

Organic design

image ?

What illustration do you intend to put here? I'm

That's out of practicalities, but I like to have the author name and details as well as the date of publication + editor / University.

Vision

The web culture

It is generally accepted that the current model of consumption is changing. The users will become more active in designing and making products. And I do not mean that there will be more user testing with the designer at one side the table and the users at the other side. Users will, in a sense, **they are becoming employees of companies designing the products that they buy**. There is no way to predict exactly what the working consumer of the future will be doing or how the relationship consumer work and traditional employment will be organized. But the passive costumer model is unlikely to dominate any longer ¹.

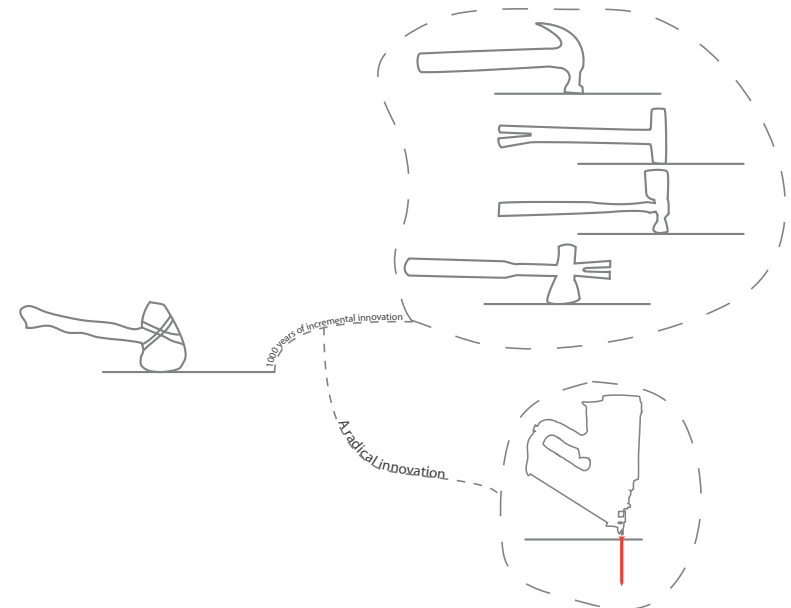
The reason for this change in user/consumer behaviour is the idea that the whole society is entering a new era in which sharing is becoming more important and the concept of owning fades away. We are moving away from the industrialised way of thinking, which tries to organise and manage by framing every aspect to the details. Industrialised thinking promotes clear structure and pushes away “chaos”. Our society is moving towards a thinking in which we embrace complexity. A society in which the interaction and the links between components in system is becoming more important than the component itself. “The culture we are heading towards is a potent mixture of post-industrial networks, the anti industrial ideology of the counter-culture and the revival of preindustrial ideas of organisation that were marginalised in the 20th century(we think p.27).”

One of the dominant factors in this change in culture is the World Wide Web. Especially since the introduction of Web 2.0. The term “Web 2.0” refers to internet applications that make possible new forms of interactive communication that go beyond conventional sender receiver models ¹. These application allow for user-generated content.

The web 2.0, from here referred to as web, provides a highly interconnected and easily accessed platform for sharing ideas. The more ideas

are shared the more they breed, mutate and multiply and *organically* grow, this process is ultimately the source of our creativity, innovation and well being (We think, p.6). The process of ideas growing organically is nothing new. Epic poems such as Odyssey and Iliad has been subject to this organic change and grow. Over the years people have been interacting with the poems and adjust them slightly to new environments. Another ancient example of such a organically designed object is the hammer which has evaluated to different forms by the input of an undefined group of people.

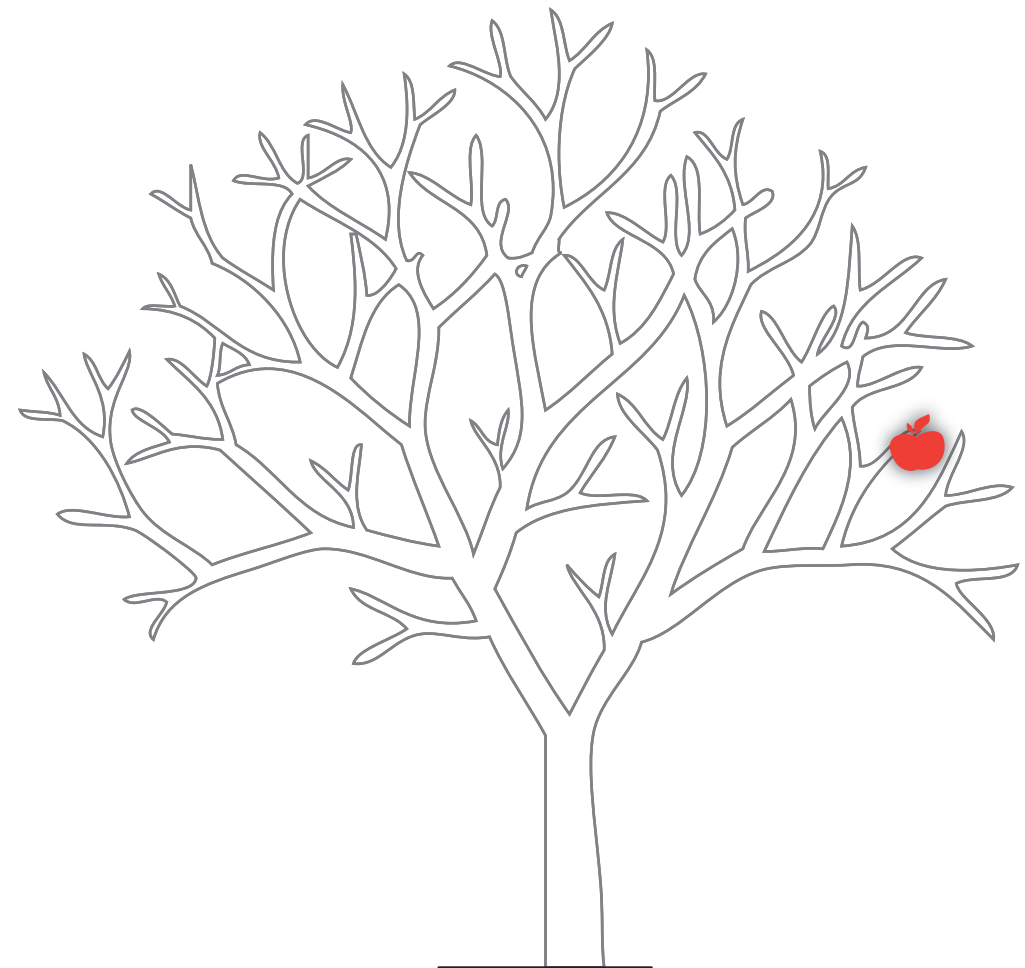
What the Web has offered us is the ability to be more interactive and connected which promises even more organically designed systems. The Rep-Rap ([Rep-Rap on wikipedia](#)) 3D printer is a good example of such a system, it has been developed and evaluated to different branches using the Web.



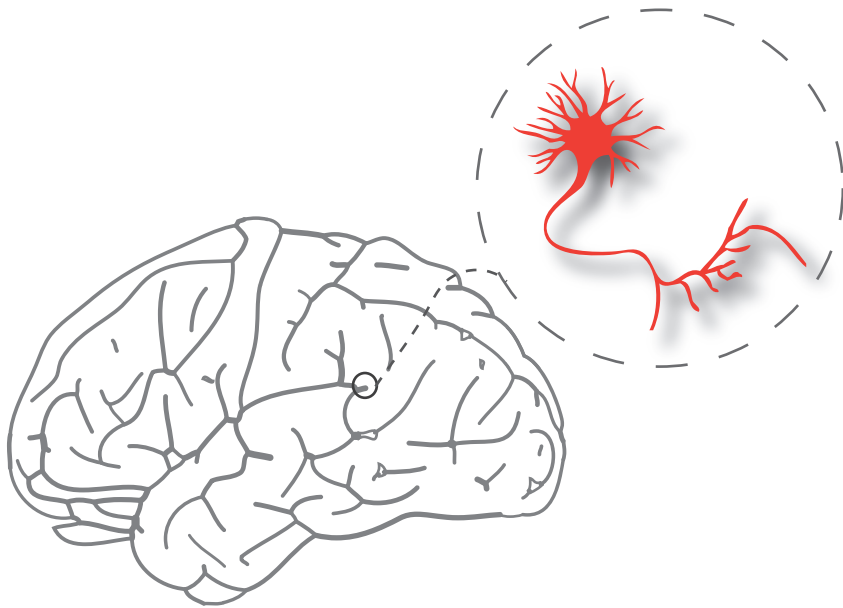
Organic Design

As mentioned before, the web has created an environment allowing products, services and systems grow organically. Organic design is a term usually used in architecture. In architecture it promotes harmony between human habitation and the natural world through design approaches so sympathetic and well integrated with its site that buildings, furnishings, and surroundings become part of a unified, interrelated composition. What I refer to as organic design is slightly different. In my view organic design shares the same goal as organic architecture: designing a product which fits and integrate into its site perfectly. However, organic design process in my view is to some degrees uncontrolled, whereas the organic architecture is usually the result of a controlled process.

Organic design is much like planting a tree. You can plant a seed and take care of the growing plant which will produce fruits. However you will never have the complete control of how the tree will exactly look like.



In my vision, organic design is less controlled because it is the result of the interaction of a network of individual contributors, which is not predefined. From this point of view you can also compare it to how the brain works. The brain creates ideas and thoughts through the interaction among a large amount of interactions among different individual neurons.



Designers

We as designers and students are constantly using the Web for designing. Most of the information, inspiration and tools are sourced by the web and eventually by others. Our systems are mainly formed by the web, nevertheless I believe that most of the designers, at least at our faculty, are not aware of how web has affects their way of designing. And that their systems are more organically formed than they think. A simple example is the common usage of Arduino, an open-source platform, among the designers. It is almost unavoidable for designers to incorporate the web and its resources in their process. That is why that designers has to become more aware of these transitions and changes, and start to consciously engage and integrate the web in their design process and design organically.

I must say that it is the first time for me that I have decided to approach my project from this point of view. That means that you wont find a definite answer or approach for organic design or web based design in this report. It is rather a beginning and a case for deeper research and explorations.

Verdien model,.....

CrowdSourcing

Definition

Integrating web in a design process is a broad statement. In essence a designer is integrating the web in the design process even if he or she is searching the Google for inspirational images. For this project I wanted to get a more deeper than the obvious activities. Therefore it seems necessary to confine the definitions and the terminology to a more concrete framing. That is why I have chosen to use crowd sourcing as the central phenomenon for my project and research. Crowd sourcing refers to a job traditionally performed by a professional and distributing it to an undefined, generally large group of people in the form of an open call ². In this case the Web is the main platform for this activity and therefore it becomes part of the definition. That is why the definition changes in this report to: the online distribution of a job, traditionally performed by professionals, to (a group of) private individuals in the form of an open call ³.

At this point I want to acknowledge that by using the term crowd sourcing I create a risk of this term being negatively associated with activities which are not aligned with the progressive vision of cultural change described in the previous chapter. The term crowd sourcing has also been used to describe marketing activity which are aligned with the traditional idea of consumption. An example for this association is My Starbucks Ideas ([Link naar website](#)). This “crowd sourcing” initiative created a community for customers to share and vote ideas to improve Starbucks’ products and services. In my opinion these initiatives are mainly aiming to market their products and brands. And even if the ideas posted by the crowd are implemented, they will result into some incremental changes which will have no effect on society. [DIY drones als goed voorbeeld](#)

Therefore it is important to incorporate the goal of crowd sourcing in its definition to distinguish the form of crowd sourcing which results to an innovative and organically designed system from the form which

aims from a controlled perspective. Therefore the proper definition for crowd sourcing in the context of this report would be:

“The online integration of an undefined and generally large community in process of creating and development of a socially relevant innovation”

Process and Conditions

In contrary to the name crowd sourcing, for organic designers this terms is more about “sharing” than “sourcing”. The fact that a designer gets involved in crowd sourcing does not mean that he will spend less effort than in a traditional design process. Crowd sourcing does not result in less effort, it aims to develop product and systems which fit their environment best. As it was also evident during my engagement in crowd sourcing. The designer should be prepared to share and put much effort into forming a community before the community becomes self governing. This process is comparable to a engine; before an engine starts running it requires relatively high amount of energy.

Different examples such as the development of Linux ([Website](#)) show us that even though crowd sourcing is open and flexible, it does require a core of committed contributors to be successful. Such a core requires leadership which clarifies the vision and the goal of the community. Crowd sourcing succeeds by creating self governing communities who make the most of their divers knowledge without being overwhelmed by their differences. That is possible only if these communities are joined around a simple animating goal and the right kind of leaders (we think, p 80).

The contributors of the crowd sourcing process are usually amateurs. They contribute on the bases of intrinsic motivation. Therefore it becomes even more important that the designer as the director within such a process should set clear and simple goals which targets the intrinsic motivation of the contributors of a community.

Next to a simple goal, it is important to have the right attitude as a leader. Leading in such a environment requires an active, interesting, humble, unprofessional and honest attitude. This attitude should be reflected in the open call which one places.

Point of evaluations.

Share before you take.

Simple goals/vision,

Right kind of leadership: committed, give before you take

Activating the intrinsic Motivation

Five points of being social

Further in this report I will evaluate my process of the last semester in which I attempted to get involved in crowd sourcing to initiate an organic design process. In the table below you will find a set terms and their definitions used in this report related to crowd sourcing.

Terminology:

Open call: “definition“

amateurs: “definition“

community: “definition“

Intrinsic motivation: “definition“

Undefined community: a community within the skills and the number of the members is divers and undefined.

Crowd: “definition“

Web Platform: Web platform refers to the place on the on which the open calls are placed and the communities are formed. This could be a self-made websites or preexisting websites such as www.wikispaces.com.

Contributor: “definition“

Tacit information: “definition“

Explicit information: “definition“

Engagement

Getting Started: open call.

To get start the engagement with crowd sourcing we decided to make and share a simple toy sailing boat and share it online. I conducted this phase of the project in cooperation with Frits Stam(See [acknowledgments](#)). Our goal was to explore how we can speak to the intrinsic motivation of individuals in a crowd. Our ideal result was that others would start remaking the boat and preferably also start sharing their experience and versions online and with us.

Requirements:

To reach this goals it was important to define the right requirements. In this case the boat or prototype which we would post had to lower the threshold for building. Therefore it had to be cheap and the material used for building had to be easily accessible for almost any user on the online platform.

We expected that people who remade the boat also would improve our design, therefore it seemed logic that our design would leave room for adjustments and change. Therefore it was required that the design would be as modular as possible.

Web Platform:

The client Protei has an website and a community. However, their web platform did not seem suitable for our goal at this phase. We aimed to reach a large audience and the online community of protei at the time was relatively small compared to the alternative web platforms.

To share our design and place our open call we evaluated the most famous web platforms which aimed at building communities around sharing information about building tangible products (See [Appendix X](#)). The web platform which we chose was the Instructables.com. This website includes more than two million members world wide. And contains a broad range of communities building and sharing products,

from toys to electronics and food. We chose this platform because of this broad rang and the large amount of users. We assumed that by enlarging our audience and the diversity within this audience as much as possible; the chance of our design being remade would increase.

Communication:

Instructables offers the opportunity to post text, photos and videos. We used all three media to convey our message. What we especially paid attention to was the visual communication. We made sure that photos were made from each single detail of the making process. And we used relatively an extensive amount of those photo material for our instructions. As the famous saying says: one picture is worth thousand words. By documenting and communicating via photos as much as possible we aimed for the tacit transfer of information which in turn made it possible for us be less explicit and therefore write less text.

Next to the photos we included a video of the testing the boat. In this we way we made sure that the audience is informed about how our design works and to motivate them to build it. In the written text we tried to be as informal as possible. We incorporate some humour and were not too serious.

Results:

Our publication on the instructables was featured by the website and it received more that ten thousand views. From a promotional point of view this post was a great success. This success supports that our first open call has is good example of how such a post should be constructed. If we evaluate this call by looking at the five points of being social we see that all the five points are incorporated in the call.

We show that we are being active. We did not only put effort in designing the boat but also put effort in making a well detailed instruction. Our open call was interesting, in my opinion, because the design of the boat and its possible applications. The boat is cheap and we received

comments from various people that they would like to have such boat for example to clean their pool or play with their children. We were unprofessional, informal and personal this is reflected in the cover picture, the text and the video. At same time stayed humble and honest about the imperfections of the design as they appear in the video. These factors helped us to win the trust of the audience which is an important element when forming a community.

Our open call received a large audience and some viewers showed interest. However this first open call did not pursued anyone to rebuild the boat, and if it did the makers have not shared the result with us. And I must that it is a bit too ambitious that such a outcome will be resulted after the first open call. As also mentioned in the literature, building a community requires commitment and persuasion. The first open call was only a beginning.

The comments from the viewers were coming from all kind of angles. People who were interested in sailing commented but also people who were interested in toys or environment. This of course was very positive. However that the same time we were wondering whether this scattered range of interests and people that Instructables.com offered, would really help us to organize community with a dedicated core to develop our boat. It seemed that a more focused web platform, however smaller, would be of a more help for setting a community than a instructables which is very broad. And that is why the web platform for this project was changed after the first open call.

We only got a lot of feedback no boots: why? because the platform was not specific enough. And it also shows us as mentioned before that crowd sourcing requires effort and commitment. It is very probable that the few first open calls result in results which would not have not the direct result as you wanted. However I must add that what we achieved with our boat did resulted in a good promotion for the client. More that 10000 people got visited the instructable. And from that point view it was a great success. Nevertheless form the point of crowd sourcing as defined here it was only a small step in the process.

Conclusions:

Simple, Generic, accessible, cheap prototypes seems to speak to the motivation of the crowd. In my opinion this mainly because it lowers the treshhold for building. It leaves room for adjustments. it was honest unprofessional interesting.

Voorbeeld PVC comment op instructables

Searching for a good platform: DIY Drones, first open call, feedback

Forming a community: Group, Catamaran, email contacts.

Keeping it simple: focusing the project

The Protei project has different aspects. There is the environmental aspect of oil cleaning. There the naval innovation aspect of shape shifting hull and of course the challenge to make an autonomous sailing boat. In my opinion this multi-focused approach has helped the Protei well, for example in their kick-strater([Web site](#)) marketing campaign. However within the protei group at ID we noticed that this multi-focused approach could also be a down fall for this project. For example why would you need sail boats to clean up oil? Why does not Protei looks for alternatives in the field of biology to break up oil spills? Why is Protei so keen on making an autonomous sailing boat from scratch while there are technologies available? And if oil cleaning is the central goal why is Protei spends so much time and effort on making a shape-shifting hull? Protei proposes to sail in a zig-zag instead of in a straight line to clean up as much oil as possible. Why is the company not testing this proposal with normal boats to show how effective it would be?

As these questions arose it became clear that by trying to solve everything under the name of oil spill cleaning, Protei was creating confusion among the contributors, at least among the contributors at ID. From that point it was clear that the project had to be simplified and focused. Not only for the students at ID but also for the online community building. It became apparent to me that clear simple goal will increase the chance for forming a community, because it made it easier to lead and organize by preventing confusion. A good example of such a approach is the community for DIY Dornes ([website](#)). This community is dedicated to design open source, do it yourself drones. And they have succeeded to do so through crowd sourcing. I believe their focus and the leadership has been a key factor for this success. As a contributor it is clear why your a part of the community. You are part of it because you like to make drones. It does not necessary matter why. It does not matter whether you will use it to detect forest fires or to play with your children. You contribute because your passionate

about flying things and/or robots. You contribute because your are intrinsically motivated.

This approach seems to work. And that is also why we changed the focus of the project from one which tries to solve a lot of problems and bring a lot of innovations, to one which focuses on one point: building an autonomous sailing boat. And since the web platform for the project also had to be changed, DIYdrones.com was chosen as the main web platform to forming a community to build autonomous sailors. This platform offered us the right audience, a multidisciplinary technical audience which already succeeded in building autonomous flying drones.

Community

I started on the DIY drones community the same way we did on Inscrutable.com. I posted what our PVC boat and informed the audience that soon I am working towards a remote controlled boat and asked them for advice (See Appendix). This open call had the same success as the one on Instructables. The comments that I received were more technical, which was expected as Diydrones reaches for a more technical audience. For example I received information about making the servo's water proof.

In my view the first open call is an introduction. The real design process starts after a community is formed.

Yet to come:

Het is nodig dat er een core gevormd wordt: bijv. linux is een open project waar duizenden aan contributen, maar er een groepe van ongeveer van 400 die het grootste contributie inleveren. Daarbij is de leiderschap van Linus Torvalds erg blangerijk. Hij stuurt the main process. What betekent dat voor organic design....

RC boat, Group and mailings

Meeting Rob

Comments:

verwerk meer de business kant in: het financiële plaatje. What are the dynamics waardoor zo'n project gefinancierd wordt.

Uiteindelijk is het een combinatie van traditioneel organiseren en en het nieuwe organisatie. Zelfs met een open project, en organisch ontwerp heb je een kern nodig -> zie we think

Protei

Wat hebben jouw activiteiten voor nut voor protei.

boats

References

1. Kleemann: Un(der)Paid innovators.
2. Rob Stokes, eMarketing, The essential guide to digital marketing.
3. Geerts A.M. Discovering Crowdsourcing. theory, classification and direction for use (Master thesis)
4. Frank Lloyd Wright (1954). The Natural House (New York: Bramhall House), p. 3