PZI, Lens-Based Media 2018-2020
Graduation project proposal:

I'M LOOKING LIKE IN YOUR DREAMS

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Commercial computational photography, finds its current progression in images taken on mobile phones. This makes what was previously reserved to experienced photographers or professionals (with the correspondingly elaborate cameras) available to everyone through devices which are accessible and immediate. How is this move informing our visual reality? The project I propose will sharpen the thematics I have been working on over the last year and further research the methods and technologies that are used to generate the visual reality we are confronted with.

In that context I create 35mm stereo-3D-photographs, that show everyday objects, spaces, scenes, or appearances of media. These are designed to awaken a desire. For example: advertisements, shop windows, showroom dummies, commercial objects or products, screens and other everyday interfaces. I will explore the relationship between the production of these media spaces and commercial computational photography.

The consumption of photography

The visual reality we are facing, is largely defined by commercial imagery of various kinds. Advertising and public relations increasingly coopt public and private images in virtual as well as physical spaces. Whereas some of this invasion is subtle, there are the also obvious, exaggerated, attention-grabbing strategies which are designed to awaken our desire. I am interested in the latter, which we see in advertising or commercial retail spaces. Often they are used for representation or promotion, acting in the space of public relations, and likely to be identified as a simulacrum. In what I photograph, in shop windows for example, lies the attainability of something beautiful, or desirable. It is not only displaying a fashion collection as a piece of crafts or arts, but it is displaying a lifestyle or form of identity that one can acquire by buying what is displayed. So the showroom dummy, a plastic maquette, becomes representational for something that can become reality. By capturing singular objects and arrangements, I isolate their ridiculousness, cheap trickery, and their abstraction towards the hyperreal.

Another component of the media surround in which the aforementioned images take place, are the methods and technologies that enable and shape them and define their visual form. I want to make use of these technologies and adapt them for the implementation of my work. These are, for example, computational photography, computer generated imagery in relation to Virtual and Extended Reality, and image distribution systems.

The photographic practice

To create the stereo pair, I use a digital range-finder camera and a custom-built tripod-mount. The tripod-mount allows me to align the camera on one line parallel to the subject, and variably define the distance between the two stereo shots. This makes it possible to accurately create a stereo pair from motifs of variable sizes and distances. After digitally developing and editing the shots I use a proprietary software “Stereo Photo Maker” by Masuji Suto and David Sykes (2002-2017) –but this could also be done manually–, to align the stereo pair and create an anaglyph stereo image that can be looked at by using anaglyph stereo glasses.

Recently and ongoing, I am developing exhibition methods of these photographs focusing on a large-scale reproduction of the images. Exemplarily, at the exhibition *Maquette* (Rotterdam, November 2019), I showed the two works “Showroomdummies 3D” and “Food 3D”. Whereas the first was displayed closer together in the curation with work by Julia Gat (“Upbringing”) and Yael Laroes (“Dense”), as traditional digital photographic prints, the latter is an installation work of three light boxes which stands more distinctly on its own within the curation. I used three 80x120 cm large backlit prints, to create “installation windows”. By curating the images that I made and using them in an exhibition layout, I can now draw a wider representation of my research. I work and will work with test prints in original size, as well as scale-models and computer generated visualisations to define hanging, material, size and arrangement of images. To improve my methods in the matter of large-format reproductions, I plan to look into new technologies for displaying immersive visual images.

Fig. 1: 360-deg. panorama of “Food 3D” in the Exhibition “Maquette” (2019)

Fig. 2: "Food 3D", Red/Cyan/Anaglyph Stereo-photographs, Orig. 120x80, backlit frames, Eco-Solvent prints (2019)

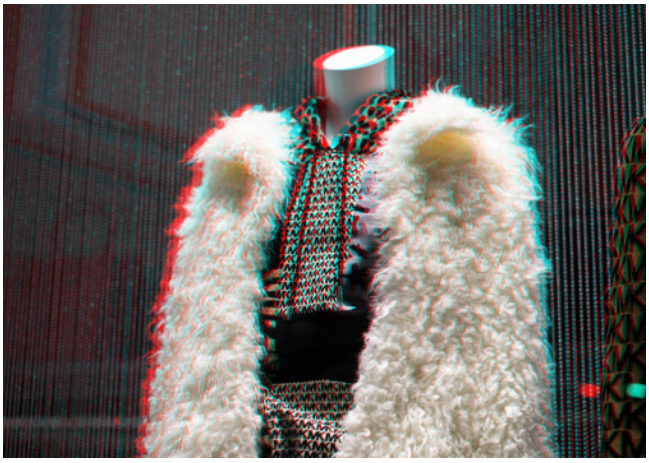

Fig. 3: From “Showroomdummies 3D”, Red/Cyan/Anaglyph Stereo-photographs, Orig. 92x70, 92x70, 62x47, Inkjet Pigment prints (2019)

Imaging technology

The stereo photographs I make result in 3D images, which share the same three-dimensional effect as imagery increasingly implemented in viewing habits of people with consumer technology applications (commonly found on mobile phones). Recent advances in mobile camera technology, displaying technology and transmission technology have collapsed the distance between professional and non-professional image making. Mobile camera technology makes multi-lens camera arrays and matching image processing hard- and software accessible to the masses. They enable advanced computational photography, that compensates the missing physical properties of the smaller smartphone cameras, against bigger semi-professional or even professional cameras. It artificially mimics the visual capabilities and aesthetics with the larger cameras, and by computing the image, even exceeds them in some point, or adds new capabilities. The output image is less a photographical image than a *traditional* digital photograph, but more a computed image that *looks like* a photograph.

Displaying devices, that act as personal displays, have the greatest impact in how the majority of images are consumed nowadays. They are equipped with multiple sensors, that allow for new displaying techniques. Not unimportant are the advances in transmission of images, on surfaces without materiality, that is becoming more convenient, sophisticated and mobile. These altogether, implemented in smartphones, as currently most important devices for image-based communication, that act as the capturing, transmission and receiving device in one, allow for the implementation of 3D effects on photographic images. This is for example realised by Facebook in their social network.

The images I am taking use a fundamentally different method and technique to appropriate the effects that are created through the modern technologies. But an important aspect is, that both approaches use technology of a more sophisticated or more primitive manner, to create visual effects. In an image surround, that is spreading more and more–which is becoming increasingly commercialised, which is screaming for more attention–visual effects that attract the eye by being different or new, are essential to create images that can compete.

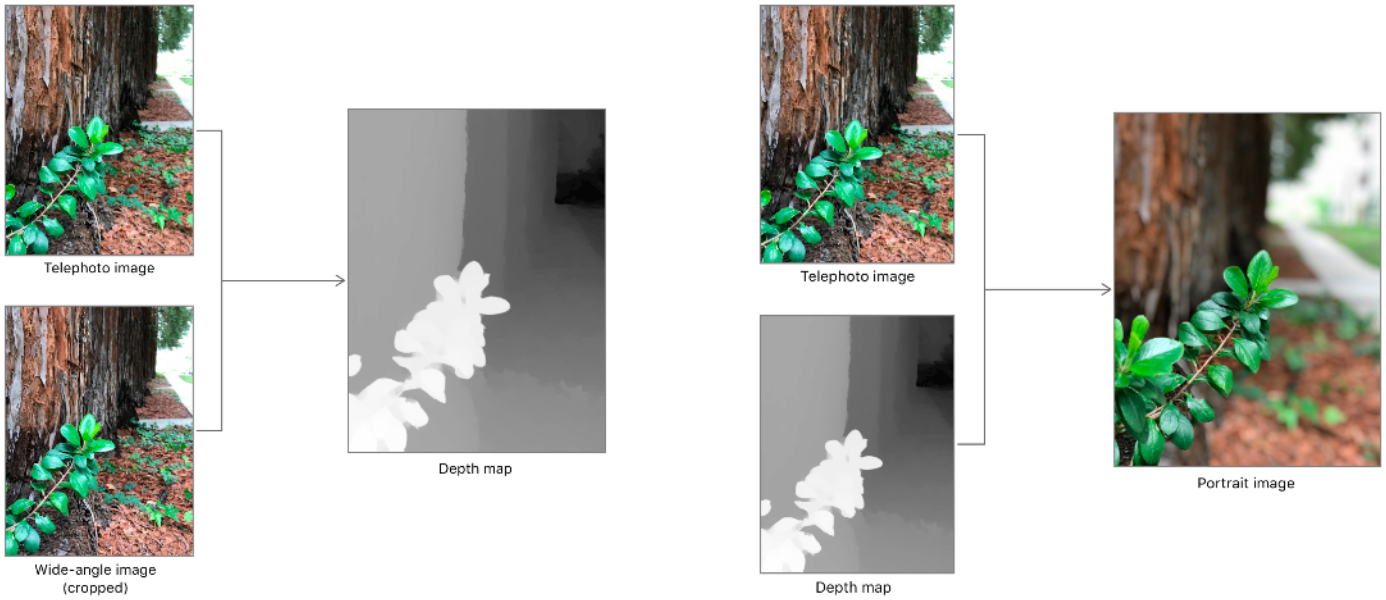

Fig. 4: Schematics of a 2D+depth process to create a portrait image in dual-camera iPhones (Source: https://developer.apple.com/documentation/avfoundation/cameras_and_media_capture/capturing_photos_with_depth)

Fig. 5: Presentation of Computational Photography Features in iPhone 11 Pro cameras, including AI-driven semantic segmentation. Apple September Keynote 2019. (Source: https://onezero.medium.com/what-the-new-iphones-three-camera-lenses-all-add-up-to-df6a986b3923, originally from Apple Inc.)

Visual Reality

Since the Internet opened up distribution channels for the broad masses, the previous clear distinctions between private, the public, the personal, the commercial, the political, the amateur and the professional have become less distinct. At the same time, consumer technologies have a greater impact on visual reality than before. When these entities were more separated the professional, image-making technology and capacity was more influential. This does not mean, that there is no longer an authority in defining the visual reality we inhabit. Rather the authority has shifted from art directors, photo- and videographers, artists, the publication and broadcasting industries, camera and film manufacturers, etc. to the silicon and software industries.

My interest lies in exactly this development, the *shift in authority* in creating the visual culture, and the way technology is impacting the visual reality that we encounter. Furthermore, the increasing commercialisation of images within public space is of central interest to me. I will explore this as my photographic practice develops.

Practical planning

To progress with my project, I specifically want to work on subjects/scenes and framing of the photographs, ways of exhibiting/displaying, to mediate an observation of the world and the visual reality of images. I will look at the way realities are mediated in public space. This will take form of field research into urban public space and into news media and social media, alongside continuous photographic work, till approximately March. I want to capture images that take something common from the world and question their credibility, showing their independent existence as a message, or mode of communication, and consequently their extent of simulation. This is why I plan to work with longer focal lengths to extract singular objects or details and through working with close shots, exhaust the 3D effect to its maximum.

Also, I want to explore the technological aspects of new ways of image-making and computational photography, as well as displaying methods. Besides the affordable and easy to produce anaglyph method, I am currently implementing, I want to research if 3D digital displays, polarised anaglyph projections and analogue holograms could also support my work. Exemplarily, I want to see how a *Philips*-developed 3D display works and find out how it is applied in the commercial markets. For that I want to get in contact with the company in Eindhoven. Also, head-mounted-displays are used to display stereo images, and their presence and accessibility is increasing in recent years. For implementing my work with these, I can get support through the resources of the WdKA's Interaction station and its tutors. These tasks I plan to happen in parallel to the field research and photographic work, too, but going on beyond April, passing on to the implementation of the final work in June/July.

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As of 5. Dec 2019, 12:00