

Design manifesto- Designing to make a difference!

A manifesto is defined as a declaration of one's beliefs, opinions, motives, and intentions. It is simply a document that an organization or person writes that declares what is important to them. A manifesto functions as both a statement of principles and a bold, sometimes rebellious, call to action.

A personal example

For the first section of my manifesto, this is where I talk about a little bit of my back story, along with research on facts and figures which enabled me to ignite the scenario for this manifesto. This is what leads me to express my thoughts and discover my overall purpose for putting together this manifesto:

My grandmother previously lived in Nairobi, Kenya and her region suffered devastating flooding in 1961 (Ref 1). She told me that water flooded the ground floor of her home completely and that the electricity supply stopped. She found it difficult to carry out the daily activities we take for granted – she couldn't cook or dry the family's clothes. Buildings in her village collapsed killing their occupants and crops and livestock were washed away. Roads were impassable and the whole village was effectively cut off from the outside world for around 3 weeks. She then said that it took several years for her village to return to some semblance of normality and the event was a major influence upon her decision to move to the UK.

The above story, as told me by my grandmother, has acted as the catalyst for my manifesto. It caused me to think about the immense difficulties she faced at that time and the fact that things could have been so different. Had she died in the flood then obviously, I would not be here writing this now. I thought about how I would have coped and then how the knowledge I've gained whilst studying could be applied to help people faced with such terrible circumstances.

I've looked at several manifestos for ideas and themes as part of this task, particularly those produced by artistic designers and design houses as they perhaps best fit what I am trying to achieve. A common theme, expected when you consider the above definition of a manifesto, is the declaration of wanting to make a difference. I asked myself whether I could make a difference to people in peril like my Grandmother was and this led to the equally important question as to whether my life so far has made a difference? Self-analysis is not something I've ever done before but, being brutally honest with myself, I must say that I have not done anything of any real significance yet and to the wider world outside of my family and friends haven't made that 'difference'.

For me, the knowledge I've learnt on this course traditionally goes towards designing vehicles which make life more convenient but, outside of owning perhaps a head turning car, these vehicles don't make life 'better' in any real sense. Such thoughts, previously completely alien to me, fired my imagination and led to the decision to design an amphibious/all- terrain vehicle with the specific application of being used in natural disaster zones.

The principle issue that my manifesto will seek to address is the lack of resources available to victims of natural disasters, particularly those who live in less developed countries. The term 'natural disaster' can be defined as meaning any event or force of nature that has catastrophic consequences and I believe that everyone has the basic and unarguable right to receive support in the event of being caught up in such life changing scenarios. The catastrophic consequences the definition refers to vary obviously upon the type of disaster involved, its location and upon many other such variables but, with little exception, means loss of life and economic disaster for the survivors. Millions of people are affected by natural disasters every year, and their impact can be calamitous. From the destruction of buildings to the spread of disease, natural disasters can devastate entire countries overnight. Tsunamis, earthquakes and typhoons do not just wreak havoc on land; they also disrupt people's lives in both densely populated cities and remote villages

It is important here to differentiate between natural hazards and natural disasters. Earthquakes, floods, hurricanes and volcano eruptions are all types of natural hazards, but they only become natural disasters when the event has an adverse effect on people's lives. When, for example, a tsunami hits a populated area, and destroys homes and lives, it then becomes a disaster. A 2014 report prepared by the United Nations and covering the period 1994 - 2014 (*Ref 2*) states that low- and lower-middle-income countries are excessively affected by natural disasters. In the same 20-year period, 33 percent of countries that experienced disasters were low- to lower-middle income, but 81% of the people who died in those disasters lived in these countries. It is proven therefore that people living in poverty are even more vulnerable to natural disasters because they have fewer resources or people to turn to when trying to rebuild their homes and livelihoods. This is not to suggest that the devastating effect upon people's lives in 'richer' countries is in any way less important, indeed according to the UN's disaster-monitoring system, the USA suffered the greatest number of natural disasters globally between 1995 and 2015. However, the USA has the physical and financial resources to better deal with the consequences of these disasters.

International organisations with tried and tested infrastructures such as the Red Cross (*Ref 3*) are often the first to reach disaster zones to provide the base level of support – food, water, shelter and medical assistance. However, there are occasions where even resource rich agencies cannot physically reach the people that they are trying to help- due to their remoteness or, perhaps, because access roads have been damaged or washed away. It follows necessarily that the logistics as to how the aid is to be delivered is often the first problem such agencies must seek to address.

Natural disasters are categorised into two types: *Geophysical disasters* which include earthquakes, volcanoes, dry rock-falls, landslides and avalanches and *Climatic disasters* which include floods, storms, tropical cyclones, local storms, heat/cold waves, droughts and wildfires. All available evidence indicates that since 1970, the number of disasters worldwide has more than quadrupled to around 400 a year. Some of the deadliest examples in 2017 include Hurricane Maria hitting the Dominican Republic, a massive earthquake affecting Mexico, monsoon flooding in Bangladesh (*See Fig 1*), mudslides in Colombia, Hurricane Irma in the USA and Caribbean, flooding and landslides in Sierra Leone and Hurricane Harvey (*See Fig 2*) in the USA (*Ref 4*).



Fig 1: Residents of Bangladesh going through unfriendly and dull floods with struggle, caused by the monsoon rain.

Source: Ref 4



Fig 2: Elderly Couple, emotionally struck following the events of the Hurricane Harvey, the cause of losing their home.

Source: Ref 4

An element of acceptance must be in-built into my design. My powers as a designer obviously do not extend to being able to stop natural disasters from happening or to completely prevent the resulting loss of life, property and livelihoods. However, a well-designed rescue vehicle with multiple applications could help reduce the number of fatalities by being able to respond quickly, reach the casualties, carry them away from the immediate disaster zone and provide those who cannot be moved with the supplies they will undoubtedly need.

My central design principles

For this next section of my manifesto, this is the business end, where I now discuss my own way of approaching my work. Since I discovered my purpose for designing, I managed to identify eight core design principles that I use towards my work. My backstory, whilst putting together my research on current events and my own ways of thinking has led me to each of these principals below:

1. I believe that as a Designer I need to properly understand what my end user client needs – I won't make assumptions but will carry out thorough research as to what is needed and consult with experts in the field as to the practicality of the design at every stage.
2. Every function of the design needs to be necessary and add value and not be there just for design's sake.
3. I will test and re-test and learn from mistakes and not see them as setbacks.
4. I will be thorough in my work and leave nothing to chance.
5. I want to embrace innovation.
6. I want to be useful to society and make useful designs.
7. I want to make aesthetically pleasing products but not let looks detract from functionality. My watchword will be less being more. The product must serve its stated purpose with design being predominant over fashion.
8. The product must be as environmentally friendly in its manufacture and usage as current technology permits.

Approach and Philosophy - Existing Designers

For this section of my manifesto, this is where I furthered my research towards existing designers or design companies. I identified and put together a few relevant sources in relation to my intentions and ambitions, in terms of comparing their own ways of thinking, opinions and approach towards design with my own views where I express my own opinions on whether I share similarities or differ from their views below:

“Drive” is an International Automotive Consultancy, working collaboratively with internationally recognised automotive brands such as Nissan, Ford, Rolls Royce etc. They believe that the success of these world leading companies is due to their insistence that the design is crucial. They stated, ‘Great design makes cars more desirable, allowing higher pricing and better returns.’ (Ref 5)

As someone who has a passion for the ‘super’ cars whose striking looks adorn the covers of most motoring magazines and web sites, I believe that a unique and eye-catching design does indeed prompt you to want to own that vehicle. This viewpoint is perhaps better put by the philosopher Peter Paul Verbeek who states, “These are functionality; aesthetic appeal; expressive or symbolic qualities suggesting a particular lifestyle or values; and mediation of the relationship between human beings and the world”. (Ref 6)

It must be appreciated however that not everyone shares my viewpoint or even have an interest in cars over and above them being a method of getting from A to B in relative comfort. For these people, it is often the reliability of the car and its cost-effectiveness which are the predominate selling points.

This is a viewpoint encapsulated in this quote: “It’s more important that it work and solve a problem than be beautiful. Too often in the design community the interest lies in the form not the function.” – David Sterling and Mark Randall (Ref 7).

Others balance functionality with design, especially those consumers who typically keep their vehicles for several years before changing them. Glenn Parsons and Allen Carlson expressed this viewpoint by stating “some aesthetic qualities, not all, involve function, or to put the point another way...Functional beauty is one species of beauty, rather than beauty per se.” (Ref 6)

In the late 70’s, Dieter Rams, who is an industrial designer, founder and designer for Vitsoe, a British based furniture company felt anxious about the world around him. He stated, “An impenetrable confusion of forms, colours and noises.” Aware that he was the main benefactor of that world at the time, he stated the following as being his ten principals which together make up a good design below (Ref 8):

1. Innovative.
2. Usefulness.
3. Aesthetic.
4. Understandable.
5. Unobtrusive.
6. Honest.
7. Long Lasting.
8. Thorough in detail.
9. Environmentally friendly.
10. Purity and simple.

My design principles as set out above share many similarities with those of Dieter Rams. Both of us place emphasis upon our designs being attractive but also seek to balance good looks with both commercial sensibilities and social responsibility in terms of recognising the impact upon the environment of our work and, ultimately, that the items we design must meet and hopefully exceed the needs of the user. To abide by the simplicity principle in my own design will require a difficult balancing act; the exterior design should be simple as ruggedness is the key and this rarely, if ever, includes extraneous niceties but in terms of the features it will need to have to do its job, then the sheer variety of them will involve much thought as to how they can be incorporated successfully.

My thoughts on simplicity shares similarities with one Paul Rand's top quotes on design. He stated, "Simplicity is not the goal. It is the by-product of a good idea and modest expectations." (Ref 9)

To assess the feasibility of the kind of vehicle I propose, I carried out a degree of research to see what, if anything, is already on the market. My research also had a secondary purpose, which was to evaluate the features of any existing vehicle to see whether they met the design brief that I have set for myself and where my design can improve upon their features. An independent amphibious vehicle manufacturer *Cool Amphibious Manufacturers International, LLC* (Ref 10) have already developed an amphibious search and rescue vehicle, the 'Amphibious Responder' (See fig 3). Their literature suggests that it is designed to fulfil a similar purpose to my idea: being an all-terrain vehicle with the facilities and equipment to rescue people from accident and disaster zones in addition to providing medical assistance and carrying vital supplies and equipment. This vehicle also boasts a firefighting function when equipped with the appropriate add-ons and is advertised as being capable of being deployed locally, nationally and globally. Whilst admiring the novelty of this design and the clever way in which rescue technology has been incorporated, I see several issues which I will seek to address and rectify in my design. For example, the Amphibious Responder does not possess passenger seats which, for me, limits its use to carrying fully mobile people and the walking wounded who may need to be seated or even put prone.

A second design issue for me is the fact that this vehicle does not have a roof. This obviously means no protection from the elements or from flying debris for its crew and passengers.



Fig 3: Amphibious Responder in action.

Source: Ref 10

Conclusion

For the final part of my manifesto, this is where I recap and put together all my thoughts, ideas and opinions I've collected throughout the manifesto as a guideline to finalise and come to a decision on what I will achieve throughout my designing career. Here is my closing statement below:

I have attempted to set out above my reasoning as to the decision to design an all-terrain/amphibious rescue vehicle. Natural disasters causing considerable loss of life and the destruction of the means which allow people to live are increasing globally year upon year. My family has personal experience of how lives are disrupted by flooding and this, coupled with the fact that my thoughts upon the subject have made me realise that I have not made my positive mark on the world yet, have combined to bring about this pronouncement. Such a vehicle is by its very nature almost exclusively utilitarian. This raises issues for me because one of my main reasons for seeking to enter this field was to design cars that are, aesthetically speaking, stunning. Many designers across every sector have considered and debated the question whether function champions over form. Here, my choice has answered the question for me. I aim to design a vehicle which is not aimed at the public i.e. the private consumer who wants a car to look good on his or her drive but one which will hopefully be bought by governments and/or international aid agencies. In truth, no one in peril in a disaster zone would care one iota about how the vehicle that saves their life looks and whether they look 'cool' being conveyed in it. This is not to say that modern design methods and the latest technology could not be employed to make the vehicle look appealing, but rather that I intend to abide faithfully by my own design principles which give precedence to the end user. Thinking upon that last sentence, it is wrong to use the term 'end user'; my vehicle will help save the lives of people and people should not be categorised by as trite a word.

Bibliography

- 1) <http://sokodirectory.com/2016/05/floods-in-kenya-and-their-impact-on-the-economy-of-the-country/>
- 2) https://issuu.com/undp/docs/undp_cpr_cta_20140901/3
- 3) <http://www.redcross.org.uk>
- 4) <http://www.telegraph.co.uk/education/stem-awards/design/deadliest-natural-disasters/>
- 5) <http://www.drivedesign.co.uk/what-we-do/>
- 6) **Galle, P. (2016). *she ji The Journal of Design, Economics, and Innovation*. Shanghai, Elsevier, Page(s) 325, 331.**
- 7) <http://www.leapdesign.biz/blog/2015/2/6/design-social-responsibility-ethical-discourse-in-visual-communication-design-practice>
- 8) <https://www.vitsoe.com/gb/about/good-design>
- 9) <https://www.invisionapp.com/blog/design-and-creativity-quotes/>
- 10) <http://www.camillc.com/searchandrescue.htm>