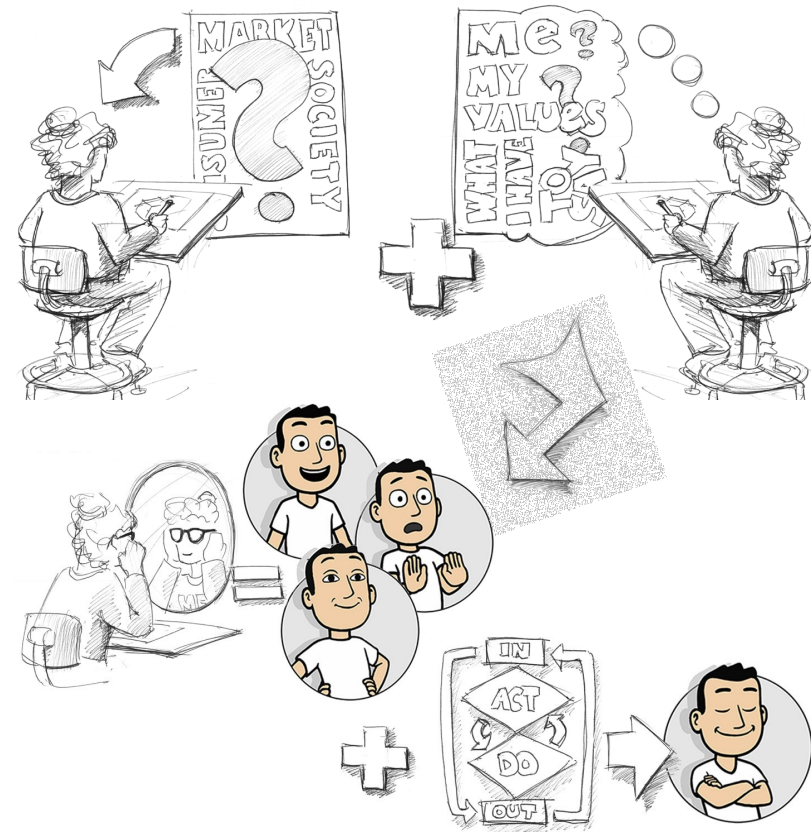
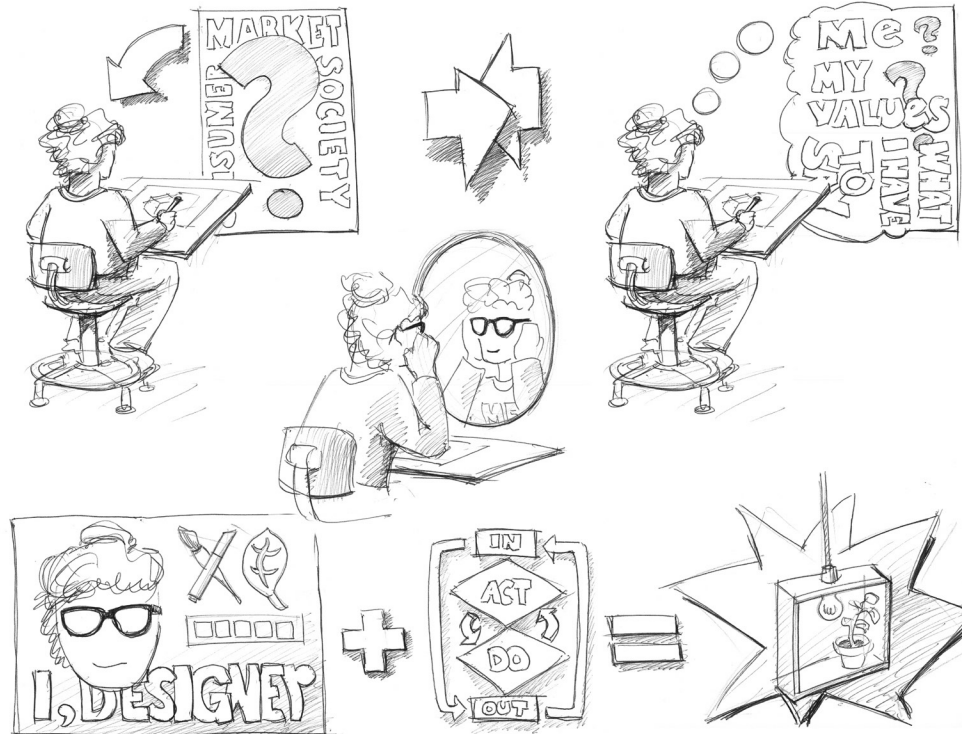


# DESIGN (FOR) YOURSELF, EXPERIENCES WITH AUTHOR DRIVEN DESIGN PRACTICES

Wouter EGGINK  
Industrial Design Engineering, University of Twente

## ABSTRACT



Within the Bachelor's programme Industrial Design Engineering we created a 15EC elective research module "Scientific Challenges". One of the possible subjects of this module is "Author Driven Design project". In this paper the approach of this project and several student examples are presented. After that, the implications for design education and student learning are discussed.

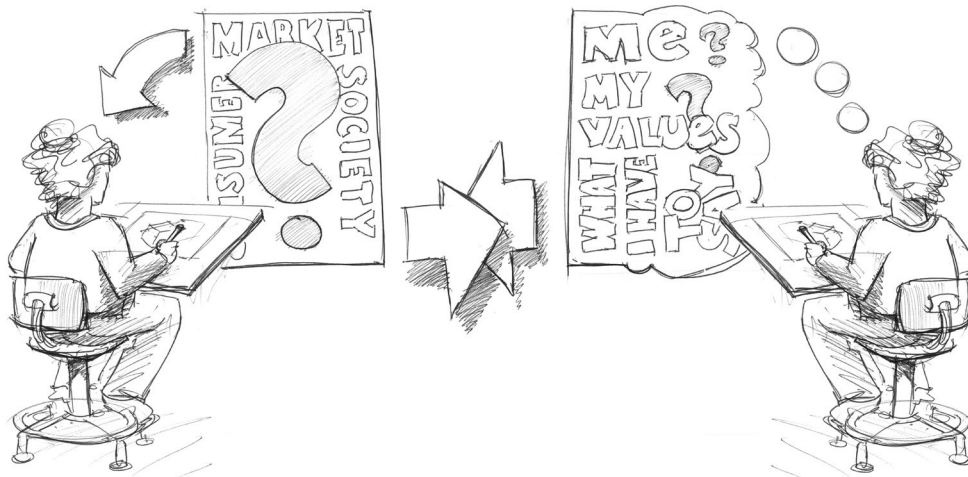
*Keywords: Author driven design, self-reflection, research through design, personal development.*

## 1 INTRODUCTION

The Bachelor's programme Industrial Design Engineering provides students with basic knowledge and skills and a broad view of the field of industrial design engineering. Industrial design engineering is a strongly interdisciplinary domain and structured around four disciplines: basics, styling, humanities & business, and engineering. Next to the broad basis provided by the programme, a significant number of students is interested in gaining more in-depth knowledge on one of the disciplines mentioned. Given the close relation between the education in the Bachelor's programme and the research in the Faculty of Engineering Design, we created an elective study module "Scientific Challenges". This 15EC module aims to allow students to explore and cross the border between education and research. The learning goals of this module are personal development as an Industrial Design Engineer, development of expertise in a delineated field of expertise, and autonomous acquisition of knowledge.

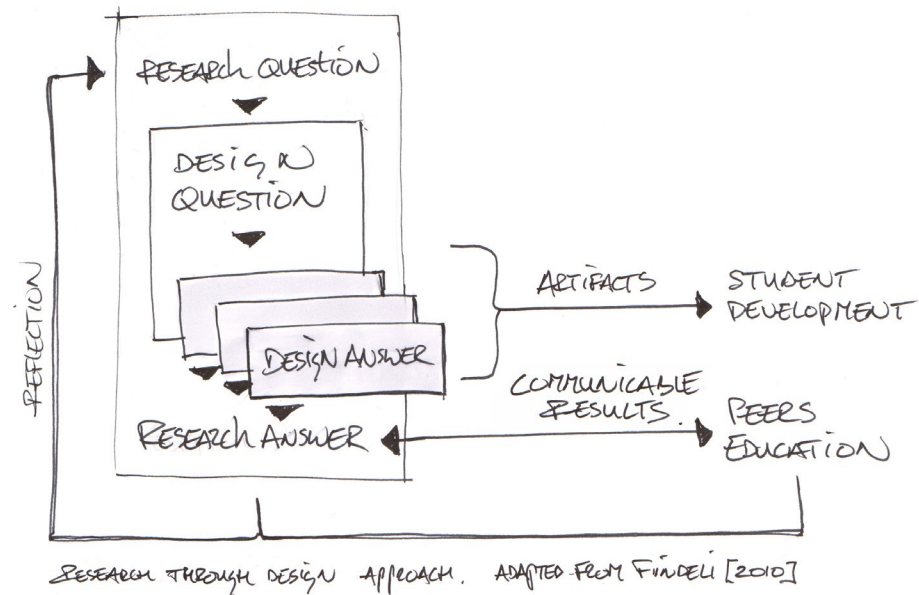
## 2 AUTHOR DRIVEN DESIGN RESEARCH

One of the possible research subjects of the Scientific Challenges module is "Author Driven Design project", which means exploring the design of objects from your own intrinsic motivation, rather than from an external demand driven assignment. The rationale behind this subject is that demand driven and author driven design practices both have strengths and weaknesses and that the two approaches can benefit from each other [1].



## 3 METHODOLOGY

The research approaches this topic by letting the students execute an author driven design project. Because the students in our project based education of the bachelor are regularly trained as a demand driven designer, we can observe how they implement and benefit from their skills in the author driven context. As such, the students learn more about themselves and about different design approaches, and we as researchers learn more about how the two approaches can influence and inform each other [2]. The project can be characterised as research through design, where the design results that are forming an answer to the design question, are also partially an answer to the over-arching research question [3]. Combining the results of many projects, a more complete answer to the research question will be emerging.

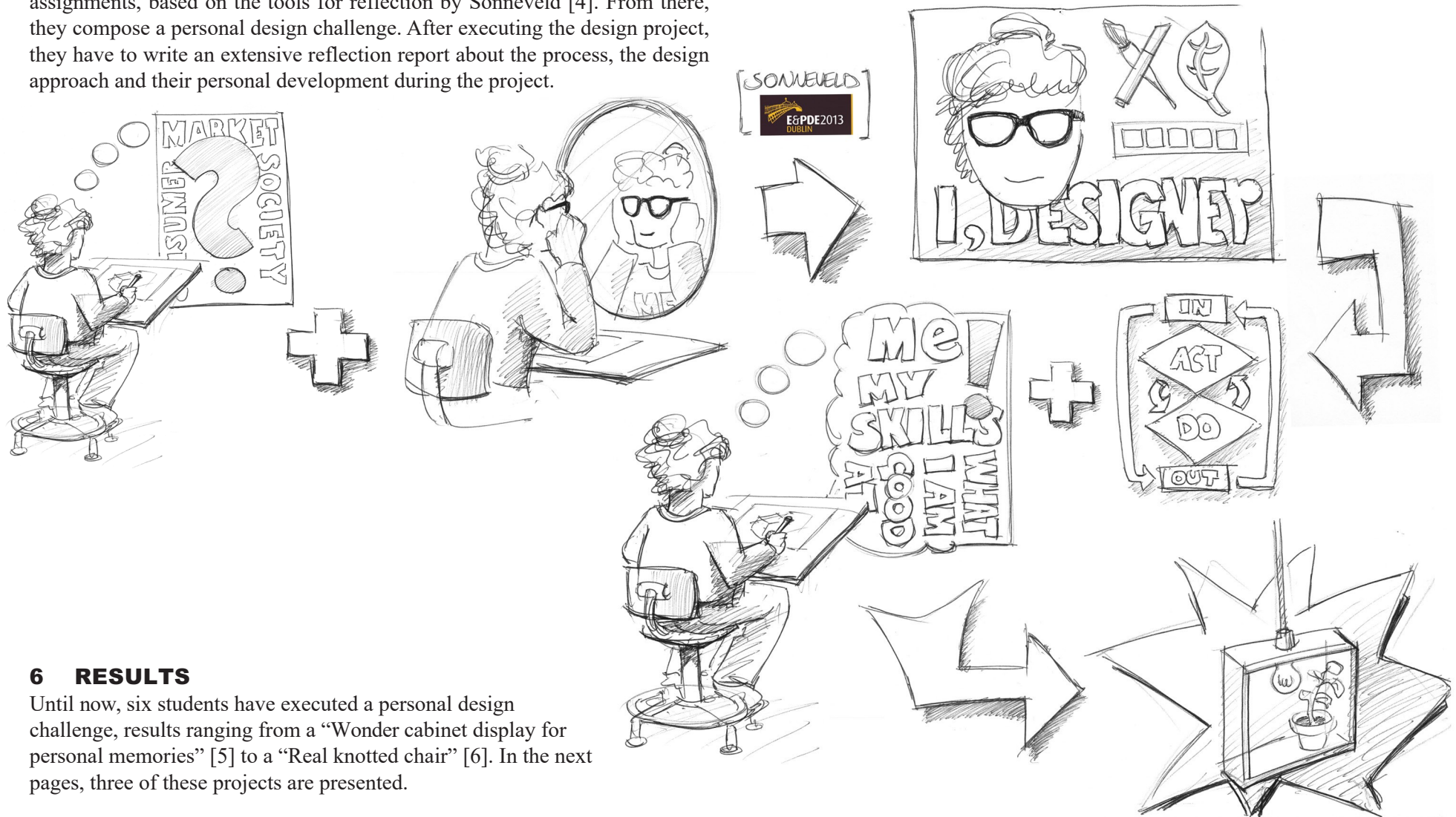


## 4 RESEARCH QUESTION

The research question in this paper consists of two parts. On the one hand how does author driven design practice inform demand driven design projects? On the other how does author driven design practice affect student development in an Industrial Design Engineering context?

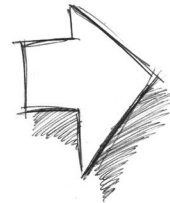
## 5 AUTHORSHIP

As our students are trained in demand driven design, they have to be introduced in the perspective of author driven design. Therefore the project starts with an extensive self-examination, where the students reflect on their own design practice and personal interests by executing a structured series of self-reflection assignments, based on the tools for reflection by Sonneveld [4]. From there, they compose a personal design challenge. After executing the design project, they have to write an extensive reflection report about the process, the design approach and their personal development during the project.



## 6 RESULTS

Until now, six students have executed a personal design challenge, results ranging from a “Wonder cabinet display for personal memories” [5] to a “Real knotted chair” [6]. In the next pages, three of these projects are presented.

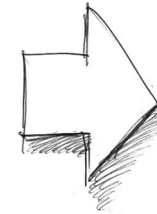


Literature +



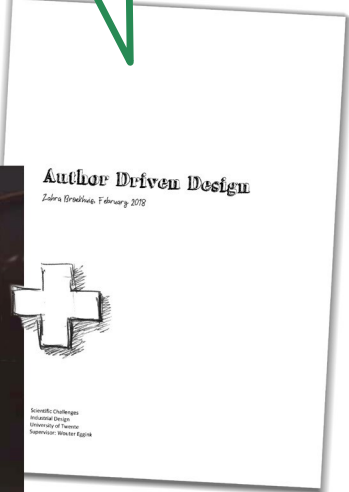
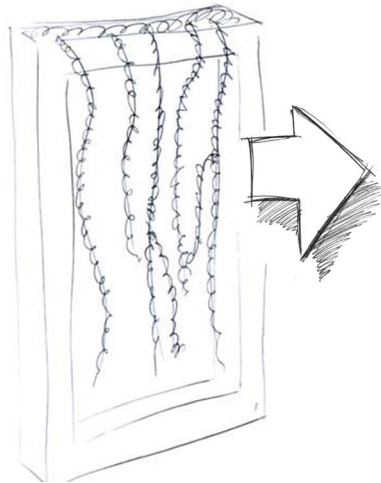
[10] +

Myself: I don't really know how I see my future.  
 Me: I would prefer to work in a social environment.



**PROJECT BY ZAHRA BROEKHUIS:  
 'A PLACE FOR YOUR FAVOURITE PLANTS'**

I could make an assignment around plants. [...] I hate that I don't have a garden, maybe I can think of something to make up for that. [...] Incorporate more "green" inside the house, in a way it can't be bought yet. [10, pp.3-4]



Scientific Challenges  
 Industrial Design  
 University of Twente  
 Supervisor: Wimster Eggen

[10]



droog®



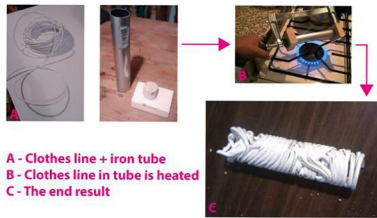
[6] +

Myself: I'll just should do it then, right.  
Me: Yeah do it.



Combining two fields who do not directly relate or even are in conflict. [...] Using everyday non-materials which aren't made for the function requirements to build a chair. [6, pp.10-11]

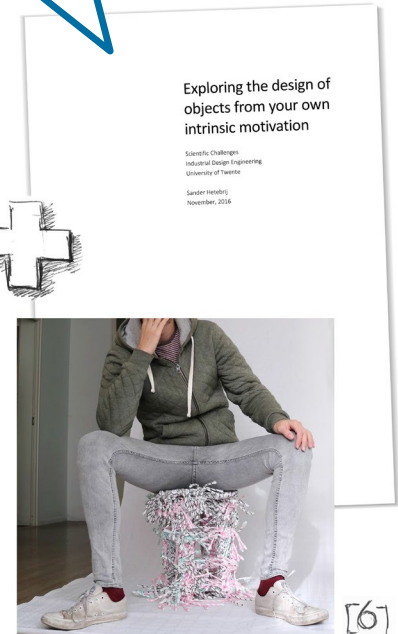
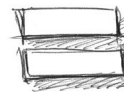
**PROJECT BY SANDER HETEBRIJ:  
'THE REAL KNOTTED CHAIR'**



A - Clothes line + iron tube  
B - Clothes line in tube is heated  
C - The end result



A - Nylon string is braided  
B - The braid is then knotted  
C - The end result



[6]

Part	Amount	Length	Total length/part
TA	40	2,50	100,00
TB	8	9,00	72,00
ZA	48	3,50	168,00
ZB	24	4,50	108,00
PAB	32	10,00	320,00
KA1	12	4,50	54,00
KA2	12	4,00	48,00
KB1	6	6,00	36,00
KB2	6	5,00	30,00
Total parts: 188		Total length: 936,00	



**CRAFT** +



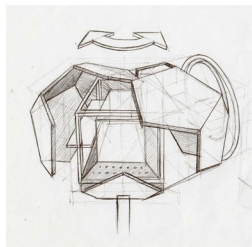
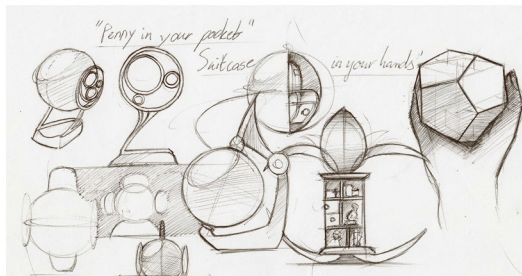
[5] +

*Myself: Innovation can also be achieved by looking backwards.  
Me: A lot of innovative designs are often inspired by elements of several earlier designs, that together create something new.*



**PROJECT BY JASPER DIELEMANS:  
'A CABINET THAT STORES YOUR MEMORIES, COLLECT-  
ABLES AND SOUNDS IN ONE BEAUTIFUL PLACE.'**

To design with the theme of "mystery" in mind, using music as an abstract source of inspiration [...] a personal relic shrine [...] inspired by the concept album "Time" by Electric Light Orchestra." [5, pp.11-12]



+



+



+



[5]

## 7 REFLECTIONS

The students had to reflect in their report on their personal experience with the integration of the author driven design approach in their project and should report about the effect on their development as a designer. The reflections showed remarkable shared observations [5-10].

It was really interesting to work on an author driven project, the differences with a demand driven project are bigger than expected. [10, p.14]

A personal connection like this to future projects could boost my work ethic, and make me get more fun and satisfaction out of a project. [10, p.12]

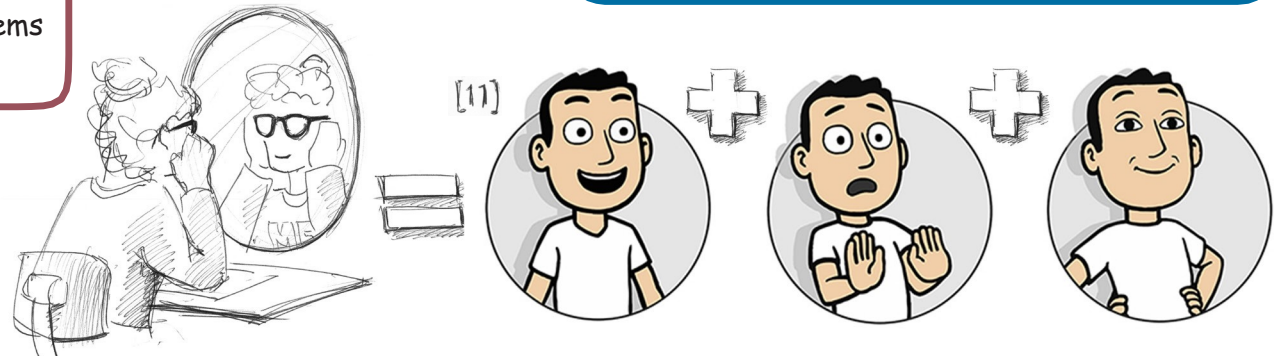
To me it seems insane that in the field of industrial design, where creativity is arguably the single most important skill to possess, a method has been developed where you are often constricted so much so early on. It's like asking an artist to paint something new, exciting and ground-breaking, but it must contain 50% blue and the picture must depict three people and it must not be larger than 50 x 50 cm. It just seems counterintuitive and contradicting. [5, p.44]

Since in Demand Driven Design one simply tries to meet the demands, there are less demands in Author Driven Design and they [are] way more flexible. This gave the incentive for a much more fun and unlimited exploration process, but on the other hand less support and structure for the decisions that had to be made. [9, p.22]

positives I always experienced in DDD is the fact that you have a lot to hold onto. ADD can be daunting, like you are alone in the dark. [5, p.43]

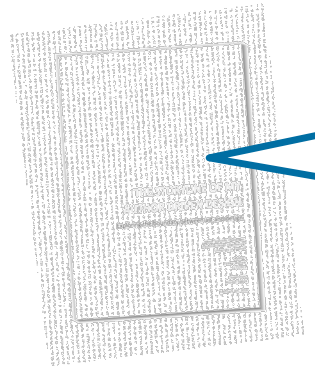
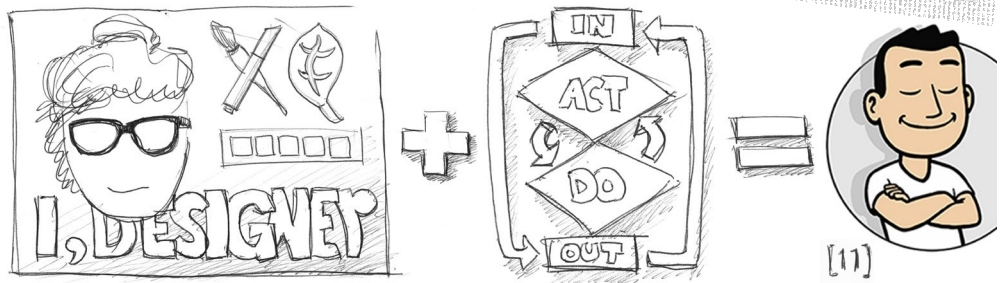
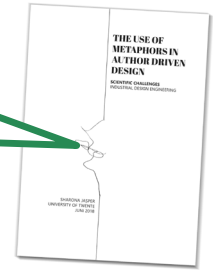
I had to make decisions that I could not base on facts [...] I did not realize however how vulnerable this makes the artist. When someone criticizes something, the artist can't 'blame' this on a requirement specification or some other rule. Art is a form of personal expression and when you criticize something about the artwork, you personally effect the artist. [8, p.36]

In the end a great feeling of satisfaction washed over me [8, p.37]



the structured thinking patterns from Demand Driven Design make a good complementation for this unlimited thinking and exploration. [9, p.22]

the best way of using Author Driven Design and Demand Driven Design is combining the to (sic). It will probably lead to a more efficient design process but with a distinct design answer." [6, p.22]



I would recommend to try a project like this in the hopes that that person will feel the same inspiration and have the same realizations I had from following this process. [8, p.38]

## 8 CONCLUSION

Considering the design process we can conclude that combining author- and demand driven design practices expands the designers toolkit. For education, we can say that the implementation of author driven design within a demand driven design curriculum fosters personal growth and self-confidence.

## REFERENCES

- [1] Eggink, W., A Chair to Look to the Moon: What We Can Learn from Irrational Design History for Contemporary Design Practice. *Design Principles and Practices: an International Journal*, 2009. 3(1): pp. 103-114.
- [2] Eggink, W. and M. Mulder-Nijkamp, Research Through Design & Research Through Education. In: *Proceedings of the 18th International Conference on Engineering and Product Design Education*. 2016. Aalborg (Denmark): The Design Society. pp. 216-221.
- [3] Findeli, A., Searching for Design Research Questions. In: *Questions, Hypotheses & Conjectures; Discussions on projects by early stage and senior design researchers*, R. Chow, W. Jonas & G. Joost (Eds.). 2010, iUniverse. pp. 278-292.
- [4] Sonneveld, M., Humanistic Perspectives On Design Education: Tools For Reflection. In: *Proceedings of the 15th International Conference on Engineering and Product Design Education*. 2013. Dublin (Ireland): the Institution of Engineering Designers and the Design Society.
- [5] Dielemans, J., *armarium*, 2018, Scientific Challenges project, Unpublished Report, University of Twente: Enschede.
- [6] Hetebrij, S., *Exploring the design of objects from your own intrinsic motivation*, 2016, Scientific Challenges project, Unpublished Report, University of Twente: Enschede.
- [7] Wijsmuller, A.-J., *Researching the Combination of Demand- and Author Driven Designing*, 2017, Scientific Challenges project, Unpublished Report, University of Twente: Enschede.
- [8] Wonink, F., *The Storyline of my Author Driven Design; Exploring the boundary between art and design*, 2018, Scientific Challenges project, Unpublished Report, University of Twente: Enschede.
- [9] Jasper, S., *The use of Metaphors in Author Driven Design*, 2018, Scientific Challenges project, Unpublished Report, University of Twente: Enschede.
- [10] Broekhuis, Z., *Author Driven Design*, 2018, Scientific Challenges project, Unpublished Report, University of Twente: Enschede.
- [11] Desmet, P.M.A. Product Emotion Measurement Instrument. 2010 [accessed 19 Feb. 2019]; Available at: <https://studiolab.ide.tudelft.nl/studiolab/desmet/premo/>