



Research Alert
on Mediterranean
Urban Spaces
and Cultural Heritage



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PAD #15

Research Alert on Mediterranean Urban Spaces and Cultural Heritage

O. EDITORIAL #15

Research Alert on Mediterranean Urban Spaces and Cultural Heritage

Marinella Ferrara & Chiara Lecce

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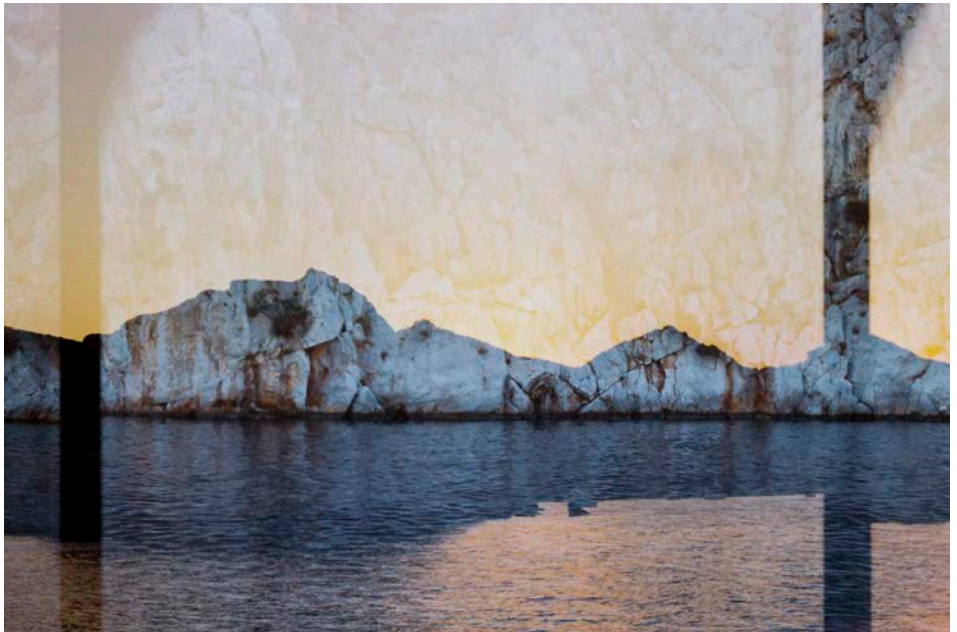
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EDITORIAL #15

Research Alert on Mediterranean Urban Spaces and Cultural Heritage

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Italy



005

Pages on Arts & Design Journal keeps on its intention to stimulate, through its call, original research topics developing around the countries of the Mediterranean area.

While the articles of the previous issue #14 examine prior topics such as Design and Circular Economy Model, Design for the Valorisation of the Mediterranean UNESCO Sites and Mediterranean Design History episodes, the present issue #15 comes back to mayor problems and potentiality of Mediterranean countries. It pays attention to sustainable development of the Mediterranean Urban Space and Cultural Heritage, giving voice to several authors from the Egyptian Academy, but not only.

Therefore, these two last issues configure together a set of design discourses and practices that describe a direction towards what we now call “Social Design”. By this expression, we mean a reflective, and creative practice able to face the situations of uncertainty, the challenges of social innovation, the awareness, and their sustainable and durable development. The papers presented address the daily vulnerability of citizens and environments, challenging problems concerning welfare, and public services with a social impact, with the aim of re-configuring social and environmental politics.

The first section of #15 proposes a deeper insight into the mechanisms of complex urban realities. It opens with the article “Design intervention: Understanding Cairo Informal Areas” by Jomana Attia and Alaa El Anssary. The essay addresses the problems of the unemployment of inhabitants of

Cairo's informal areas. Authors' aim is to help the numerous NGOs active in Cairo to understand better this reality and establish more sustainable projects, serving informal area inhabitants through design interventions.

“Industrial waste management in Egypt: a sustainable design system” by Nariman Lotfi concerns the whole Egyptian industrial waste cycle. The study hypothesizes that by applying design-thinking strategies, designers can establish a link between large industrial companies in Egypt and small workshops, thereby creating a sustainable waste management cycle. The essay reports information from all those involved in the production process (from engineers to craftsmen, company managers, and final users) adding the practical example of the glass production chain which findings showed the importance of the designer's role in addressing design and product quality to a sustainable production process.

The third contribution of this section, “Kaleidoscopic presence: a study of presence, listening, and movement in Lisbon” by Camila Soares de Barros is about the relationship of the need of body expression and a particular context.

The essay, in line with a perspective of pragmatic aesthetics, reports the birth of a creative practice: a site-specific dance performance, called BICHO, created “*in, about, and with*” the Lisbon neighbourhood of *Beco do Jasmim*. The article illustrates the creative and investigative process of this dance, which strictly links the human body (and all its senses) to a specific space and its residents, defined by the author as a “kaleidoscopic presence”.

The second section of this number collects three articles gathering each other around cultural heritage topics, even if with distant perspective.

The first article brings us back to Egypt. “From Moving Image to Still Image: Feature Films as Reference for Preserving Architectural Heritage” is an original paper proposed by Ahmed Wahby and Nora Kahil, that investigates Egypt’s Belle Époque (the 1930s and 1960s), and the vision that Khedive Isma’il Pasha (19th and 20th century) had for developing Egypt. The thesis supported by the authors is based on their conviction that visual media can effectively aid in both documenting and referencing cultural heritage. In particular, cinema movie’s scenes could contain layers of visual information, enhancing the knowledge of the past and present, and ultimately, the future. Therefore, this study aspires to promote the extraction of historical material, principally with the intent to revisit and contemplate the vanishing Belle Époque historical architectures in the cities of Cairo and Alexandria in Egypt.

“Augmented Reality and Mixed Reality for cultural heritage. New tools for the enhancement of Mediterranean sites and stories through empathic and emotional experiences” is the paper presented by Carla Langella, which explores the research project titled “CHEESE” (Cultural Heritage Emotional Experience See-through Eyewear). The research, attended by an interdisciplinary team, intends to investigate challenges and opportunities of new technologies like Augmented Reality and Mixed Reality transferred to the field of Mediterranean cultural heritage. The role of design is at the centre of the

essay, thanks to its capacity to investigate users needs, attitudes, and expressive languages in a hunter-gatherer perspective. Just as, concerning museography, the design is central to control both material and immaterial factors of innovation, in order to define dense and rich exhibition experiences.

The last paper undertakes the critical subject regarding people limited knowledge of the Islamic art, which creates – according to the authors – a superficial and limited understanding of the “Islamic” specification in an object or design. “Critical Design Approach to Understand the Current Public’s Perception of Islamic Art and Design” by Andreas Sicklinger, Alaa Baligh and Sherin Helmy reports a one-year research project investigating the public’s perception of Islamic Art, applying Critical Design strategies for the analysis framework.

PAD #15 ends with the images of “Post Disaster Rooftops Ep01 - Taranto 20149. Is this fading-city-on-the-Ionian-Sea cooler than Blade Runner?”, a curatorial exercise that uses the architecture of Taranto as a platform to investigate the marginal condition of the Mediterranean urban scenario. Post Disaster Rooftops is a collective performance that occupies unconventional urban spaces like roofs, used as a device to have a recognition of the collapsed buildings of the old city and its disturbing skyline of industrial plants.

We believe this issue – like the previous one and the following upcoming next year –, has the discrete merit to collect unedited and performing arts and design studies able to issue the Mediterranean heterogeneous habitat.

These stories represent just a few extracts of the enormous potential that Mediterranean areas can generate – avoiding commonplaces and undercutting attitudes – solving contingent problems with a look towards the future.



URBAN SPACE ALERT

Design Intervention: Understanding Cairo Informal Areas

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Faculty of Applied Arts and Sciences, Product Design Department

Keywords

Informal Areas, Design Strategy, Cairo, NGOs, Social Design

Abstract

After the January 25th Egyptian revolution, 250.000 Non-Governmental Organizations were active in Cairo alone, with the aim of solving numerous poverty-related problems. In this paper, the unemployment of inhabitants of informal areas is under the spotlight. The aim is to help NGOs establish more sustainable projects serving informal area inhabitants through the intervention of designers. Research aimed to grasp an understanding of the NGOs' problems, micro-projects they undertake and problems facing their target group – the informal area inhabitants – in relation to their projects, in order to investigate how design can intervene. The research results in the analysis of sustainable development in the informal areas of Cairo. As revealed in the NGOs' members unstructured interviewing, poverty in Cairo has four cyclical reasons: lack of education, unemployment, overpopulation and health problems. The analysis concludes that micro-projects face problems and it is hypothesized that they can be solved through a design intervention. Producing outdated products that have no specific target group can be reversed through market research and participatory design. Also, marketing and pricing were better formulated through collaborative strategic design with the NGO team. These results draw attention to the significance of interfering in the local issues to support NGOs sustainable programs.

1. The situation of NGOs post-revolution till present

Much has occurred since the 25th of January 2011 revolution in Egypt, some changes aided NGOs and others did not. For example, the increase in NGOs was foreseen by the government thus fulfilling socio-economic development and charity work under state authority up until the revolution. A year later, not only were some NGO founders taking the lead in pushing the nation forward, but also applying for presidential elections. But after some reshaping of the regime, the situation went from calls for “Bread, Freedom, Social justice” to cries of horror. Both national and international NGOs were continuously accused of receiving illegal foreign funding and consequently, some were shut down. Not only were NGO offices, hardware and documents raided by the state security, but also tens of staff members were imprisoned for up to five years. Four and a half years later, the regime backed down from their public services responsibility. The majority of 45 million Egyptians under 35 years worry about their economic survival. Therefore, in 2014 unemployment increased to 13.4% due to an unskilled workforce and an education system neglected by the state, thus the Egyptian struggle for inequality of wealth remains. Despite that, according to the International Center for Not For-profit Law (ICNL) for NGOs in 2015, Egypt represented the largest and most influential force in the Arab world, due to being the pioneer in NGO law creation (Civic Freedom Monitor: Egypt, 2018). Finally, while NGOs report success stories, the government newspapers are filled with tales of foreign spies working in NGOs (Franz, 2015).

1.1. The call for “Bread, Freedom, Social justice” and the role of design

After increasing the demands of “social justice” – the main slogan symbolizing the revolution – design is asked to contribute effectively to create value at the social level. Today’s social challenges in Egypt are numerous and complex; such as environmental problems, alleviation of social inequalities and sustainable development. Each Egyptian informal area is suffering from hopelessness, illiteracy, and depression, and yet is full of potential, which is why many NGOs suffer while developing informal area inhabitants, as they are more often than not resistant to learning or even work. But once this is overcome, success stories come to life. Providing that design is to play a role in effectively reducing poverty, unemployment, education or any other socio-economic problems in informal areas, it must be accompanied by other fields to produce practical results. Many of the critiques on social design projects lie in the project being too hypothetical or theoretical to be applied in reality. Papanek clearly stated, “Am I on the side of the social good, or will the object that I design be an addition to the catalog of unnecessary fetish objects?” (Papanek, 1985). A question that should be addressed by social designers who intend to design for the real world.

Informal areas are unauthorized settlements, where the inhabitants and their houses have no legal claim to be constructed (OECD, 2018). The population of Egypt has a life expectancy of 72 years and a literacy rate of 72%. The population consists of 90% Muslims, 9% Coptic and 1% other Christians. In another estimate, Egypt has 40.000 NGOs (ICNL, 2015).

However, according to the Ministry of Planning, every eight months, one million people need housing thus leading to 53% of Cairo being informal. These unfortunate circumstances created an initiative by the more privileged to help the poor. Therefore, Cairo hosts 250.000 NGOs, ranging from small NGOs with a maximum of 30 people to larger NGOs with 20.000 volunteers (Egypt Urban, 2018).

Each informal area develops its unique traditions. The inhabitants develop methods for providing for their families according to the needs of the area. For instance, *Manshyet Nasser* in Cairo consists of more than two million people, some of which earn their daily living by collecting garbage and sorting it for resale. In fact, there cannot be one certain definition for informal areas, especially in Egypt. In 2015, the new President created the Ministry of Informal Areas, led by Dr. Laila Iskandar, who worked with informal areas and garbage collectors for 30 years, and consequently based her doctoral dissertation on garbage collectors. According to Iskandar, the way into developing the unemployed isn't in providing them with good housing or money, it's in teaching them vocational skills that will allow them to solve their own problems (Iskandar, 2015). Currently, social designers tend to go into informal areas to define problems. But frequently due to their lack of experience in social research, they get inaccurate results. Robertson and Sobol (2011) state designers need to be aware of their more powerful positions in society - more powerful than the communities they seek to serve. They enter informal communities with the intention to help but they are ineffective as the inhabitants offer misleading information due to a trust issue between them and

the designers. This leads to the designers producing solutions that are not acceptable to the inhabitants as they do not satisfy their needs (Robertson and Sobol, 2011). This study is searching for a design intervention to increase the sustainability of NGO projects addressing informal area unemployment.

2. Investigation Methodology

The research methods described here are essentially design focused and framed by social context and subject area. The methods conducted are interviews, field visits and observations.

2.1. Interviews

Unstructured interviews were conducted with leaders and members of the selected NGOs and with inhabitants of the informal areas in which the NGOs worked. The following interviews took place.

Interview types	In-depth interviews	Interviewees & number of interviews	17	NGO members, founders and leaders
	Short face to face		4	Crochet and clothing experts
	Friendly / under cover interviews		24	Women living in informal areas

Figure 1. J. G. Attia, Interview types and interviewees.

Moreover, further into the project, several interviews took place with people with similar interests to members of NGOs.

2.2. Field Visits and Observation

Field visits and on-site observations were used to observe the environment internally. One of its main hypotheses was to

prove that when a designer/researcher observes the informal area inhabitants with an expert from an NGO he sees further into the problem rather than when visiting alone.

Three field visits were held with the databasing team leader of a local NGO. The aim of the visits was to observe the informal area and its inhabitants at work. The visits involved going into the school that the NGO works with and being led by a number of children into their homes where their mothers were interviewed.

2.3. Samplings

It was quite important to specifically select the interviewees from the NGOs. Since NGO members normally have several reasons to join an NGO, and that is why by time their perception and values vary from one another. Volunteers join NGOs for one of three reasons; professional experience, social life and/or benefiting their community. In the NGOs that had a personal contact inside, it was decided to select members or team leaders and not founders or members of the board of directors. On-ground members are closer to understanding the actual day-to-day problems with the informal area inhabitants and could also offer sincere feedback on the procedures of the NGO. In addition, team leaders have more experience thus their input is rather more output and short-term goal-oriented than the members. The reason NGO founders were not interviewed is that their input is vision oriented. Furthermore, to be accurate about the sampling process, not all interviewees were particularly selected by us, as in some interviews the NGOs were visited and we were referred to the person who is in charge and available for a discussion.

3. Investigation Findings

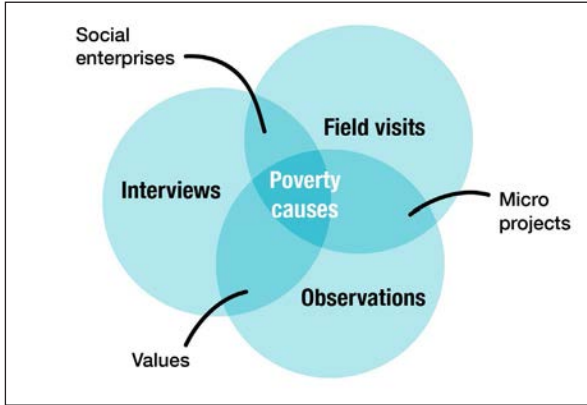


Figure 2. J. G. Attia, Findings overlap.

Below are some of the investigated activities of NGOs as listed by the sample:

Developmental organizations' Activities	Research and mapping	Charitable organizations' Activites	Awareness
	Technical and personal skills development		Feeding
	Crafts		Educating
	Micro - finance credit		Vocational Training
	Children education		Orphans care
	English learning		Health supplies
	Computer learning		Relief programs
	Village development		

Figure 3. J. G. Attia, Charitable and Developmental NGOs activities.

3.1. Interviews' and field visits' findings

The Head of Microcredit of an NGO branch in a private university was interviewed. He describes that their approach is development through the whole family, not just the individual,

aiming to eventually terminate poverty and unemployment. His team in the Microcredit project creates case studies and database analysis then accordingly selects the cases that deserve the equity. On the university student NGOs' scale, the equity is used for relief like health or small business problems. Therefore, the equitable is required to repay the money over 12 months. The NGO also holds computer learning, English and illiteracy programs. They face problems, despite the fact that the team researches about the cases in need through their neighbors, sometimes the individual does not pay off his equity and the NGO ends up losing money. Yet their Monitoring Specialist explains that before offering the people small projects, they hold a modified project planning and soft skills training so the recipients are well oriented before receiving and launching their micro projects. These Micro programs solve only the problem at hand. They provide their cases with microcredit and do not follow up to check on the progress of the project except to confirm the equity is paid. The second interview was held with the NGO Development specialist, who explained the NGO was founded 10 years ago simply for human development. After a couple of years of common relief projects, the foundation decided to alter its approach into a more sustainable one. Then he added that people in need should not be given money but rather receive a means of living and pay back its equity.

Furthermore, in another foundation that mainly works with *Manshyet Nasser* inhabitants, the President explains the main goal is to establish a model for developing informal areas, in order to achieve this, they need to spend around 10 years in *Manshyet Nasser*. Their approach is to contain poverty and un-

employment through education. So they visit schools and target children and help them learn. In around four years they have educated around 1400 children. Moreover – according to the databasing team leader – they aim to document all cases, to tackle their needs, expenses and any extreme situations like health problems. They go to the schools where they help the children, discover which of them are not paying the fees and ask them to lead them to their houses. We went into the school, the leaders already had lists of the children’s names, so we were divided into teams of girls and boys and set off with the children to their homes. We asked about the possible expenses, health problems, educational level, number of electrical devices they have and finally what they expect from the foundation. Some asked for sewing machines as they prefer working from home. The NGO classifies poverty into four levels. The women we interviewed are level two and don’t need help right away. Level four would be a house where the main provider had a health problem and there is no source of income. From this experience, it is deduced that the sample of women interviewed wanted to provide for their families, had the potential but are held back by their traditions. The foundation also aims to create socio-economic empowerment by providing loans to establish small businesses (micro-finance) (Fig. 4).

Socio- Economical Empowerment Micro Projects examples	Tricycles that transport food	Carpentry
	Vegetables business	Electrical business
	Sewing machines	Mechanical business
	Clothing business	Kiosks and small supermarkets
	Accessories business	Ovens

Figure 4. J. G. Attia, Socio-economic empowerment micro projects.

3.2. Social enterprises

The final section of the investigation was about social enterprises. During the entrepreneurship summit Rise Up, a number of NGOs were present for exposure. One was a social enterprise that helps the underprivileged develop economically through building farms on their rooftops. Thus allowing them to grow and sell vegetables. Fortunately, after a couple of years they were approached by corporations aiming at creating gardens on their premises' roofs, but then they convinced their client to rather build a farm and teach their staff about farming. They are currently developing vertical farming as a new product. At the same summit, a social incubator explains that they gather startup NGOs and social enterprises to join. They are mentored for a certain amount of time and are provided with seed funding to start off their projects. An e-commerce social enterprise aims to help underprivileged housewives. The enterprise provides these women with a platform, where people order oriental homemade food and they cook it and deliver it to their houses. Below are some of the activities that social enterprises do:

Social Enterprises' Activities	Roof farms
	Catering
	Seed funding
	Incubating startup ideas
	Training entrepreneurs

Figure 5. J. G. Attia, Social Enterprises activities.

3.3. NGO poverty reduction programs analysis

In order to create a conclusive research about unemployment in informal areas in Cairo, it is logical to continue what other NGOs have developed. Since over the past decades and especially after the 25th of January revolution, thousands of NGOs have started to assist in the development of Egypt. Thus the purpose of the research is investigating the methods the NGOs use to solve informal area problems.

From this, an overall picture emerged of the poverty cycle in Egypt. The cycle starts with lack of education leading to large-scale unemployment and reliance on insecure, day-to-day work to meet basic needs. In Fig. 6, the testimonial of an NGO founder is illustrated. He explains there are 4 cyclic core reasons for poverty. Each of the four can lead to high levels of poverty on its own, let alone if several occurred together.

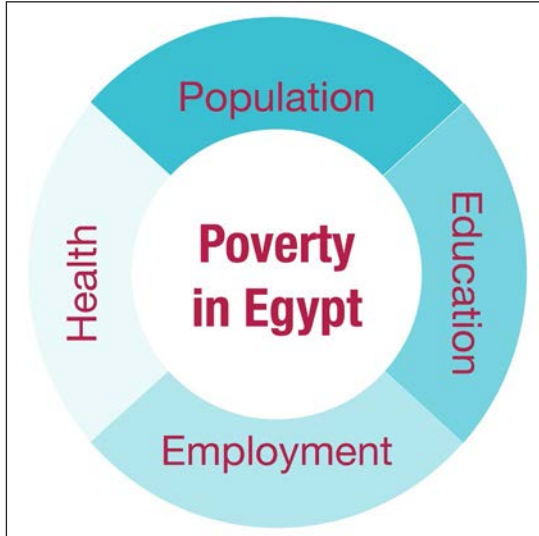


Figure 6. J. G. Attia, Poverty reasons in Egypt.

Despite their unemployment and poverty, most of these underprivileged people get married and have several children, because – according to Egyptian traditions – marriage is one of the noble conventions of life. So more people require houses to live in and, not being able to afford to buy new ones, they build informal houses. The physical conditions of informal living – such as inadequate water supply and sanitation, overcrowding and poorly constructed buildings – lead to health problems, with many people spending a large proportion of their wages on medicines and construction for instance. According to the Ministry of Planning, every eight months, one million people need housing thus leading to 53% of Cairo being informal. These unfortunate circumstances created a fortunate initiative by the more privileged educated people to help the poorer, therefore Cairo hosts around 250,000 NGOs that vary from active working groups in universities to smaller NGOs to large-scale organizations that try to develop Cairo (Why Informal Areas, 2018). As mentioned, after visiting diverse and seemingly successful NGOs, some approaches to solving these problems were observed:

- Classes for the illiterate take place on a weekly basis for people age 40 years and above.
- Enrichment classes for children are held to help with their school studies.
- As for health problems, regular inspection and blood donation campaigns take place.
- For unemployment, NGOs offer equity and loans to help families provide.

3.4. NGOs' Values

All the NGOs interviewed had valid intentions to help Egypt become a better place. They have different visions and values they follow. But they all evaluate their impact similarly. Since it is quite difficult to get accurate statistics of poverty levels, income, and population, the NGOs cannot set a realistic long-term strategy to minimize poverty for instance. They can only calculate what they have implemented and compare it to their and others' previous year's achievements. Since most of the NGOs mentioned in the field research approach the problems with on-ground research and databasing methods, rather than online research or competitor study research, the idea generation and brainstorming taking place internally is limited. When the projects of a charitable NGO are compared with those of a developmental one, it seems that the vision of the charitable is only focusing on encouraging volunteerism regardless of the output created. Therefore, the volunteers get carried away with the work and its motivating and emotionally fulfilling spirit and forget that they are not impacting the community as effectively as they can. We assumed the only way design intervenes in the NGO's process is through styling and marketing. Not surprisingly the intervention of design in the NGO's process is quite difficult and needs a reflective form of practice allowing NGO members and designers to fuse experience. The importance of design for NGOs is to give better understanding of people's interaction with their environment thus giving better solutions.

Therefore, in this study design is introduced to raise the quality bar of their business model through maintaining loyalty with the end user.

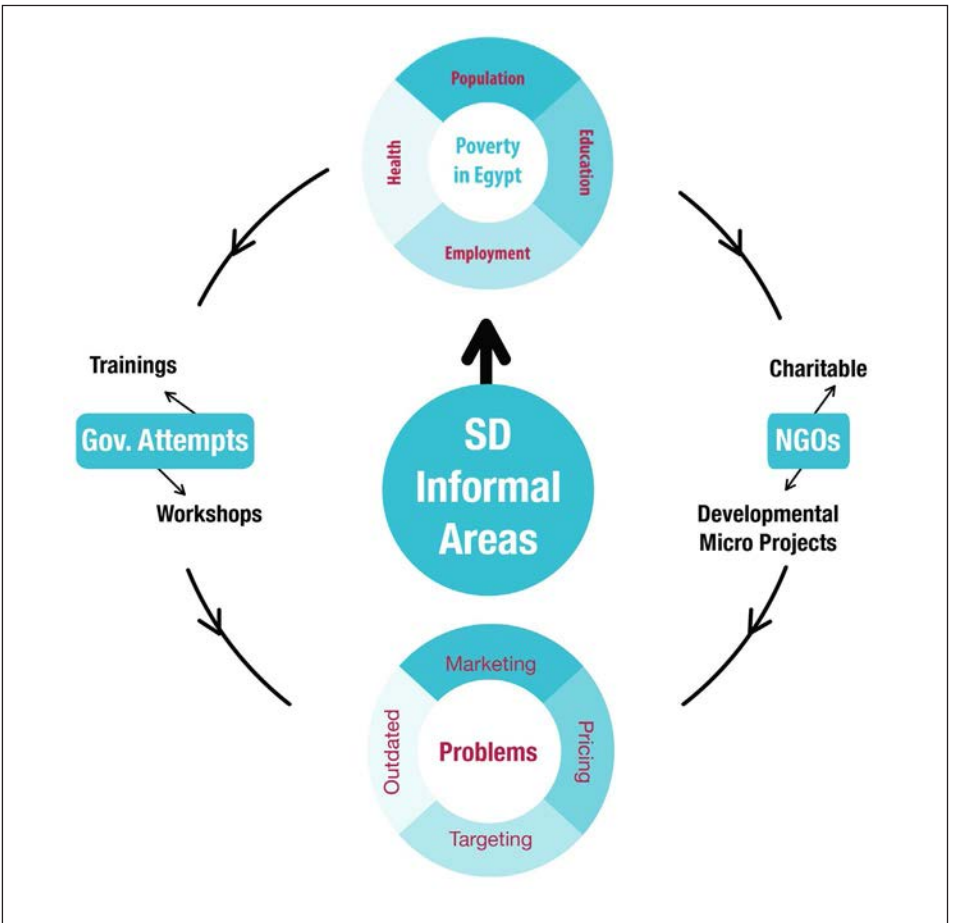


Figure 7. J. G. Attia, Analysis map of problem and solution for sustainable development of informal areas.

4. Design intervention and reflection

One of the NGOs established a sewing workshop in *Ein El-Seera* where informal area inhabitants are introduced to sewing and some traditional handcrafts. The workshop sells their products through seasonal bazaars. It is located in the informal area itself, thus allowing the women to maintain their traditions of working within their neighborhoods.

Due to this, it is hypothesized that unemployment can be treated through; creating a social enterprise inside the NGO, selling fashionable convenient clothing online, that is made by informal area inhabitants targeting Egyptian girls of “Class A”, age range from 20-25. The target finds it difficult to look fashionable while maintaining their cultural traditions. Accordingly – through participatory design – a sample from this target group was selected and guided to design their needs themselves and then have the informal area women sew the products. Finally, the products were sold through a branded online store. It was created to appeal to the aspiring needs of the target group, rather than branding the clothing as the products of an informal area economic development project. “Class A” veiled women are expected – according to Islam – to wear non-transparent and loose clothing, but they prefer shopping at international brand stores who provide a limited variety. When they do find an appropriate item, the risk of finding a number of their friends wearing the same item increases. Another situation takes place as well if the shopper buys a loose skirt for instance but the fabric is transparent, she is forced to find a tailor to add a layer underneath. The research and the implementation phases took almost one year, and during this year the process went around in loops several times.

4.1. Social change implications for design

This research analyses sustainable development in the informal areas of Cairo. People started creating NGOs with several approaches to solving the problems through volunteering and donating. These contributions were either categorized as charitable or developmental projects. Charitable projects can be

further subcategorized into various methods where people in informal areas receive money, medicine and other basic needs. Yet in developmental projects, NGOs focus more on the sustainability of the supportive action, so they do not give money or any basic needs directly, they provide what the individual or family needs indirectly, like education and a source of income like microcredit projects. These methods serve the pursuit of autonomy. Moreover, these micro-projects face problems as well on the long term. Only the NGOs that do regular follow-up notice that most individuals lack experience in planning, marketing and pricing even when given proper training.

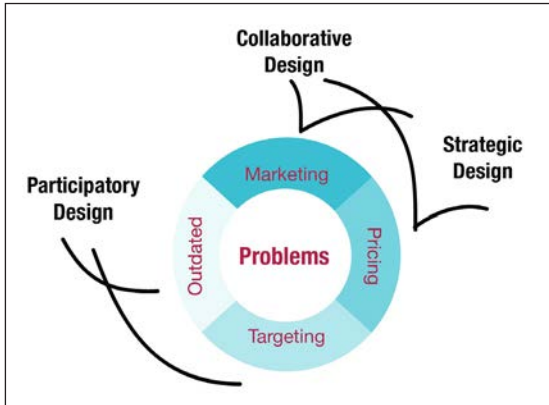


Figure 8. J. G. Attia, Design approaches to each problem.

There are four main problems with micro-projects applied in informal areas (Fig. 8). But they can be approached through design. Producing outdated products that have no specific target group can be developed through research and participatory design. In addition, the marketing and pricing can be better formulated through collaborative and strategic design with the NGO team.



Figure 9. J. G. Attia, Strategic concept map.

Under this context, participatory, collaborative and strategic design intervention took a role in empowering the intervention (Fig. 9). There were three main players; the NGO, the store, the informal area inhabitants and the end user. The flow between all parties is either two way or one way. First, the relation between the informal area women and the NGO is a two-way relationship, where the NGO selects the women, trains them and controls the quality of their products, the women deliver the products and get paid in return. Second, the NGO creates a team that works in the store that needs public relations, graphic, and product design, Social media management, marketing, customer service, and logistics. The relation of the NGO with the team is simple because it only acts as an initiator and supervisor of the team, but gives guidance whenever help is needed. Third, the store interacts with the end user, markets and delivers the products. Therefore, the end user and the women don't interact, but the revenue goes back into developing the informal area through the NGO.

There is no one generic model that could be applied to develop all informal areas, as each varies from poverty levels to habits and capabilities. Therefore, a specific model should be created for each area(s) with similar characteristics. For instance, in this research, all 4 informal areas have similar capabilities and habits yet different levels of poverty. The model created can be applied to all areas but with some variations. The actual result of this research is a plan of how to help four informal areas (*Batn Elbaara, ElMatareya, Mansheyet Naser, ElKonayesa*) that were tested during the research.

For the area of *Batn Elbaara*, a workshop was implemented in the area, equipped with all materials, which could be outsourced to factories that need manpower but lack hiring capabilities. The online store was the final step in the implementation. It was launched on Facebook, Instagram and a website. During the first three weeks, the Facebook page received 7000 likes, two shop partnerships, 20 orders, and two returns.

References

- Civic Freedom Monitor: Egypt*. (2018). Retrieved 21 September, 2018, from <http://www.icnl.org/research/monitor/egypt.html#intro>
- Franz, L. (2015). *Non-governmental Organizations in Post- Revolution Egypt. How advocacy organizations operate in the political and social context of Egypt*. (Master of Public Policy Willy Brandt School of Public Policy, University of Erfurt, 2015). Retrieved from <https://goo.gl/6xJFm9>
- Iskandar, L. (2015, October 6th). *NASS Graduation 2015*. Speech presented at NASS Graduation Ceremony in National Academy for Science and Skills, Egypt.
- Keitsch, M. (2012). Sustainable Design: A Brief Appraisal of its Main Concepts. *Sustainable Development*, 20(3), 180-188.
- OECD Statistics. (2018). Retrieved 14 November, 2015, from <https://stats.oecd.org/>
- Papanek, V. (1985). *Design for the real world*. London: Thames & Hudson.
- Robertson, J., & Sobol, D. (2011). The designer's paradox. *Zoontechnica: The Journal of Redirective Design*, (1).
- Why Informal Areas. The emergence of informal Cairo and current challenges for urban development*. (2018). Retrieved 21 September, 2018, from <http://egypt-urban.net/why-informal-areas/>

Industrial Waste Management in Egypt: a Sustainable Design System

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Keywords

Industrial Waste, Design System, Sustainability, Management, Design Thinking

Abstract

Every year, industrial companies in Egypt discard tons of materials during the production process. However, these unused materials can be utilized by small workshops to make new products. The study aims at investigating disposed materials at the industrial stage of a product life-cycle. The research hypothesizes that by applying design-thinking strategies, designers can establish a link between large industrial companies in Egypt and small workshops, thereby creating a sustainable waste management cycle. By implementing this cycle, companies, workshops, and consumers will benefit. The research collected information from all those involved in the production process: engineers, craftsmen, company managers, and users. Findings showed that the materials industrial companies get rid of can be exploited by small workshops. One example of this production chain, glass, was used to offer a practical solution to the industrial waste problem. The research outcome was a waste management system proposal applied using one of the wasted materials. The report shows that design and product quality need not be compromised for the creation of a sustainable product, emphasizing the importance of the designer's role in addressing this issue.

designs. By doing so, a waste management system is developed to locate designers between industrial companies and small workshops. By integrating this system it is hypothesized that industrial waste will be repurposed and the livelihoods of small workshop owners will improve, thereby creating sustainable development.

2. Sustainable Development

Sustainable development can only be established if economic, social and environmental sustainability are all considered in one way or another. Several researchers have suggested that without environmental sustainability and natural capital there would be no social sustainability. Goodland (1995) describes environmental sustainability as protecting source materials while making sure that sink materials are not surpassed (Goodland, 1995). To create social and economic sustainability, natural resources must first be sustained.

2.1. Source and Sink Capacities

Environmental sustainability focuses on maintaining the natural capacity as a provider of input (sources) and as waste outputs (sinks). Raw materials such as food, water, air, energy are categorized as sources whereas any wastes or outputs are defined as sinks (Goodland, 1995). Source capacities are used in staggering amounts with sink capacities created during production, following a linear process; materials > production > waste > products > use > waste again. Sustainability proposes the use of circular cycles to reduce material consumption, reuse waste materials, and recycle final discarded materials. To effectively sustain, both source and sink capac-

ities must be considered to find a use for the sinks in a way which will not affect the global life-support systems.

2.2. Product Life-cycle

There are four main stages in the Product Life Cycle (PLC) which are suggested to represent the biological life stages: “a seed is planted (introduction), it begins to sprout (growth), it shoots out leaves and puts down roots as it becomes an adult (maturity), after a long period as an adult the plant begins to shrink and dies out (decline)” (Product Life Cycle, 2010). Unlike natural objects that disintegrate into the environment, our products are thrown away after decline with no value or disintegration.

Life cycle thinking is a fundamental part in creating sustainable designs which focuses on obtaining raw materials, production, and “the distribution, use, recycling, and, finally, disposal of products” (Prosler, Rubik, Schmincke & Tischner, 2000).

2.3. System development using checklists

The relationship between materials and the environment is clear: one cannot logically be considered without the other. It is difficult to include both in the same project or design because designers are often limited by clients or companies. However, some clients will brief designers about a project aiming towards environmental friendliness and, accordingly, designers need to develop tools to include this in the design process. One technique, checklists, allows a designer to refer to a set of reminders such as “Can a recycled polymer be used? What material is more recyclable? Which produces less waste?” (Benjamin, Edirisinghe & Zwetsloot, 1994).

This enables designers to find new information and techniques for designs and allows designers inclusion in the industrial process to make environmental aspects of the design intuitive.

2.4. Integrating designers to create sustainable development

By reducing product sizes and material quantities during manufacturing, designers have the potential to change product concepts significantly. As indicated by Ashby and Johnson (2002), reducing materials can be achieved by using renewable materials, recycling, creating services instead of goods, and miniaturization (Ashby & Johnson, 2002).

To create successful sustainable products designers need to identify:

- Reusable energy sources
- Waste product recycling
- Wasteful consumption pattern alteration
- Excessive product packaging reduction
- New product aesthetics from recycled materials
- Technologies to reduce industrial waste production
- Better environmental impact statements for products
- Methods of recycling waste materials into new products (Margolin, 1998).

3. Materials and Resources

Technological mediums have increased the materials available to be used and although this allows designers more choice it also has drawbacks. Doordan explained that “materials are not just a ‘given’ to be incorporated into the designer’s calculation but are part of the design problem” (Doordan, 2003).

3.1. Industrial waste generated in Egypt and its relevance to other countries

Due to the rapid development of Egypt, the amount of waste produced is higher than a lot of other countries in the world. When compared to other countries such as the United States of America, where protocols were established in 1994 by the Resource Conservation and Recovery Act (RCRA) which created a recovery rate of 27% in 1995 and increased to 34.7% in 2011. In Austria, 69% of municipal waste was recycled through the Industrial Ecology Close Loop system (Ibrahim & Mohamed, 2016).

According to the Country Report on Solid Waste Management in Egypt (2013), 89.03 tons of solid waste were produced in 2012, 6 million of which is an industrial waste (Ministry of State for Environmental Affairs, 2013). The number of industrial enterprises in Egypt is approximately 64,997 with industrial sectors in 2011 representing 37.6% of Egypt's GDP (Gross Domestic Product). This sector "impacts environmental degradation in Egypt to a substantial extent" with a steady increase in the amount of industrial waste produced in Egypt over the years (Ministry of State for Environmental Affairs, 2013). Initiatives to tackle the issue such as "Green Growth" focus on developing green jobs and entrepreneurship to reduce environmental effects from unnecessary discarding of wastes (Sweep Net, 2014). Because of the high amount of industrial waste produced in Egypt annually as well as the growth rate of production and development it is a relevant country to consider as a case study.

3.2. Material and production resources in Egypt

Each society holds its own unique collection of materials, production techniques and resources as well as waste pro-

duced. A designer should focus first on a society's waste problems and material availability before solving world problems. Egypt, in particular, has both traditional and modern resources and techniques unique to the country.

3.2.1. Industrial companies

Interviews and observation with four industrial companies in Egypt were conducted to find out materials and processes used for production. Questions were divided into four categories: the transformation of raw materials, application of the materials, production technique(s), and recycling process (if any). The findings were categorized in the method shown in Fig. 2.







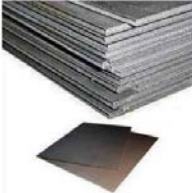


	Materials	Production	Products	Waste
Edu Fun	 <ul style="list-style-type: none"> - Raw wood: local and imported - Standard sizes 	 <ul style="list-style-type: none"> - Cut into required size and shape - 2 production lines: main line and "leftovers" line - Waste from the main line is used to create the other product line 	 <ul style="list-style-type: none"> - Main line: wooden furniture  <ul style="list-style-type: none"> - Smaller line: wooden toys 	 <ul style="list-style-type: none"> - Chunks of wood pieces - Reused to make smaller product line - Designers included to reuse materials - Sawdust not reused, sold to farmers 
Industrial Park (GUC)	 <ul style="list-style-type: none"> - Standard sized metal sheets 	 <ul style="list-style-type: none"> - Laser machine Vs. punching machine 	<ul style="list-style-type: none"> - Furnituing and metal orders requested - Projects 	 <ul style="list-style-type: none"> - Metal scraps - Unused, sold to workshops or used by students

Figure 2. Table showing some of the wasted materials studied in the research collected from the company, Edu Fun, and the Industrial Park at the German University in Cairo.

3.2.2. Small workshops

Materials used, production techniques followed, end products, and recycling involvements were identified in eight small workshops through the use of interviews and observations, as shown in Fig. 3 and 4.

3.3. Research findings and summary

Based on the research findings, it was established that some companies are unable to reuse wasted materials because it would produce different products than the ones they sell. Workshops use waste materials to make new products to profit and are involved in selling unneeded wasted materials. However, there were three main limitations to be addressed.









	Materials	Production	Products	Waste
Plastic	<ul style="list-style-type: none"> - Raw solid plastic 	 <ul style="list-style-type: none"> - Raw material milled into shape 	 <ul style="list-style-type: none"> - Plastic sheesha parts 	 <ul style="list-style-type: none"> - Plastic sawdust created - Disposed of, not reused
Aluminium sheets	 <ul style="list-style-type: none"> - Thin sheets - Bought from scraps from industrial companies 	 <ul style="list-style-type: none"> - Punching machine 	 <ul style="list-style-type: none"> - Small metal rings 	 <ul style="list-style-type: none"> - Scraps of metal with punched holes - Sold to large companies again
Raw Aluminium	 <ul style="list-style-type: none"> - Raw aluminium melted in a large oven 	 <ul style="list-style-type: none"> - Casting technique 	 <ul style="list-style-type: none"> - Parts for washing machines 	 <ul style="list-style-type: none"> - Negative parts from the casting process - Melted and reused

Figure 3. Table showing the wasted materials studied in the research observed at small workshops across Cairo.

	Materials	Production	Products	Waste
Wood	 <p>- Long chunks of wood</p>	 <p>- Milled into shape</p>	 <p>- Wooden sheesha parts</p>	 <p>- Broken pieces, sawdust - Sold to anyone who wants it</p>
Clay	 <p>- Raw clay</p>	 <p>- Tuntable forming - Burnt in oven afterwards</p>	 <p>- Natural clay pots</p>	 <p>- Broken parts - Not used again</p>
Sugar Cane	 <p>- Used sugar cane residue</p>	 <p>- Grinded</p>	 <p>- Grinded sugar cane</p>	 <p>- Sold to farmers, food for cattle</p>

Figure 4. More wasted materials observed during the research.

The workshops were:

1. Unable to retrieve materials from companies easily
2. Unable to visualize design possibilities using sink capacities
3. Producing traditionally designed products not marketed well, creating a loss of profit

Fig. 5 shows that the research found an absence of designer inclusion in the waste management process affecting the way materials are used and products are designed. Consumers indicated that there is a lack of awareness towards the value of the waste materials.

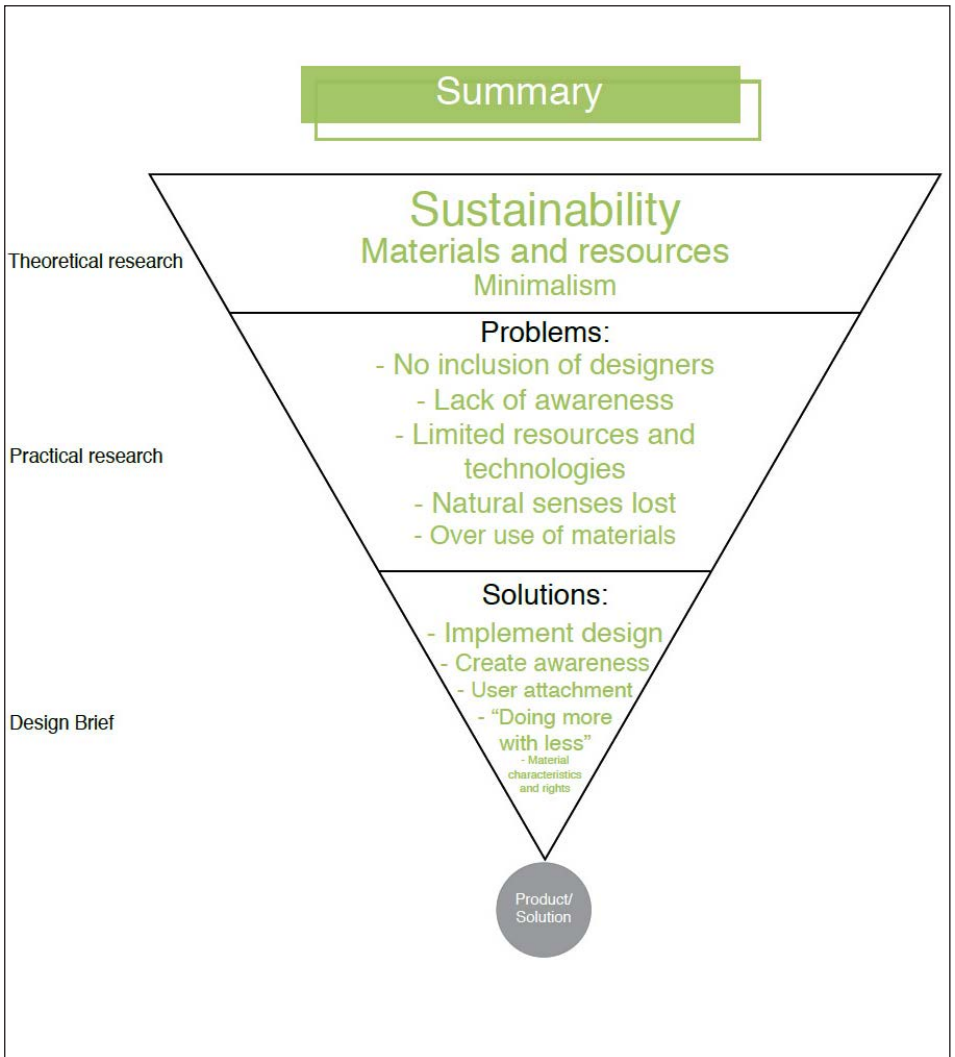


Figure 5. Research summary demonstrating the different levels to be considered to achieve a sustainable design solution.

4. Case study testing

A case study with one of the wasted materials was selected to test the waste management system. The system involved the following steps and incorporates the checklist method described previously:

1. Identifying wasted material from industrial companies
2. Identifying the needs of small workshops
3. Retrieving the industrial waste from the companies
4. Designing products using the retrieved materials
5. Providing the workshops with the materials and the designs
6. Producing new products using the retrieved materials

4.1. Case study process

The sink capacity used in the case study was glass, a material wasted in abundance with plenty of opportunities and needs from workshops. The main companies that waste glass in Egypt are car window companies; if a window has a glitch the complete windshield is broken into pieces and thrown away. Workshops required retrieval of the material in any quantity or shape to be melted and reused for other products sold to consumers. Once products are made, waste is still created that is thrown away and not used again. One of the broken windshields was retrieved and a new design was created for that material. The entire life-cycle of the glass material in Egypt is explained further in Fig. 6.

It was vital that the material be the hero of the design to market the idea to consumers. According to consumer research using a survey, it was found that an everyday product is best to create user awareness for the products they buy.

Glass



The glass process in Egypt is an interesting one with many growing needs and possibilities. Large companies use parts of sheets of glass and disregard any unwanted pieces. These unwanted pieces of glass are usually of high amounts. Small workshops need this material to work with and look for any glass to use.

waste

In each different process and using different types of glass there is always waste created.



waste

Figure 6. The life-cycle of the glass material in Egypt.

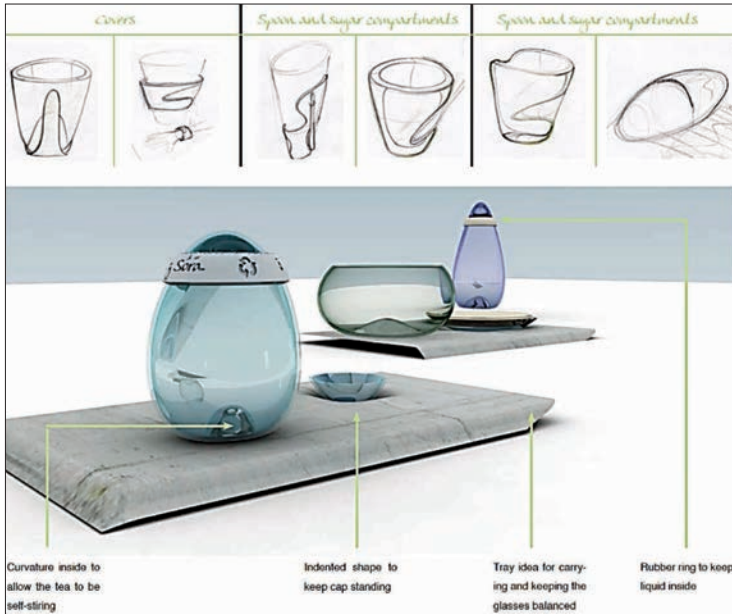


Figure 7. The design process followed by the researcher to develop a new tea set design for the Egyptian market.

The choice of product was a tea drinking set because different target groups buy it, yet it has no unique Egyptian design. Minimalism and doing more with less were considered when developing the simplistic shape, form, and function of the design. Fig. 7 shows part of the design process and a detailed explanation of the design where it considered functionality by providing a cap compartment used instead of a spoon to scoop sugar and cover the cups from external elements. The small bump at the bottom of the glass can be used to swirl the tea to mix the sugar, eliminating any need for a spoon. Emotionally, the new design incorporated a droplet shape to create a natural and unique feeling for the product, tying together with the natural material used to market the sustainable product.

After the design was created the retrieved material was taken to the workshops to communicate the required design outcome. Design thinking and communication were crucial to fulfilling the project requirements at this point in the case study. Two types of glass workshops were visited for this case study to test the reusing of the material and the quality of the final outcome, as shown in Fig. 8.

Fig. 9 shows the final design manufactured by the second workshop with the development of a packaging and branding to further market the products to customers.



Figure 8. Prototype testing of two different workshop techniques in Egypt.



Figure 9. Final product outcome developed using the wasted materials and taken to a small workshop demonstrated in the case study.

4.2. Case study findings and results

The case study showed that using the checklist to create a waste management system worked successfully.

By integrating a designer in the middle of the production process the following was achieved:

1. Reapplication of sink capacities that were previously disposed
2. Implementation of design thinking to create a new design lacking in the market
3. Increase in profit for workshop owners by attracting more consumers
4. Increase in awareness towards sustainable and recycled products

5. The industrial waste management system

The findings of the case study provided information needed to finalize the industrial waste management system in Egypt. Fig. 10 shows a visual plan to better communicate the process to interested designers. It shows the process starting from industrial companies using raw materials (source capacities).

The sink capacities are retrieved and contained by the designer who creates a design for the material given to workshops along with sinks. It strategically locates the designer in the middle between the industrial companies and the workshops to aid communication between them.

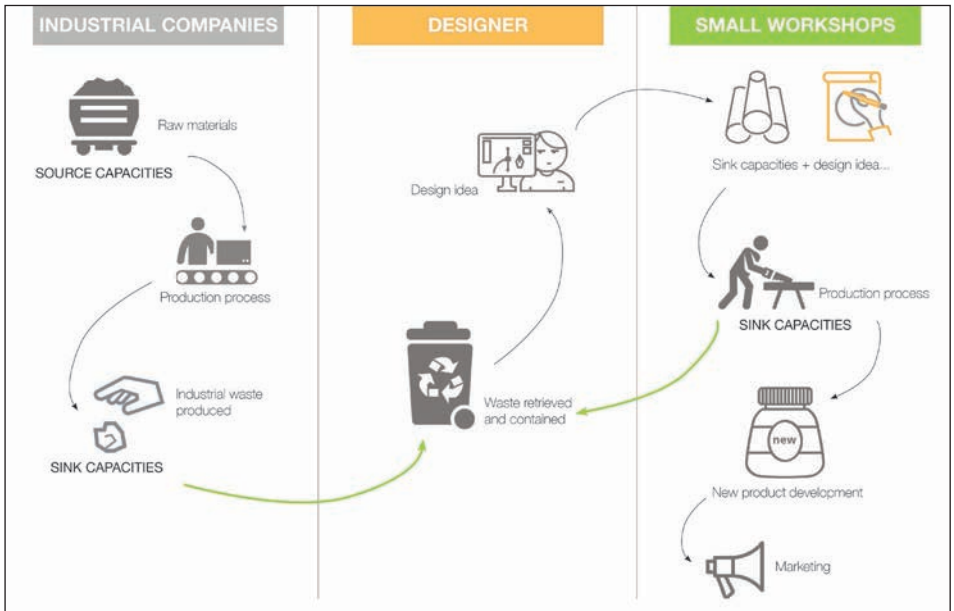


Figure 10. Waste management system showing the different steps to follow to achieve a sustainable design outcome using sink capacities.

6. Discussion

The waste management system collaborates and interacts with several different parties involved creating benefits for each of them. These benefits include:

1. **Industrial companies.** Unwanted materials are easily disposed of and acknowledgement is addressed during marketing.
2. **Workshops.** Provided with materials and designs required to produce products and will profit from selling new designs.
3. **Consumers.** Provided with unique designs catered to their specific needs that are locally produced and less expensive than imported products.

4. **General well-being of the country.** Sink capacities valued and used as source capacities. Waste will be reduced and reused to create valuable products.

Retrieval of the material was difficult at first as industrial companies required the building of trust with the designer to provide materials. Initially, workshops were reluctant to produce products using wasted materials as they were unaware of its necessity or value.

It is recommended to continue to test the system using different materials to produce different products. A wider variety of research on industrial companies is required to get a deeper understanding of other available materials. Formation of a multidisciplinary team dedicated to fulfilling the system is needed to include more people from different fields. Building on the proposed system to develop into a business or a non-profit organization that can sustain and build clusters throughout the country working on this initiative is recommended to integrate a waste management approach for managing sink capacities produced by small workshops, making them self-reliant.

7. Conclusion

Today, designers who intend to create environmental solutions not only need to find orientation among numerous options but must adapt their intuitive capacity, creativity, and work methods towards abstraction, immateriality, and multiplicity of parameters with which they must deal to work with matter.

Therefore, a sustainable designer's process changes the design's planning and processing to optimize product forms and sizes to achieve positive impacts on environmental protection.

This research investigated the challenges and opportunities for sustainable design in Egypt, integrating principles of minimalism and goes further to observe the local manufacturing processes. The research identified a crucial issue in Egypt and proposed a system that can achieve sustainable development. It considers environmental sustainability by reducing sink capacities that are disposed of and reusing them to make products that are missing in the Egyptian market. The system provides economic development for the country by providing less expensive, locally-made products for customers and increases the incomes of small workshops lacking in new design approaches in their product lines.

Finally, through marketing, awareness of sustainable products will increase the value placed on the materials we use for our everyday products.

References

- Ashby, M. & Johnson, K. (2002). *Materials and Design: The Art and Science of Material Selection in Product Design*. Oxford, UK: Elsevier.
- Benjamin, Y., Edirisinghe, M., & Zwetsloot, G. (Eds.). (1997). *New Materials for Environmental Design: A multidisciplinary report*. Luxembourg: Office for Official Publications of the European Committee.
- Doordan, D. P. (2003). On Materials. *Design Issues*, 19(4), 3-8.
- Goodland, R. (1995). The Concept of Environmental Sustainability. *Annual Review of Ecology and Systematics*, 16, 1-24.
- Ibrahim, M., Mohamed, N. (2016). Towards Sustainable Management of Solid Waste in Egypt. *Procedia Environmental Studies*, 34, 336-347.
- Margolin, V. (1998). Design for a Sustainable World. *Design Issues*, 14(2), 83-92.
- Product Life Cycle (PLC)*. (2010). Retrieved January 15th, 2019, from <http://www.marketingteacher.com/product-life-cycle-plc/>
- Prosler, M., Rubik, F., Schmincke, E., & Tischner, U. (Eds.). (2002). *How to do EcoDesign: A Guide for Environmentally and Economically Sound Design*. Frankfurt: Verlag Form.
- Sweep Net. (2014). *Country Report on the Solid Waste Management in Egypt*. Cairo, Egypt: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.
- Ministry of State for Environmental Affairs. (2013). *Annual Report for Solid Waste Management in Egypt*. Cairo, Egypt: Zaki, T., Kafafi, A. G., Mina, M. B. & Abd El-Halim, A. M.

Kaleidoscopic Presence. A Study of Presence, Listening and Movement in Lisbon

Camila Soares de Barros, Independent artist and researcher, Brazil

Keywords

BICHO, Dance, Creative Process, Lisbon, Kaleidoscopic Presence

Abstract

BICHO was a dance created *in, about, and with* a specific place in Lisbon called Beco do Jasmim. This article intends to share the creative and investigative process of BICHO, bringing to surface questions such as: what is the technical bodily element that I have been calling “kaleidoscopic presence”? How could I elaborate this dance without hierarchizing it over the space and the local residents? How can I listen the birth of states of dance in the street? And, is it able to show me the path to a dance creation?; Is this process a micropolitics gesture? Lastly, dancing BICHO pointed to the experience of the animal’s daze and the act of noticing myself in this state of dance. Dazing as a work procedure may be the next step of this embodied investigation.



Figure 1. Investigation process of BICHO at Beco do Jasmim. Photo: Clara Bevilaqua and Thiago Righi.

1. The artist is implicated

B I C H O

Há uma delicadeza em farejar o fluxo do corpo.

Eu tenho um bicho

Um bicho que habita o relevo das coisas

bicho de canto, de chão, de quinas, bicho que não quer ser visto

O corpo entornado,

relevo que engole a si próprio.

Dançar é lamber as feridas

cá coisas para não esquecer.

This article intends to assemble considerations of an artistic process that took place at Beco do Jasmim – Lisbon, called BICHO. It is important to state that this text is not the result of a bodily creative process, but a weaving of the many materials that emerged from the bodily investigation. The physicality of the act of writing may also promote a critic actualization of the current work in progress, in order to launch new questions to future developments.

Here, the author and the artist coincide in the same figure: in this process there was no hierarchy between dancing and writing - the information that emerged from the body could be also expressed (and processed) in words, in order to return to the moving body as new questions to be danced, and so on. These concomitant roles and materials are a decisive information to understand that BICHO wasn't a dance choreography, but a synesthetic and aesthetic investigation that lead to a specific ethical posture of the moving body.



Figures 2-3. Investigation process of BICHO at Beco do Jasmim. Photo: Clara Bevilaqua and Thiago Righi.



Figures 4-5. Investigation process of BICHO at Beco do Jasmim. Photo: Clara Bevilaqua and Thiago Righi.

The following describes the experience of the creative process of BICHO as a consequence of being in the international collective of artists in the formation course called *The Risk of Dancing at c.e.m – centro em movimento*, which is an investigation structure in the studies of body and movement dedicated in practicing art as a form of knowledge, located in the heart of Lisbon. During the work at the studio of *c.e.m*, I felt that my body demanded being in the city, at the street. At this point the body research embraced the possibility of developing a flow between investigating the body at the dance studio and investigating the state of dance at the street, more precisely at Beco do Jasmim, at Mouraria neighborhood.

This article intends to discuss some questions regarding to a dance that emerged from bodily states suggested by the relationship with a specific location. BICHO is a work that integrated Pedras'18 Festival's program in July 2018, and the current text comes from the windstorm that this dance work has brought to surface. It is from this bodily experience that I intend to share questions such as: What is the technical bodily element that I have been calling "*kaleidoscopic presence*"? How could I elaborate this dance without hierarchizing it over the space and the local residents? How can I listen the birth of states of dance in the street? And, is it able to show me the path to a dance creation? Is this process a micropolitics gesture? Is it possible to consider the investigation process in dance and movement as a work itself, open, porous, alive?

Bodily practices demand listening. Bodily practices with the city demand adding another layer of listening. Being with a location means to open the skin pores to listen and receive

what the city reveals us – the sounds, the words in the air, the flow of the neighbors’ daily routine, the movement of opening and closing the restaurants, the tourists passing through with their roller suitcases, the light incidence changing through the space as the day goes by, the humidity of the rocks in the ground, the peculiar landform that suggested another way of moving with that ground, the many view perspectives that the eyes could reach: all this elements shapes the body state when it is moving. For this “in state of dance” investigation there are some words that pops in my mind, such as *remain*, *listening*, *presence* and *move-with* (c.e.m, 2010). The methodology had to be created during the process – each step defined the next one – the body invites what kind of material needs to be brought to the process, whether it is a text, a sound, a moment of writing, or a moment of dancing. Listening the stages of dance development in interaction with the city’s movement was the key to elaborate the creative process step by step, in real time. Therefore, the process is considered a piece of art itself, alive, mutant.

Cai por terra a ideia da obra entregue ao público como a sacralização da perfeição. Tudo, a qualquer momento, é perfectível. A obra está sempre em estado de provável mutação, assim como há possíveis obras nas metamorfoses que os documentos preservam.
(Salles, 2006, p.26)

This artistic practice research was based on a tripod: (1) *Klauss Vianna Technique*¹; (2) the experience of being part

1. Klauss Vianna (1928-1992) was a Brazilian artist and researcher who started a relevant work

of *The Risk of Dancing at c.e.m* in Lisbon-PT, 2017-2018; (3) *Biopolitics* (Agamben, 2007, 2016; Barros, 2014, 2017). These three main bodily references, lead me to think the body movement as an opportunity to practice a profane politic action against the many power apparatuses that try to constrict the body, life and death (Barros, 2017). In addition, some of the main guidelines of the work BICHO were to defy the property over the body and to inhabit fissures (in the city, in the system). These guidelines are considered here as a micropolitics gestures, not by fighting against normativity, but by existing as a different, as an element that integrates the space – this dance is about co-existence and not about confrontation. Dancing BICHO was also a micropolitics practice.

2. Embody the Beco do Jasmim. The exercise of listening the space and its residents

For this entire process there was an effort in avoiding formulas or pre-designed procedures. The methodology was entirely based on the physicality of the meeting with Beco do Jasmim. There is a specificity of each meeting of the body with a location, in the words of c.e.m's staff:

A relação que cada um estabelece com o contexto é muito singular, não existe à partida uma fórmula a seguir ou um objetivo fixo a atingir, cada um se reserva o espaço de estar-com, de escutar atenta-

in dance and theater in Brazil. The bodily work started by him is nowadays placed in the scope of Somatics, and is known as *Klauss Vianna Technique*, named after his death by some of his apprentices who continued the research and developed the systematization of the knowledge. The technique was didactically systematized in three stages: Ludic Process, Vector Process, and Creative Process (Miller, 2007).

mente a textura daquilo e daquele que encontra, criar laços, aproximar-se, deixar que se aproxime, esperar, descobrir, integrar, ouvir histórias, detectar linhas de movimento ou de ausência dele.

É neste sentido que o acompanhamento dos profissionais do c.e.m se torna precioso, tanto no permanente tecer dos movimentos singulares no sentido da criação de um organismo multifacetado como no estabelecimento da matéria de criação/acção e evidenciar uma outra escala do mapa que cada indivíduo se implica.

Todos os processos de criação englobam momentos mais solitários e momentos em que a partilha de pontos de vista e questões emergentes da prática se torna incontornável. Sabemos que aquilo que nos propomos a fazer é pertinente a nível de desenvolvimento humano e da reoxigenação do espaço urbano, sabemos que trabalhamos com pessoas e que, indo ao encontro de quem elas são levando conosco quem somos, estamos a abrir espaços de afecto sensíveis e frágeis, mas também, a nosso ver, urgentes. (c.e.m., 2010, pp.6-7)

I've noticed that in this bodily investigation I was entering, the body revealed itself in a specific movement texture, combined with the unbalances and spine curves, caused by the daily coexistence with the wrinkled and rocky landform. The eyes of BICHO found the possibility of traveling through many planes and landscapes that the place offered: when I was in the top of the landform I could see places of the city that I couldn't reach with my eyes when I was dancing down the small hill at Beco do Jasmim. The reach of the eyes produced changes of the kind of movement in the entire body, changing the way that the creature BICHO was looking and interacting to the space, resulting in a vicious circle. Marie Bardet (2014) discusses the relationship between dance and

space supported by Schopenhauer's writings about architecture. She points that "the aesthetic experience of the gravity to go out of the opposition between heavy and light is what Schopenhauer observes in an art that, *a priori*, does not have to do with dance, the architectural art" (Bardet, 2014, p.59), and that some elements that architecture deals with, as well as in dance practices, are: weight, coherence, resistance, fluidity, the light reflection, among other elements (Bardet, 2014). Bardet brings Schopenhauer to discussion to point to a much more complex relationship of the moving body in a constant dialogue with the space information and the architecture that surrounds the dancer.

In a creative process is inevitable to invite and coexist with technical body memories in a creative process, so, working on BICHO allowed me to study the behavior of *Global Axis* and the *Bone Vectors*, both are topics of *Klauss Vianna Technique* (Miller, 2007) that were recruited in order to deal with the landform of the chosen location. Opening myself to this process lead me to re-elaborate the old statements of a dancing body and also meant updating what I understand as a bodily technique. It must be able to embrace questioning, updating, mashing, and reviewing movements.

The investigation path followed the scent of the body, and this is something revolutionary, when leads us to question the power apparatus of the established and rigid knowledge that may want to dictate and tell the body what to do before letting it be whatever it wants to be. The creative process of BICHO wasn't planned with predetermined procedures: as long as I

experienced the daily routine of being at Beco do Jasmim in state of dance, the body itself revealed the procedures to be tried out. The questions were made from the whole body to the whole body, and not from the mind to the rest of the body. This listening approach is decisive when one of the main concerns is to *move-with* the space, and not over it, resulting in a very specific experience that is not only aesthetic, but ethic and therefore, political.



Figures 6. Investigation process of BICHO at Beco do Jasmim: footwork in the landform. Photo: Thiago Righi.

With the side by side support of the teachers and colleagues of c.e.m, I could align the daily work routine at Beco do Jasmim, dedicating hours to just stay there, sitting, observing, writing and experimenting the flow of the words dancing on the paper, listening to the space, getting to know the routine

of the residents, to finally listen and follow the birth of the movement that one day would become a dance. The “choreography” was precisely the state of dance that this experience provided me. The practices with c.e.m were absolutely decisive to this and the future investigations.

3. Kaleidoscopic presence

In the field of bodily arts, *presence* is an important matter to be considered. The artists need to work out on their attention to be able to not only be aware of the context, but also be capable of communicating through their art (Barros, 2017; Viana & Carvalho, 2005).

What I have been elaborating in my practices is something that exceeds the act of “being present”. It is something that is more than the event of the present body. It’s a state of presence that transforms itself in every change of the body or of the environment. It is something such as a kaleidoscope, in which we may have a completely change of image even if a single small element changes its place inside the device – *one* can change the *whole*. Seeing the transformation of one image to another may invite other sensations, other understandings about what is been seen. The *kaleidoscopic presence* is about the same process: there is a specific tonus, a temperature, a smell, a desire, a speed, a distance that constellated in a certain way leads the body to move according to it. To each constellation of these elements there is a specific way of moving (or pausing) the body in space. I feel the *kaleidoscopic presence* as a nude presence, unpretentious, alert, honest – it is about the trust in letting myself to the flow, and assuming this

process as an art investigation that expands itself to the daily life practices. To do it so, a certain detachment from what I think I want to do is required, so I can be able to exercise the movement of listening. The birth of every movement must come from this subtle act of listening.

Presence is the first topic of the first part (Ludic Process) of *Klauss Vianna Technique*. And, not by chance, presence is the subject that accompanied me during all the way through my history in dance studies. This means that I consider presence as a resource that we may expand and develop, and for me this has the same importance as developing any virtuous physical skills.

Specially after being in touch with the dynamics of c.e.m (working with people and places) I started to investigate and to observe how *presence* is recruited as one of the most important foundation of an artist's practice. Presence is not only to master your acting, but it is mostly about listening, about being open to the space and to the other people around us. It is about building a non-hermetic life, and, therefore, a non-hermetic dance - and this was the most important thing I've learned about dancing BICHO at Beco do Jasmim. Not an easy way of working, but for sure a long-lasting experience that changed my whole conception of moving and dancing.

At the course called *The risk of dancing*, at c.e.m - centro em movimento, I was defied to inhabit/dance/be in places on the streets of Lisbon. During my bodily practices at the studio, I had already been listening a specific body state that was fre-

quent in my movements: a curved and tipped over body, wrinkled, wild, with a high tonus. It was during the orientation sessions with Mariana Lemos, Paula Petreca, Sofia Neuparth, Margarida Agostinho, Peter Michael Dietz, and Valentina Parravicini that I've found ways to experience this quality of movement at Beco do Jasmim.

In methodological terms, I would like to share some questions and guidelines that has emerged during the process of being in state of dance at Beco do Jasmim: entering into the routine of that space was, for me, such as asking for permission to become part of that space. Therefore, it was necessary to not impose myself neither to the place nor to the people, and that was an achievement of the daily insistence of the work. I've learned that the presence at the dance studio shouldn't be bigger or better than the presence on the streets, so I couldn't hierarchize the situations, the places and the actions - this means that being in a conversation with someone deserved the same attention as dancing, and also the same attention as writing, as cooking and singing, or even flowing through one situation to another. It is the same body. It seems important to me to learn how to travel from one situation to another without losing myself, without getting in the "automatic" mode and stop noticing the surroundings. It is also important to allow me to have no control over a situation. The deep listening that this presence requires is a listening by the pores, with the whole body, tridimensional - that is what I call a *kaleidoscopic presence*. Kaleidoscopic because when I am related to myself and the environment (360 degrees), in real time, I am able to produce new landscapes, new designs of movement,

new responses and proposals every moment. Being in state of kaleidoscopic presence means to be available and flexible, means to co-create with the ambiance.

4. A scent of what may be BICHO – Looking backwards, looking forward.

*Não é sobre o que faço, mas como faço e quem sou quando faço.
Quem vou sendo enquanto faço.* (Neuparth, 2010, p.13)²

Being at Beco do Jasmim with the conditions described above has produced a specific quality of relationship with people and space. BICHO was part of Beco do Jasmim and *vice versa* – inhabit that place was also inhabiting relationships that were beside the power apparatus, beside the normativity (I was dancing in a non-usual space for dance, but as the time passed by, I started to become part of that landscape, turning that place into a place of dance as much as a space for life). Therefore, the creative process also focused on creating other kinds of relationship between the dancing body and the residents: free relations, aired, unpretentious, in which we hardly exerted power over each other. The potency was exactly at the gathering, at the unpretentious side by side that interlaced us. The coexistence let us to know each other. If the Biopolitics points to the desire of control over life and death of the bodies, the profanation points to the potency of the body to slip out of the power apparatus shackles creating, this way, another existence

2. It is not about what I do, but how I do and who I am while I am doing. who I am being while I do.” (translated from Neuparth, 2010, p. 13)

(even if temporary). I understand profanation as a movement, as a way of living and being a moving body in the world. In this case of the work in Lisbon, the profanation might be considered as the act of inhabiting Beco do Jasmim and “letting me become Beco do Jasmim”. It also may embrace the power of the body that was sitting there “for nothing”, to dance, to listen all the potency that the meeting might have revealed. “The importance falls in the maintenance of the movement, in keeping alive and potent the chance to profane. Thus, we keep also alive the political potency of the subjects”³ in favor of a *micropolitics of the profane body* (Barros, 2017, p.97).

Beyond these micropolitics optic, dancing BICHO allowed me to experience the animal’s daze when BICHO faces itself as a life potency (Agamben, 2013). Lastly, this article opens the doors to a future discussion that this dancing creature brought about the dazing⁴ of this state of dance - for now, this is the expression that best communicates the feeling of this “in state of dance creature” - but this stage is still in course and put in words here would constrict the experience. In these seven months of investigation in Lisbon I could taste a bit of the animal’s life potency, embodied in the experience of BICHO. This is a bet and probably one of the next steps of the investigation that follows - much more as a question to be danced than a final response. The possibility of the dazing as an investigation procedure is what interests for the next experiences.

3. *A importância recai na manutenção do movimento, em manter viva e potente a chance de profanar. Dessa forma, mantemos vivo também o potencial político dos sujeitos.* (Barros, 2017, p. 97)

4. In Portuguese *aturdimento*.

Lastly, I believe that these questions and micropolitics practices of the body in the city are important matters to think not only the artistic creative process itself, but also the reverberation of this movement in the context that the process is included. Beco do Jasmim remained with this dance's trail on it, and BICHO persists in investigation, now with the territory of Beco do Jasmim embodied as a quality of movement – "(...) o movimento criativo é a convivência de mundos possíveis" (Salles, 2006, p.26).

Composing BICHO was never a goal to achieve, because it always showed itself as a consequence of the physicality that was created with the daily practice at the studio of c.e.m and at Beco do Jasmim. The body invents itself in the contact with others. This will always a matter to pursue.



Figures 7. Dancing BICHO at *Festival Pedras'18 - Em que mundo queremos viver?*, july-2018, Beco do Jasmim - Lisbon-PT. Photo: Clara Bevilaqua.

References

- Agamben, G. (2007). *Profanações* (S. J. Assmann, Trans.). São Paulo: Boitempo Editorial.
- Agamben, G. (2013). *O aberto: o homem e o animal* (P. Mendes, Trans.). 1. ed. Rio de Janeiro: Civilização Brasileira.
- Agamben, G. (2016). *O uso dos corpos (Homo Sacer IV,2)* (S. J. Assmann, Trans.). São Paulo: Boitempo Editorial.
- Barros, C. S. (2014). Profanações. Possíveis contra-dispositivos da Técnica Klauss Vianna. *Revista TKV 1*(1). Retrieved January 15th, 2019, from <https://www.revistatkv.art.br/camilasoaresmonografia>
- Barros, C. S. (2017) *A Técnica Klauss Vianna: por uma micropolítica do corpo profano*. (Dissertação de Mestrado em Educação. UNIFESP- Universidade Federal de São Paulo, 2017).
- Bardet, M. (2014) *A filosofia da dança: um encontro entre dança e filosofia*. (R. Schopke and M. Baladi, Trans.). São Paulo: Martins Fontes.
- c.e.m - centro em movimento (Org.). (2010) *Pessoas e Lugares*. Lisboa: Edições c.e.m – centro em movimento.
- Miller, J. (2007). *A escuta do corpo: sistematização da Técnica Klauss Vianna*. São Paulo: Summus.
- Neuparth, S. (2010). *Práticas para ver o invisível e guardar segredo*. Lisboa: Edições c.e.m – centro em movimento.
- Salles, C. A. (2006). *Gesto inacabado – Processo de criação artística*. 2^o Ed. São Paulo: FAPESP: Annablume.
- Vianna, K. & Carvalho, M. A. (2005). *A dança*. São Paulo: Summus Editorial.



CULTURAL HERITAGE ALERT

From Moving Image to Still Image: Feature Films as Reference for Preserving Architectural Heritage

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Keywords

Egyptian Feature Films, Historical Architecture, Cityscape, Alexandria, Downtown Cairo, Cairo, Egyptian Cinema, Khedival Cairo, Belle Epoque, Paris on the Nile, Cultural Heritage

Abstract

History is preserved by conserving the heritage of bygone periods and without documentation, future generations would not have any access to this past. It is imperative that records of historical events and/or accomplishments are retained and revisited. The history of Egypt is rich and varied. This paper centers on Egypt's Belle Époque (1930s and 1960s) and the vision that the Khedive Isma'il Pasha (19th and 20th century) had for developing Egypt. The Belle Époque or 'beautiful era of Egypt' to date has received relative attention. Periods such as Egypt's Pharaonic and Islamic eras are well-known and commonly debated as they were, and remain, continuously researched and documented. Documentation of the past generally occurs through the mediums of writing, engraving, painting, photography and cinematography. The motivation for this research study was to extract information from Egyptian feature films to aid as reference source for present and future studies. This research primarily focused on the metropolitan cities Cairo and Alexandria as they were the predominant centers for Egyptian cinema during the period 1930-1960. The latter cities were competing with the top ranked cities worldwide. However, with time they became out of the ranking

due to negligence, mega population and ignorance. Somehow, Cairo's downtown is still maintained comparing to Alexandria's architecture. However, the disregard for Alexandria's architectural heritage is sadly proliferating the loss of original building façades. The threat to Alexandria of losing its bygone charm and therefore the greater part of its identity, weighs heavy on the spirits of its inhabitants who wish to preserve their surrounds.

1. From moving images to still image: new sources of information

“Film is ... an important scientific tool that has opened up new areas of knowledge” (Monaco 2000, p. 63). New universes and parallel worlds can be explored through cinema. The cinematographic experience is an apt instrument for educating the public. Through a portrayal of humankind through the ages, it serves as an opulent visual record of the past, present and future. Films are contemporary story-telling tools that impact indefinitely. Whether they present in the form of documentaries or narratives, cinematographic genres deliver a broad overview of society and its unique cultural traits.

Through a combination of sound, text and visuals, movies constitute underestimated, detailed sources of information. Each of the mentioned recording mediums potentially represent a new realm of study which, in return, aids in an understanding of the past and present. Films can be a medium to export information and documenting nations, in particular in the case of Egypt with its long cinematic history, as per (Kahil, 2018) film footage can be used as a mode of ethnographic representation. Performing research to investigate film objects, consider aesthetics representations, identities and evaluating how the Egyptian culture and country are evolving and developing. An image, whether in still or moving format, reflects the world of fashion, behavioral science, architecture, furniture and urban design amongst others. Sound informs on the language and musical traditions of a specific community. Through promoting the importance of urban rebranding, recreating memory and restoration, cinematographic films

indorse urban historical spaces as products, which in return provides them with marketable value. These historical spaces could attract investment, new residents, retailing opportunities, whilst also supplementing cultural tourism. Moreover, films augment heritage archives through the preservation of documented architectural and building styles.

Moving images originated from photographs or still images. Besides functioning as a medium for self-expression, still images have always been valued for their ability to record, and record authentically. In the past photography was considered the most unbiased medium. However, photographers were always able and keen on manipulating the setting in order to add or remove elements deemed as either fitting or unfitting for the photograph subject matter. In a similar manner the moving image consists of a sequence of still images or photographs, which, through a sequence of frames played in a specific speed give an illusion of movement to the human eye providing the illusion of continuous movement or action. However, moving images provide the audience with a wider scope of information concerning place and time and, in most cases, not manipulated. A cinematographic camera moves by means of panning and tilting and these actions provide an extensive view to interpret. In contrast, the still image or photograph can be cropped and edited, and its understanding is not dependent on the involvement of a sequence. This allows the viewer to imagine and make his or her own deduction of time. Creating and exporting still images from moving images (films), through prolonging the time an image can be viewed and studied, encourages in-depth exploration of the bygone

period and ultimately, a deeper discussion regarding the construction of a rehabilitated public space. This, in return, may foster investment in heritage campaigns that are aimed at reviving historical districts.

2. Cases study

The Khedival Opera House, Cairo

Experienced theatre construction architects Pietro Avoscani (1816-1891) was consulted and invited to Egypt to design the first Khedival Royal Opera House (Volait 2001, p. 93). The Khedival Royal Opera House, which is located in the el-Az-bakeya district, was built on the occasion of the inauguration of the Suez Canal in 1869 as a small-scale replica of the renowned La Scala Opera House in Milan.



Figure 1. Khedival Opera House. Courtesy Cairo Opera House, Cairo, Egypt. Retrieved December 2017. <http://www.cairoopera.or/img-bank.php>.



Figure 2. Jean-Christophe Benoist Scala De Milan, Italy [Image] (2011). Milan, Italy. Retrieved December 2017. https://en.wikipedia.org/wiki/La_Scala#/media/File:Milan_-_Scala_-_Facade.jpg.

Currently, the area it is located on is known as Opera Square after the Cairo Fire 1952 which caused a partial destruction of the Khedival Royal Opera House. The Opera Square as well as equestrian statue of Ibrahim Pasha which is also located on the square, appeared in a number of cinematographic films between the 1930s and 1960s; among others in the films *Adl el Samaa* عدل السماء [*Heaven's Justice*] in 1948, in *Maaboudet el Gamahir* معبودة الجماهير [*The People's Diva*] in 1967, and in *Akhtar Ragol fel Alam* أخطر رجل في العالم [*Most Dangerous Man in the World*] also released in 1967. These movies and a small number of archived photographs are the only records which reference this area and how it looked during the past.



Figure 3. Khedival Opera House. Courtesy Akhtar Ragol Fel Alam Movie, 1967.



Figure 4. Khedival Opera House. Courtesy Maaboudet El Gamahir, 1967.



Figure 5. Khedival Opera House photo-merge of stills captured from *Dalila Movie*, 1956. Photo: Nora Nabil Kahil, 2018.

A number of the previously remarked upon buildings in Downtown Cairo had been demolished or burnt-down. Much of Cairo's architectural heritage disappeared. As per Wahba, Bahgat, & Saleh (n.d.) "Despite the legislation protecting these buildings from demolition and alterations, the public awareness to nineteenth and twentieth century architecture is still not fully formed and certainly maintenance laws were not respected." In 1971 the Khedival Opera House tragically burned to ground level and only some photographs and postcards survive to preserve the memory of its glorious past. The current Opera House located on Gezira Island in Zamalek in the vicinity of Downtown Cairo was inaugurated in 1988 by former Egyptian president Husni Mubarak twenty years after the original building was destroyed. The design and function of the current day Opera House differs entirely from that of its predecessor. The site of the original Khedival Opera House is now occupied by a multi-story car park. The history of the former Khedival Opera House is recalled in a display housed in a small room at the modern Opera House, and on the Opera House website.

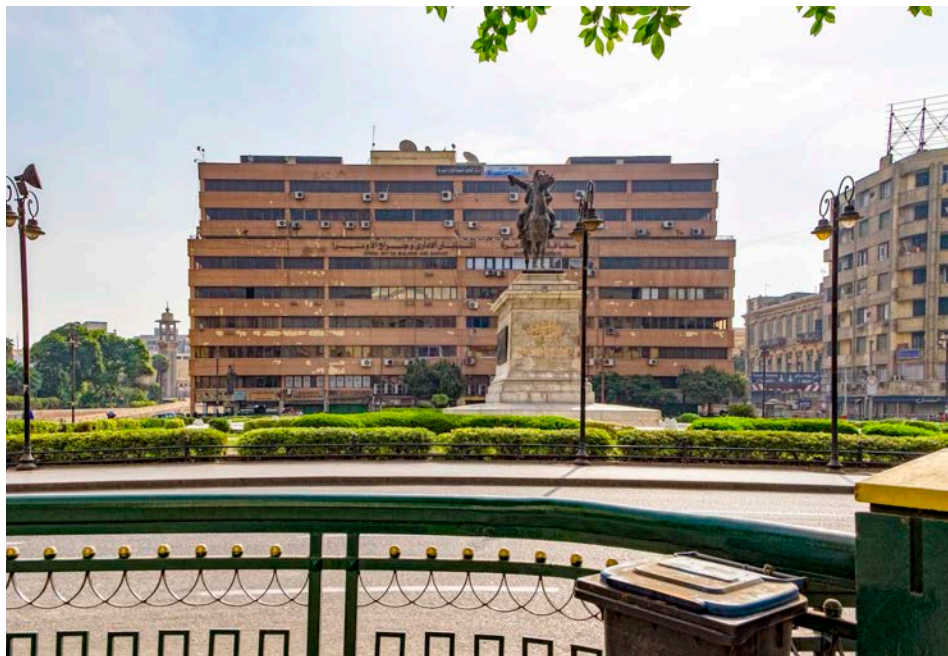


Figure 6. Current place of the former Khedival Opera House, Opera Square, 2017. Photo: Nora Nabil Kahil.

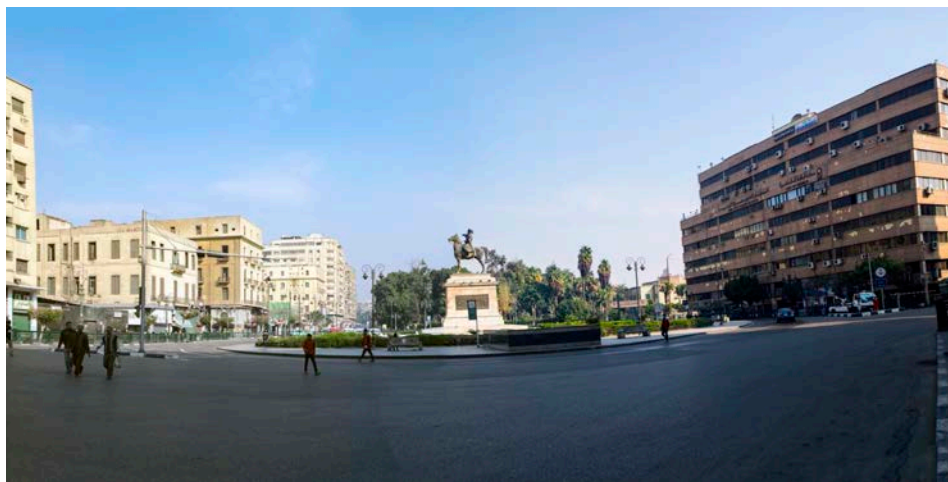


Figure 7. Current place of the former Khedival Opera House on the right side which became multi-story car park and the Historical Continental Hotel on the back-left side, Opera Square, 2018. Photo: Nora Nabil Kahil.

The Continental Savoy Hotel, Cairo

Downtown remained Cairo's business center as well as an elitist residential area and the societal focus of Cairo up until the 1950s. This area also featured the leading commercial establishments, amongst these The Shepherd, Semiramis and the Continental-Savoy hotels, a large number of distinguished department stores, international banks and art galleries.

The Continental (previously known as Savoy) Hotel was one of the last historical extravagant hotels to withstand modern development in the Downtown Cairo area. Sadly, this building was demolished in early-2018. It is currently not known whether the hotel will be rebuilt, or whether it will make way for fresh development.



Figure 8. The Continental-Savoy Hotel Advertising, Cairo 1922. Ahsan Nas. “Continental-Savoy Hotel” March 20, 2011.



Figure 9. The Continental-Savoy Hotel Main Entrance, Opera Square 1934, Egyptian Hotels, Ltd, Cairo. Courtesy Library of Congress.

Following figures, (Fig. 4 and Fig. 5), depict the Continental Savoy and the state the structure was in before being demolished in 2018. Re-photography is invaluable as it records historical buildings in their existing form. In addition, it highlights the unconsidered and hasty entry of commercial establishments into Cairo's downtown district. This phenomenon is illustrated by means of contrasting (Fig. 8) with (Fig. 11).

Downtown's main attractions and prime locations continued to present in films, either in the form of establishing shots, or through featuring in background scenery. Examples thereof are depicted in the following figures.



Figure 10. Main entrance of the Continental (Ex-Savoy) Hotel in 2017, before being demolished in 2018. Opera Square, Cairo. Photo: Nora Nabil Kahil, 2017.



Figure 11. The Continental (Ex-Savoy) Hotel in 2018 whilst in the process of being destroyed, Opera Square (Cairo), 2018. Photo: Nora Nabil Kahil.

By destroying many of its prominent national and international landmarks, the 1952 Cairo Fire unequivocally brought about the demise of the la Belle Époque era in Cairo Downtown.

3. Cinema and the City

Egyptian cinema started in 1895, shortly after the Brothers Lumière, the inventors of the moving images and manufacturers of photographic equipment who invented an early motion-picture camera and projector called the *Cinématographe*, had their first screening in Paris. In 1896 “(...) Only a few months after the first screening in Europe had taken place, films by the Brothers Lumière soon found their way to Egyptian audiences, in particular in Alexandria” mentioned Shafik (2016, p.10). Screenings took place in one of the halls of the Toussoun Bourse (the Café Zawani) in Alexandria, in Egypt.

In the years to follow, Alexandria became the birthplace of many Egyptian filmmakers. As Alexandria is located along the northern coast of Egypt which flanks the Mediterranean Sea, this port was the first point of entry into Egypt from Europe. The atmosphere in Alexandria at the time was conducive for establishing new industry, for attracting international investment, fostering innovation and creativity. Filmmakers who established in Alexandria, though referred to as ‘Alexandrians’, were predominantly of French, Italian and Greek decent. It was these filmmakers who further paved the way for investors to establish film production houses such as the Italian Cinematographic Society (SITCIA).



Figure 12. Still capture from the film *Ayam w Layali* (1955). The Continental (Ex-Savoy) Hotel, located on Opera Square in Cairo, is shown in the background.



Figure 13. Still capture from the film *Ehna el Talamza* (1959). The Continental (Ex-Savoy) Hotel is depicted in the background.



Figure 14. Stills captured from the film *Youm Men Omri*, 1961. The Continental (Ex-Savoy) Hotel is located to the right of the picture. Photo: Nora Nabil Kahil Photo-merge, 2018.



Figure 15. The Continental (ex-Savoy) Hotel during the demolishing process. Photo: Nora Nabil Kahil, 2018.

This Italian production company, was the first in Egypt to establish by means of an Egyptian-Italian partnership. It is also the first in Egypt to pioneer the production and release of a film, as opposed to simply creating the film footage.

Paralleling the above development, was the advent of Egypt's *La Belle Époque* in the 19th century. As elsewhere in the world, the *Belle Époque* in Egypt was characterized by a sense of renewed optimism, latter brought on by the introduction of technological advancement, scientific discovery, economic stability and renewed interest in Egypt. At the time, peace and prosperity allowed for the arts and sciences to flourish and prevail across the Egyptian landscape. Myntti (2014) stated "Cairo, 'Mother of the World': its vividly diverse neighborhoods and building styles reveal its cosmopolitan energy and reflect the myriad of economic, political, and cultural forces that have shaped the city over the centuries." This sums up the Khedive (Viceroy) Isma'il Pasha's vision for developing and modernizing Egypt. Isma'il Pasha (1830-1895), known as Isma'il the Magnificent was the Khedive of Egypt and Sudan from 1863 to 1879. During his reign, he heavily invested in industrial and economic growth, urbanization, and the expansion of the country's boundaries in Africa. Many noteworthy artworks and monuments originated during this period can be observed in Egyptian cities today. Of these, Cairo and Alexandria take center stage.

Relevant to the discussion presented in this paper is the commissioning of the ruling Khedive Khedive Isma'il' *Paris on the Nile* plan for Downtown Cairo. Latter was done with the guid-

ance of the Parisian city planner and architect Baron Georges-Eugène Haussmann (Rodenbeck, 2003). Baron Hausmann and a number of prominent European continued to design buildings which, collectively, established a new and regenerated Downtown district. These architects, who were largely French, Italian, British, German, Austro-Hungarian and Syro-Lebanese, also contributed to the architecture of greater Cairo, Alexandria, and Port Said as per Kahil (2018, p. 4).

The 1930s is generally considered the Golden Era of Egyptian cinema; Cairo's *Belle Époque* (Boraie, 2008). Bryant remarks as follows: "Through the 1920s until the mid-1930s, filmmaking was driven by the creative efforts (and financial investments) of individuals there was no Egyptian equivalent to the Hollywood studio system." (Bryant 2016, pp. 130-131). In the 1930s, a total of ninety-six films were produced in Egypt by both Egyptian and foreign film producers (Kassem 2008). The films produced during this period are indicative of a cosmopolitan society comprising French, Greek, Italian and British communities. Well-known Egyptian producers included amongst other Mohamed Bayoumi (1894-1963), Ahmed Galal (1897-1947), Naguib El Rihani (1889-1949) and Bahiga Hafez (1901-1983). Held in high esteem were Italian producers Alvisè Orfanelli (1902-1961) and Togo Mizrahi (1901-1986). As he established his own film studio and production company Shirkat el-Aflam el-Misriyya شركة الأفلام المصرية [Egyptian Films Company] in 1929, Mizrahi was considered one of the most influential persons in Egyptian cinema production at the time. Mizrahi's company also produced most of the movies during this period and as such he is also deemed one of the founding fathers of Alexandrian cine-

ma. Mizrahi's films aptly reflected the values of Egyptian society and a broader Arabic audience. Many Egyptian filmmakers paid homage to their place of birth, Alexandria. Youssef Chahine (1926-2008) produced an entire series of films dedicated to the city. This series comprised the films "Alexandria... Why?" (1979), "Alexandria Again and Forever" (1990), and "Alexandria, New York" (2004). The reason for Alexandria featuring in so many Egyptian films at the start of the 1930s, is its location and the fact that it acted as the main port of entry at the time. Cairo, however, presented more often in the 1940s due to an apparent shift of the film industry to the capital during this time, Tab. 1 presents data demonstrative of the latter.

Years	Total Films Skimmed	Alexandria	Giza	Downtown	Heliopolis
1930	18	4	0	1	0
1940	55	2	0	5	1
1950	67	4	4	18	6
1960	151	25	15	33	16
TOTAL	291	25	19	57	23

Table 1. Count of films and scenes featuring Alexandria, Giza, Downtown and Heliopolis spanning the period 1930 to 1960. Kahil (2018, p.91).

It is not only in Cairo and Alexandria, but also in cities such as Port Said and Isma'lia that architectural masterpieces from the past can be found. These buildings date from the reign of the Khedive Isma'il Pasha and Egypt's *Belle Époque*. However, due to negligent municipal law enforcement, a general disregard for the aesthetics, and ignorance regarding cultural preservation and historical significance, most of these structures have fallen

into disarray. Buildings are rapidly deteriorating and in some instances they, despite the fact that they should be considered monuments, are simply demolished to make way for modern developments. There is a notable urgency to revisit and recover information from the past, and to use this as historically-correct reference material. These resources could support the efforts of heritage initiatives intent on restoring and preserving the charm of these architectural masterpieces and the cities they occupy.

4. Conclusion

Historical film footage can provide unique material from which to reference and extract information. As a valid and original resource that presents a wealth of previously unexplored information, this material can greatly enhance studies reliant on historical data. What we learn from historical films should not be restricted to the act of studying film posters, dialogue and familiarizing ourselves with its cast. Cinematographic films capture layers of information that can be studied, intelligently analyzed and assimilated to act as fresh sources of information. The differing genres in film provide us with a broader, more “three-dimensional” perspective of the past. From these layers we make deductions regarding human behavior, the fashion trend of the time, a noteworthy event, interior- and architectural design – to mention only a few.

Through generating still images from moving images, original building facades, details of current architectural styles and urban design tendencies, are emphasized. For the purpose of this paper, said method was applied and referenced in a case study of the historical Khedival Opera House and the (now

demolished) Continental (ex-Savoy) Hotel which was located in Downtown Cairo. The added method of re-photography supplemented the research outcomes by means of providing not only a visual record for comparing the “then” and “now”, but by presenting a current-day document with which to contrast historical documents such as photographs, artworks and postcards. Film still images that were not subjected to “unorthodox” methods of photo-rendering, provided solid evidence of historical Downtown Cairo architectural styles and designs. This material will prove irreplaceable in the event of architectural restoration and renovation, and for the purpose of maintaining the integrity of such (original) design. These visuals in the end contribute to the restoration and/or preservation of our cultural history. Egyptian feature films, besides providing us with a glimpse into history, mainly from a uniquely architectural viewpoint, present us with the opportunity to learn about the development of Egyptian society and culture during a period of time now gone by. Moreover, this method of extracting and representing information can be applied universally and in any country with a past of producing feature films.

Cultural heritage can and should be preserved for generations that follow. The *Belle Époque*'s Cinematography from 1930's to 1960's is a means to achieve the latter. At least this article is an attempt by the authors to rediscover and revive historical Egypt, specifically as it relates to Egypt's *Belle Époque* period. It is the authors' prerogative to make their findings accessible to those who wish to undertake a similar study, have similar interests, or are able to benefit from it in a positive manner.

References

- Boraie, S. (2008). *The golden years of Egyptian film: Cinema Cairo, 1936-1967*. Cairo: American U. Cairo.
- Bryant, R. (2016). *Post-Ottoman coexistence sharing space in the shadow of conflict*. New York, NY: Berghahn.
- Cinematographers: Alvis Orfanelli. (n.d.). Retrieved from https://www.bibalex.org/alexcinema/cinematographers/Alvis_Orfanelli.html
- Johnston, S., & Sunbul, S. (2006). *Egyptian palaces and villas, 1808-1960*. Cairo: American University in Cairo Press.
- Kassem, M. (2008). *العربي والعالم مصر في العشرين القرن في الافلام دليل*. Cairo: Madbouly Library.
- Kahil, N. N. (2018). *Egyptian Feature Films as Reference for Cairo's Historical Metropolis: A Case Study Downtown Cairo* (Master thesis, German University in Cairo).
- Monaco, J. (2000). *How to Read A Film: The World of Movies, Media, Multimedia: Language, History, Theory* (3rd ed.)
- Myntti, C. (2014). *Paris along the Nile: Architecture in Cairo from the Belle époque*. Cairo: American University in Cairo Press.
- Shafik, V. (2016). *Arab Cinema: History and Cultural Identity*. Cairo: American University in Cairo Press.
- Rodenbeck, M. (2003). *Cairo: The city victorious*. Cairo: American University in Cairo Press.
- Volait, M. (2001). *Le Caire-Alexandrie: Architectures européennes, 1850-1950*. Publication Ifao.
- Wahba, M., Bahgat, R., & Saleh, F. (n.d.). *Cairo's Architectural Heritage: The Downtown Area*. Retrieved from http://www.archimuse.com/publishing/ichim01_vol1/wahba.pdf

Augmented Reality Implementation in Cultural Heritage for Emotional Experiences. The Case of CHEESE

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Abstract

The paper illustrates, from the Design point of view, a research project entitled CHEESE. (Cultural Heritage Emotional Experience See-through Eyewear), funded by MIUR in the context of PON projects, and its subsequent developments. The project was aimed to investigate the challenges and opportunities proposed by Augmented Reality (AR) and Mixed Reality (MR) technologies in the field of cultural heritage. The research was conducted by an interdisciplinary team, made up of engineers, computing scientists, product designers, graphic designers, experience designers, art historians and museum curators. The paper aims to define, in particular, the role of design in interpreting the potential enhancement offered to the context of the Mediterranean cultural heritage by a new technological and experiential scenario that is still being defined. Design, with its tools for trends and future scenarios prefiguration, is able to investigate users needs, attitudes and expressive languages in a hunter-gatherer perspective. Moreover, in the fields of museography its capability to control both the material and immaterial factors of innovation aims this discipline to define dense and rich exhibition experiences. Based on these cultural skills, in the CHEESE project design has been tasked with integrating the different actors and phases, keeping in balance the humanistic components with the scientific-technological ones.

1. Introduction

The CHEESE project was born with the intention of using Augmented Reality (Bekele et al., 2018) and Mixed Reality Technologies (Ioannides, Magnenat & Papagiannakis, 2017) with an empathic and emotional approach to improve cultural heritage in terms of audience development and enhancement through the integration of Italian design and innovative technologies. In Italy and in many Mediterranean countries such as Turkey, Greece and Spain cultural heritage is immense and has enormous potential for economic, cultural and social development. This attributes, however, does not correspond to an adequate fruition of the very numerous and precious goods located in our territories, equally distributed in relation to their cultural value. For example, in southern regions of Italy there are frequent phenomena of concentration of visitors, both tourists and locals, on a few large museum attractors, while many sites of very high cultural value tend to be neglected.

For most of the cultural sites and museums, therefore, there is a problem of audience development that needs new strategies and tools for communicating and exposing these values. Strategies that must be effective, attractive, flexible and adaptable for different categories of users, capable to use innovative expressive languages coherent with contemporary lifestyles.

Through the new technologies of Augmented and Mixed Reality, museums and cultural sites can meet the visual and communicative canons of digital, cinema, video games, comics, app and therefore the tastes of young people and of many people who do not usually visit museums.

The project deals with the emerging theme of digital fruition for Cultural Heritage, which is gaining increasing interest in the scientific community and also for cultural operators and museums.

In Italy there are several research institutions, companies and networks that specifically study and analyse the challenges and opportunities that digital innovation brings to the broad field of cultural heritage through research, formative and educational activities. Among these the *Observatory for Digital Innovation in Heritage & Culture* (SoM, Politecnico di Milano) and the *Network Digital Cultural Heritage, Arts and Humanities* (DICULTHER) emerge.

Structures like these in Italy and in the world have been founded, with the aim of building and consolidating a culture of digital technological innovation on issues related to conservation, enhancement and promotion of Cultural Heritage.

The CHEESE project referred to international case studies and research applications of AR and MR in cultural heritage with particular attention to understand the expressive and technical opportunities to use these tools to tell stories that can help to consolidate Mediterranean identity and peculiarities interpreted as cultural cohesion catalysts and as socio-economic development activators.

During the project development emerged that these technologies can help to fascinate the new generations, that are more and more difficult to attract and engage and less inclined to focus their attention and interest on cultural issues, especially if they are offered in a traditional way (Pedersen, Gale, Mirza-Babaei & Reid, 2017).

The AR experiences, and even more the MR ones, can be conceived, instead, as a kind of enchantment that allow people to travel in the time and in the space, to touch virtually, look beyond things, listen to the artifact story, feel empathy for the protagonists' emotions, even play and socialize with other users. So that they make possible things that are generally not allowed in museums and cultural sites. The feeling of freedom and the opportunity to expand the experience, sometimes even towards transgression, generates in the users, especially in the younger, intense emotions like surprise and astonishment (Dey, Billinghamurst, Lindeman & Swan 2018).

2. Augmented and Mixed Reality for cultural heritage narratives

Augmented Reality (AR) is a digital technology in which the user, looking at a graphic sign (target) or approaching an activating element like beacon or RFID, with an opaque device (tablet, smartphone, viewer) or transparent (glasses), can see digital content like 3D models, digital animations, drawings, texts, documents, movies, and animations overlapping the real context. AR can be integrated with sound effects and can have different forms of control, from the conventional touch, to voice control.

Research projects and commercial applications on AR applications in the field of cultural heritage are nowadays very numerous. Among the first projects in the field of archeology there is *Archeoguide*, a mobile system installed at Greece's Olympia archaeological sites that proposed, through a Head Mounted Display (HMD), a virtual reconstructions of the temples overlaid on the real ruins (Gleue & Dähne, 2001; Vlahakis et al., 2002).

Many museums worldwide are equipped with dedicated Augmented Reality apps that can be downloaded to visitors' devices such as smartphones or tablets.

The Cleveland Museum of Art's proposes the *ArtLens* app, that contains interpretive content for every work of art in its collection. Real-time updates ensure users to have access to the most accurate information available.

In some AR projects, users activate digital content by manipulating real objects that act as markers, as in the case of *AR-Cube* in which holding a cube in hand and rotating it, it is possible to view 3D models of archaeological artifacts through a screen, in high resolution, from different points of view. Each face of the cube loads a different view of the 3D model on a scale of 1:1 (Jiménez Fernández-Palacios, Nex, Rizzi& Remondino, 2015). Another examples of dedicated handheld AR device with capacitive touch-screen display is *Who Do You Think You Really Are?* developed by *IVC Media Ltd and Melford* for the *Natural History Museum* in London that combines animated 3D models of extinct creatures according to palaeontology with live video from the webcam (Debenham, Thomas, & Trout, 2011).

The term Mixed Reality (MR) was introduced by Paul Milgram and Fumio Kishino (1994) as an intermediate area of technologies that involve the merging of real and virtual worlds, when these technologies were still at a very embryonic level. Today, the devices are finally ready and performant. For Mixed Reality or Holographic Reality we mean a new

approach that differs from Augmented Reality because the visual digital contents are displayed in form of three-dimensional holograms integrating and merging with the real context, which remains perfectly visible. The MR headsets are, in fact, always transparent (see through) because they are based on the vision of natural reality.

The most performant MR device is *HoloLens*, wearable headset produced by Microsoft. Using it is possible to three-dimensionally scan the space in which the experience takes place must so that the holograms can be placed in a precise position. If the design of experience includes it, users could have also the opportunity to digitally manipulating the holograms moving, enlarging or reducing them, passing through and turning around, just as if they were real objects. The potential for interaction and involvement of MR is very high, especially when integrated with natural sounds and commands.

In Kyoto, since February 2018, is available a Mixed Reality experience to visitors of *Kennin-ji*, the oldest Zen temple in Japan, developed in partnership with the *Kyoto National Museum* and *Hakuhodo-VR*. The 10-minute experience proposes a dynamic, holographic narrative that shows to the temple visitors the Tawaraya Sotatsu's vision for his sacred artwork *The Folding Screen of Fujin and Raijin*, painted over 400 years ago.

The *HoloMuse* project, an application for the *HoloLens* developed at the *Wellesley's Human Computer Interaction Laboratory*, to make art and archeology more accessible and tangible to students, and learners in general, outside of the traditional

museum actively engaging them with artifacts from different museum collections to facilitate learning (Pollalis, Fahnbulleh, Tynes & Shaer, 2017).

A team of Delft University of Science and Technology led by Annelies Maltha, is working to use *HoloLens* experience to expand the number of *Dutch National Museum of Antiquities* exhibits they are able to show to the public.

Mixed Reality is an effective tool, not only for the narration of historical artifacts, but also for experimentations in galleries and museums of contemporary art.

In New York in 2017 was available to the public at *The Armory Show* the exhibition *The Concrete Storm*, an immersive mixed reality experience based on using *HoloLens* headsets to digitally project a virtual art catalog.

Bitter & Sweet is a project that opens a different area of action, defined by the authors as Mixed Reality but that does not use holographic headsets, and combines AR software with iOS handheld devices, onsite media projection, installations, old films fragments, sound traces and images, onto surfaces and objects at the Royal Cast collection of the *Copenhagen National Gallery* housed in the *West India Warehouse*. The project is aimed to use these tools integrated by design for revealing history of slavery and their legacies in Copenhagen (Engberg, Kozel & Odumosu, 2017).

Also in the field of design teaching initiatives and courses to implement the learning of AR and MR experiences are in-

creasing. At *Rensselaer Polytechnic Institute* in Troy, NY, in the *AR Design for Cultural Heritage and Mixed Reality Experience Design* courses held by Rebecca Rouse design students work in interdisciplinary teams to develop functioning prototype mobile Augmented Reality (AR) and Mixed Reality (MR) applications for cultural heritage collaborating with different museums as the *Museum of Science and Innovation (MiSci)* in Schenectady (Rouse & Barba, 2017; Rouse, Engberg, Jafari-Naimi & Bolter, 2015).

3. Design of an empathic and emotional museum experience

The CHEESE project was oriented to experimenting Augmented and Mixed Reality approaches in the cultural heritage of southern Italy, with particular attention to the possibility of using typically human Mediterranean attitudes such as empathy (Fogu, 2018) and emotional communication in fruitive experiences. The project defined new approaches and experiential models validated through a museum experience that was developed for a specific site at the museum of Capodimonte in Naples, with two different devices (*Epson Moverio* for the AR experience and *Microsoft HoloLens* for the MR experience), but was designed to be exported in different sites and platforms.

The development of Augmented and Mixed Reality experiences for cultural heritage necessarily requires an interdisciplinary research team. The participation of different discipline, including design, humanities and technologies, is the only possible way to face the complexity involved in the implementation of these advanced technologies that will generate rad-

ical revolutions in such a delicate and conservative sector as museology. So that the design of experiences could merge the museum cultural constraints, the technological opportunities as well as the users' attitudes and needs (He, Wu & Li, 2018).

The CHEESE project involved experts in history of art, design for communication, design of experience, product design, engineering, video games and digital experiences at the University of Campania "Luigi Vanvitelli" research unit and experts in informatics, human-computer interaction, applied linguistics, and optical technologies at HUB, CNR and Federico II research units. An integrated system of specialized skills, devices and methodologies around the topic of Augmented and Mixed Reality for cultural heritage was generated. The necessity to coordinate and link such distant competences required common objectives and languages and a great commitment of all the participants who, using both scientific and relational skills, managed to cooperate in a profitable and mutual way, respecting the cultural differences and specificities. The balanced integration between technological and humanistic competences was an important added value for the CHEESE project, compared to other similar projects that apply digital technologies to cultural heritage with a preferential point of view (technological or) humanistic.

In the prototype exhibit experience a human centred design approach was applied (Giacomin, 2014). The first phase of the project started with a survey on users expressed and latent needs applying ethnographic methods (contextual inquiry; users and guides interviews) which allow to both observe and

talk to people (Holtzblatt & Jones, 1993; Holtzblatt, Wendell & Wood, 2004; Sanders, 2003). For two successive Sundays, the days of greatest attendance at the museum, design researchers in collaboration with art history researchers observed and engaged users of the *Ottocento Privato* section to gather information about their permanence, typical users behaviors, activities, interpersonal relationships, questions to the guides, emotional expressions and natural interaction with the exhibition in presence of a guide or not. This phase included also an analysis of the emotional reactions to specific stories or informations related to the museum artifacts. The user observation was integrated with a context survey (Visser, Stappers, Van der Lugt & Sanders, 2005).

The results of these surveys made it possible to establish the design direction based on the choice to enhance the personal, human and private character of the artworks; the design guidelines; the different qualities of the experiences; the contents to communicate; and the hierarchy among the augmented artifacts, highlighting those that aroused more interest and curiosity in users.

The project was developed using different design tools like sketching, mockups, storyboarding, system maps, prototyping of digital contents (audio, video, pictures, texts, 3d models, digital animations).

The *Ottocento Privato* section is located on the first floor of the museum building and exposes visitors to the history of Capodimonte as a court residence. In the Nineteenth Century

the spaces occupied by the section were private apartments of the Borbone family, while subsequently with the arrival of the Savoia they became rooms destined for the cadet branch of the dukes of Aosta, until the Republic advent. The section is an integral part of the museum itinerary, but aims to tell the more intimate and private dimension aristocratic houses through paintings and sculptures from the Neapolitan and Italian school from the early Nineteenth to the early Twentieth Century and furnishings of Neapolitan production made in the same years, just for the Royal Palace of Capodimonte, restored and recomposed with philological attention (Mormone & Martino, 2012).

The attention to the private life of protagonists is the main reason why the section was chosen for the prototype experience. During the research, emerged, in fact, that AR and MR are particularly suited to narrating personal stories of the artifacts authors and subjects, to induce empathy in users towards them (Kouprie & Visser, 2009) by listening to their voices, reading their private letters, observing photographs, sketches and portraits.

The private dimension and the human aspects related to the sphere of emotions hidden behind the artworks were the key to tell the stories in the augmented experience.

The natural narrative capability, the attitude to share the private dimension, and the empathic approach are human characters typical of Neapolitan people and of Mediterranean culture in general. The prototype exhibit, therefore, was de-

signed to improve the inhabitants sense of identity and identification but also to offer foreign visitors a museum experience with a specific local flavour.

A further reason for choosing that section was the lower number of visitors, compared to the other Capodimonte sections more famous and important. Another statement emerged from the CHEESE research is that new digital devices like AR and MR technologies could be particularly effective in enhancing small museums, single sections or less visited sites, which need to be highlighted, exploiting the technological appeal that these tools have on people.

These technologies offer not only opportunities but also hints for critical evaluations. In the Digital Cultural Heritage research context, many complex problems emerge, including the questions of the authenticity of digital models related to their original counterpart on which many authors are discussing (Jones, Jeffrey, Maxwell, Hale & Jones, 2018). On the basis of this dispute in CHEESE project we avoided to reproduce historical objects 3D models, but only models and holograms evoking concepts or emotions useful to tell the real objects stories.

4. *Ottocento Privato* Mixed Reality experience prototyping

In the CHEESE research the first prototype experience was implemented in the Epson Moverio platform, waiting for Mixed Holographic Reality devices to be available.

Following the conclusion of the project, part of the research team, in collaboration with the company *Netminds*, has chosen to continue the path of experimentation implementing

part of the results, acquired in the prototype demo, using the *Microsoft HoloLens* Mixed Reality headset device, recently introduced on the market. Thus, an academic spinoff project called ARTEMA was born, which aims to propose new solutions of Mixed Reality in cultural heritage and events.

For the new demo, room number four of the *Ottocento Privato* section was chosen, large and significant enough to show the potential of tools and approach.

HoloLens allows to enjoy increased fruition both in visual and acoustic terms. In the demo it was chosen to interact with the headset only through the gesture tracking and eye tracking included in the device and not the voice control to prevent speech could distract or disturb other users.

At the beginning of the visit a training session was proposed in which the basic commands were illustrated, in particular how to activate and interrupt the contents play by gesture or eye tracking.

In the demo five levels of incremental experience were defined increasing in terms of intensity, complexity and emotional density of digital contents.

The first level of experience is based on the visualization of static captions that appear next to the artworks when the users approach. The captions, proposed in Italian and English, have been conceived as three-dimensional objects with luminous white texts and white frame, with a thickness, transparent background, high-readable fonts, sized to be easily read.

The second level of experience is based on primary audio content, including the most important information, pictures and video. When the user stops in front of the artifact, if it includes multimedia contents, a luminescent marker is activated to report the presence of an augmented information that can be activated by the user with a specific gesture or withholding himself near the artwork for more than five seconds. The basic audio was played by an actress and accompanied by images such as portraits of the author, pictures of other related artworks, historical documents, private letters or sketches. The contents appear on the side of the artifact but never overlap with it or with the captions. If the user moves, the audio is completed until the end of the first meaningful sentence, unless the user does not voluntarily interrupt the content with a gesture, to continue the visit. In any case, during the walking no visual contents are displayed. They remain positioned next to the artwork. If the user comes back, he finds the contents already explained.

The third level of experience consists of an in-depth audio and multimedia narration. If in-depth content is available, after completing the primary audio, the recorded voice warns with a message that if the user is interested he can stop and listen to further information. A luminescent white arrow pointing downwards indicates the possibility of continuing. To activate the in-depth content it is necessary to express a consensus with a gesture or with eyes. If the user moves before the recording begins the audio will not start, otherwise it will be suspended at the end of the next complete sentence, rather than to be entirely reproduced. To assure this kind of

option, the text has been elaborated in modular form, that is divided into sequential fragments, in order of deepening, of one or at most two periods.

The fourth level of experience is characterized by the presence of dynamic holograms with a particular emotional character. It concerns only some artworks related to private stories, backstory, curiosity, little-known details considered to be particularly significant both from the cultural point of view and for their involvement and empathic participation potential.

The artworks including this kind of experience are marked by a tridimensional hologram, like a white luminescent slightly pulsing sphere, larger than the markers of the basic contents, so that the user, entering the room, can be aware of the contents hierarchy and of the presence and position of the more significant and emotionally contents. Dynamic digital holograms are placed in a specific point of the space but become visible only when the user activates the pulsating marker. If an animation, an interaction or a sound content is available, it starts only when the user activates it or if he stops nearby (at a maximum distance of 1.50 m from the artwork) for more than five seconds. Holograms are also equipped with a recall sound function inviting people to approach, additional to the visual one, emitted by the device only when no other contents are active. Recognizing the active artworks is very easy and intuitive but the effect of the contents activation appears as a magical and surprising event, also thanks to the holographic visual high quality. The choice of using both visual and

acoustic markers and recalls, therefore with a redundant approach, is motivated both by the aim to make the experience simple and fluid, even to people who are not very familiar with these technologies, but also to adapt it to a large range of people categories. A gesture command that allows to repeat an already used content is provided.



Figure 1. *Pescatoriello* Mixed Reality experience in the *Ottocento Privato* section, Museum of Capodimonte, Naples. Photo Credits: Beniamino Guida, Laura Guarino.

Mixed Reality is also particularly suitable for implementing the contribution of contemporary arts such as cinema, music, conceptual art in the fruition of historical and ancient heritage, of which the Mediterranean territories are rich. In this direction, the emotional and holographic representation of the *Pescatoriello* statue by Vincenzo Gemito was designed. In this experience the MAD company, producer of great interna-

tional successes in animation cinema such as *L'arte della felicità* and *La gatta Cenerentola* was involved, in collaboration with *Netminds* and *Spinvector*. In developing this experience, historical information and original sources from the early twentieth century newspaper have been reversed into creative inputs, interpreted by the designer researchers and by MAD creative, who translated that through interactive holographic experience based on digital animation.

The private story narrated by experience refers to a detail of the *Pescatoriello* generation process. The bronze exhibited in the room is one of the two copies that Achille Minozzi requested of the little fisherman presented in Paris in 1878. The statue is characterized by a vivid naturalism of the boy pose, with tense muscles, ready to shoot and the careful look on the small prey. A posture that seems to have been due to a stratagem used by the sculptor who placed the boy employed as a model with his feet focused on a rock strewn with a slippery substance for laundry, a kind of soap (Lepore, 1957). In the holographic experience, while a narrating voice tells the story, holograms of soap bubbles, in which a small fish (which in the statue is held by the fisherman) is mirrored, go up starting from the stone, rising all around the statue, so that people, and in particular children, wearing the headsets can interact by the gesture tracking and make them burst by virtually touching them, just as if they were real bubbles.

Among the artworks augmented in an emotional way, the *Trionfo della Tavola* also emerges, a model of a centerpiece made of wax and wood, that was commissioned by Vincenzo

Gemito from King Umberto I in 1886, which should have been made in silver for the dining room of the Real Palace of Capodimonte.



Figure 2. *Trionfo della Tavola* Mixed Reality experience in the *Ottocento Privato* section, Museum of Capodimonte, Naples. Photo Credits: Beniamino Guida, Laura Guarino.

During the period when Gemito was engaged in the design of the centerpiece, never completed, the sculptor began to manifest increasingly serious nervous disorders that accompanied him until the end of his life (Savino, 1938). About these personal events there are several testimonies such as private letters, newspaper articles and numerous Gemito's sketches of parts and details made on paper. In the holographic experience these documents are proposed to the visitor through a 3D digital animation in the form of multiple apparitions, in correspondence with the parts of the work to which they refer,

floating upwards with an ever more pressing rhythm accompanied by a particularly dramatic musical track and the reading of personal letters written by Gemito interpreted in an emotional way by a Neapolitan actor. The experience is conducted in a crescendo that is a prelude to the final explosion of the state of madness of the sculptor who arouses empathy and emotion in the user.

The fifth level of experience corresponds to gamification (Papagiannakis et al., 2018), which concerns only a few artworks. In this kind of experience, the user, after having benefited from the main experiences, moving closer to an already explicated work, can activate the gamification mode. So that a graphic multiple choice test appears on the side of the artwork, the question is read and the user is invited to indicate the chosen answer by a gesture. The software is able to recognize the marked box and thus verify if the reply is correct. The gamification is activated only when the user has visualized a minimum number of augmented artifacts, as if he had acquired a minimum credit, and concerns only the artifacts enjoyed in form of holograms. In this way users have the possibility to access different game levels in function of the completed visit and the correct answers.

The different types of experience and content (text, audio, video, images, drawings, videos, photographs, 3D animations) proposed in the experiences are developed to verify the versatility and effectiveness of these tools in different contexts. The *HoloLens* implementation was realized by Netminds.

5. Guidelines, opportunities and reiterable methodological approach for museum AR and MR experiences

The rapid evolution of the see through AR and MR technologies (Shah & Ghazali, 2018) during the evolution of the CHEESE project, and subsequently in the holographic demo experimentation phase, led to develop new approaches, contents and interactions that could be valid also with other see through devices. The research team carried out a repertory of experience guidelines, useful for designers of museum experience or cultural heritage curators and administrators, implementable in many other contexts.

Among the most important guidelines emerges the consideration that in the applications of Augmented and Mixed Reality related to cultural heritage, the see through systems are preferable compared to opaque ones such as tablets and smartphones, more frequently used in museums, as they do not visually distract the user from the real context and interlocutors. The opaque device can be interposed as an obstacle, a barrier, between the user and the observed artifact. Transparency, on the other hand, allows to directly appreciate the real aspects of the experience, to perceive the material qualities and the details. Factors that contribute to amplify the user emotion in perceiving the privilege of being in proximity of unique, precious, unrepeatable objects, observing them in details and from different angles and distances.

An aware visitor is potentially less bored and less distracted, because he enjoys acquiring information and skills directly from the artifacts, which in many Mediterranean archeolog-

ical and historic museums are of inestimable value, survived the passing of centuries and sometimes also to the carelessness. According to this approach digital technologies can be used to reinforce the perception of the corporeity of cultural heritage, therefore of the analogical aspects, rather than to remove people from the concrete reality as nowadays often happens when digital tools are used. This is especially important for young people who will be increasingly immersed in a digital world risking to completely separate themselves from the concrete reality and from all its experiential, relational and emotional aspects.

In a not too distant future other forms of experiences, relationships and emotions will arise, but the world will always be concrete too, and it is important that concreteness continues to balance the evanescence of digital because man has an important body component, made up of pheromones, sensory perceptions, as demonstrated by the emerging studies on *embodiment* (Regenbrecht, Meng, Reepen, Beck & Langlotz, 2017). These theories, really important for design discipline, are based on interdisciplinary research that integrate studies on the phenomenology of living body with neurosciences and cognitive sciences, to understand the complex relationships existing between bodily factors, such as physical and motor perception, and cognitive processes.

With the use of commands based on natural languages and gestures, moreover, the relationship between user and device can become more spontaneous and direct (Brondi, Carrozzino, Lorenzini & Tecchia, 2016), compared to other modes

based, for example, on touch screens that require a focus on the screen that risks to distract from artifacts. In fact, more and more often, in the museums, people are busy trying to use the dedicated app following their images and effects on their devices, neglecting objects and values that will probably never be lucky enough to observe in presence.

With transparent glasses and headsets, users keep their heads stand up, instead of immersing in their screen, and remain hands-free. This allows them to conduct a more natural, continuous and spontaneous visit and also to engage in non-verbal social communications with other users. Furthermore, the possibility to position contents in specific point of space make designers able to focus user's gazes, and therefore their attention, where they strategically prefer, to favor a hierarchical, adequate and aware fruition of the artworks.

The AR and MR experiences with transparent glasses offer, finally, the advantage of making the museum reality look with different eyes, stimulating additional, alternative, unusual points of view. Visions than are not included in catalogs or audio guides and that user otherwise would not have had the chance to grasp.

Visiting cultural heritage in this way allows to acquire awareness and expertise that will make the subsequent visits more intense and appreciated. This kind of experience must not replace the conventional visit, but it is proposed as an opportunity to deepen, as a moment of opening new windows of interpretation that will improve the way in which people see and live museums and cultural heritage.

The natural experience remains the most beautiful and dense ever if, but thanks to the intermediation of digital technologies, users can acquire the adequate awareness to recognize the values and meanings of the artifacts to fully enjoy them.

References

- Bekele, M. K., Pierdicca, R., Frontoni, E., Malinverni, E. S. & Gain, J. (2018). A Survey of Augmented, Virtual, and Mixed Reality for Cultural Heritage. *Journal on Computing and Cultural Heritage*, 11(2), 7.
- Brondi, R., Carrozzino, M., Lorenzini, C., & Tecchia, F. (2016). Using mixed reality and natural interaction in cultural heritage applications. *Informatica*, 40(3), 311-315.
- Dey, A., Billinghamurst, M., Lindeman, R. W., & Swan, J. (2018). A Systematic Review of 10 Years of Augmented Reality Usability Studies: 2005 to 2014. *Frontiers in Robotics and AI*, 5, 37.
- Debenham, P., Thomas, G., & Trout, J. (2011). Evolutionary augmented reality at the natural history museum. *International Symposium on Mixed and Augmented Reality*, IEEE 2011, 249-250.
- Engberg, M., Kozel, S., & Odumosu, T. (2017). Postcolonial Design Interventions: Mixed Reality Design for Revealing History of Slavery and their Legacies in Copenhagen, *Design+Power*, 7, 1-8.
- Fogu, C. (2018). We Have Made the Mediterranean; Now We Must Make Mediterraneans. *Critically Mediterranean*. Palgrave Macmillan, Cham, 181-197.
- Giacomin, J. (2014). What is human centred design?. *The Design Journal*, 17(4), 606-623.
- Gleue, T. & Dähne, P. (2001), Design and implementation of a mobile device for outdoor augmented reality in the archeoguide project. *Proceedings of the 2001 conference on Virtual reality, archeology, and cultural heritage*, 161-168.
- He Z., Wu L., & Li X. R. (2018), When art meets tech: The role of augmented reality in enhancing museum experiences and purchase intentions. *Tourism Management* 68, 127-139.
- Holtzblatt, K., & Jones, S. (1993). Contextual inquiry: A participatory technique for system design. *Participatory design: Principles and practices*, 177-210.
- Holtzblatt, K., Wendell, J. B., & Wood, S. (2004). *Rapid contextual design: a how-to guide to key techniques for user-centered design*. Amsterdam: Elsevier, 320.

- Ioannides M., Magnenat-Thalmann N., & Papagiannakis G. (Eds.). (2017), *Mixed Reality and Gamification for Cultural Heritage*. Berlin: Springer, pp. 235.
- Lee, K. F., Chen, Y. L., Hsieh, H. C., & Chin, K. Y. (2017). Application of intuitive mixed reality interactive system to museum guide activity. *Consumer Electronics-Taiwan (ICCE-TW)*, 2017 IEEE International Conference, 257-258.
- Lepore, M. (1957). Infilisse allo scugnizzo la tortura del sapone, *Visto*, 31-32.
- Jiménez Fernández-Palacios, B., Nex, F. Rizzi, A. & Remondino, F. (2015). ARC ube—The Augmented Reality Cube for Archaeology. *Archaeometry*, 57, 250-262.
- Jones S., Jeffrey S., Maxwell M., Hale A., & Jones, C. (2018), 3D heritage visualisation and the negotiation of authenticity: the ACCORD project. *International Journal of Heritage Studies*, 24(4), 333-353.
- Kouprie, M. & Visser, F. S. (2009). A framework for empathy in design: stepping into and out of the user's life. *Journal of Engineering Design*, 20(5), 437-448.
- Milgram, P. & Kishino, F. (1994). A taxonomy of mixed reality visual displays. *IEICE TRANSACTIONS on Information and Systems*, 77(12), 1321-1329.
- Mormone, M. & Martino, L., (2012). *Ottocento a Capodimonte*, Naples: Arte'm.
- Papagiannakis, G., Geronikolakis, E., Pateraki M., López-Menchero, V. M., Tsioumas, M., Sylaiou, S. & Partarakis, N. (2018), Mixed Reality, Gamified Presence, and Storytelling for Virtual Museums. *Encyclopedia of Computer Graphics and Games*, 1-13.
- Pedersen, I., Gale, N., Mirza-Babaei P. & Reid S. (2017). More than Meets the Eye: The Benefits of Augmented Reality and Holographic Displays for Digital Cultural Heritage. *Journal on Computing and Cultural Heritage (JOCCH)*, 10(2), 11.
- Pollalis C., Fahnbulleh W., Tynes J. & Shaer O. (2017), HoloMuse: Enhancing engagement with archaeological artifacts through gesture-based interaction with holograms. *Proceedings of the Eleventh International Conference on Tangible, Embedded, and Embodied Interaction*, 565-570.

- Regenbrecht, H., Meng, K., Reepen, A., Beck S. & Langlotz, T., (2017). Mixed Voxel Reality: Presence and Embodiment in Low Fidelity, Visually Coherent, Mixed Reality Environments. *Mixed and Augmented Reality*, 2017 IEEE International Symposium. 90-99. IEEE
- Rouse, R., Engberg, M., JafariNaimi, N. & Bolter J. (2015). MRx: An Interdisciplinary Framework for Mixed Reality Experience Design and Criticism. *Digital Creativity*, 26, 3/4, 81-87.
- Rouse, R. & Barba, E. (2017) Design for Emerging Media: How MR Designers Think about Storytelling, Process, and Defining the Field. Eds. N. Nunes, V. Nice, I. Oakley. *Interactive Storytelling: Lecture Notes in Computer Science* 10690, Springer Press International, pp. 245-258.
- Sanders, E. B. N. (2003). From user-centered to participatory design approaches. *Design and the social sciences*. CRC Press, 18-25.
- Savino A., (1938), *Seconda Vita di Gemitto*. Roma: Modernissima.
- Shah, N. F. M. N., & Ghazali, M. (2018). A Systematic Review on Digital Technology for Enhancing User Experience in Museums, *International Conference on User Science and Engineering*, Springer, 35-46.
- Visser, F. S., Stappers, P. J., Van der Lugt, R., & Sanders, E. B. (2005). Contextmapping: experiences from practice. *CoDesign*, 1(2), 119-149.
- Vlahakis, V., Ioannidis, M., Karigiannis, J., Tsotros, M., Gounaris, M., Stricker, D., ... & Almeida, L. (2002). Archeoguide: an augmented reality guide for archaeological sites. *IEEE Computer Graphics and Applications*, 22(5), 52-60.

Critical Design Approach to Understand the Current Public's Perception of Islamic Art and Design

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Keywords

Critical Design, Islamic Art and Design, Shallow Perception, Design Language and Taste, Mixed Living Styles

Abstract

Despite the strength, beauty and depth found in the Islamic art, people hold limited knowledge towards it, which creates a superficial and limited understanding of the “Islamic” specification in an object or design. Therefore, our aim is to investigate the public's perception of Islamic Art, using critical design as the framework of investigation. A one-year research project investigated this issue from different points of view. Initially, a survey was made reaching the result which states that people keep a superficial understanding of Islamic art limiting it to decorative patterns and calligraphy. In order to overcome this, a historical research was conducted in order to investigate and understand the belonging of certain design aesthetics and forms to specific dynasties in relation to location and time as a potential knowledge container. However, the people's awareness about strength and beauty of Islamic art would stay limited. Therefore, a third approach tried to borrow from the Critical design research strategy, which is aimed at leveraging designs to make consumers think about the everyday objects. It challenged peoples' shallow perceptions about the role of the daily used products, as opposite of affirmative design. A public experiment was conducted in a public park, juxtaposing contradictory design styles through using “unislamic” forms with Islamic decorations and vice versa.

1. Introduction

The term Islamic Art “encompasses the visual arts produced from the 7th century onwards by people who lived within the territory that was inhabited by or ruled by culturally Islamic populations” (Mcquillian & Lucey, 2009).

The Grove Encyclopaedia of Islamic Art and architecture goes deeper into the issue declaring how difficult it is to define or classify this commonly spread term:

[Islamic Art] is neither fish nor fowl. It is not the art of a religion, like Buddhist art or Christian art, nor is it the art of a single place or of a single time, like ancient Rome or the Renaissance. It is not confined to a single medium or technique, such as painting (Bloom & Blair, 2009).

Furthermore, it is not confined to a specific territory, as long as Islam is the main state's religion referring to countries from Morocco to India.

Islamic Art is not only relative to the art intended for Islamic rituals and purposes, different from the Christian or the Buddhist art which are intended for religious purposes. However, Islamic Art is pertinent to the art and architecture of the whole Islamic culture. The Islamic purposes in this art are symbolised in a small scale when compared to the variations of designs for different purposes. People who participated in this movement were not only Muslims, a lot of designs were generated and made by Jewish and Christian artisans.

Some of the Islamic art historians have supported the myth of the unity of Islamic art evolving an undesirable conception. As a result, this conception generates a paradigm for understanding and differentiating the artistic products. The conception of the unity of Islamic Art (or alternatively Muslim Art) in terms of the aesthetic language became amorphous leading to a complete misplacement of gene, displacing the idea that these artefacts are a product of a culture that involves a particular range of time and a particular space. Richard Ettinghausen in an article titled “Unity and Diversity in Muslim Civilization” stated:

The unique character of Muslim art is a commonly known fact, which is experienced even by people who know hardly anything about this civilization ... Yet, in spite of the apparent uniform character of Islamic art, everybody who becomes familiar with its various aspects realizes more and more the tremendous variety in the different regions and even in the changing periods within a single territory. (Shalem, 2012)

Inevitably, Islamic art is not constricted to religion. It embraces a wide variety of artistic traditions in the Muslim’s culture that incorporates more than one thousand years of history and covers an area extending from Morocco at the Atlantic to the borders of India and China. Consequently, new distinguished visual cultures have been created with a unique distinctive artistic language for each period and region, linked through a common artistic grammar which is not always obvious at the first glance. The Islamic art has powerful aesthetics that remained remarkable through the centuries.

Having said all this, it shows easily the confusion that has been generated through the simplification of calling anything related to Muslim's culture as Islamic art without distinction of purpose, use and tradition, further historical period and geographical location. This confusion protrudes into the mind-set of all people involved in the subject not only in the Western World, but sadly in the own lines of Muslim citizens, from the public to designers, from scholars to artists.

2. Superficial Understanding of Islamic Art

This leads to the fact that, despite the strength, beauty and depth found in the Islamic art, people hold limited knowledge towards it, which creates a superficial and limited understanding and recognition of the "Islamic" specification in an object or a design. The original focus of the objects created under Islamic art was on the main design elements such as form and material, while pure surface decoration was the least important element as an "Islamic design feature" to a certain historical period. These decorative design elements have been implemented on daily life objects to communicate certain concepts. Following the three levels of Donald Norman regarding the acceptance of beauty in design, visceral, behavioural and reflective¹, people were involved by actively choosing the pictures only the behavioural and partly reflective emotions acknowledging the visual impact of patterns and calligraphy.

1. The visceral level is responsible for the ingrained, automatic and almost animalistic qualities of human emotion, which are almost entirely out of our control. The behavioral level refers to the controlled aspects of human action, where we unconsciously analyze a situation so as to develop goal-directed strategies most likely to prove effective in the shortest time, or with the fewest actions, possible. The reflective level is, as Don Norman states, "(...) the home of reflection, of conscious thought, of learning of new concepts and generalizations about the world" (Komninos, n.d.).

Visceral acknowledgment of shapes and other less obvious elements have been neglected, proving the poor understanding and perception of Islamic traditional forms of objects and deeper meaning of design. In addition, there is a need to distinguish between different terms and how they connect to each other. The public's and people's general opinions or perceptions comes into play when they turn into consumers; greatly affecting purchase decisions, which in turn creates certain "trends" where the designers come to fill in for such demands.

Therefore, our aim is to investigate the public's perception of Islamic Art, using critical design as the framework of investigation. A one-year research project at the German University in Cairo was conducted to investigate this lack of understanding from different points of view, the research activities have been divided into three parts. Initially, a survey was made in order to investigate people's knowledge, understanding, perception and interpretation of "Islamic" art. The questions were designed to test which were the most recognisable visual elements by previewing different pictures and asking people to select the most relevant to Islamic art. Analysing first results led to the conclusion that people keep a superficial understanding of Islamic art, defining and limiting it to certain types of decorative patterns and Arabic calligraphy. Other elements, like shapes of objects, specific functions or typically used materials such as copper and glass, have been largely ignored. A hypothesis and design aim was elaborated stating that for the attribution to the Islamic culture there are more significant elements to be considered in design rather than only patterns and calligraphy, and that this must be clearly shown.

3. The “traditional” way to promote a concept

Following as second part, a historical research was conducted in order to investigate and understand the belonging of certain design aesthetics and forms to specific Islamic dynasties in relation to location and time. The design method and concept development followed an experimental approach that would lead through trial and error of the material properties and craft techniques to acceptable designed products, as long as the designer was able to guarantee the reshaping of the form with “Islamic” characteristic without altering the main function.

Working with a local craftsman for glassblowing and the clay workshop of the university campus, the design proposal was a series of glass water jars with an intern corpus made of clay.



Figure 1. Media Production Centre GUC, 2016. Glass and pottery craft experimentation exhibited at El Maqaad in Qaietbay area.

Perforating the clay walls with Islamic patterns, the design concept followed both aims, aesthetical and functional, at the same time: matching the arabesque form of the glass jar and allowing the filtration of water with herbs and perfumed leaves. The outcome has been presented in an Exhibition called “Meeting with the Sultan” at the Maqaad, Sultan Qaytbey Area of the Eastern Cemetery in Cairo in December 2016 (Fig.1).



Figure 2. A.Sicklinger, 2016. Glass craft experimentation exhibited at El Maqaad in Qaietbay area.



Figure 3. Media Production Centre GUC, 2016. “Meeting with the Sultan exhibition” El Maqaad in Qaietbay area.

In parallel, another design concept was dealing with pure Islamic forms as a combination of single elements. By blowing three little bowls in glass, an “Islamic form family” was evoked and shown in the same exhibition in a series of photos (Fig. 2-3).

However, the public’s awareness about strength and beauty of Islamic art stayed limited. The reason could be found in the fact of insufficient quality of manufacturing and detail of the objects themselves. At this point of the research, there were two open paths to foster the initial hypothesis: either improve the quality of the objects themselves and hoping for better feedback from the observers, or by taking for granted that the improvement, however would not have led to breakthrough results, to be more explicit in the statement itself: how to recognise Islamic Art?

Aiming for a clearer result, necessarily, the team was directed towards reaching the core of the problem through understanding Islamic culture. The Oxford dictionary defines culture as “the arts and other manifestations of human intellectual achievement regarded collectively” (The Oxford dictionary, n.d.) and art as “the expression or application of human creative skill and imagination, typically in a visual form such as painting or sculpture, producing works to be appreciated primarily for their beauty or emotional power” (Facchinetti, 2012, p. 180). Hence, Islamic Art does not represent the religion but rather it represents the culture when Islam is and has been the ruling religion in a geographical area. Ahmad Ibrahim discussed in his bachelor thesis the concepts of visual and design cultures and the importance to study them.

He described visual culture as “the visual expression of our collective thoughts, ideas, beliefs and knowledge” (Ibrahim, 2016) and referring to contemporary pop-culture: “This breeds what is commonly known as pop-culture (or popular culture) which is also visual imagery that reflects ideas and thoughts of the mainstream collective culture”, stating eventually that “Design Culture is a process. All designers think and work for one purpose, to communicate better. A big part of the process before the phase of creating the design is to ‘understand’. Understand the context, the language, the viewer, the viewed, the history, the future...etc.” Street observations in Cairo in the figures 4 and 5 show the current products sold successfully in the street, acknowledging the decline of aesthetics in the visual culture.

One clear example of the complete mutation of an “iconic Islamic” product is the evolution of the *fanoos*. Dr Nasif Kayed, the managing director of the Sheikh Mohammed Centre for Cultural Understanding, stated that the concept of the Ramadan lanterns originated in ancient Egypt (Harrison, 2016). It is narrated that Caliph Al-Muizz li-Din from the Fatimid dynasty in 358 AH (969 AD) when he arrived to Egypt in the first day of Ramadan, was greeted by the people of Egypt holding lanterns.

Ever since, these lanterns called *fanoos* have been a cultural symbol for the holy month of Ramadan in the Islamic tradition. Nevertheless, the design is distorted from its origin and still being a symbol of the today’s Islamic culture, it has been completely defaced and merged with icons from pop culture and produced with cheap materials in China.



Figure 4. S.A.Helmy, 2016. Street Observation in front of Al-Hussein Mosque.



Figure 5. Elghary, 2017. Visual Trends in the streets of Egypt.



Figure 6. The Origins of the Ramadan lantern - Fanoos- of Egypt and Beyond, n.d. A comparison between the traditional fanoos and an example of the modern day fanoos.

This leads to complete loss of its aesthetical value and disintegration of public taste and culture (Fig.6). Relating such a phenomenon to how pollution is affecting our planet, one could argue that also in natural evolution, mutations into different species have been taking place over time, but one can't deny how nowadays pollution is causing global warming which is ultimately driving human kind, apex of this evolution, towards destruction. This example was inspiration and guide of the drives towards the concept that was developed for the third step of this research.

4. Critical Design as tool

The third approach tried to borrow from the *Critical Design* strategy, which is aimed at leveraging designs and to make consumers think critically about the value and impact of everyday objects. Critical Design is a term which was first introduced by Anthony Dunne and Fiona Raby through Dunne's book "Hertzian Tales" followed by "Design Noir".

Critical Design is closely related to speculative design which aims at challenging perceptions, evoking discussion that emerges from its nature to provoke the audience. Speculative design uses such concept while visualising how our current way of life affect our future. An approach which aims at exploring the problems with current methods and products rather than just offering solutions to existing obvious problems, which is how conventional design or how Dunne and Raby call it "affirmative design" operates. (Dunne & Raby, n.d.; Johannessen, n.d.)

By presenting alternative visions of what our shared futures might be, and through reflection upon these visions, design can reveal what is important to us in the present. (Helgason et al., 2015)

In short, critical design proposes an approach to provocation, rather than design as rearranging surface features according to the latest fashion while obfuscating the norms and conventions inscribed in the designs and their use. (Bardzell, et al., 2012)

This form of design can be traced back to the Italian Radical Design in the 1970s which aimed at critiquing social values and design ideologies. The movement towards conceptual forms of design started in the 1990s which paved the way for critical design to emerge as a non-commercial type of design that challenges the status quo. (Dunne & Raby, n.d.)

Critical design is a relatively new concept and it is often facing criticism. To use its concept as designers surely might find criticism as long the outcome does not relate to functional design solutions. As a response to that Matt Malpass argues “By embracing a concept of function beyond practical functionality, these critical designers strive for an extended role for the designer beyond being an agent of capitalism.” and presents the fact that function is not limited to the physical and essentialist characteristics visualizing so through Ligo’s categories of functions a wider view of how functions in a product would be: structural articulation, physical function, physiological function, social function and cultural existential. (Malpass, 2015)

Another argument presents itself regarding the driving forces behind conventional design. Globalisation together with its underlying forces such as capitalism presents itself as a major player behind all aspects of our current life, together Ritzer and Ryan present the concept of “Nothing” where nothing refers to empty forms that are without distinctive content. This creates this scale where everything lies between “Something” and “Nothing”. They evaluate such terms based on five criteria: Distinctive Substance-Lacking in Distinctive Substance, Unique-Generic, Local Ties-No Local Ties, Temporally Specific-Time-less and finally Human Relations-Dehumanized. (Ritzer & Ryan, 2007)

To materialize this concept of Critical design and to gain knowledge through a related experiment, in a public park in Cairo has been conducted an exhibition showcasing different but known objects, juxtaposing contradictory design styles through using “unislamic” forms with Islamic decorations and vice versa. It was paid strong attention on the fact, that one element, either form or decoration, should be iconic, highly recognizable for the public. The other element should contrast strongly and, for the instructed observer, should make no sense or better, be an adverse element to the iconic basic element. The aim was to point out the elements people perceive first, which elements are recognizable for them as “Islamic” and which are not. The aim of this approach was, based already on previous observation explained in this paper, to showcase people’s shallow perception, understanding and knowledge of Islamic art and styles in general, how their understanding in best cases is limited to geometric decorative patterns. But more over all, through the exaggeration in the mix of forms and visuals, it wanted to manifest the bad taste of people who accepted and sometimes loved the “impossible” combination of form and decoration.

The products used mixing Islamic forms with non-Islamic decoration. There has been designed and produced two lamps and two chairs for the purpose of testing. They have been chosen based on their different origins: one lamp is out of Islamic tradition, the other is a contemporary mass product by Ikea. One chair is a common functional design, the second one has been designed and manufactured specifically for the research purpose.

The first lamp was a traditional *Mishkah* which is used in mosques usually hanging from the ceiling as source of light; it is entirely made out of glass with a typical form dating back to the Mamluk period and is normally covered by an *ayah* (verse) from the Quran in Arabic calligraphy. It is widely used and due to its iconic Islamic form people would easily recognize it. The “altered” *Mishkah* holds the famous 1893’s painting of *The scream* by Edvard Munch which is contradictory to the essence of the product itself. The painting is a reflection of the painter’s inner feelings, consisting of exaggerated colours with simple painting technique, and considered one of the early expressionism paintings. Looking carefully at the design in order not to generate an offensive feeling towards religious sensitivity, this particular painting seemed matching the idea of the experiment. Hence, people demonstrated clearly that they were attracted to the artistic value of the painting and not for its iconic Islamic form, supporting the initial hypothesis of the people’s limited perception of Islamic art.

The second lamp is a product by IKEA; it’s a generic white hanging plastic lamp and was covered it with colourful units of recognizable, typical Islamic patterns. Similarly, the third object which is the “Studio Chair” (found in part in Fig. 9); it is a generic chair found on campus in the German University in Cairo. It has been edited by adding a surface cover with Islamic patterns. Similar to the IKEA lamp, the decoration has been added on a non-modified industrial product, without considering traditional techniques such as inlay, carving, embossing etc. The desired result was to look “cheap” yet with Islamic reference.

The fourth product is a chair using traditional *Mashrabiya* decoration elements; *Mashrabiya* is one of the core elements in Islamic architecture, used mainly as window shading. By being spread over the entire Islamic area in all times until today without particular mutations, Hans Belting in his book “Florence and Baghdad” (Belting, 2011) creates the analogy for the Arabic culture to Erwin Panofsky’s understanding of perspective as a cultural symbol representing the entire Western visual culture (Panofsky, 2012). The design is made to look stereotypically Islamic by using the Mashrabiya elements in the backrest and the Moroccan arcs for the legs. It was then coated with random vibrant colours and glitter in order to relate to pop-art (Fig. 7 to 9).



Figure 7. S.A.Helmy, 2016. The First lamp; Mishkah covered with “The Scream” painting.
Figure 8. S.A.Helmy, 2016. The second lamp; Ikea’s Lamp covered with Islamic patterns.



Figure 9. S.A.Helmy & A.G.Baligh 2016. Snapshot from the social Experiment video showcasing the Studio Chair and the Mashrabiya Colourful Chair.

Through a qualitative research method, perception was observed, and the data was collected through observations and interviews. The chosen location for interaction with the public was Al-Azhar park. It's a public park located in Cairo which has a wide variety in social standards of the visitors leading to a random sample. We wanted to grab primarily the participants' attention with the previously described products, whether they would understand the part of Islamic Art and what would be their preferences when it comes to their purchasing decisions. In support, a flyer was given out with a brief description about the project and Islamic art.

5. Outcome of social experiment

During the process of designing and preparing the products, people with design background were shocked to see the incompatible mixes once the team introduced to them. The designs were provocative, posing a challenge to understand the relevance between both. However, during the social experiment the products appealed to people with non-design background. It was obvious that peoples' eyes got used to pop colours and "modern" artefacts where they interpreted our hypothetically Islamic designed products as modern ones, so the designs did not shock them.

When it came to the Mosque lamp *Mishkah* the lack of knowledge towards the Islamic art and design was clear. People started giving it different names relevant to their knowledge and perceptions. People criticized the painting *The Scream* on the *Mishkah* as a frightening one, non-Islamic, scribbled painting and even tried to link it to Islamic design.

Furthermore, the pop-art *Mashrabiya* chair had the most surprising responses, people started linking it with chairs in Cafe's and claiming if they own one they would buy such colourful furniture. It is observed that people link colourful products to modern. On the contrary when designers judged it, it created a great visual disturbance to them.

Also, people always relate to the decorations more than the form of the product itself, as most of them were viewing the studio chair with Islamic decorations as an Islamic chair and the Ikea modern lamp with being a modern Islamic-cheerful lighting unit. As a consequence, it shows that people only see the outer surface of products supporting our initial hypothesis of shallow perception (Fig. 10).



Figure 10. S.A.Helmy & A.G.Baligh 2016. Snapshot from the social Experiment.

6. Conclusion

Referring to the scale of “something versus nothing”, we argue that the mindless mixing and matching is not going into the favourable direction of creating unique objects. But rather these hybrids are so mindlessly created and mixed that it lacks character to the point it became undefinable, therefore deeming it as devoid of distinctive substance. We see this as a dangerous turn of events as shown through the results of our social experiment. Consumers are no longer aware of important parts of their culture especially Islamic art. Either unable to recognize important products of the Islamic culture or accepting and admiring products that are essentially strange to the local culture mixed together with design elements that are considered stereotypically Islamic.

In addition, the “Mindless Acts” play a critical role into driving integral parts of the culture towards nothing. Both the designer and the consumer act mindlessly in their respective roles, creating a cycle of dangerous mindless acts. It starts by the designer mixing cultural elements i.e. stereotypical Islamic aesthetics together with “trendy” or popular elements typically pop-cultural elements. With this attempt to modernise the products driven by the capitalist urge to maximise profit. Followed by this, the consumer makes mindless purchase decisions, acquiring such items with no cognition of the distinct cultural and design elements involved, thinking that they are purchasing “modern Islamic products”.

The research shows that people only see the outer surface of products supporting the initial hypothesis of shallow understanding of Islamic Art. The public was attracted, showed interest and was not rejecting towards the idea of using noisy and unqualified design languages, which can also be found i.e. in local bars, café’s and restaurant, showing a low general taste.

As a result, it can be stated that stereotyping and being used to mixed living styles create even more difficulty to maintain alive traditions. Instead of innovation, traditions are altered to unrecognisable forms and materials mixing almost unlimitedly everything. Art and craft works from previous periods are seen as old and outdated, losing their value and not getting valorised.

References

- Belting, H. (2011). *Florence and Baghdad: Renaissance art and Arab science*. Cambridge, MA: Belknap Press of Harvard University Press.
- Bardzell, S., Bardzell, J., Forlizzi, J., Zimmerman, J., & Antanitis, J. (2012). Critical design and critical theory: The challenge of designing for provocation. *Proceedings of the Designing Interactive Systems Conference on - DIS 12*. doi:10.1145/2317956.2318001
- Bloom, J., & Blair, S. (2009). *The Grove encyclopedia of Islamic art and architecture*. New York: Oxford University Press.
- Dunne, A., & Raby, F. (n.d.). *Critical Design FAQ*. Retrieved from <http://www.dunneandraby.co.uk/content/bydandr/13/0>
- Elgohary, D. (2017). *The overlooked art of vehicle decoration in Egypt*. Retrieved from <https://stepfeed.com/the-overlooked-art-of-vehicle-decoration-in-egypt-5876>
- Facchinetti, R. (2012). *English dictionaries as cultural mines*: New Castle upon Tyne: Cambridge Scholars Publ.
- Harrison, P. (2016). *How did the Ramadan lantern become a symbol of the holy month?* Retrieved February 18, 2017, from <https://english.alarabiya.net/en/2015/06/19/Ramadan-is-here-light-up-your-lanterns.html>
- Helgason, I., Rosenbak, S., Smyth, M., Mitrović, I. (2015). Discourse, Speculation and Disciplinarity: Designing Urban Futures.
- Ibrahim, A. W. (2016). *Samaklaban*. (Bachelor Thesis, The German University in Cairo, 2016) Retrieved April 20, 2017, from <http://researchjournal.guc.edu.eg/StudentThesisFiles/Season38/Applied%20Arts%20&%20Design/2800998.pdf>
- Johannessen, L. K. (n.d.). *The Young Designer's Guide to Speculative and Critical Design*.
- Komninos, A. (n.d.). *Norman's Three Levels of Design*. Retrieved September 21, 2018 from <https://www.interaction-design.org/literature/article/norman-s-three-levels-of-design>
- Malpass, M. (2015). Criticism and Function in Critical Design Practice. *Design Issues*, 31(2), 59-71. doi:10.1162/desi_a_00322

Mcquillan, W., & Lucey, B. (2009). The Validity of Islamic Art as an Investment. *SSRN Electronic Journal*. Retrieved from <https://doi.org/10.1016/j.ribaf.2015.02.010>.

Oxford Living Dictionary. (n.d.). *Culture | Definition of culture in English by Oxford Dictionaries*. Retrieved from <https://en.oxforddictionaries.com/definition/culture>.

Panofsky, E. (2012). *Perspective as Symbolic Form*. New York, NY: Zone Books.

Shalem, A. (2012). What Do We Mean When We Say 'Islamic Art'? A Plea for a Critical Rewriting of the History of the Arts of Islam. *Journal of Art Historiography*.

Ritzer, G., & Ryan, M. (2007). *The globalization of nothing*. London: Pine Forge Press.



SUGGESTIONS FOR DESIGN

Post Disaster Rooftops

Ep01 - Taranto 2049

Gabriele Leo and Grazia Mappa (Plasticity Studio), Peppe Frisino, Gabriella Mastrangelo, Italy

Post Disaster Rooftops is a curatorial exercise that uses the architecture of the city as a platform to investigate the marginal condition of the Mediterranean urban scenario.

Post Disaster Rooftops is a collective performance that occupies unconventional urban spaces, free spaces that eschews the main forces of control systems.

The roof is a device to observe the city with a diagonal look, neither horizontal nor vertical, escaping the rhetoric of public space, while remaining in the urban space.

The Post Disaster Rooftops investigation started in Taranto, a city in the Apulian region that has become a symbol of the disillusioned ideology of growth. The view of the city from its roofs, represents an immediate recognition of the disaster: the collapsed buildings of the old city, the voids left by the disused activities, the skyline of industrial plants, the urban area that fades into the sea in an endless suburb.

The title of the first episode recalls an article by the New York Times issued on February 2017, in which Taranto was defined as “a fading city on the Ionian Sea”.

The arrival of the industry in 1965 compromised not only the development of future alternative work opportunities, but also the natural ecosystem and the health of the citizens of Taranto and its extended territory, creating a short circuit between the right to work and the right to health.

At the same time, the informal economy that developed in the collapsing and abandoned city centre, represents today the only alternative to the main narrative of the industrial city, which is generated by subtraction and produces survival mechanisms. Post Disaster Rooftops gathered a series of reflections on the future of the city of Taranto, on an environmental, cultural and architectural scale.

The first episode took place over three days, through open talks with thinkers, activists, artists, curators, accompanied by performances, inspired by the daily talks.

Post Disaster Rooftops is an independent, open and permeable curatorial project by Gabriele Leo and Grazia Mappa (Plasticity Studio), Peppe Frisino, Gabriella Mastrangelo.

Guests and Contributors: Marco Petroni, Alessandro Coppola, Lorenza Baroncelli, Marianna D'Ovidio, Michele Bee, Chiara Giubilaro, Salvatore Peluso, Antonio Ottomanelli, Azzurra Muzzonigro, Orizzontale, Saverio Massaro, Like a Little Disaster, Clessidra Teatro, Where is Wave, TakeCare, Teatro Crest, Evo Ristorante - Gianvito Matarrese, Mandorle&Miele, S. Andrea degli Armeni - Domus Armenorum Taranto.

7 / 8 / 9 — SETTEMBRE 2018 — TARANTO

POST DISASTER ROOFTOPS

POST DISASTER ROOFTOPS
EP01 — TARANTO 2049
IS THIS FADING-CITY-ON-THE-IONIAN-SEA
COOLER THAN BLADE RUNNER?

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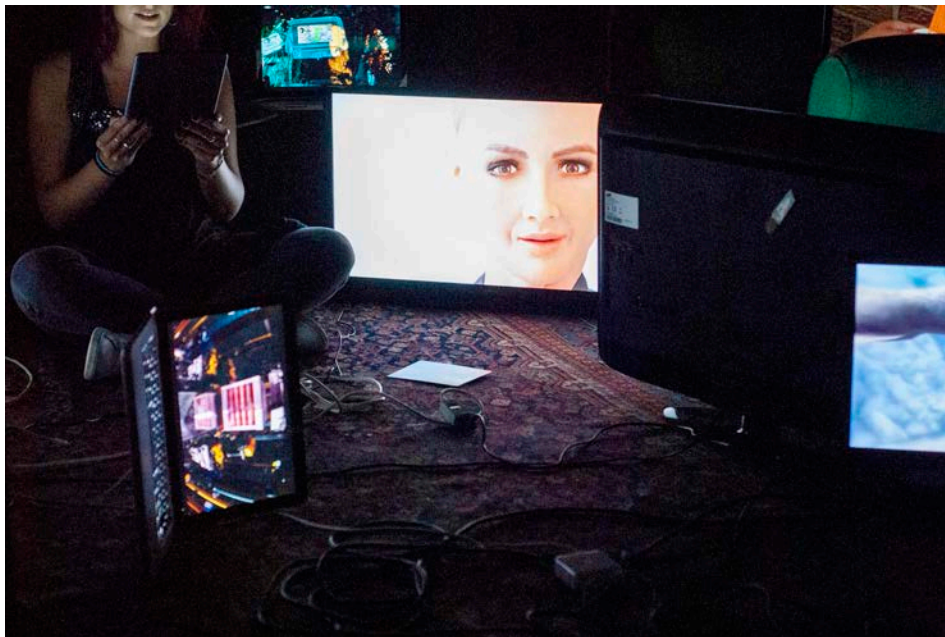
Photos by Post Disaster.



Day 1 - Talk “Il disastro è in corso o è già avvenuto?” Photo: Post Disaster.



Day 1 - Reading “Clessidra Teatro”. Photo: Post Disaster.



Day 1 - Lecture “@Like a little disaster. Appunti per un manifesto di ecologia simmetrica”. Photo: Post Disaster.



Day 2 - Talk “Decentralizzare / Decolonizzare”. Photo: Post Disaster.



Day 2 - Performance “Holozone: Places and Signals” by Whereiswave? Photo: Post Disaster.



Day 3 - Rooftop workout "Takecare 30". Photo: Simona Intini.



Day 3 - Talk "Spazi agonistici". Photo: Post Disaster.



Day 3 - Reading Teatro Crest. Photo: Post Disaster.

BIOGRAPHIES

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Awarded a PhD degree in Design from the university of Duisburg-Essen, Art and Design faculty - Folkwang Hochschule der Künste – Germany. El Anssary has been teaching at the department of Product Design since 2007 at the German University in Cairo GUC. With extensive professional and research experience in the field of product design he focuses on the process of designing as an interdisciplinary research including culture, human behavior and technology. Alaa El Anssary is the author of many papers, articles and he has published a book on the design process and innovation.

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MA Design for Visual Arts, Design and Arts Faculty (IUAV University, Venice) with a broad interest in artistic practices and do it yourself cultures with a glimpse to social design. His research focus on collaborative practices applied to crafts and social innovation, as well as creating spaces for collective experiences and art residencies.

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Was born and raised in Downtown Cairo, Egypt. She has a Masters degree in the field of Media Design and currently instructs Applied Arts and Sciences students at the German University in Cairo. Her passion for conserving her cultural heritage and her hometown, as well as her specialized field of work, continuously highlights the importance of preservation. Nora's Levantine origins appear to support her desire to revive the grandeur of the past. This topic finds precedence in her publications and the projects she undertakes. Nora is a passionate photographer who, more recently also took the stage as a TEDx speaker.

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Nariman Lotfi

Lotfi is an instructor at the German University in Cairo where she was awarded a Master's degree in Product Design in 2014 focusing on Design and Bionics. She has focused on research in the fields of Product design, Biomimicry, and Sustainability which she presented in workshops and talks including a TEDx talk at Zewail City University in 2017. She was awarded the Grand Prize by the Biomimicry Institute for an irrigation solution for Fayoum's agriculture in 2013. She is currently working on her PhD degree focused on 4D printing and the future of the industrial design scene in Egypt.

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MA in Interior Design (Politecnico di Milano), she studied illustration at Central Saint Martins and worked at Cinimod Studio (interior and interaction design) in London. Her work is focused on creating spaces for relations, experiences and participation through urban installations and hands-on workshops. In 2011 she started "Make People Do Lab" a research project on crafts and participatory design practices, based in the Apulian region. In 2014 she joined Entropika, a multidisciplinary design lab based in Athens, operating at the intersection of art, architecture and technology. In 2016 she co-founded Bordo, an interior and visual design practice based in Taranto. Since January 2018 she is part of the Open Design School in Matera, Italy, designing urban infrastructures for public spaces for Matera European Capital of Culture 2019.

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Plasticity Studio

Art and research project established in 2017 by Grazia Mappa e Gabriele Leo in an attempt to investigate the natural and political implications of western design culture. Our multimedia work finds itself at the intersection of contemporary art, and design sociological investigation.

Currently we live and work between Taranto and Milan.

plasticity-studio.tumblr.com

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Camila Soares de Barros

Dance and movement artist and researcher interested in biopolitics, education, creative processes, and in art as power of life. Brazilian, Bachelor of Dance (UNICAMP- Brazil), Specialist in Técnica Klauss Vianna (PUC-SP, Brazil) and Master in Education (UNIFESP- Brazil). In 2017-2018 she integrated the international collective of artists "O Risco da Dança" at c.e.m - centro em movimento and presented her latest dance work BICHO in Festival Pedras'18, in Lisbon-PT. Back to Brazil since August 2018, she keeps investigating BICHO and its developments and potencies in different territories.

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Ahmed Wahby

Graduated in 1992 with a degree in Architecture from Ain Shams University, Cairo Egypt. In 2000 he obtained an MA degree in Islamic Art and Architecture from the American University in Cairo, AUC where he had worked as a research assistant for almost 4 years. In 2008 he was awarded his Ph. D degree in Islamic Art, Architecture and Archaeology from the Oriental Department of the Otto-Friedrich University, School of Human Sciences, Art and Culture, in Bamberg, Germany. Dr. Wahby has been teaching since 2008 at the German University in Cairo GUC, the Faculty of Applied Sciences and Arts in the Design Theory Department. He has also served as the Faculty's Vice Dean for 8 years. He has numerous publications in local and international journals.

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Progetto grafico is an international graphic design magazine founded in 2003 and published by Aiap, the Italian association of visual communication design. A point of reference for such design in Italy from its start, it has also been fully translated into English since 2012. • In December 2017, Jonathan Pierini and Gianluca Camillini became the current editors. • The new *Progetto grafico* offers a critical look at graphics and visuals through a narrative broken up into fragments. Its aim is to offer articles connected in different ways so as to foster a series of transdisciplinary, historical and contemporary considerations. This multiple viewpoint, ranging from very distant to very close, seeks to look at the real both in the broadest terms as well as in a more specialist context. Our belief is that observation, whether of artifacts or representations, as well as production of visuals or graphics can add to today's cultural debate. • Contributions can include visual material, essays and interviews. Each issue intends to explore the storytelling opportunities of the journal.



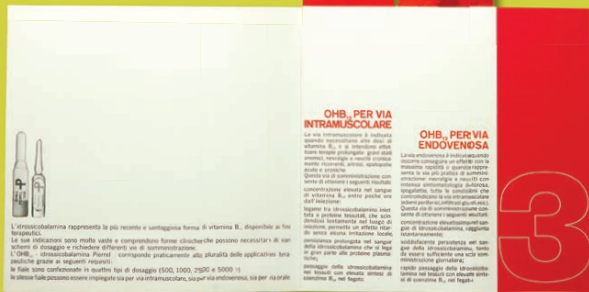
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