When numbers and arguments are not enough

- The power of Artisan Storytelling for Public Mobilization and Policy developments for Sustainability in Systems Thinking perspectives

Working Paper
Author Hilde Opoku * and Kristin Støren Wigum**
Position * SDG Advisor and deputy mayor, ** Industrial designer and researcher (PhD) in own consultancy
Affiliation *Ghanaian Government, Trondheim Municipality, **Gaia Trondheim, Product and System Design for Sustainability

1. Introduction
Despite strong scientific evidence, and people experiencing that our basis of living is at threat from climate change and environmental degradation adequate populace or political responses are not taking place as required. In 2017 world leaders agreed on 17 Sustainable Development Goals (SDGS) including the Paris agreement, that are to be met by 2030. We are in a hurry! Still the political system is reluctant to act most probably out of fear of lost support from their voters, and the civil society has failed to mobilize enough people to give them necessary support for political action. Also, the questions at stake are so complex that both the population at large might feel overwhelmed both in terms of understanding it all, how to address them and not at least how to solve them.

In 1973, when environmental issues just had become part of the global policy discourse, Webber framed the term “wicked problems” (Rittel, Webber 1973), on complex issues related to social, ecological and economic sustainability, and argued that in lack of complete solutions we needed to address these issues in ways that communicates through emotional appeal, as well as evaluation good or bad, not right or wrong. Where scientific and political communication can be rather advanced, the visual methods used by artists, has the potential of explaining complexity more simplified and reach out to our intuitive understanding.

After we (the authors), separately, got inspired to actually do communicative and political work related to sustainability after interacting with the work of two artists we decided to look further into the power of art for mobilization and policy development for sustainability. We also have a joint common background from the field of Industrial Ecology as hency political scientist and product designer. Inspired by the ecological metaphor the industrial ecology views the flows of energy and material in society as the web in interacting ecosystems, and the environmental impact they have on the various compartments of the system. With this background we decided to develop this working paper where we look at how art and artisans may play a role as opinion leaders through their artwork. We look at two contemporary artists from hence West Africa and Northern Europe the way they conceptualize a systems perspective on products impact on culture, ecology and democracy. And discuss the effect it eventually may have on decision making.

Through these two case studies we discuss how artists with both local and global orientation can play a role as catalyst of value changes, and thereby in the shaping of public involvement, policy development and revitalization of identity that eventually leads to systems and products redesign.

We have chosen two artists that represents both a local and global scope in terms of where they come from, and the message of their work: Serge Attukwe Clottey, is from Ghana in West Africa, and Marjetica Potrčs from Slovenia. The work of both artists, has universal relevance, whiles at the same
time they give voice to local culture and environment threatened by current systems and product designs. Both have played a pivotal role in the shaping of a momentum through their artisan storytelling. Storytelling is a common goal and tool of the different professions mentioned. However, what stories do we want to tell? And where do the stories come from? How far do these artists reach with their work?

2. Our Approach to Systems Thinking

The basic premises of industrial ecology as a field is to understand the flows of material and energy in society. Inspired by the ecological metaphor, it views these flows as the web in interacting ecosystems and the effect they have on the various compartments of the system - natural resource conservation, pollution prevention, dematerialization and decarbonization become central objectives for the social systems. In this perspective, systems thinking means that we think of the product, and product developments, in terms of environmental impact throughout the products life cycle - from materials extraction - land use - refining - manufacturing - distribution - consumption - disposal and material reuse.

The systems thinking approach can be applied at different levels and scopes, depending on the system’s boundaries identified as important for the analysis. For industrial designers these analysis helps advice on i.e. material choice and composition, in the context of design for closing loops and behavioural change or support. For policy developments for sustainability it helps identify bottlenecks that can be opened through law or change of political objectives and strategies. To fully understand the systems dynamic, the agents or driving mechanisms in the system must be identified. These are often strong corporate actors, consumers, civil society and political actors. To change some of these systems to be efficient and sufficient enough in a sustainability perspective, the public must demand it.

Our hypothesis is that the work of artisans and their storytelling can play a role in helping the public become aware and mobilize for change when these mechanisms fail to develop systems of sustainability.

The research questions are therefore:
- How can systems oriented art and artists play a role as catalyst of paradigm change, and through their work catalyst public involvement, policy development and eventually systems and products redesign?
- Can art play a breakthrough role, where social movements have failed, in shaping new politics and future systems designs for sustainability?

Thinking in systems as methodology for research and change

In the book Thinking in Systems (2008, ed. D. Wright), Donella H. Meadows describes the method of detecting and defining the system with its elements, functions or purposes, and interrelations between these, in order to manage a system change. The elements are the first usually to be detected, and can be the easiest to map. Elements can be both visual and intangible, and further be divided into sub-systems that may as well play important parts. The work in defining the elements is infinite if there is not set a border for the system. However, placing the borders of the system is crucial to the results of both analytical work as well as design strategies or new policy development. It is also important how Meadows refers to system theory and point out that changing the elements usually have the least effect on change: “A system generally goes on being itself, changing only slowly if at all, even with complete substitutions of its elements - as long as its interconnections and purpose stays intact.”.
Following the theory of change, we need to look beyond single products and elements, and search for the purposes (of the humans in the system), the functions (of the elements), and the interconnections. As an example; it is not enough to change our traveling from fossil fuel-driven vehicles to electrical ones, if people just increase their traveling or the electricity is derived from coal, (that is also fossil). Changing relationships more likely leads to change in system behaviour, which in this example would be to change the purpose of traveling, or the distance between functions so the traveling becomes unnecessary. Then the traveling could occur in new forms (walking or biking) or not at all. We also need to understand the systems over time. The elements seen at any time, are the stocks in a system. The changes in stocks are caused by the interrelations in the system. Your car would be a stock, as well as a population, or articles saved on your computer. Meadows says even your own self-confidence, or hope for a better future can be a stock! The elements are therefore essential, though their existence as such is not causing change. A stock is the foundation and the historical memory of the flows or interrelations between the elements.

Visualisation of a wished new system as well as the existing one, is an important tool or method in the design process. We divide between the visualisation of a process for development and a system as such. For mapping and analysing the systems there are many technical methods that can be rather advanced. The use of visual methods, on the other hand, has the potential of explaining complex systems more simplified, which again may appeal to a broader audience. Meadows uses drawings and illustrations along her explanations in her book. However, when the field of design in relation to artistic expression also becomes a part of the explanations, the message of system thinking may appear clearer and give a deeper impression of important interconnections and purposes. The two artists we discuss later in this paper, are exceptional in creating awareness of elements out of place because of change of purpose, such as for plastic cans, and disturbed interrelations between humans, soil and water, which is essential for life.

3. The role of art in industrial design

Some important distinctions between a piece of artwork and a designed product, are the focus on functionality, user perspectives, and criteria for mass production in an economic efficient way for a certain market. Where the artists use their own experiences, perceptions of society and context in life to emphasize what they find important and valuable to visualise and talk about.

Our globalized western lifestyle is in large degree permeated by consumerism. Rituals, rhythms of the day, holidays and activities in our spare time have become costly affairs. Designers have used their skills together with companies to give shape to everyday things as trendy products that must be exchanged regularly. Status is not what you have as such, but having the right product at the right time (Dokk-Holm, 2004). The ideal designer working for a non-profit cause is rare. However, lately designers who are working in the intersection of art, architecture and design, have introduced the values of arts and crafts modernised by artistic methods and storytelling. Expression of local identity is shown through choices of local (raw)material and crafting methods. Slowly new solutions are appearing.

For example, in the exhibition “One does not take it anywhere,” (Gallery 1957, Accra, November 2017.) Paa Joe and Elisabeth Efua Sutherland presents traditional funeral rites through contemporary art. Paa Joe is internationally recognized for his fantasy coffins. Despite the commercial and institutional interest it has gained abroad, the fantasy coffin business in Ghana has, until recently, been seen as a skilled trade rather than an art practice. It is still learned by apprenticeship, like other vocational professions, and you can see the coffins lined up for sale for funerals along one of Accra’s main streets. At the opening of the exhibition a performance of a funeral rite was presented. “We’re
both coastal people,” Sutherland said, explaining that the performance is gathered around water. “We’re using the metaphor of life as a beach, from which you push off into the sea, the unknown.” Weaving together specific funeral practices of the country’s Ga and Fante communities—the coastal communities to which the artists respectively belong—it becomes a narrative of a fictional passing of a young girl. It can also be seen as a metaphor of life on earth at a time we are all moving into the unknown.

Another example of the metamorphosis between product design and art is, the project Temple of Manufacturing by the artist and designer Aamu Song and Johan Olin from Finland, exhibited in New York at Storefront for Art and Architecture, 2017. The duo explored traditional manufacturing in 6 countries and designed new products honouring what they found in workshops far away from today’s mass production, plastics and imitations. The new products honoured the choices of raw materials, joint-techniques, as well as traditional aesthetic expressions that they learned from the “herb farmers, woodwork masters, wool spinners, toy makers, and dressmakers....” (Exhibition text, Aamu Song and Johan Olin, 2017). These new designs, based on old craft methods and knowledge, local resources and traditional processes becomes a voice in the debate of material things, global mass production and consumption. The products are results of processes implicitly presented as sacred, housed by the Temple of manufacturing, and is challenging both the public, the economic system and policymakers.

4. The role of art in policy developments

43 years after the first global conference addressing the Environment in Stockholm in 1972 and 23 years after the UN Conference on Environment and Development that coined the term “sustainable development’ into a global policy objective, world leaders agreed on 17 Sustainable Development Goals developed (SDG) in 2015 - acknowledging that we have failed to meet the main target. Now we have a deadline, the ambitious SDGs are to be met by 2030. Included is the Paris-agreement aimed at limiting the global increase of temperature to 1,5 C. Whilst before different targets were set for developing and developed countries - the new SDG paradigm set the same targets for all countries. However, a forecast from 2017 (DNV GL, 2017) show that the global political approaches planned so far are not radical enough to reach the ambitions by 2030. It calls for more collective thinking and cooperation. It is in this perspective we look for hope in the arts.

Through history there has been a strong relationship between the arts and politics. The arts take on political as well as social dimensions, and may be used to communicate political statements or become themselves a focus of controversy and even a force of political as well as social change. [see w 1]

A great challenge regarding sustainability is that we often feel untouched by the problems of others and by global issues like climate change, even when we could easily do something to help. Artist and designer Eliasson states: We do not feel strongly enough that we are part of a global community, part of a larger we. Giving people access to data most often leaves them feeling overwhelmed and disconnected, not empowered and poised for action. This is where art can make a difference. He concludes: “art does not show people what to do, yet engaging with a good work of art can connect you to your senses, body, and mind. It can make the world felt. And this felt feeling may spur thinking, engagement, and even action” (2016).

In an article discussing the economical development in the US Friedenwald-Fishman, founder and creative director of Metropolitan Group working with businesses, Civil societies and social issues, states that for the last century, financial and institutional capital have been the priority leverage
points for addressing society’s challenges. He deeply believes that, in the future, human, social, and creative capital will have the greatest impact. And this is where arts and culture are a necessity:

“There is no discipline that nurtures and sparks the cognitive ability to imagine, and unleashes creativity and innovation, more than arts and culture. There is no approach that breaks barriers, connects across cultural differences, and engages our shared values more than arts and culture. There is no investment that connects us to each other, moves us to action, and strengthens our ability to make collective choices more than arts and culture” (Friedenwald-Fishman, 2011).

This give resonance with Eliasson’s statement as well: “The arts and culture represent one of the few areas in our society where people can come together to share an experience even if they see the world in radically different ways. The important thing is not that we agree about the experience that we share, but that we consider it worthwhile sharing an experience at all. In art and other forms of cultural expression, disagreement is accepted and embraced as an essential ingredient. In this sense, the community created by arts and culture is potentially a great source of inspiration for politicians and activists who work to transcend the polarising populism and stigmatisation of other people, positions, and worldviews that is sadly so endemic in public discourse today.”

Eliasson has a positivistic approach to the power of art in making a difference by bringing people together to share and discuss, and argue that a work of art can make us more tolerant of difference and of one another, and show us that individual engagement in the world has actual consequences. That my “I” through art can be understood as important for the greater “we”. He argues that artists should be invited to take part in discussions of social, political, and ecological issues even more than it is currently and that artists should be included when leaders at all levels, from the local to the global, consider solutions to the challenges that face us in the world today.

With this paper we want to start exploring this potential by starting to analyse the outreach of the artwork of two artists, that have a systems critique from a sustainability perspective embedded in their work, and a outspoken clear message to policy makers.

5. Two artists, many stories and public involvement

5.1. Afrogalloism

Serge Attukwei Clottey’s artistic concept is to explore the relationship between the prevalence of the yellow oil gallons that has invaded the African continent, and question its role in regards to consumption and necessity in the life of the modern African. He is born in Accra 1985, and is today presenting his works globally. One of his latest exhibitions in New York, Gallery Burning in Water, describes his mission:

“Clottey’s work pivots more towards socio-political concerns. The artist strongly maintain practices that, at his crux, have an overriding concern with the explication of complex systems. (...)Clottey articulates an array of themes that include global trade and inequity, resource allocation, international migration, political corruption and collective memory.”

The works of Clottey are expressed through installations made of the yellow jerry cans, originally coming from China with cooking oil or other chemicals. The yellow cans can be seen everywhere and is somehow “infecting” the country, being used by all families to gather clean water. Clean water is a scarce resource in Ghana. However, the cans as such are not necessarily suited for this purpose. The artworks in the the Gallery Burning in Water, have Chinese signs, showing the origin of the cans, and also symbolize the disrupted messages these cans represent.
Where Serge Attukwei Clottey comes in as an eye opener that help us see the devastating effects of contemporary consumption on culture, identity and environment, and invites us to ask new questions Marjetica Potrč, a Slovenic artist and architect, wants us to go back and look at the original sustainable qualities of indigenous people. Her exhibition in Trondheim Norway under Trånte* thus became relevant for the Sami peoples’ ongoing fight for land for their reindeer herds against the developments of Europe’s largest wind mill park.

5.2. One Co-Existence
Marjetica Potrč born in Slovenia in 1953, is now located as a professor in Hamburg. Her works expand from architecture to paintings and sculpturing, and she has a clear focus on the importance of processes involving the audience in collaborative design processes. Her teaching embraces a holistic thinking in the concept Design for the Living World. Marjetica Potrč is known for her interest in involving the audience or public in her physical work as well as her exhibitions and art performances. In London 2015, her installation Of Soil and Water: King’s Cross Pond Club was a concrete invitation for the audience to take a bath in the middle of the city, and experience the clean water with their own body. The project is described by the artist: “The temporary available land is transformed into a place where visitors can take a swim next to the aquatic plants that clean the water. The swimming pond is free of chemicals. The water is purified through a natural, closed-loop process using wetland and submerged water plants.” However, the admission of people going for a swim was restricted to meet the limitation for the plants to keep the water clean. The project is a living laboratory aiming to show how nature restores itself, and how humans may live in balance with nature showing respect for the interrelation with it.

Spring 2017 her exhibition On Coexistence in Kunsthall Trondheim, Norway, presented wall paintings, drawings and painting as thinking maps, visualising the relationship between different types of knowledge. Knowledge of how to coexist with nature seen from indigenous peoples’ experience. Potrč’s paintings help us to understand the importance of knowledge extracted from the qualitative experiences and traditional transfer of knowledge from generation to generation through storytelling and practical teaching. Rituals and art are also parts of the indigenous peoples’ ways of communicating important knowledge for a lifestyle in balance with nature, local resources and other people. As a part of the exhibition in Trondheim, Potrč held a seminar bringing light to the connection between western reductionist and quantitative research, and indigenous traditional knowledge.

Reindeers are used as example of an animal living close to people in a nomadic lifestyle. The largest Nordic windmill park is planned in the region of Trondheim, and is in its early phase of being realised. The area of the planned park is today wild nature stretching from the coastline all the way to mountain area, as uninterrupted fauna. It has been the area for reindeer husbandry and the Sami people have gained detailed knowledge over centuries of the relationship between the nature as such through all seasons, climate changes and how the reindeers must be guided in the winter to different grazing land, finding the food under the snow.

6. From artisan exhibition to policy development

The personal consequences from being exposed to the art, the exhibitions and artistic speeches are receiving new knowledge, inspiration, and motivation for political communication and action. Placing ourselves into the different systems we act as people with a purpose, where our relationships to certain contexts are changed. Our eyes have been opened for an alien element in a culture strongly affected by our western industrialism, and the values of local knowledge and indigenous people in
near surroundings has become visual. Suddenly it is clear that the ancient culture and knowledge is threatened by the generalised argument that renewable energy must be produced even on the cost of nature and a life style coexisting with nature. The consequences of the solutions originally designed for tame problems, show the characteristics of a wicked problem. And sadly, as in this case, they are most often not reversible.

The stories told by the artists, may or may not represent a point of view that the audience agree upon. However, an artist presenting a contradiction to our personal emotions or experiences, may as well provoke a reaction in own context, promoting new directions for designs or political work. The interrelation between the artist’s way of telling a story, and the viewers reaction to it, may seem to have the potential of transferring more complex and sensely involving messages, than rational texts and numbers.

Transforming the personal reaction to political development or new design strategies might demand more parallel factors and that the receiver is open to a deeper phase of work and effort. For the two cases mentioned, the main author was inspired by Clottey’s work in dialogue with Ghanaian politicians, and is now in a new position cooperating on their budgets in the framework of the UN SDG goals. The second author wrote a newspaper article in order to influence the common local opinion and create a new awareness of the consequences of windmills in the area of the Sami people. Both actions were inspired by art, but also had a foundation in individual engagement and an existing base of knowledge concerning ecological challenges. However, in both cases, the artistic expression was experienced as eye openers even by the authors with twenty years of experience in the field of Sustainability development discussions.

7. Discussion

Above we have presented a basis for further exploration of the potential power of art in processes for sustainable transformation. Art and science must exist with open-end inquiry– different from design and politics. (Maeda, 2013, Sevaldson 2017). How is that secured, and is it a premise for its power being a catalyst?

If we return to our research questions:

- How can global oriented art and artists play a role as catalyst of paradigm change, and through their work catalyst public involvement, policy development and eventually systems and products redesign?
- Can art play a breakthrough role, where social movements have failed, in shaping new politics and future systems designs for sustainability?

By this pre-study, we see that art can play such a role in shaping new politics and design solutions through influence in three dimensions 1) as eye opener through words, visualisation, social and body related experiences, 2) as process in way of using creative capabilities. 3) as emotional mobilizer for action and expression, on an individual level, or common as experiences for bounding in new awareness.

The stories for sustainable development must be manifold in language and content. Art is important representations of thoughts and emotions elaborated by people and artists who live in a pace of searching and exploring, differently from most of us in the rush for “lean and efficient” everyday life. If art can capture what it means to be a human and facets of human in relation to each other and nature, it is clear that this means art can play a significant role in presenting both notions and facts in the debate and search for meaningful solutions.
Our next question will be how can this force be given empowerment and space to utilize this power. In other words, what systems changes are needed to create the necessary space for transformational forces to influence the population and policymakers in ways that empower them to make necessary decisions for sustainability? In further studies we see it relevant to discuss if the systems of democracy as such must be part of a transformation, opening arenas for a diversity of expression and engagement that actually must be taken into consideration by the politicians.

References:

Eliasson, Olafur (2016). Why art has the power to change the world. https://www.weforum.org/agenda/2016/01/why-art-has-the-power-to-change-the-world/


Internet sources:

(1) https://en.wikipedia.org/wiki/The_arts_and_politics

http://www.gold.ac.uk/pg/ma-art-politics/

Marjetica Potrč, Of Soil and Water: King’s Cross Pond Club. https://www.potrc.org/project2.htm

Student courses, Design for the Living World: https://designforthelivingworld.com/about/
Related projects to look to:

- UiO, Kjetil Fallan, Research project: Back to the Sustainable Future: Visions of Sustainability in the History of Design