspiration">https://www.kickstarter.com/projects/1794375019/master-your-3d-pen-tips-techniques-and-inspiration</a> ) Just not sure if they will get the money together to produce the book. Not that I want to copy what I see. That is not how I produce art. I invent new things and try new techniques that I like, and then document the results.

Unlike the first wave of users, I like to explore what effects it has in Intermedia. As I told before. I see a lot of potential in how I use the writing tool to produce new connections in what I do and produce. I have even thought out a lot of things that I don't have time for to do right now. To mention one:

write the mould for a rubberstamp, that put layers of rubber over it, and make a rubberstamp out of you writing with the 3D pen. Technically it is quite simple, and the results mean that you can make any kind of rubber of what you actually write with 3D.

Off course I also know that eventually the object might get bigger and more 3D. But the object itself is not my goal. I am focussing what the production of these objects can bring to me. And also I realize these kind of searches fit to who I am. I like the new functionalities that techniques give us. Unlike of some colleagues who are only fascinated by the technique itself, I focus on the new functions it brings us. Also a reason why I started my own social network on <a href="http://iuoma-network.ning.com/">http://iuoma-network.ning.com/</a> which brings me the power to interconnect with my network on a global scale without any large problems. I am reaching almost 4000 artists there at the moment, and it is interconnected with Facebook an Twitter which makes it a highly effective platform with its almost 2,000,000 page views a year.



So all is changing now, but sometimes the basics come back from the roots you are from. A 3D pen just means I can produce plastic objects, and I am free in what form I give them. Changes are mostly very simple, but highly effective.

This first report was from week one I used the pen. In a next overview I will tell you more on what I did and what reactions that came in.

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