YAŞAR UNIVERSITY
GRADUATE SCHOOL OF SOCIAL AND APPLIED SCIENCES

RESPONSIBLE AND CO-DESIGN FOR CREATIVE CRAFT COMMUNITIES

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TEXT OF OATH

I declare and honestly confirm that my study, titled "RESPONSIBLE AND CO-DESIGN FOR CREATIVE CRAFT COMMUNITIES" presented as a Master's Thesis, has been written without applying to any assistance inconsistent with scientific ethics and traditions, that all sources from which I have benefited are listed in the bibliography, and that I have benefited from these sources by means of making references.

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ABSTRACT

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This thesis contains a research on responsibility of designers regarding to social, environmental, economic and cultural sustainability. Furthermore it points out how responsible design as an activism can contribute a sustainable development of craft communities.

The first phase is based on the research on the current need for responsible designing for sustainable development regarding to theories and practices, created by designers and scholars in literature. The second phase narrows down the research to understand the role of designers in design activism and co-design method for a progress and sustainable development for creative and craft communities.

As follows, the second phase is supported by a case study on a real organization incorporating the practices of design activism to amplify creative craft communities in Pakistan. The case is built around the debate of the crucial need of design to rescue the crafts and craftsmen for social, cultural and economic sustainability in their respective regions.

The conclusion of the research is based on the proposition of projects that can integrate the craftsmen and designers with the co-design approach as a contemporary culture of design and production.

Keywords: Responsible Design, Design Activism, Sustainability, Creative Communities, Craft, Participatory Design, Co-design and Well-being.

ÖZET

FAROOQ, Amama

Sanat ve Tasarım Yüksek lisans

Danışman: Ast. Prof. Dr. Mine Ovacık

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Bu tez tasarımcıların sosyal, çevresel, ekonomik ve kültürel sürdürülebilirlik sorumlulukları hakkında bir araştırma içerir ve ayrıca sanat topluluklarının sürdürülebilir gelişiminde tasarımın aktivizim olarak kullanılmasının ne derece sorumluluk sahibi olduğunu işaret eder.

İlk aşama edebiyatta tasarımcılar ve akademisyenler tarafından yaratılmış teori ve pratiklerin sürdürülebilir bir şekilde gelişmesine duyarlı tasarım ihtiyacına yönelik araştırmaya dayanır. İkinci bölüm ise araştırmayı tasarımcıların tasarım aktivizmindeki rolünü anlamaya, yaratıcılık ve sanat topluluklarının sürdürülebilir gelişiminde eş tasarı metodu ve ilerleme boyutuna daraltır.

İkinci bölümün devamında bir konu araştırmasından yola çıkılarak Pakistan'daki yaratıcı sanat topluluklarının tasarım aktivizmini ve pratiklerini birleştiren gerçek bir organizasyondan destek alınmıştır.

Araştırmanın sonucu, tasarım ve üretimin çağdaş kültürüne zanaatkar ve tasarımcının ortak çalışmayla yaklaşımını birleştirebilen projelerin önermesi merkezlidir.

Anahtar Kelimeler: Duyarlı Tasarım, Tasarım Aktivizmi, Sürdürülebilirlik, Yaratıcı Topluluklar, Zanaat, Katılımcı Tasarım, Eş-tasarım ve İyi olmak.

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INDEX OF SYMBOLS AND ABBREVIATIONS

Symbols	**Explanations**
&	And
%	Percentage
e.g.	For example

Abbreviations

HIV	Human Immunodeficiency Virus
etc	Etcetera
Eco	Ecology
ADA	Americans with Disabilities Act
AIGA	American Institute of Graphic Arts
AP	Associated Press
VOC	Volatile Organic Compounds
E-Cigarette	Electronic Cigarette
PETA	People for Ethical Treatment of Animals
WWF	World Wildlife Fund
IIED	International Institute for Environment and Development

UN	United Nations
WCED	World Commission on Environment Development
NGO	Non-Governmental Organization
TV	Television
org	Organization
TBWA	Tragos, Bonnange, Wiesendanger and Ajroldi
UK	United Kingdom
Co	Cooperative
CG	Craft Galleria
IRC	Interactive Resource Centre

1. INTRODUCTION

Materialism and consumerism have penetrated to the very root of social systems. At one hand human being's main objective has become to sustain the materialistic and energy intensive life rather than to sustain the ecosystem and welfare of its inhabitants. On the other hand industrialization has taken over the control and has made designer and artists look over the ethics and responsibilities in the process of creation and production. Designers overlook the effects of their designed products on the environment, its habitants and the social life of other fellow beings.

It is creating a huge economic gap between communities all over the world. That gap is becoming a threat to the social and economic life of common people, designers need alternative solutions to sustain the needs of materialistic and societal values. That could be achieved by becoming more socially, environmentally and ethically responsible on a personal and professional level. All professions, including "designers" can practice these responsibilities at their own ends. The question is; how designers have any responsibility towards the society, people and environment and how they can help?

1.1 Propositions

Design plays an important role in shaping the change. It is a strong tool and can be used for both a positive and negative change. By the end of 20th century the designers started to ponder upon the impacts of their works towards society and ecology. Theoretical studies and research in design have been focusing on this issue. Designers are rethinking their ways of design practices. Books with the titles like "Do Good: How designers can change the world" by David Berman, "Design Activism: Beautiful Strangers for Sustainable World" by Fuad Luke and "Design Activist Handbook" by Noah Scalin and Michelle Taute and etc, are encouraging designers to think responsibly and reevaluate their professional and ethical priorities.

The new emerging terms in design horizons like Design Activism, Design Sustainability in Social Design, Ethical Design and Participatory Design and Co-Design are redefining the purpose and definitions of design practices. This is a time where designers can connect with communities, public and stakeholders to work together towards the development and sustainability of society.

Industrialization has mostly affected the art and craft communities in the world. Especially non- westerners like Pakistan, India, Africa and etc, the craftsmen and artisans are affected by the industrialization. The crafts and artifacts which are a huge part of one's culture are losing their value because of modernism, which is inflicting a great damage to financial and social stability of the craft communities in these countries.

This research will lead through idea of designers understanding and taking care of their responsibilities towards crafts communities and their collaboration with craft communities to benefit them with innovative design thinking, will be analyzed. These collaborative projects can help in a great value to bring the sustainability in terms of economic, social and cultural structures of the society. Also it can support these communities to commercialize crafts in contemporary markets and achieve the value and appreciation that they deserve as "keepers of culture and traditions".

1.2 Research Questions

This thesis begins researching on the studies of a wider term: "Responsible Design" that defines all kinds of responsibilities of the designers towards ecology, economics and society. The second phase focuses on to the term "Design Activism" which is an approach that designers can use to practice their responsibilities. The third and final phase emphasis on the point and suggests that designers can collaborate with the craft communities to establish the sense of responsibility towards the financial, social development of these communities. This includes also the cultural and social sustainability of the society and the part of the world they are living in. The research questions that lead this study are based on the following ideas and studies:

What is responsible design? And why do designers have to be responsible? What are the responsibilities of designers?

How design can support in the establishment of a sustainable society?

How design solutions can be used to trigger a positive change in the unprivileged communities of the world?

How design can support in empowering craft communities?

1.3 Research Methodology

The literature review conducted with the purpose of assessing the existing studies and ideas on the topic to understand the perspectives established by designers and scholars on *design responsibility, design activism* and *co-design*. Books, publications, articles, online information and journals are reviewed.

Interviews are based on the objective that is to get the firsthand knowledge and understanding of the experiences and challenges faced by designers. Also for the case study, the interviews of the members of an organization and their artisans are interviewed. The interviews are attached in the end as appendix. In the light of these interviews and with the personal experience of the author, a SWOT analysis is conducted for the organization Craft Galleria.

A Case-study is presented to understand the benefits of co-designing and co-creation case-study was built on a real running organization; Craft Galleria, which is working with the concept and practices of co-design and co-creation to empower the craft communities in Pakistan is analyzed. Also, the author's process and final products of co-design experience with artisans under the CG are described in the 6th chapter in order to analyze co-design and co-creation experience and design works.

2. DESIGN AND RESPONSIBILITY

Since the evolution of humanity, humans have been using all the bounties of the earth. Humans invented machines and built structures by their gift of intellect. Human being developed technology, which is considered as advancements and achievements that built up a life, which contains products and services for not only (vital, basic needs) but also created artificial needs to achieve a state of great comfort that are considered as luxury.

The consumption of luxury goods causes some social, economic and ecological problems and creates costs. Risking social and environmental values pay for these costs. Today, the world face many economical, ecological and social problems based on power relations between societies of the world. Some of these world-wide problems are highlighted in the book "Do Good". These problems are daily portrayed on our news sources. Sometimes with numbers and fractions such as, 43,000 hectares of ancient forest destroyed, 26,500 human children under the age of 5 slain by poverty, 7,400 humans infected by HIV virus, 2,800 African children killed by untreated malaria, 600 reported deaths in car accidents in China, 73 species made extinct, etc. (Berman, 2013, p. 20)

As a result of these facts the responsibility emerges seriously, with the need for acting more sensitive and to be more aware. This calls everyone to play an active role and be responsible in an individual way as Dave Eggers says:

"Again the greatest use of a human was to be useful. Not to consume, not to watch, but to do something for someone else that improved their life, even for a few minutes" (Eggers, 2012).

Design is a medium which shapes ideas into functionality and usefulness. Responsibility is an issue which can be considered as a duty or necessity that can perform. When design is combined with responsibility it not only serves for the function of usefulness but also impacts the society and environment in better conditions, today and for future. Responsibility in design is defined as:

"A primarily active practice that intervenes in real-world circumstances, the responsibility of action proves to be a useful means of orientation. Systematic and

time parameters are relevant to responsibility in the design process. Invention, innovation, economy, production, reception, function, and form all serve as systematic parameters. The past, present, and future serve as time parameters. Ideally, design takes responsibility for creativity, historical reflection, and orientation for the future" (Erlhoff & Marshall, 2008, pp. 336-337).

Design is a term and action of everyday life. That creates the architecture, spaces, interiors, furniture, automotive, products, machines and the print material, etc. The way all these buildings, automotives and every day print materials are designed impacts social life of people and the whole ecological circle. Consumption of goods which are designed come with some hidden costs, not in terms of money, but higher costs that cost us our environmental and social life assets (Berman, 2013, pp. 21-29). Many designers all over the world are incorporating responsible approach in their designs, be it industrial, environmental, architectural or graphic design all mediums are human-centered design that facilitate human beings. The understanding of responsibility started in late 70s and became a serious practice in 90s (Ramirez, 2011, pp. 2-4).

At a certain point, a socially responsible design practice may cease to be recognized as design at all. According to a discussion between six designers debating unresolved relationship between designer and social responsibilities, a well known designer and activist from New York, John Emerson, states that design is less centered on making objects, images, or spaces as on how people interact with them and how these things function within social, economic, political and environmental contexts. A socially responsible design practice may take on any number of forms for intervention, education or advocacy even spinning off non-profits or non-governmental associations (Emerson, 2011).

In order to explore responsibility in design, it is important to understand all sub- categories of responsibility such as social, environmental, ethical and economical responsibilities (Emerson, 2011).

2.1 Socially Responsible Design

In design world social design is defined as a process that contributes to improving human well-being and livelihood. Design reflects society in all its facets and forms. Designers take positions on the mental states, including anxiety, indifference and euphoria, problems and desires of social groups. They plan and work out interpretations of society in the form of trivial or ingenious products, media and systems by giving them functions and meanings. Designers do not act autonomously in that process but as part of a society, subject to its influences. Another attribute of a social design is that it is responsive. It generates a positive reaction and the impact of the reaction can vary from the types and mediums of design being used. For example the architects are now being more aware of the environmental impacts of materials they use in their projects. Industrial designers are also incorporating techniques and methods in the production process that makes their products more environmental friendly and socially responsible (Erlhoff & Marshall, 2008, pp. 366- 367- 368).

A very remarkable example of such design can be seen in a book titled as: "Cradle to Cradle" not only mentions consciously about Eco-effectiveness, responsibilities and practices in design and consumer culture, but also it is an example of eco-effective book design itself. It is presented as, "this book is not a tree"; lays an example of eco-effective design the pages of the book were made by plastic resins that are recyclable (McDonough & Braungart, 2002, pp. 3-5).

Similar approach is used in graphic design to produces images and design that impacts the social behaviour and convey the message to make change and alter the thoughts in a positive way. For example, a graphic posters campaign by Amnesty International to highlight the human rights issues in Iran, Iraq, China and Sudan. The campaign posters can be seen below in Figure 2.1, it was done outdoors in the form of huge ad posters on the bus stops in several countries of Europe to spread awareness about human rights violations. The campaign was launched in June 2006 under the slogan of "it is not happening here. But it is happening now". The campaign left an impact in terms of awareness and was awarded as a best campaign on human rights violations (Walker & Tschurtschenthaler, 2010).

2.1 Amnesty International Human Rights Campaign 2006. Posters-Left, depicts the violation of human rights in China. Poster-Right, hunger and drought in Africa. (Walker & Tschurtschenthaler, 2010)

The socially responsive design shows how design can reflect awareness on socially problematic issues. Such as social security by making them primary drivers, social impact as one of our main considerations and social change delivered through objects, systems or services in which deflection or prevention of crime is integrated within the designed functionality, as an ultimate aim and objective (Thrope, 2009). The above campaign from Amnesty International explains the whole function and impact of socially responsive design defined by Thorpe. It is evident in both of the posters, the left posters shows the miseries of child labor in China, how children are ruled and forced to work which is violation of human rights while the poster on the right side simultaneously shows a child suffering from hunger in Africa. The posters were designed with the images of the actual spaces where they were installed but showing the people suffering in different part of the world. This was a social design experiment to generate the social responses. Socially responsive design is dependent on socially conscious design also. Response is generated by decisions and choices for a design to be socially responsive it has to be socially conscious first. What exactly is socially conscious design?

Socially conscious design is about being aware, or as the Buddhists might say, finding a right livelihood. It is simple like being honest and not causing harm

to other living things. At the most basic, it is a commitment to making conscious choices and realizing how all the decisions you make as a designer affect other people and the planet. It is about being awake instead of sliding by with the way things have always been done. Socially conscious designers stay present and in the moment. They look at every job, every client as an opportunity to make the world better. It means looking at where and how you work and whether those decisions support your personal ethics or work against them (Scalin & Taute, 2012, pp. 19-20). There are some advantages and some drawbacks for designers while practicing responsibility in a design.

2.1.1 Advantages and Drawbacks of Socially Responsible Design

Socially Responsible Design on one hand provides advantages and benefits for the society, but on the other hand, it has some drawbacks. Socially responsible design can manipulate the public. The messages channelled through design can have a positive impact or a negative one and the power to manipulate public is a biggest disadvantage. Victor Papanek; a designer and educator who strongly advocated socially and ecologically responsible design products, tools, communities and infrastructure, states in his book some advantages of socially responsible design that it can informs, reforms and give forms which is a positive aspect of socially responsive design. However, on the other hand some disadvantages are that it can deform and misinform. For example, he considers the environmental effects of various materials, techniques, processes in common use, and suggest practical alternatives that designers could to consider. He predominantly criticizes large-scale, highly unified production, and debates about the expansion of a small-scale, un-unified alternative (Papanek, 1995, p. 53).

Julia Lasky: editor of journal titled “design observer”, states that drawback of the social-design movement is its tendency to drown out achievements. Designers have always maintained a sense of responsibility, whether they were badgering clients to use recycled paper or refusing to work on tobacco accounts although some have been more vocal than others have**.** This could be a drawback that designers stop working on products, which can be socially hazardous (Lasky, 2011).

The design affected by politics cannot reach the public. Socially responsible design is considered as a design method by companies and corporate to get more popularity. Allison Arief: editor and columnist in The New York Times, mentions in one of her discussions with six other designers at the platform of "Design Matters" that there has been a lot of progress but it is astonishing that the business case still needs to be made for sustainable design, not in all circumstances, but in far too many. She disagrees with design that is ecologically, culturally or socially responsible still is in its own category: great design consultancies use it for strategies for public relations but cannot actually commit to developing an appropriate business model for doing the work (Arieff, 2011).

Another drawback is that the designers are not educated to deal with cultural and political barriers, which make their design naive. Lasky also refers to the same problem in her discussion that often, ambitious designers who take on social causes underestimate the demands on their time and patience, especially when it is required to negotiate cultural differences, bureaucratic and political obstructions, as they are trained elitists (Lasky, 2011).

The political influence also comes with the political beliefs brought up by designers. Lucienne Roberts, a London based designer, describes in her book: "An introduction to ethics in design" that the political believes influence designers thought process to a great extent. Sometimes designers get manipulated by their own believes. She states that:

"*Designers can fall prey to dogma. Even if politicians start off wanting to do good, doesn't the mixture of ideology and power get the better of them?*" (Roberts, 2006, p. 61)

This is a very important question when it comes to the political influence on design. There are many design campaign all over the world to promote political parties to get their message to the world with all the promises of doing good for the future. Many designers support the political parties by doing campaigns for them but they can never tell if the promises that are made in the campaigns will be fulfilled for real. Lucienne also underlines further the risks that can develop by theses influences which makes designers delusional and they get confused between theory and practices of politics or they becomes dislocated from ideology

and lose sight of objectives. However, if designers have real conviction then there should be one point of compromise also beyond which they will never go to support all the good things they believe in. The developments in corporate business and large-scale government have made questions of ethics even more crucial, that practically every decision made by designers has an ethical dimension, requiring them all to "balance the forces" in our own small way as responsible individuals (Roberts, 2006, pp. 61-64). These ethical grounds define the role and responsibility of designer towards society, its people, environment and economy.

2.1.2 Role and Responsibility of a Designer

The role and responsibility of a designer are very important because the industry depends on design and the world depends on industry. The main responsibility of a designer has to do with professional behaviour in daily business interactions. The responsibility demands to deals with specific professional expertise needed in such areas as accessibility, usability, consumer safety and environmental practices. This is about overall professional values a broader framework of moral principles and obligations in life (Perkins, 2006).

Professional values and professional expertise are the main keys to take care of Professional behavior depend on the nature of the work and on clients. It demands to take care of some additional responsibilities and some legal obligations that include *Universal Design Accessibility, Ecology and Sustainability, and Legal Obligations.*

Universal Design Accessibility refers to places, products and services should be universally accessible to people of all ages, abilities and physical conditions, requiring creative work to reduce barriers and welcoming to everyone. Designs should facilitate mobility, communication and participation in civic life.

Ecology and Sustainability means that designers can make a big difference, not only through responsible choices about materials and processes used in current projects, but also by staying well-informed and providing expert guidance to clients about long-term plans and activities. Industrial designers in

particular are faced with a dual challenge-the need to constantly re-create and improve products while avoiding the excesses of planned obsolescence and throwaway culture.

Legal Obligations refers to regulations for design works and designers. For example, if a physical space design work in the United States the project is a subject to the Americans with Disabilities Act of 1990 (ADA), which is a civil rights act that affects private businesses as well as governmental organizations. ADA requirements are of particular importance to industrial designers, interior designers, and architects. These requirements apply to new construction as well as to alterations. In many other countries, also the ecological principles are being written into law. Germany has taken the lead in establishing requirements for manufacturers regarding the use of recycled materials, the use of sustainable energy sources and the reduction of waste. General reference information is available to designers from a number of sources including several professional associations. Here are some places to start" (Perkins, 2006).

Also designers are responsible professionally. They can expand the consumer culture, increase the power of corporate and practice moral and professional ethics and the environmental responsibilities in their design.

2.1.3 Moral and Professional Ethics

Moral responsibilities of a designer are related to plagiarism, decisive messages, and using design to manipulate the minds of public while professional ethics are related to their responsibilities towards their clients, products and fellow designers. To help designers understand their way around their professional and moral ethics many worldwide design companies have also published some

guidelines of ethics in design, e.g. AIGA,[1] Society for Environmental Graphic design[2] and etc.

According to AIGA the ethical responsibility of a designer involves the responsibility towards the client, public, other designers, society and environment. Some of the important points stated in AIGA standards of professional (2010) practice are:

- A professional designer shall consider environmental, economic, social and cultural implications of his or her work and minimize the adverse impacts.

- A professional designer shall communicate the truth in all situations and at all times; his or her work shall not make false claims nor knowingly misinform. A professional designer shall represent messages in a clear manner in all forms of communication design and avoid false, misleading and deceptive promotion.

- A professional designer shall not accept instructions from a client that involve infringement of another person's property rights without permission, or consciously act in any manner involving any such infringement.

- A professional designer shall not knowingly make use of goods or services offered by manufacturers, suppliers or contractors that are accompanied by an obligation that is substantively detrimental to the best interests of his or her client, society or the environment.

- A professional designer shall refuse to engage in or countenance discrimination based on race, sex, age, religion, national origin, sexual orientation or disability (AIGA, 2010).

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[1] *AIGA (American institute of graphic arts) is a New York based largest professional association of designers in the world, AIGA is committed to advancing the value and impact of design, both locally and globally, and working together to inspire, support and learn from each other, at every stage of career.*

[2] *Society of Environmental Graphic Design is a global, multidisciplinary community of professionals who plan, design, and build experiences that connect people to place.*

All of these laws and codes of conduct for designers are very helpful to practice their design in a professionally in a responsible way.

2.2 Environmental Responsibility in Design

Professional ethics and values are not the only important responsibilities for a designer but there are also some environmental responsibilities. The designers are responsible to consider the impact of their designs to the environment and ecology and that involves all design fields. Design is a strong tool and can be used to shape and change the both. Design creates behaviour for consumerism and that involves the consumption of resources and materials. Designers have this great responsibility to work to adverse any negative impact their design is making to the environment and ecology.

The impacts of designer's actions not only affect human being but they affect other living creature on this earth too. For example in North America that the designers are responsible for helping to create 40% of North America's solid waste; paper accounts for 81 million tons of waste annually, according to the Printers National Environmental Center. The pulp and paper industry is the third largest industrial client of elemental chlorine. Chlorine is used to whiten paper, a process that is linked to a proven cancer-causing chemical called dioxin (Szenasy, 2003).

This is an example that states the actions of the designers have adverse effects on the environment and ecology. The designers have to do the right thing to save both and reduce the toxins created by the designs and materials they are using. A designer can be responsible for the use of papers and keep check that the paper is coming from cutting natural forests. Materials which are used in the architectural, industrial and interior design is being consumed by graphic designers too. It should be the material that could be easily regenerated and is not embedded with harmful chemicals that produce the toxins that are dangerous for humans as well as for other living creatures.

Design is a powerful tool that loads designers with a great responsibility towards the human race, environment and the whole ecology. The impact of art and design profession on the environment is not ignorable. Artists and designers effect environment by their work. There are many art and design projects that highlight the issue of environmental problems and on the other hand they design objects and use resources that are affecting the environment. In recent years it has been a trend to make environmental statements through art, particularly installation art and modern sculpture. Memorable examples of environmental art including the artist that poured away thousands of gallons of water to highlight water shortages or the collages made from exotic bird feathers to highlight extinction issues and endangered birds (Dunn, 2012).

These examples can be seen from two juxtaposing positions; on the one hand there may be sympathy with the cause, yet on the other it may feel that any waste is wasteful and that the art was unnecessary and ineffective. These merits can be debated till the cows come home and never be certain as to whether the increased environmental awareness outweighed the environmental impact of the materials used (Dunn, 2012).

One more example of the effects of design on the environment is Taipei 101 tower. The tower is located in Taiwan and was designed to be the world's tallest tower with 101 stories. But, the tower later became the huge threat to the geographical area where it is locating. The construction of tower began in 1997 and the seismic activity in Taipei-Taiwan, has increased in the form of micro earthquakes since then (Ravilious, 2005).

Another important fact is the chain reaction caused by pollution in the land, water and air. In a study conducted in the University of California the bees were tested for the toxins they carry through the pollens from the plants because of the polluted soil. The studies showed that the toxins absorbs by plants from the soil produced selenite (a toxic and highly absorbable acidic chemical found in water) and the bees cannot differentiate between selenite and sucrose and it results in the killing of bees. This phenomenon is putting the species of honey producing bees to extinction (Beeby, 2012).

Many examples of such kind of chain reactions can be seen in the form of global warming, greenhouse gases and extinction of species because of toxins in the environment. In another studies the level of mercury (a poisonous element) were checked in the blood of the birds to understand the chain reaction caused by water pollution. The scientist made a discovery that the levels of mercury in the blood of blackbirds (seed eating bird) were seven times more than the birds that eat fishes. The mercury is contaminated in the soil and water because of the disposal of wastes mostly the industrial waste. This is resulting in the extinction of the species of birds and many other animals that are drinking polluted water (Jackson, 2012).

The pollution in the environment is the result of industrialization and consumerism. The consumerism depends on design and advertising industry. Humans consuming too much material are causing to tear at the earth, upset the oceans, melt the poles, and litter the sky (Berman, 2013, pp. 25-26). Scott Ewen from Émigré supports this situation with his these words: *"Designers make the world's most beautiful trash".* (Berman, 2013, p. 26)

Design and advertising tempts people to buy all the beautiful and fancy things that they do not need. World is running out of space, there is no backup to throw the trash, but people are consuming increasingly. The future of humankind has accomplished since the invention of civilization depends upon the wisdom people show in their lifetime (Berman, 2013, p. 26).

2.2.1 Effects of Consumerism on Environment

All design professions of today were created by capitalism, which supports and creates consumerism; parallel to this, designers create consumer culture with their design skills. The role of designers in persuasive visual communication is very evident whether it is through product design, architecture, marketing, corporate labeling or branding.

David Berman, Ethics Chairs of the Society of Graphic Designers of Canada, underlines designers potential for society other than consumerism as

below:

"*…rather than sharing our cycles of style, consumption, and chemical addictions, designers can use their professional power, persuasive skills, and wisdom to help distribute ideas that the world really needs*" (Berman,2013, p. 39).

He further states that the designers not only have potential to be socially responsible but they also have potential for change. Persuasion and manipulation in design plays an important role in the communication of the message that intends to be delivered. Designer can have great impact on the consumer behaviors. This persuasion and manipulation can be used responsibly and as a tool to trigger a good change.

Berman gave few examples of ads, of few daily life products, which leave great impact on human consumer behavior and that affects the environment in the long run. Goods are bought in the name of luxury or necessity, which have not financial but environmental cost such as air, land and water pollution and a threat to the eco-system, the life of species on this planet including human beings themselves.

2.2 – Consumerism Ad (Berman, 2013 p. 4)

Berman demonstrated an example of an automobile add in which the manufacturer claims that by driving this car people can boost their confidence (Figure 2.2). This is an advertising trick to manipulate the buyers' psychology. Berman rises a question here that how one thing that is responsible for killing many people around the world is supposed to be a therapy to boost confidence.

This is one example of how the advertisements change perceptions and human behaviors. Automobiles are not just responsible for accidents around the world but also for the environmental pollution. But how much pollution do cars produce? The answer is more complicated. Air pollution is not consistent around the world. Areas where large quantities of fossil fuels are burned have much higher levels of air pollution than sparsely occupied regions. Heavily populated cities such as Los Angeles, Mexico City and Beijing are all famous for their air pollution. According to the Environmental Protection Agency, motor vehicles produce roughly one-half of pollutants like VOCs[3], nitrogen oxide and particulate matter. 75 percent of carbon monoxide emissions come from automobiles. In urban areas, harmful automotive emissions are responsible for anywhere between 50 and 90 percent of air pollution. All told, this is quite a lot of air pollution produced by vehicles (Smith, 2010).

Automobiles are one example among many other products and factors that contribute to boost the air pollution around the world. Smoke which rises from the chimneys of the industries, residential premises, commercial complexes and cigarettes also play a major part in spreading the pollution in the environment. Studies suggest that three cigarettes can cause more air pollution than an exhaust of diesel car. Another study conducted by Washington University shows the increase in cigarette consumption over a period of decade. According to the studies the consumption of cigarettes over a decade went up from 5 trillion to 6.25 trillion (Hitti, 2004).

The portrayals of class and elegance associated to cigarettes in ads encourage public to be like these people who start the compulsive consumerism of these products and later it becomes addiction.

[3] *Volatile Organic Compounds*

The messages drawn by the designers and businesses in these ads of cigarettes are very evident and they tempt people to buy these cigarettes, which not only result into hazardous health risks but cause damage to the environment as well.

2.2.2 Effects of Design Industry on Ecology

Design professionals are not only generating consumerism but it is also affecting the ecological life on this planet. According to PETA[4] every year, millions of animals are killed for clothing industry, all in the name of fashion. Whether the clothes come from Chinese fur farms, Indian slaughterhouses, or the Australian outback, an immeasurable amount of suffering goes into every fur trimmed jacket, leather belt and wool sweater. In another article from PETA about fur industry they state following facts:

"*More than half the fur in the U.S. comes from China, where millions of cats are bludgeoned, hanged, bled to death, and often skinned alive for their fur. During the annual Canadian seal slaughter, tens of thousands of baby harp seals are shot or repeatedly bludgeoned with clubs tipped with metal hooks. Also in Canada, hundreds of black bears are shot at point-blank range or caught in traps*".

One Green plant[5] organization declares that the animals are exploited in the five worst ways for fashion industry: leather, fur, wool, feathers and cosmetics. Many animals around the world are critically endangered because of their extinction form the face of the earth because of their rapid killings for fur, leather, wool and ivory. Fashion designers, all over the world who are working with these materials are considered that they are responsible for the killings of these animals around the world (Garlow, 2014).

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[4] *(PETA): People for Ethical Treatment of Animals is the largest animal rights organization in the world, founded in 1980, with more than 3 million members and supporters.*

[5] *One Green Planet is a platform for the growing compassionate and eco-conscious generation. Officially launched in 2013, in USA.*

The architecture and construction industry impacts a great value of change in the resources of earth. The designers and architects encourage people to get accustomed to modern design trends to live better, modern and adopt a standard for their lifestyle. Consumption of forests causes "deforestation" which results in drastic changes in the climate, the structure of earth, the fertility of soil and biodiversity. Many species of animals and birds are getting extinct because of deforestation in the world. Forests on our planet cover almost 31 percent of the land area. They produce vital oxygen and provide homes for people and wildlife. Many of the world's most threatened and endangered animals live in forests, and 1.6 billion people rely on benefits forests offer, including food, fresh water, clothing, traditional medicine and shelter. All of this is under threat because of the consumption of world's forests (WWF, 2015)[6].

According to Greenpeace[7] every two seconds, an area of forest the size of a football pitch is lost due to logging or destructive practices. The wood taken from the forests of the world is used in the manufacturing of comfortable lifestyle. The second most consumed product from wood is paper. Paper is made out of the pulp of wood. Purdue Research foundation[8] and US Environmental Agency[9] (1996) declare that one-ton of paper takes 17 trees to get manufactured. (IIED)[10] Discussion Paper suggests that average worldwide annual paper consumption is 48 KG per person with North America accounting for over 1/3 (IIED, 1996). Worldwatch Institute[11] discovered that 115 million sheets of paper

[6] *(WWF): World Wide Fund for Nature, a non-governmental organization to stop the damage of nature and aims internationally to repair damage of the nature. Since 1961 organizations established in the expanding work the area has changed into the present name.*

[7] *Greenpeace is an independent global campaigning organization, established in 1971 in USA that acts to change attitudes and behavior, to protect and conserve the environment. Greenpeace is present in more than 55 countries across Europe, America, Asia, Africa and the Pacific.*

[8] *Purdue University and Purdue Research Foundation operate business incubation programs to assist organizations in the process of commercializing innovative technologies. It represents the largest cluster of "technology-based companies" in Indiana, USA.*

[9] *The United States Environmental Protection Agency (EPA or sometimes USEPA) is an agency of the U.S. federal government which was created for the purpose of protecting human health and the environment by writing and enforcing regulations based on laws passed by Congress.*

[10] *IIED is one of the world's most influential international development and environment policy research organizations. Founded in 1971 in London, it is working with partners on five continents.*

[11] *The Worldwatch Institute's Globescan Survey of Sustainability Experts named a globally focused environmental research organization based in Washington, D.C. Worldwatch as one of the top ten sustainable development research organizations.*

are used annually for personal computers. Xinhua News Agency[12] declared that 10,000 trees are cut down annually in China to make holiday cards.

All these facts are alarming for humans to ponder upon their consumption habits and make a choice in present to save the future.

2.2.3 Consumption and Pollution

Drastic decrease in the resources of the Earth is not the only problem that the world is facing because of consumption. To meet the requirement of consumption increasing industries are setup and these industries are also responsible for the pollution problems that are all faced today. Pollution is also a major problem that is leading towards many serious problems (Bradford, 2015).

Environmental pollution is the major problem that the planet is facing today and this is caused by deforestation. Global warming and green house gas effects are results of consumption, caused by human being, out of misbalance between resources and usage. Air pollution is a harmful form of pollution caused by the injurious gas emitted by automobiles, transportation vehicles and factories. They all produce, sulfur dioxide, carbon monoxide and nitrogen oxides.

Timber is an important material in architecture, construction and paper industry. But cutting down the forests is causing a lot of air problems. Increase in carbon dioxide in the air along with other green house gases, soil erosion and loss of species are few of them (Bradford, 2015).

Water pollution is another serious problem as water is vital for life, which when is polluted carries diseases and bacteria with it, which are harmful for all living organisms. Water wastes from industries, sewage, waste disposal in water, chemical sprays, and throwing liter into the sea and oceans caused water pollution. When Earth's population was much petite, no one would have ever thought of such a serious problem. It was once popularly believed that the oceans were far too big to pollute. Today, with around seven billion people on the planet, it has become

[12] *The Xinhua News Agency is the official press agency of the People's Republic of China.*

apparent that there are limits. Pollution is one of the signs that humans have exceeded those limits (Woodford, 2015).

Land pollution is also not ignorable as soil contaminants can have significant deleterious consequences for ecosystems. Resulting from human activities these pollution results in an imbalance in nature that exposes the land to an elemental threat. Due to land pollution, the Earth loses approximately 25 billion tons of valuable topsoil each year. It takes at least 500 years for 2.5 centimeters of topsoil to regenerate. Up to 80 percent of land pollution is caused by energy production, food production and transportation that affect drinking water fundamentally. About half of the world's population does not have access to safe drinking water because of soil and land pollution (Kevin, 2012).

All of these pollution factors are related to the design field and the designer's responsibilities. As designers make decisions based on the requirements of the clients, for choosing materials in products and their choice of materials used in these products, they play a critical role and responsibility towards the environment and ecosystem. McDonough and Braungart questioned if designers are aware of the toxic chemicals that spreads out material in people – users' environment. According to McDonough and Braungart, the everyday things, from a chair to the computer, rugs, paints, toothbrushes, all have some toxic chemicals that go into users' body in one way and also become a part of the environment. But users are not aware of all the toxins which are spreading into the environment because of these things (McDonough & Braungart, 2002, pp. 3-7).

Creating and applying eco-friendly design solutions are emerging necessity in order to stop and decrease hazards that are threatening natural resources for the future of this planet and upcoming generations. Indeed, human beings are living in the time where they can leave a greater impact of their actions on earth and its environment. They can propagate the future by making a choice between positive or negative ways. These entire scientific consensuses that human activities are changing Earth's climate are pointing towards overconsumption. It is a leading driver towards environmental shipwreck. But this shipwreck can be saved by creating sustainability in the cycle of consumption and generation of resources. (Berman, 2013, p. 25).

The next chapter is based on the research about types of sustainability that are important and the methods through which designers can play their role in maintaining the sustainability.

3. SUSTAINABLITY, DESIGN AND ACTIVISM

The definition of sustainability is an ability and capacity of something to be maintained over a long period of time. It is about taking what is needed now and maintain the cycle without jeopardizing the potential for human being in the future to meet their needs. Awareness has been growing over the period of last thirty years about the design of modern built environment and the lifestyle it support and promote appears to be unsustainable. The construction and operation of these environments destroy resources faster than a natural system can create them (Erlhoff & Marshall, 2008, pp. 380 - 386).

Sustainable design, generated from environmental problems has evolved from a variety of concerns, experiences, and needs like; energy efficiency, recycling, sick building effect and toxic materials. *Sustainable design, green design, sustainable development, environmentally responsible design, environmental sensitive design, green architecture and responsible design* all these terms deal with sustainability. The capacity of the environmental, economic and social system continued over the periods of time (Kang, 2003).

3.1 Sustainable Development

In the middle of nineteenth century, the meaning of sustainability was clarified by providing the evidence of the relationship between all the entities present in the ecology. It was showed that all the living things in the ecology are interdependent on each other and if one parameter changes it reflects the change to others automatically or exerts pressure on them for evolutionary change in response (Erlhoff & Marshall, 2008, pp. 380 - 386).

In order to understand the aim of sustainable design, it needs to understand the purpose of sustainability. The most common cited definition of sustainability is the one that was put forward in relation to the term: “Sustainable development” in 1987 UN Brundtland Report: “Our Common Future”, in this report sustainability was defined as meeting the needs of present without harming the ability of the future generations to meet their needs. The formulation of intergenerational equity

was not considered to be practical because it raised other questions about the needs of present, the future and the nature of the "harm" (WCED, 1987, p. 43).

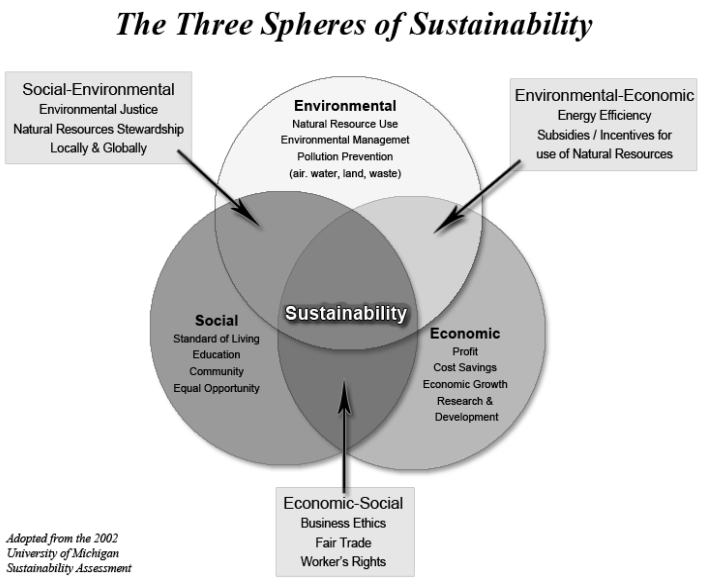
The members of Forums for the Future and Sustainable Wealth defined sustainability as:

"In essence sustainable development is about five key principles: quality of life; fairness and equity; participation and partnership; care for our environment and respect for ecological constraints - recognizing there are 'environmental limits'; and thought for the future and the precautionary principle". -Forums for the Future Sustainable Wealth London, 2008 (Team, 2008, p. 22).

In 2001, the Earth Charter[13] broadened the definition of sustainability by including the idea of a global society. Global society was defined as a society founded on respect for nature, universal human rights, economic justice, and a culture of peace. These goals demand human to re-examine their policies on environmental protection, social responsibility and economic practices (Charter, 2001).

The three policies for sustainable future that are implied to the sustainable design philosophy also, are defined as three spheres of sustainability. Social, environmental, economical are the main spheres whereas there is another sphere that is of culture which depends on all three of them.

[13] *The **Earth Charter Initiative** started in 1968 as a collective name for the global network of people, organizations, and institutions who participate in promoting the Earth Charter, and in implementing its principles in practice. The Initiative is a broad-based, voluntary, civil society effort, but participants include leading international institutions, national government agencies, university associations, NGOs, cities, faith groups, and many well-known leaders in sustainable development.*



3.1 – The Three Spheres of Sustainability (Rodriguez, Roman, Sturhahn, & Terry, 2002)

The figure 3.1 is adopted from the 2002 University of Michigan Sustainability Assessment. Figure depicts that the three spheres: Environmental, Social and Economic are interconnected and interdependent on each other and by combining them to work together in a harmony can create a perfect sustainability (Rodriguez, Roman, Sturhahn, & Terry, 2002). The three main spheres of sustainability are discussed below.

3.1.1 The Planet: Environmental and Ecological Sustainability

Human civilization has long experienced the extent to which the natural system can be damaged through the resource extraction before the ability of such system to recover from the damage is exceeded, for example the rate of logging. Human beings have been aware of the fact that damaging the sustainability of one species can in turn lead to the damage of other species and entire eco-system. The example of such damage can be seen in terms of hunting species of animals. The

hunting of animals leads to the misbalance in the number of the predators and the remnants (Erlhoff & Marshall, 2008, pp. 380 - 386). However the contemporary environmental debate, predominantly, assumes that environmental concern is linked to the problem of industrial pollution and considers this to be a unique feature of the industrial society. Historically, hazards of pollution, deforestation, killing of species, land degradation and chemical food adulteration have determined humanity, to a greater of lesser extent, for most of its existence (Wall, 1994, pp. 2 - 4).

This sweeping effect of environmental degradation and ecological damage has been a major driving force behind every socio-environmental transformation in the history including agricultural and industrial transformations. The growth of population, the gradation and depletion of resources, the reformation of societies have usually been slow as to be imperceptible during an individual life span. That is why natural environment has reached the limits where it has started to give human beings the "vital signs" and is calling for environmental sustainability (Brown, Renner, & Falvin, 1997).

The most important one is environmental sustainability. It describes the rate of renewable resources harvest, pollution creation, and non renewable resource depletion. This can be continued indefinitely. If they cannot be continued then they are not sustainable. Herman Daly proposed the base solutions for environmental sustainability as:

"For renewable resource *the rate of harvest should not exceed the rate of regeneration…**For pollution** the rates of waste generation from the projects should not exceed the assimilative capacity of the environment….**For nonrenewable resources** the depletion of these resources should require comparable development of renewable substitutes for that resource*" (Daly, 1990, pp. 2,3).

Design and manufacturing is all about using resources for making products of everyday life. These products share their significant responsibility in terms of resources that are used to create them and their impact to the environment. For controlling the negative impacts of the products and the process of productions some strategies are developed. During the design process of products and

important decisions are made to determine product's environmental impacts, lifecycles, materials, manufacturing processes and the possibility of them to be recycled and reused at the end of their useful lifecycle (Gajardo, 2014).

Many industries and organizations around the world are adopting these strategies in the production of their products to make them more environmentally sustainable and friendly. Walmart is an example for implementing environmentally sustainable strategies into their business. Its strategy is targeting zero waste, eradicating the use of plastic bags, using packages made of recyclable materials, recycling of electronic products and gadgets and responsible sourcing by green and yellow factories (Walmart, 2015).

3.2 - Walmart reusable recycled material shopping bags. (Walmart, 2015)

In 2006, Walmart launched a campaign: "Sustainability 360", this campaign aimed to achieve the following goals:

Reducing greenhouse gas emission from company's establishment all around the world. Also reducing company's solid waste substances within next three years and improving Wal-Mart brand product packaging within the next two years.

Increasing the number of environmentally friendly products in the stock of the entire chain by 20% within next three years of time period. Wal-Mart is one of the biggest companies to implement sustainable strategies and responsible behavior into their business. It is educating millions of consumers and suppliers by generating a substantial change throughout its entire value chain (Team, 2008, p. 188).

Other than Walmart many other businesses are also adopting these strategies in their business. This is a positive change in manufacturer and consumer behavior towards their environment and social values. This also impacts the next important sphere is of economy.

3.1.2 The Profit: Economic Sustainability

The initiative for environmental and ecological sustainability depends upon economic sustainability. It is achieved through economic activity that allows human beings to meet their genuine needs in the present without compromising the future (Brova, 2008 - 2009, p. 54). Economic sustainability is a strategy that provides the solutions for socio-economic development and resource management to their full advantages. It is a process of allocation and protection of scares resources while ensuring positive social and environmental outcomes and economic stability for future generations (Doane & McGillivray, 2001).

Historically, economics have been rarely concerned with natural capital; e.g. protection of forests, atmosphere and natural sources. To the traditional economic criteria of allocation and distribution efficiency has now been added a third, the one of scale. This scale criterion measures the growth and flow of the material from the environmental resource to sinks (Daly, 1992, pp. 186 - 188).

*"**Allocation** refers to the relative division of the resource flow among alternative product uses; how much goes to the production of cars, to shoes, to plows, to teapots etc. A good allocation is the one that is efficient. **… Distribution** refers to the relative division of the resource flow, as embodied in the final goods and services, among alternative people. **… Scale** refers to the physical volume of*

throughput, the flow of matter energy from the environment as low entropy raw materials, and back to environment as high entropy waste " (Daly, 1992, pp. 186 - 188).

The most prominent example of economic stability can be seen in Germany. The German economy saves some 3.5 billion Euros a year by recycling a total of 88 percent of paper, 87 percent of glass, 72 percent of metal and 67 percent of plastic, according to a study by the German Association for Waste Management (Jeppesen, 2011). For maintaining all these figures for economy the third sphere of sustainability, which is of "people", plays an important role.

3.1.3 The People: Social Sustainability

Social sustainability relates to how individuals, communities and societies live with each other and commence to achieve the objectives of development models, which they have chosen for themselves. It also takes into account the physical boundaries of their places and planet earth in general. At a more operational level, social sustainability starts from taking actions in main subjected areas, encircling the social realm of individuals and societies. That ranges from capacity building and skills development to environmental and spatial discriminations. With this regard, social sustainability blends traditional social policies and principles, such as equality and health, with rising issues concerning participation, needs, social capital, the economy, the environment, and more recently, with the wisdom of happiness, well being and quality of life (Colantonio & Dixon, 2009, p. 4).

It is a precondition to achieve environmental sustainability where as both are dependent on economic sustainability. Social sustainability balances the cohesion of the society and its ability to help its members to work together to achieve common goals, while at the same time also meeting basic needs of individuals; e.g. wellbeing, educate nutrition, shelter, cultural expression and political involvement (Gilbert, Stevenson, Girardet, & Stern, 2009, p. 12).

Long term sustainability and success in the social life of the communities is as important as physical, economic and environmental sustainability. Affirmation of social success and sustainability needs to be integrated into the policies and professional practices around the world in all professions that are related to the business of creation (Arendar, Bacon, Woodcraft, & Hackett, 2011, p. 9). Design is one of these creative businesses that have potential to bring social sustainability and change by using the method of social innovation.

Design and innovation supports to resolve the major problems of society when it is focused on socially and environmentally responsible issues such as: climate change, access to clean water, better sanitation, poverty, pollution, female empowerment, social justice, crime etc. Responsible design is for social sustainability and stability of the society instead of focusing on only making sales and growing economy, designers can work for society and its member whether for profit and nonprofit sakes (Sherwin, 2012).

There are various examples of such new design projects around the world. One of them is the "One World Futbol Project" is a great example of innovative design combined with social responsibility. The project is designed to provide the facilities to play football for youth in the third world countries. The ball is designed by nearly indestructible material and does not need to be inflated. The motto of the project is: "Buy One, Give One". It has helped over one million people from the third world communities with the money they collected. They have distributed the footballs to the children who never had money to buy a football. Also the children in some third world countries do not make these footballs. It implies that games do not just belong on the schoolyard—it heals and rebuilds communities devastated by wars, disasters, diseases and poverty. Through play this project help individuals and communities thrive and transform themselves and the world (ONEWORLDPLAYPROJECT, 2014).

3.3 – Children playing with special football designed. Image courtesy: One World Play Project (Cress, 2013)

The football designed by One World Play Project, which in comparison to the regular footballs is made with recycled materials, is cheaper to make and lasts longer (Figure 3.3). This project is a good example of how range of activities can also help communities to thrive socially. However culture also plays an important role in the stability of society. People live complex lives and relate both to communities that are defined by "where they line" and communities of interest based on religious or shared identity interests. This is where culture plays an important role in the development of sustainable social life of communities (Arendar, Bacon, Woodcraft, & Hackett, 2011). In the following the fourth sphere of sustainability is discussed, which is not usual but can have an enormous impact on the other three spheres.

3.1.4 The Values: Cultural Sustainability

Creation of cultures creates values of people for future of people as Albert Camus said: *"Without culture, and the relative freedom it implies, society, even when perfect, is but a jungle. This is why any authentic creation is a gift to the future".* (Camus, 2010)

Culture plays an important role in the environmental, economic and social problems, which have cultural activities, decisions and mindsets behind them. All these problems are caused by human actions and their root is culture. Therefore the solutions used for economic, social and environmental sustainability are unlikely to be successful without cultural considerations (Soini, Battaglini, Birkeland, Duxbury, & Fairclough, 2015, p. 14).

Culture is considered to be the fourth circle of sustainability. It is defined as socially learned knowledge and patterns of behaviors shared by groups of people. It is a collective aspect that is shared between people brought up with a specific set of behaviors, mindsets, traditions and values. Human beings brought up in a given culture are most likely interacting and communicate with each other without any misunderstandings (Peoples & Bailey, 2014, p. 23). Whereas in another context culture is considered as a part of evolutionary psychology of human beings through which they adapt to the environment they are living in (Rosman, Rubel, & Weisgrau, 2009, p. 5).

Every culture makes a difference between social system and environment or between socially expected behaviors and social divergence. The social construction of reality is mainly the cultural one, based on the dominant culture, subculture or an alternative culture. The sustainable cultural development means the change in the dominant culture of globalization into diversity of sustainable cultures. The cultures are made sustainable when some means or channels communicate to them successfully. The most important channels for cultural sustainability are *people*: People, and communities carry their values and traditions to other geographies through their social institutions. These institutions are comprised of individuals (family), institutions for religion (churches, mosques, etc.) and educational institutions. The other channels are printed and broad casted media such as TV, cinema sector, social media, cultural media, etc. All work together to transfer the culture over time to generations and geographies (Brocchi, 2008, pp. 26 - 27). These instruments of cultures are strongly related to design issues.

The sustainability of culture is connected to the sustainability of social life, economy and environment. For example; while forests are material source for industries within capitalist mind, forests are living system and sources for people

living in rural area culture of different geographies in the world. Also culture is a part of social system and one of the goals of the sustainable development is to satisfy the needs of people respective to beliefs, traditions, cultures, justice, peace and democracy (Brocchi, 2008, pp. 30 - 33). Many countries use this cultural aspect of sustainability for their economic development. For example in *Burkina Faso* the cultural industries are the part of the policy for the economic development. One of their policies implies the economical aspect of culture by promoting cultural industries like arts, crafts, tourism, festivals, heritage sites and cultural events. Culture is the fourth biggest source of economy in Burkina Faso. Their other policy implies the context of culture in a broader spectrum in which culture is practiced as a way of life, the core design of social fabric and traditional mechanism in the country (Soini, Battaglini, Birkeland, Duxbury, & Fairclough, 2015, pp. 18 - 19).

Design is a part of third medium of cultural transmission. However there is an argument about the manifestation and consolidation of design being out mounted to the global monoculture of design, there is also a possibility for designers to connect to the "culture permaculture"[14] to get fresh creative nutrients. This can be achieved by employing the concept and approach to combine the skill and knowledge of indigenous people with ethically ecological design to allow the culture to evolve sustainably (Carlson & Richards, 2011).

Design and culture are interrelated terms. However the understanding of design as a culture, but not a part of cultural context of society itself, is more common. There are multiple applications of design, but design in general is losing its authenticity as a cultural icon, which happens because of globalization of design concepts, where global culture of design over dominates the diversity of different cultures around the globe (Carlson & Richards, 2011). History shows that there always has been a debate about design impacting the culture and enquiries made about the role of design in changing the "social culture" or "design culture" itself. Studies suggest that today's design culture does impact the change in the values and sets new things and create new roles that result in the change in society (Fuad-Luke, 2009, pp. 33-34).

[14] ***Permaculture*** *is a term used for an approach to design human settlements and agricultural systems based on the relationship to nature and ecology.*

The evidence of such concepts of cultural based design can also be found in the history. William Morris is a great example of a revolutionary worker. He was the leading member of Arts and Crafts Movement. His vision of connecting arts and crafts to the commercial design industry paved the way for the evolution of design under the light of cultural and more personal contexts declining the age of machines (MacTaggart, 2015). However industrialization has always been a major drive behind the evolution of design. It has occupied the central role as a mediator of cultural acceptability and therefore provides a regulatory service in production and consumption. The role of design shifted from phase to phase through centuries from creating artifacts of cultural identity, over creating a culture for the production of industries with the invention of steam engines, up to the establishment of trade fairs and the boost of industry. In each of these phases, the products become texts in "circuits of culture". These artifacts or products are texts in the history of design. They are representations sustained within cultures, inform about identities and social relations and generate feedback to the next generation of production. These feedbacks help in giving form to the dominant socio-political and socio-economic norms; design simultaneously confers meaning and values, and affirms the dominant paradigm (Fuad-Luke, 2009, p. 36).

Solutions for sustainability are based upon systematic thinking and ecological practices. It challenges the capitalist system of production and consumption that involves product, people and profit (also the new capital of culture). Design can have positive impact on these capitals. It has already advanced in the last three decades to highlight the sustainability challenge by the means of activism (Fuad-Luke, 2009, pp. 2-24).

3.2 Design Activism: Solution for Sustainability

"A dead thing can go with the stream, but only a living thing can go against it." G.K. Chesterton

Activism is said to be a backbone of sustainable development. Including the sustainability of resources, cultures, traditions, arts, crafts and architecture, the world needs activists to highlight these issues and bring them to the attention of

the world with their dynamic activism. It involves taking action and claiming change on the behalf of wronged and neglected actions. Activism is driven by the identification of wrongdoing or a problem in general and can result into reformative and reactionary actions (Thorpe, 2011). Activism is defined as a policy or act that uses vigorous campaigning to bring about the social, political and environmental change in the world (Oxford, 2015).

Design activism is a term that is to represent the central role of design to bring change in the society, to raise awareness about believes, values and practices (e.g. environmental issues, sustainability issues). This has the effects on that mass consumerism and production are putting a burden on the life of people and the life of this planet. Design activism is not restricted to one discipline of design it involves everything from industrial design to architecture, from graphic design to media and fashion industry (Markussen, 2012). To understand the design activism to the very root of it, first the definitions of "design" and "activism" should be understood.

3.2.1 Definition of Design

"Design is the act of deliberately moving from an existing situation to a preferred one by professional designers or others applying design knowingly or unknowingly" (Fuad-Luke, 2009).

Design is a diverse field that includes unique and creative disciplines, which differ on the bases of their complexities and practices. Design is seen as a dynamic tension between design studies, design practices and design explorations. Design becomes more complex when another dimension is added into it and that dimension is sustainability including all of its contexts. Sustainability adds economic, ecological, social and institutional factors into design. Whereas design also involves myths, meanings, philosophy, science, media, culture, politics and etc.

This dynamic and versatile range of things and systems allows design to deal with contemporary issues like societal, economic and environmental life of this

planet (Fuad-Luke, 2009, pp. 2- 6). Since design seeks to improve the condition of life for the people, most of it, in some sense, is *activism* (Thorpe, 2011, p. 1).

3.2.2 Definition of Activism

"Activism is taking actions to catalyze, encourage or bring about the change, in order to elicit social, cultural or political transformations. It can also involve transformation of individual activist" (Fuad-Luke, 2009).

Activism is a broad belief. It got its shape from the issues arising from industrialization, consumerism and economic disasters. Activism is now a days channeled and aided through information technology and social media. The activists orientate around special interests and specific issues. The professional activists work for nonprofit and charitable purpose. They may embed transformation in the system and its target audience, social, cultural or political group (Fuad-Luke, 2009, pp. 5-6). Activism can be progressive, as well as regressive, visionary and reformist (Thorpe, 2011).

3.2.3 Design Activism

"Design Activism is design thinking, imagination and practice applied knowingly and unknowingly to create a counter-narrative aimed at generating and balancing positive social, institutional, environmental and economic change" (Fuad-Luke, 2009).

History indicates two things. One is that the economic, social, political and cultural forces have always shaped design. The other is that many designers are idealists. These two issues remain in conflict. The former suggests that design is a passive, pragmatic activity destined to respond to the faults and flaws and pave the way for local and global change. It is driven by services to wider interests. But designers are also interested in improving on what exists. Even though, despite a history of reformists, from John Ruskin, Henry Cole and William Morris to Walter

Gropius to Buckminster Fuller, Tomas Maldonado, Victor Papanek and Italian radical movement, designers continue to concern about the perplexity of the gap between their ideals and the reality of what is around them. They are, arguably, historical examples of design activism (Julier, 2011). It determines how current theories of design and practices in sustainability can help improve contemporary social, economical, environmental and cultural issues (Fuad-Luke, 2009, pp. 23-27).

Studies determine that sustainability is a key to design activism. For sustainable future developments of all economic, cultural, environmental and social factors designers need to work on multiple things simultaneously while keeping their main emphasis on society. Sustainability can be a voice of design activists (Fuad-Luke, 2009, pp. 48-50). In the following chapter the research about how design activism can be used as a tool of change, in maintaining sustainability on different levels, has been assembled.

4. DESIGN ACTIVISM: A TOOL FOR CHANGE

The interest of professional design communities in design activism is getting more dynamic over the period of time. Numbers of organizations were established around the world between the years 1999 to 2008, with an activist agenda focusing on architecture, social design, slow design and interdisciplinary design, etc. In 2008, in Turin, Italy, there was a meeting of designers, researchers and a practitioner researching on diverse sustainability issues at the conference titled "Changing the Change" was a great step in the development of design activism approaches. A coming together of the global design research community focused on sustainability at this conference indicated that design explorations can be essential to encouraging the social learning journey required to move towards more sustainable ways of living and working (Penin, 2012).

All these advances in design practice and design studies are equally important. Over the past few years many design approaches have been established to cope with the challenges of sustainability agenda (Fuad-Luke, 2009, pp. 77-84). Designers are becoming more active agents of sustainable change, moving from elitist mode to more effective and operating mode. This redefines design practices as a strategic activity based on awareness or benefits with an agenda for change. Designers are occupying positions to bring in social and economic reforms in the society in extraordinary ways (Penin, 2012). David Berman supports this extraordinary ways of design, too by putting down the contemporary design age into one line: *"We live in an age where everyone is a designer, and the future of the civilization is our common design project"* (Scalin & Taute, 2012, p. 3)

Indeed all people of society are shaping up the future together by their actions today. But there should be some reforms in the behaviors or approaches to ensure the future will be better than present. The first groups of people that need reforms in their behavior are the designers themselves. Many design theorists and critics have been pondering upon the sustainability theme since the release of Richard Neutra's book, Survival through Design, in 1954. Then in the early 1990s the discourse on the environmental impacts of design came to attention and only in the past five years or so that attention refocused on design in the social platform. Recently, there have been a number of new design approaches that have gathered under the umbrella of sustainability. However, the more famous approaches

include critical design, slow design, co-design and metadesign. These approaches are directed to reframe design theory and practice. Transforming thoughts and perceptions of the culture of design about sustainability is a crucial undertaking for the design activists and researchers around the world (Fuad-Luke, 2009, pp. 85-87).

Successful design activism for the benefit of society can be lead by four criteria; disruption, framing the problem, claiming for change and involvement of neglected groups (public, craftsmen, children etc). There are many types of design activists who work to provide social benefits or services to the communities and general public. These activists can be divided into the following five categories; *Organizing, Services, Advocacy, Mobilization, Solidarity* according to their work approach for activism (Thorpe, 2011, pp. 5-11):

Organizing designers are responsible for encouraging the communities to bring about the change by co or participatory designing. **Service** designers actively provide facilities, give trainings and professional advices by the help of humanitarian service structure. **Advocacy** is an designers' approach on behalf of others sometimes without their direct involvement and provide solutions based on eco- designs, defend for nature and react to cause oriented ideas. **Mobilization** is another approach used by designers using traditional methods of activism by bringing together large number of participants for an action out of protest. **Solidarity** is the other one that designers get involved with cultural communication to change the circumstances by critical thinking and designing (Thorpe, 2011, p. 9).

The work of design activists can be determined to bring social benefits to the society or it even can provide services to ensure stability in cultural, moral, social and economic grounds of the communities (Thorpe, 2011, pp. 6-7).

4.1 Design Activism for Social Benefits

There is a wave of recognition and activity around what could be defined as "socially innovative design". Independently the focus of the design is society and its transition or transformation to a more sustainable way of living, working and producing (Fuad-Luke, 2009, p. 78). Social innovation through design was perceived to achieve social goals for sustainable society. It includes a variety of initiatives such as; groups sharing services to reduce environmental and economic costs, improvements of neighborhoods with social interchange and mutual help, development of productive activities based on cultural resources to link the skillful people to wider international networks and in general aspects of daily lives. These initiatives challenge the traditional ways of doing things and provide new, alternative and more sustainable behaviors to reinforce the social fabric between people (Crocker & Lehmann, 2013, pp. 218-220).

Ezio Manzini has long declared that sustainability is a journey of the whole society. It is triggered by acquired awareness and perceptions and attained by generating new solutions, activating new behavioral patterns resulting in cultural change. This approach guided his work with Francois Jégou and their colleagues at the Faculty of Design at Milan Polytechnic in Italy. He linked 15 design schools from around the world to determine how design could help to enable everyday design solutions to help in the physical and social transition to sustainability. The project is called "Sustainable Everyday". Each design school developed a range of scenarios for everyday life and observes daily tasks and routines. These approaches were developed into providing series of solutions based on whether the user required "quick", "slow" or "co-op" (co-operative) solutions (Fuad-Luke, 2009, p. 78).

These three approaches for solutions based on design activism have been incorporated in many successful projects. "Slow Food" project is one of them. This project started with the vision of Petrini who was the founder of the international Slow Food Movement. He believed that everyone has a fundamental right to pleasure and consequently take the responsibility to protect the heritage of food, traditions and culture that makes this pleasure possible. Slow Food believed that customers are co-producers not consumers, by informing them about the

system of production of the food they are using and getting their approval on that makes them a part of production process (Crocker & Lehmann, 2013, pp. 216-218).

On one hand side Slow Food cultivated the awareness of consumption among consumers by making them co-producers and created a market for high quality products. On the other side it also addressed the local farmers, fishermen and food processing firms by connecting them to one and other with the support of local organizations. It is a long-term active project that was made realized by connecting vision with action. This is bringing people together and motivating groups and individuals to take important actions, whether big or small. These actions derived by the vision of slow Food team brought a meaningful, radical social change (Crocker & Lehmann, 2013, pp. 216-218).

Their design strategy is based on three simple steps; the first step involves the recognition of the real problem specially of social resources like people, communities and identify their capabilities that could provide solutions to the problem that has been recognized. The second step follows up the proposals from the organizations and the economic structures that could help these resources to activate and last over the time or replicate them for better resources. The final step involves building and communication of the overall vision that monitor and encompass the local activities and guide them effectively. Following these three simple steps designs solutions can be provided to the people and communities to solve their basic problems like availability of good food and vegetables. Slow Food is a good example of one such project (Crocker & Lehmann, 2013, p. 219).

4.1 - Carlo Petrini, Founder of Slow Food Movement. (slowfood.org, 2015)

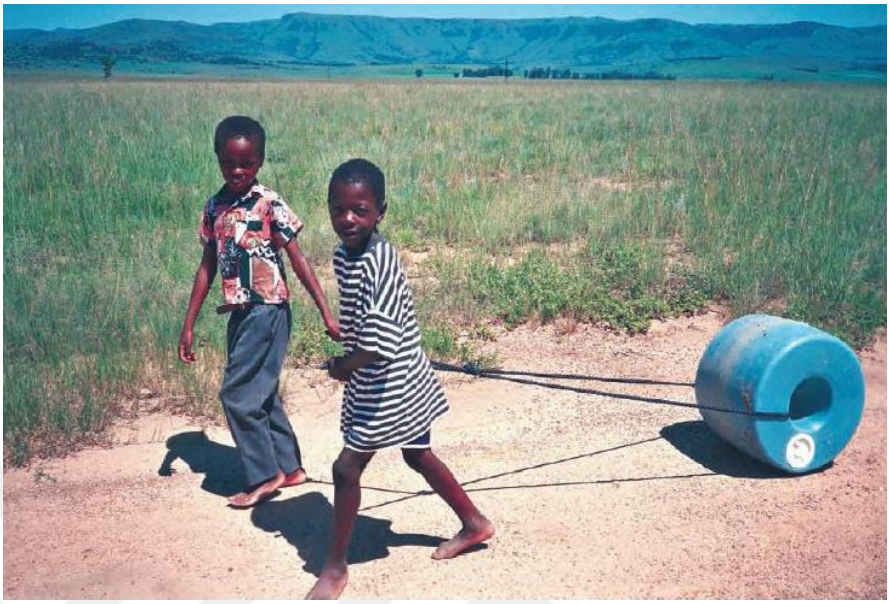
Slow Food is an international movement founded by Carlo Petrini in 1986. The movement has since expanded globally to over 100,000 members in 150 countries (Petrini, 2015). Slow food project proved to be an example of a successful design project even though the founder of the project was not a designer. Even though he and his team are considered to be "great designers" because they successfully designed and operated the system of production of slow food. This project mounted a connection between organization and culture, led by intuition and design activism approaches, which triggered a sustainable social innovation between farmers and the users (Crocker & Lehmann, 2013, pp. 219-220).

Another worthy example of the design activism for social benefit can be seen in a project done by MIT Senseable City Lab, supporting Tsunami victims in Singapore. The houses were designed for the fishermen to settle down on the coastal areas despite tropical storms. The researchers found out that the destructions of houses along the coastal areas were not entirely uniform. The houses, which were built perpendicular to the coast, tend to survive Tsunami. They used this observation and designed the structure of houses with specific construction technique. The project helped coastal communities to resettle in the places close to the coast and provided homes to the families, which were affected by Tsunami (Thorpe, 2011, p. 7). The following figure 4.2 shows a house built under this project to provide shelter to the affected.

4.2 - House structure designed by MIT Senseable Lab (Thorpe, 2011)

Designers around the world are also addressing the basic needs of human life like shelter, water and food. Many projects are being circulated around the world where designers have been doing brainstorming to provide simple and adaptable solutions for the underprivileged communities in Africa, South East Asia and other parts of the world where people have no access to basic facilities required for their survival and a sustainable way of living.

Interesting examples of design work in providing simple solutions to the society can be seen in water facility projects. In these projects individual designers or teams of designers used conventional design techniques to make products like the *Q Drum* water transporter, the *Oxfam Bucket* and the *Watercone* for filtering water in an easy way to provide healthy and clean water to these communities (Figure 4.3), (Fuad-Luke, 2009, pp. 127-131).



4.3 - Q Drum design by Pieter J and J PS Henderikse (Fuad-Luke, 2009, pp. 131)

Two children dragging the Q Drum to fetch water is a remarkable good example for a socially responsible product design (Figure 4.3). The idea of Q Drum originated to respond the need of rural people in Southern Africa, where women and children struggle everyday to fetch and find clean water for their families from distant places. This everyday struggle was resulting into many back injuries and neck injuries among children and women and they had to go to the water source few times in a day because of limited capacity of cylinder. This problem was resolved by Q Drum which is easy to roll, reduces the load and contains 50 liters of space for water. Q Drum is an admirable example of design innovation providing simple solutions to improve the life of communities (Fuad-Luke, 2009, pp. 129-131). Another important role of design activism is spreading social awareness focuses on as follows.

4.2 Design Activism for Social Awareness

Critical design thinking not only addresses the issues of making specific demands and claims for change and how change can benefit the society, but it also shows design efforts to change and challenge the cultural dissertation (Thorpe, 2011, pp. 3-4). Spreading awareness can challenge the cultural discourse. Awareness is a broad term that is usually perceived as to raise an issue and promoting its visibility and credibility with in the society. It also educates and informs people about problems and issues concerning the intention of altering their attitudes and behaviors (Sayers, 2006, pp. 10-11).

There are many design campaigns by WWF to raise awareness about animal rights and environmental issues with ads like “Before it’s too late”. The campaign creates a visual reminder of the importance of trees for the environment (Macleod, 2009).

4.4 - WWF Lungs. WWF (Macleod, 2009)

This campaign was design by TBWA[15], Paris, by the creative director Erik Vervroegen. The figure 4.4 shows a landscape of earth with trees in the shape of human lungs. One of the lungs is partially dry because of tree cutting and felling. Figure 4.4 is a reminder of the loss of forests and its direct effects on the survival of human life. The campaign holds a tagline "Before it's too late" that leaves the viewer with the conscience of doing the right thing and awareness of the loss that is being made by deforestation. Such kind of campaigns has huge impact on the social behaviors and consumerism. They make people think over their actions and consumer habits.

Many designers are targeting consumerism and spreading awareness about overconsumption and balance of resources. As it is mentioned in previous chapters that consumption is a huge problem that risks sustainability of the whole societies and economies. Twenty percent of the world's populations are rich people and the problem of consumption is mainly flowing through their overconsumption habits. Sustainability can only be achieved by consuming less. This awareness is a process of social development that revolves around product based wellbeing, thoughts about product, dematerializing products, services and providing solutions to meet human needs. Different designers use different approaches to address to this issue of consumerism. Some of them directly question the public about their habits of consumption for social change (Fuad-Luke, 2009, pp. 86-87). Berman uses the same approach of directly addressing and questioning the public by providing "Shopping Tips for Agents of Social Change", to raise awareness among general public about their consumption habits (Berman, Do Good Design, 2013, pp. 144-145). He states strongly a less-consumerist approach below:

"Have a personal mission. RETHINK. Know what you need, then seek out products that will fit you for a long time. Read CRDALE TO CRADLE. Demand objects that are designed to last. AVOID DISPOSABLE. Carry one great pen. Carry your own shopping bag. Be happy with your hair. GIVE IDEAS AS PRESENTS MORE OFTEN, THINGS LESS OFTEN. Eat less junk. EAT FEWER ANIMALS. Avoid BOTTLED WATER. Resist all messages that seek to convince you that you need to consume more in order to feel good. BUY PRODUCTS THAT

[15] **TBWA** stands for the initials of founders, William G. Tragos, Claude Bonnange, Uli Wiesendanger, and Paolo Ajroldi. It is an international worldwide advertising agency.

TELL THE TRUTH. Resist designer's products unless you see the value the designer has contributed. RESIST BEING MANIPULATED BY VISAUL LIARS. Stay alert. DEMAND THE TRUTH." (Berman, 2013, p. 145)

In other situations, designers communicate by events and scenarios to raise awareness. For example, Matthews designed a project in London, targeting to the general customer to decrease their consumption. The campaign was organized on "The International Buy Nothing Day and Friends of Earth" in United Kingdom. The central point of the campaign was "No Shop", which was in fact a shop in Central London that sold nothing. Only the information about the campaign was given inside the shop to the visitors (Fuad-Luke, 2009, p. 93).

No Shop was a temporary installation devised to create media attention for the U.K. launch of International No Shop Day - (known as "Buy Nothing Day" in the U.S.). "No Shop" uses the visual language of shopping; sales banners, coupons and shopping bags to start a conversation about what consumer spending habits ultimately impose to the society.

4.5 - NO SHOP by Thomas Matthews (Fuad-Luke, 2009, p. 94)

Once inside the store, the visitor realizes there are no goods to consume, only information. The response to "No Shop" was overwhelming: It received coverage in the U.K. and European press, and was subsequently featured in Eye Magazine and other design journals, as well as in books including "Graphic Agitation" and "Conscientious Objectives" (Matthews, 1997).

These strategies and campaign designs can help creating a social change in either ways. It may benefit the society or simply raise the awareness among people. But the most effective way of social change is created through co-operation, co-designing and involvement of creative communities in the thought process and action. It is an effective strategy that affects the complete design process and creates a change on the base of existing ideas and innovation of those ideas (Crocker & Lehmann, 2013, p. 236).

The term co- design is a mushroom term that holds all forms of participatory design, co-operative design, social design, and all other design approaches. They encourage participation of communities and individuals in the design process, to build a social change and innovation in society (Fuad-Luke, 2009, pp. 146-147).

Co-design can be used to help the communities, which have skills, but they lack contemporary knowledge of design practice. Many small craft communities around the world are suffering economically and socially because of their less knowledge of contemporary market demands. Designers can establish projects that can help these craft communities to improve their crafts, their skills and have a chance benefit economically and socially. One such example of design collaboration with crafts communities can be seen in a project of the industrial design department of TATA Center of Technology and Design, in Bombay, India. Where story telling is combined with the crafts and the skills of craftsmen are used to produce multiple media artifacts like animation films, books and etc, to provide the economic opportunities to these craft communities. It is an interesting way of using design and technology in combination with crafts, to amplify the creative craft communities (Nadkarni, 2014 - 2015). The next chapter continues with the research on how the creative craft communities can be strengthen with co-designing.

5. AMPLIFYING CRAFT COMMUNITIES BY CO-DESIGN

Craft communities are group of people who practice particular skills and processes through which they produce crafts. The word "craft" refers to the mastery or skill of working with the materials and processes. Craft is associated with applied or "low" arts and is normally described in the contexts of ornamentation, decoration, handmade and folk arts. From the late eighteenth century up until now art and craft are referred as a skill and mastery of a particular method, trade, applied arts and other creative disciplines. The term of art and craft separated in the recent times particularly with the Industrial revolution and the First World War when art took a philosophical notion and design emerged at that time and conjoined with material crafts only. Thus design became the industrial version of crafts and the originality of crafts and worth of handwork started to decline. Even though Arts and Crafts Movement back lashed on the industrial revolution but the due value of crafts and hand ornamentations was never regained.

However, now a days, designers are showing great interest in crafts and craftsmen, which are now commonly regarded as artisans. Despite the fact that craft is seen as archaic and bears semblance, the designers are reinvestigating it as a critical design sensibility. The recognition of crafts on the platforms of design sensibility is seen as a revolution against digitization. The designers are working along with craftsmen to investigate sophisticated crafts sensibility and skilfully combining it contemporary design knowledge to create distinctive and unique products with the process of co-design (Erlhoff & Marshall, 2008, pp. 90-91).

The process of co- design is considered to bring in the change in the social, economical and cultural values of the society and its communities. Chapman and Gant refer to this process as:

"*The purpose of co-design is the creation of new social values to balance human happiness with ecological truth. In doing so design contests the notion of material and economic progress, and its inherent ecological untruths".* (Chapman & Gant, 2007, p. 47)

To understand how co-designing amplifies craft communities one need to understand the concept of co-design first.

5.1 Definition of Co-Design

The term co-design or co- creation suggests any activity that involves a process of creation and creative thinking shared between people or groups of people. Co-creation is a very broad term and can be applied on the diverse range of activities from physical, metaphysical, material to spiritual levels. Whereas co-designing refers to an activity that involves; specifically design professionals or designers working together with other people. It involves designers working with people who have no professional knowledge of design and they work to create together by the theoretical knowledge combined with design and skills of these people combined with design (Sanders & Stappers, 2008, pp. 1-3). It involves people brainstorming the ideas, then testing them and making decisions about how these ideas could shape projects and services for society. It stems into two probabilities that are being adapted by designers and companies. One is co-designing the services for social change and benefit of society with the help of citizens. The second is co-designing products with the process that involves the feedback of users and customers (Burkett, 2014, pp. 2-7).

However there is another stem that can help empower the communities of society by using their skills and knowledge. Combining those with the design thinking process and producing products it can provide sustainability to the society with respect to social, cultural and economic development (Crocker & Lehmann, 2013, pp. 231-236).

5.1.1 Background and Specifications of Co-Design

Co-design is an umbrella term to describe a type of participatory design and related to metadesign, social design and other design approaches that encourage contribution with non-designers. The prefix *co-* is the short form of *com* meaning

with (originated from Latin) and is applied to verbs, nouns and adjectives such as co-operate, co-operation, co-operative. The term, co-design suggests "designing with others" (Fuad-Luke, 2009, p. 147).

The practices of co-design in the history of design are evident in last 40 years. The former term for co-design was known to be "participatory design". This term of design originated in Europe for the research projects of user participation in product design in 1970s. In courtiers like Norway, Sweden and Denmark, engaging workers of the industries in the design process established collective research approach to increase the quality and value of products. Putting together the expertise of the designers, researchers and the respective practices of people whose work was to be impacted, developed this approach. Thus it was built on the worker's own experiences provided with resources and expertise. While at the same time the design researchers, authors, architects, designers, engineers and economists were writing for the first time papers that drew attention towards the responsibility of designers and other creative business entities towards the adverse impacts of their products and designs to the society and the environment. These papers were presented in the conference titled "Design Participation" held in Manchester, in September 1971. Afterwards all the papers were compiled in the form of a book. In the preface of the book the editor drew the attention of designers towards their actions with these words: (Sanders & Stappers, 2008, pp. 3-5)

"... professional designers in every field have failed their assumed responsibilities to predict and to design out the adverse effects of their projects. These harmful side effects can no longer be tolerated and regarded as inevitable if we are to survive the future. There is certainly a need for new approach to design if we are to arrest the escalating problems of the man-made world and citizen's participation in decision making could possibly provide a necessary reorientation. Hence this conference theme of: 'user participation in design'." (Cross, 1972, p. 11)

The outcome of this conference was well described in the comments by Robert Junk, a futurist social inventor:

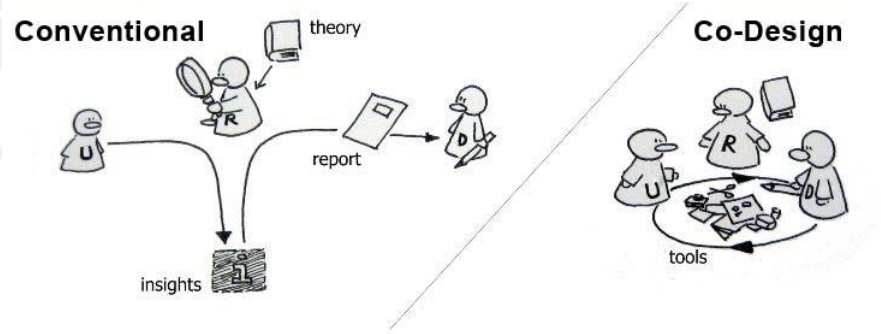
"... we could talk not (only) about participation at the moment of decision, but participation at the moment of idea generation. We can bring the participation for this radical change. As a prognostician, I don't think this change will take place by the end of this century. We will have to suffer first for the lack of foresight of our fathers and forefathers. After that, something radically different can come out, but it won't come on its own: it has to be prepared." (Cross, 1972, p. 122)

Junk's assumption supports strongly the co-design approach is exactly for sustainable change. Currently in this century, design participation is practiced and being pondered very seriously. It has become one of the design solutions to provide a sustainable economic, social and cultural development in the society. It is now focused on problem solving by the exploration and identification of positive future opportunities. In the past it was based on identification of problems and adverse effects generated by human designed projects (Sanders & Stappers, 2008, p. 4).

It is distinguished with the three approaches of interacting with users and customers during a design process: "Say", "Do" and "Make", where "make" is associated with co-design. One can listen to what other people "say" and interpret what they express. Through observation, one can watch what other people "do" and how they use products or services. While in creative ventures people can explore and articulate their needs together to "make" solutions. The main benefit of such "make" or co-design approaches is that they help to organize combined creativity (Steen, Manschot, & Koning, 2011, p. 54).

The underlying belief of co-design is an approach predicated on the concept that people who ultimately use a designed artifact are entitled to have a voice in determining how that artifact is designed. Another main belief is that co-design offers an opportunity for multi-stakeholders and actors to collectively define the context and problem and in doing so; improve the chances of a design outcome being effective. It is a commitment regarding inclusion and power, as it contests dominant hierarchically orientated top-down power structures. Also it requires mutual learning between the stakeholders and actors (Fuad-Luke, 2009, pp. 147-148).

The shift from the user-centered design to co-design is having a great impact on the design process. In a conventional design process, the user is considered to be a passive object of studies. The researcher brings the knowledge and develops more knowledge through observations and interviews. While the designers receives this knowledge in form of a report and adds to it the understanding of technology and creative thinking to generate the ideas. Whereas, in co-designing the roles gets mixed up. The person who will eventually be served through the design process becomes the part of experts in the process itself and plays a major role in the development of ideas and concepts. The designers then collaborate with the users and researchers with his/her design skills to accelerate the ideas into the real forms (Sanders & Stappers, 2008, pp. 6-8). The image below depicts a comparison between conventional design process and co-design.



5.1 - The conventional design process is describing the role of user, researcher and designer and compares it to the co-design process which has all roles merged (Sanders & Stappers, 2008, p. 6)

The methodologies that are commonly used for co-design practices involve following steps:

- *"Being iterative, non-linear, interactive process.*
- *Action based research.*
- *Top-down and bottom-up approach.*
- *Simulating the real world.*
- *Being useful for complex systems and problems.*

- *Being situation driven, especially by common human situations.*
- *Satisfying pluralistic outcome.*
- *Being internalized by the system."* (Fuad-Luke, 2009, p. 147)

Bringing the process of co-creation into design changes many things. It changes what designers do and how they design. It also affects the tools and methods of the co-designing. Future will be a very close collaboration of designers with the stakeholders. Many designers, companies and healthcare units are using this approach recently. Also in education sector recently co-designing is taking its place in curriculums (Sanders & Stappers, 2008, pp. 12-14).

There are many examples in product designing where the concept of co-creation and co-designing is being implemented. "Halfway" products are getting popularity where designers collaborate with non-designers in the completion of the design process. In this process the designer and the manufacturer take a product so far that it leaves the space for the user to complete the making. The user input his creativity, stories and mistakes in the process of finishing the product. Thereby, cementing a personal narrative, memory and associations differentiate this product from the others even if they are manufactured at the same time. Halfway products differ from examples of car customization where the user has takes a standard production car, remove some elements and/or adds own 'customized' element. They also differ from "mass customization" or "mass personalization" (Fuad-Luke, 2009, pp. 94,95).

In a more direct and obvious way, designer Natalie Schaap provides the user with a real and symbolic chair, "*An Affair with a Chair"*. She offers a chair frame, which the user must complete to obtain the final use-value and full functionality of the chair (Figure 5.2). As the name suggests the user needs to have a full relationship from the beginning. This approach of co-designing adds a layer of value to the product and gives it a meaning of just more than a product by the involvement of the user. It makes the aesthetics of the products more personal and individual to the user (Fuad-Luke, 2009, pp. 95-101).

5.2 - An Affair with a Chair, by Natalia Schaap (Fuad-Luke, 2009, p. 101)

Co-design demands sensitive and well planned activities of design associated with materialization for the purpose of business and sustainability. This process allows societies to design their own future based on economic equity, human flourishing and long term environmental stability.

Designers, in this context focus on well-being of the society and its communities not on things and goods. By this process the lay people (craftsmen/ artisans) and the professional designers can become a channel for linking society to a viewpoint, which is beyond the basic and conventional believes (Chapman & Gant, 2007, pp. 48-47). In doing so some strategies and principles can be followed which are discussed in the next topic.

5.2 Strategies and Principles of Co-Designing with Creative Communities

In the social perspective, the co-design method provides great potential for sustainability, being practiced in number of ways and types for benefits of societies and people. The different types of co-creation and co-designing activities can be applied with communities, in companies with their customers or partners (Sanders & Simons, 2009)

The focus of this study is about co-creation or co-designing with creative communities that hold specific making skills and local knowledge. These two processes are underlined with the strong participatory democratic principal that encourages, motivates, activates and transforms people for their social and cultural benefits. This is a kind of activism where designers and activists hold a clear perspective of problems to work together with non-designers. The role of designer is very central in all co-deign activities (Fuad-Luke, 2009, p. 167).

While co-designing with communities, designers should have dynamic interaction and participation in all phases of design till the very completion of it. The following ten strategies and principles are offered to be taken into consideration with great sense of responsibility (Mukaze & Villamil, 2012, pp. 8-9).

5.3 - Role of a designer in co-designing setup (Mukaze & Villamil, 2012, p. 9)

Be Humble. Knowing that everything is new, avoid assumptions and be open to new ideas while co-designing with communities instead of knowing that you know all the solutions.

Be in Context. Before staring a project in any community the designer needs to understand the context of that community and become a part of it. Think like a member of community and understand the problem. This helps the designer to

create the environment of participation for co-designing and collaboration with all of the stake holders.

Have a System Perspective. It is important to have a comprehensive view of the whole system. The system need to look at all the components of sustainability. How all components of environment, social, economic and cultural sustainability interact with each other.

Find the Need. Focus on solving a need instead of creating material stuff. Be involved with the community, listen to them, observe them, talk with them and generate a good communication.

Involve Key Stakeholders. By involving all the stakeholders it allows the designer to co-create an active participation of all stakeholders involved from the start of the design process. Focus on the idea of; "create with" the user and the stakeholder play very important roles in the design process.

Keep it Simple. When the idea is simple it is easier to spread it and replicate it. It can be more efficient, can easily be repaired and is understood by everyone.

Make Solutions Local. Whatever solutions are created it is important that all the solutions use local resources so that they can be accessed easily.

Measure the Impact. Solutions provide needs to have a measureable impact on how they are positively impacting the communities in their context.

Make Impact Last. It is important to create the future scenarios based on a vision in order to design solutions that last. Most of the systems are unsuccessful when designers are not around because they do not have a good planning for the future solutions.

Spread the Impact. Share the transferable knowledge, good communication strategies to spread the knowledge to improve their way of living. Collaborating, sharing and transferring information according to requirements of the community. Learn from other stakeholders that are involved in the process of co-designing (Mukaze & Villamil, 2012, pp. 1-20).

These individuals od co-designing and their link to all the economic, social, cultural and educational aspects of the system and the society should be in focus. It supports the understanding of the relationship of arts and crafts with the economic and social sustainability of the communities (Rushton, 2013, pp. 96-99).

These strategies can be used for local arts and crafts communities to amplify the economic and cultural sustainability of artisans' work. Strengthening and amplifying "arts and crafts" communities is very important for the development of the society in a positive way. As many artisans and craftspeople have valuable local making knowledge as an cultural heritage, which is different than formal and contemporary design education and knowledge. Unfortunately this differences pulls them back from the paths of development under the shadow of mass production and capitalist mindset. Today's designers and entrepreneurs have the ability that can be contribute the value of craft to reincarnate skills of traditional artisans and their economic conditions. This reincarnation is important for the social and cultural sustainability of the respective regions they belong to. Therefore, in following chapter, these suggested principles are used to analyze the case-study on co-design act will be analyzed.

5.3 An Example of Co-Designing to Empower Artisans

Designers in the regions like South East Asia are more actively using crafts and incorporating design with them. One such example is Klove Studio in New Delhi, India. The designer Prateek Jain works with the local artisans to create unique lights. The art of blown glass lights and the aesthetics of contemporary design combine together in his work. He believes that it is an opportunity for a designer and the artisans to learn from each other. It also helps the artisans to sell their work and earn decent money from their work (Pallister, 2014).

5.4 - Peacock Light By Klove. The light is made by blown glass made by the glass artisans of Ambala region in India. These artisans are producing laboratory equipment by blown glass technique. The designer Prateek Jain saw the potential to create something unique, contemporary and crafty, with the sills of these artisans (Pallister, 2014).

Another detailed example of such project is presented as a case-study in next chapter. The following case study is conducted to understand this relationship between designer and craftsmen in order to generate cultural, social and economic sustainability for a craft community and to analyze the potential, limitations and outcomes of such projects in future.

6. CASE STUDY: CRAFT GALLERIA AMPLIFYING THE CRAFT COMMUNITIES OF PAKISTAN.

Through the main idea of this thesis research by responsible and activist's design theories on social, cultural and economic sustainability can be maintained in society. Particularly in arts and crafts communities, craftspeople have limited access to modern knowledge and latest techniques, the designers and entrepreneurs can collaborate and design with them for creative innovations of their crafts and skills to help them stabilize in economic aspects and provide cultural sustainability to the society by preserving the arts and crafts for next generations". Within the thesis a case study of an organization in Pakistan is conducted. "Craft Galleria" is known to be working with the local artisans in collaboration with the local designers to provide these arts and craft communities an economic and social boost. This is maintained by giving these craftsmen opportunities and platform where they can sell their work (Leghari, 2015) (Appendix 1).

The case study is built on the SWOT analysis and interviews conducted with the CEO of the organization Mrs. Leghari, who hired craftsmen and designers for the organization. Also the information from interviews of the craftsmen and the business manager of CG are included in SWOT analysis. The efficiency and success of the organization is measured through the responsibilities of the designers co-designing with these communities, within the frame of 10 co-design principles offered by Muzake & Villamil (2012) presented in Chapter 5.

6.1 Craft Galleria: Organization Background

The Craft Galleria (CG) is an organization, founded in September 2009 in Multan, Pakistan. The idea of forming an organization was generated by the history of the city Multan. This city was known to be a hub of arts and crafts in the region and is a home of many arts and crafts families for centuries. The city was known for its cultural richness and the crafts like "Kashigari" (blue pottery), camel skin lights and leather works in general (Leghari, 2015).

6.1 – Logo of Craft Galleria Pvt. Ltd. Multan, Pakistan (Galleria, 2010).
Image Courtesy: Amama Farooq

As modern economic developments moves local establishments of crafts and society's interest towards modern artifacts also diminished the value of the indigenous crafts. Due to which these local craftsmen and artisans were forced to do menial works and leave their practices of arts and crafts behind. This led to a huge economic crisis among these families and craft communities because they did not have formal education to get other jobs. Also the prices and the low value of these crafts among the local markets added more misery to the dilemma of these craftsmen and artisans. For the financial sustainability of their families they left their crafts that have been running into their families for centuries and they were forced to work as laborers (Leghari, 2015) (Appendix 1).

The organization was founded by the Director Fatima Leghari to give opportunities to work graduate art students, especially females. Mrs. Leghari gave a partnership of the organization to the two founding directors; Miss Sundas Khokhar , who is a graduate in Business Administration and Miss Amama Farooq, Design graduate from Multan College of Arts. The main objective of the organization was to save the crafts of the region Multan, and to provide opportunities to design students to experiment and use their design skills to build organization and for the artisans to earn their livings.

Fatima Leghari has been an advisor at an arts institute and is working with young design graduates. She created the idea of combining design with craft to help these craft communities to get economic benefits from their crafts. Also she provides a platform for young design graduates to work in a business

establishment where they can practice their design knowledge and merge it with the skills of artisans. Since 2009, Craft Galleria held successfully several exhibitions in Pakistan, Turkey and London. In 2014, Wexnet Award awarded Craft Galleria for its services for arts and crafts and for best emerging small enterprise (Leghari, 2015) (Appendix 1).

Craft Galleria is a semi- profit based organization. A 30% sum from profit is divided into all shareholders including craftsmen and rest is reinvested. In the first year, the Directors supported the organization financially, before the profits generated. The 70% of the profit of organization is reinvested. The organization has "Flat Line" system where all responsibilities and roles are divided among members of organization. Decisions are made by increased involvement of all shareholders (Appendix 1).

6.2 Design by CG Empowering Crafts of Multan

In 2009, Craft Galleria (CG) started with its first craft mission to promote the blue pottery of Multan Region. In this regard, the organization hired a young design student and provided them a platform to work with a local artisan; Wajid Kashigar (Figure 6.2). As his surname states that he is from the family of Kashigars (blue pottery makers). He is a regional master artisan of blue pottery, carrying the legacy of blue pottery (Kashigari) from his forefathers. Wajid Kashigar owns a small blue pottery workshop in the house where he lives. He was approached by CG to work with designers to innovate new forms and patterns of pottery without diminishing its traditional identity (Leghari, 2015) (Appendix 1 & 2). Mr. Wajid Kashigar expresses his satisfactory experience with designers of CG as follows:

"The understanding of design that I learnt while working with designers to innovate the designs of traditional pottery, has helped me improve my sales and the company has provided me a platform to experiment with young designers. I learn from them and they learn from me." (Wajid, 2015) (Appendix 2).

6.2 - Mr. Wajid Kashigar working in his small in-house workshop (Galleria, 2012).

Mr. Wajid's explanation states that his collaboration providing opportunities and improving his conditions in terms of his local business. Not only him, but also a designer working with him and CG also learns the craft of blue pottery from Mr. Wajid during the experienced collaboration. They work with him to redevelop and redefine the patterns and forms of pottery. The author of this thesis had an experience of working with CG and craftsmen as a designer. She was involved in the projects of blue pottery and camel skin lights. She learnt both craft techniques and aesthetics from these craftsmen before further redefining or working on these crafts (Figure 6.3).

6.3 – The author (Amama Farooq) is working with artisans and experimenting with the shapes of pottery (Galleria, 2013). Image courtesy: The author

The organization arranged pattern trainings and drawing classes for the new artisans by assigning one master artisan and a designer as a pattern innovator (Figure 6.4). These weekly classes helped the artisans experiment with traditional patterns by merging them with contemporary shapes, but still following the rules of traditional pattern making (Leghari, 2015) (Appendix 1) .

6.4 - Pattern training classes organized by Craft Galleria in collaboration with Blue Pottery Training Center in Multan, Pakistan. (Galleria, 2012)

6.2.1 Background of Kashi: Blue Pottery Craft of Multan

Multan was the capital of the Trigarta Kingdom more than 2,500 years ago, which is one of the oldest cities in Asia. Alexander the Great conquered the city as part of his campaign for Asia then in 7th century Multan was conquered by Muhammad bin Qasim and remained under Muslim control beyond the reign of the Mughal Empire. In 19th century, Sikhs conquered it. It remained under Sikhs until the British Raj, where it remained until independence of Pakistan 1947 (McGuigan, 2003).

The history of Multani arts and crafts dates back to medieval period. Kashi work (blue pottery) of ceramic pottery is an indigenous art. The use of foliage or branches and leaves of trees with rich colors, mainly blue in pottery is an evidence of Persian influence. Over the centuries, Multani pottery matured and developed its unique and distinctive style and is still made by the local artisans (Shirazi, 2007).

CG has provided training for young generation of designers and artisans about the importance of crafts to save the cultural identity of the region. The design revaluation and upgrading in the crafts succeeded. It caught the attention of the local buyers and art society of Pakistan. The potter pieces that are designed are upgraded from the traditional designs without losing the hint of the traditional work. The patterns are blended into the contemporary motives, forms and styles while the process of application and painting of these patterns is conventional. The raw clay pots are molded and casted by hand and then they go through the process of half making before they are painted and glazed. Once the pieces are painted and glazed they are assembled into the kilns for final baking process that follows the finishing of the pots once they are cooled down (Farooq, 2016).

6.5 – Process of making pottery. From the left to the right: Casting, Painting, Glazing (Galleria, 2013).

Figure 6.5 depicts the process of pottery making in CG. The image on the left shows the process of cleaning the casted clay piece of pottery followed by the image depicting the drawing process and on the right the process of glazing the painted pottery pieces. The company adopted the strategy to promote *crafts as art pieces*. Target was to take these crafts to international platforms and initiate the export of these crafts to the international markets. For inland promotion of these crafts the high elite society of Pakistan was targeted to draw their attention to the traditional crafts.

6.6 – Left: Traditional blue pottery. Right: Blue Pottery by CG (Galleria, 2013).

This was established by providing them the hints of contemporary design in combination with traditional essence in the design process of these crafts (Leghari, 2015) (Appendix 1). Comparison can be seen in figure 6.6 between the traditional blue pottery and blue pottery by CG, with contemporary shapes and pattern placements.

6.2.2 Camel Skin Lights Craft of Multan

Another craft product that CG redeveloped and revaluated is camel skin lights. It is also one of the vanishing crafts of the region and the city of Multan was well-known. The camel skin lights made by the local artisans were not demanded as much as in the past because of their aesthetic values and design are contemporarily considered poor. Similar to Kashi, the craft of camel skin light originated in the time of Mughals when the camel skin was used to make sacks for carrying water. The artisans in the Mughal era started making decorative vases and vessels out of camel skin, which were some times painted or used, raw. This trend of camel skin vessels and vases follwed later to the 19th century. In the begining of 19th century an artisan, Ustaad Abdullah Naqash, started painting them with lampblack and later this craft gained popularity (IRC, 2015).

The author has also worked on designing camel skin lights to upgrade the value of the craft with CG. She worked with the local artisans who make these

camel skin lights and redefined the shapes, utility and aesthetics of these lights. The project of camel skin lights redefinition gained immediate response and the camel skin light makers got back into the business of making and selling (Leghari, 2015) (Appendix 1).

The lights that were made by artisans earlier were used as table lights or lampshades. The shapes and patterns were repeated over the years and the finishing and utility of lights had poor quality. The use of chemical dyes in the painting process of lights made their life short, and blocked all the light coming through the patterns. The designer identified these problems and redesigned the forms and patterns of these lights. The artisans then followed the measurements and the shapes given by the designer to make the lights, which were later painted by natural dyes to ensure the long life of the product and possibility of light to pass through it (Farooq, 2016).

Farooq, who was the designer at CG identified that the problem with camel skin lights has their utility and design. The lights have been painted for centuries in the same way as the artisans paint them today. These artisans realized the poor demand of their camel skin lights in the markets and they tried to improve them by painting them with oil paints, which in result gave them bright colors, but the paint blocked the light to pass through the skin hence making the aesthetics and utility of these lights to the least. The other problem were the way these lights were decorated with leaving the negative spaces and filling all the ground of the lamp with color and pattern. Resulting the lights look busy and too colorful. These artisans are carrying the legacy of their forefathers just like the craft of blue pottery making. Farooq observed that the artisans do not have a conventional design problem solving knowledge, therefore, collaboration and contribution between the artisans and designer were essential in order to upgrade and up-to-date lights of this craft.

These issues were identified and resolved by the designer. Using the natural powder pigments for painting, which allowed the light to pass through them naturally, revived the utility of these lights and the forms and patterns were upgraded to the contemporary aesthetics of design without losing the touch of the conventional style of camel skin lights. The process of making conventional camel skin light was adopted in which the artisan or the camel skin worker, cleans the

skin, removes the hairs form the skin of camel and then the skin is kept in a chemical for two days resulting in making it soft and bleaching it out to the white color.

After the skin is made soft the artisan scrapes of the skin layer by layer and collect a mash of the skin. Figure 6.6 shows how the mesh of camel skin is made. This mash of the skin is very soft and kept wet. This makes it easy for the artisans to apply it over the molds. The thin-scarped layer of the skin makes it translucent when it is dried and allows the light to pass through it (IRC, 2015).

6.7 – Artisan scraping of the skin and collecting a mash of it (IRC, 2015).

The soft mashed skin is applied to the molds by hands (Figure 6.7). The molds are either made of plaster of paris or red clay. The mashed skin is applied to the mold piece by piece until the surface of the mold is completely covered with the skin. After the process of application of the skin is completed, the molds with the skin are left in the natural skin light to dry (IRC, 2015).

6.8 – Artisan applying the mashed skin on the mold of white plaster (IRC, 2015).

Once the skin dries the mold is broken by gently hitting the dry form by the help of a wooden stick. That allows the mold inside the skin to break leaving the dry form of skin. After the mold is removed completely the surface of the form is cleaned and made ready for drawing and painting (IRC, 2015). Figure 6.7 depicts the artisan breaking the mold inside the cast of a camel skin light.

6.9 – Artisan breaking the mold inside the dry camel skin cast to get the forms for making lights (IRC, 2015).

Once the forms are cleaned they are drawn over by hand, either by pencil or by taking the impressions of patterns on the skin. CG asked to transforme the conventional aesthetics of these camel skin lights and instead of using them only as the side table lamps they transformed them into the ceiling lights, wall lights and garden lights. Farooq took the elements from traditional patterns of these camel skin lights and blended them with the contemporary shapes and designs (Figure 6.9) . Also painting them completely as an art piece by making a replica of the paintings and miniatures of the famous artists of Pakistan. This design upgrading and redesigning strategy for camel skin lights gained immediate response and increased the demand of these lights in the local markets.

6.10 – Left: Camel skin light being painted. Right: Finished light with the blend of contemporary design (Galleria, 2013)

Figure 6.10 shows the comparison of the light that was originally painted and worked on by the artisans and the light designed by Farooq at CG. In the left image, it visible that the light is blocked by the oil paint as the pattern is busy. While the image on the right hand side shows the light, which is made for hanging by the ceiling and is painted in translucent colors that allow the light to pass through them. Also it is designed using one element from the conventional patterns of camel skin and is designed to balance out the positive and negative spaces.

6.11 Camel skin lights Project Comparison. Left: lights made by the artisans in early times. Right: Lights redesigned by Craft Galleria's designer, Amama Farooq (Galleria, 2011).

6.12 - Camel skin lights Project. Lights redesigned by Craft Galleria's designer, Amama Farooq (Galleria, 2011).

The camel skin lights project from Craft Galleria got a positive response and was appreciated by the clients immediately. The lights were sold as art pieces which have purpose to save a dying craft and functional utility as lights that are designed with its new aesthetic values .

The process of critical thinking to redesign these camel skin lights involved all the key elements of activism by Thorpe: organizing, services, advocacy, mobilization and solidarity, which are presented in the Chapter 4. **The services** and **advocacy** were provided to the camel skin light artisans by the organization itself and the designer by identifying the problems and providing solutions for it and **mobility** was provided by learning these crafts from these artisans to ensure the authentic design process and later on promoting these lights and crafts pieces into the markets and providing them a platform to sell. The involvement in the cultural process brought the change in the circumstances of these artisans and their craft enabled **solidarity** between the designer and the artisan. This leads to the co-designing.

The strategies of co-designing, by Muzake and Villamil stated in Chapter 5, can be seen in a practical paradigm. The designer and craftsman at CG work with **humbleness**, understanding, and mutual perspectives to find the solutions which are simple, local and sustainable.

6.3 Crafts for Economic Sustainability

The business and marketing director of CG, Sundas Khokhar, stated that the company incorporated the notion of emotions into the marketing strategy. The stories of the life of artisans and the making process of the craft pieces were shared with customers in printed brochures and Facebook business entry where the stories of craft pieces and craftsmen and their artifacts were promoted (Khokhar, 2015) (Appendix 1).

"We promoted and sold these craft pieces as art pieces by holding the exhibitions in the well-known art galleries of Pakistan. Our team and designers worked very hard to give a new face to the pottery without losing its traditional value and identity. This new design is unique and gets its roots from centuries old traditions of Kashigari. This was our unique selling point that caught the attention of art society and art appreciators in the big cities of Pakistan. In doing so, we managed to give the fair monetary value of these crafts pieces to the artisans. They got almost double the price per piece they were earning before. That was

only possible by quality management and innovation in design process that made our craft pieces unique and valued." (Khokhar, 2015) (Appendix 1)

The concept of promoting crafts as unique art pieces was risky but it worked because of the uniqueness and quality of design. Risky because these crafts are popular and known all over the country, people know their prices and value. It was a risk for CG to sell them as art pieces knowing that the clients in the market already know the less value of the craft it was not sure if people would appreciate the redefined design and value of these crafts. The artisans also got a fresh perspective and design concepts for their crafts. That gave them more opportunities and possibilities of architectural projects, combining traditional and innovative designs (Khokhar, 2015) (Appendix 1).

6.4 Crafts for Cultural Sustainability

CG claims their corporate philosophy to "keep the traditions alive". Traditional arts and crafts are an enormous part of the culture for any region in the world. Arts and crafts are known to be the cultural identity of the region they are made in. This cultural identity should be saved for the upcoming generations to identify themselves with their traditions. Blue pottery, camel skin lights and other indigenous crafts are the culture of the region Multan because of the historic value. The artisans are keepers of the culture and the designers can help them keeping it alive through time by innovative design thinking (Leghari, 2015) (Appendix 1).

CG is working with four different crafts e.g. blue pottery, camel skin lights, leather cutworks and quilt making and increasing number of the artisans in this project as it keeps growing. But there are some reservations because the organization is not getting much support from the local establishment and is running on its own since its very start (Leghari, 2015) (Appendix 1).

STRENGHTS	WEAKNESSES
- Location the company based on. - Access to artisans. - Cultural background of area. -Access to young graduate designer. - Financial support from the Directors. - Dedication to work. - Creative Thinking/ problem solving. - Redefining and redesigning Products. - Strong Reputation. - No competitors.	- Lack of marketing expertise. - Conflicts between the designers and the craftsmen. - Different levels of understanding and working between artisan and designer. - Designers are not willing to work on cultural and conventional crafts. - Time consuming process for designer to understand and learn the traditional crafts.
OPPORTUNITIES	THREATS
- Gap improvement. - Rescuing cultural identity of Arts and Crafts in Multan. - Craft Galleria developed an international market for these crafts. - Potential to improve economic conditions of artisans. - Providing work opportunities for graduate designers. - Having collaboration with international craft markets.	- Conventional less value of Crafts. - Hard to get mass production. - High costs of natural resources. - Unavailability of energy resources because of energy crisis situations. - Lack of encouragement from Govt. Cultural bodies. Increased Taxation. - Lack of protection of intellectual properties -Increased barriers for International Trade.

6.13 - SWOT Analysis of Craft Galleria. Based on the interviews, observations and the personal work experience of the author with the organization as a designer.

A SWOT analysis is conducted to identify the future potential of the organization and the measures and to determine specification of the organization to understand better in the frame of the research. The SWOT analysis is based on

the data that was gathered through interviews with team members and artisans of CG and the personal experience of the author, who worked with/for CG as designer.

According to the SWOT analysis the strengths of the CG is based on its location, the cultural and historical aspect of the demographics. The organization is based in the city of Multan, which has a remarkable cultural, historic significance. The city is home for many artisans. This makes it easier to access the artisans based in the city for generations. The other strength is the access to the young graduate designers because of the availability of design studies in the local university. Young graduate designers in the city are trained with creative thinking and problem solving through design methodologies, which is an enormous strength for CG. It is the only organization in the region which is working on these crafts so there is no competition. While all these strengths are the benefits for the organization, on the other hand there are some weakness and threats too.

The main weakness is lying in the lack of marketing perception that is crafted items are considered with low value. In order to get rid of this perception, a lot of effort and a good strategic planning for marketing needed. Another weakness that lies within the organization is conflicts between designer and craftsmen. Because these craftsmen are practicing their crafts in a certain way for centuries. They are not encouraged yet by the contemporary design methods and philosophies of the designers. Added to this, there is problem between the two different mutual understanding between designers and craftmen. Because the craftsmen are the masters of their crafts that is why they do not want to follow the instructions of designers, on the other hand the designer finds it difficult to balance between the urge of designing a contemporary design and the need of incorporating the traditional elements in to their designs. This creates a conflict between the craftsmen and designers.

Along with these weaknesses come threats too. The minor value of the crafts in general is also a biggest threat to the business because the buyer thinks the crafts are always low price items. They do not want to spend a lot on the crafts products because they are sold cheaper.

Crafts take more time and more patience in production. The process includes mostly work by hands that is why it takes more time and requires more manpower to get a mass production. Also the concept of working with crafts and upgrading their designs is relatively new. The results of the market demand and value of designed crafts cannot be determined until they are brought to the markets, which involve a lot of risk in terms of investment and finding the right market. Another weakness is that in Pakistan, there is no support from the government for the private bodies of business and the private business are subjected to high taxation because of the economic crisis in the country. The atrocious condition of economy in the country makes the buying of resources expensive. The prices for materials keep increasing which results into the fluctuation in the selling prices of these craft pieces.

With these weakness and threats there lie some opportunities for CG. The organization is only working organization of it nature that makes it the pioneer in craft design in the region. It can earn the prestige of rescuing the cultural and traditional identity of the region (Leghari, 2015).

Design ventures like Craft Galleria take more time to be successful and they need more investment, dedication, determination and creative thinking. While these projects do not define and work with conventional design methods, they involve integration, participation, cooperation, responsibility and activism. (Leghari, 2015) (Appendix 1).

7. CONCLUSION

7.1 Settlements for Design

The social and civic responsibilities of designers are very challenging to practice, but not impossible. They are challenging because of the economic situation of the world that compels designers and other professionals have to work commercially to earn their livings. The financial needs and responsibilities reserve professionals from practicing their professions with responsibilities.

That is why to implement the practices of social and environmental responsibilities in their work, designers and other professions have to be financially strong and persisting. The growing competition because of industrialization, globalization, disvalued local resources and consumerist mind demands of clients make it difficult to practice design with ethical and responsible approach. However within the confined premises of responsible design some acts of responsibilities can be managed.

The "Ethics in Design" approach has already been adopted and implemented in the form of laws by the help of organizations like AIGA[16], Ico-D[17] and others in USA, Canada, UK and Australia. But the designers are systemized to work with the commercial understanding and implementations of design. To subsist this understanding of design, these laws can be implemented all over the world to ensure that designers practice their design within the boundaries of ethical and social responsibilities. These professional practices of codes of ethics in design world can bring the change in the commercial world.

The industrialization has mainly affected creative communities who produce hand-made products. These communities can be addressed and supported through design by design-activism approach and the process of co-design. Designers can collaborate with these communities to upgrade and innovate the crafts and help

[16] *American Institute of Graphic Art: AIGA is a professional organization for design founded in 1914 in New York.*

[17] *International Council of Design: Ico-D is a worldwide organization for communication of professionals founded in 1963 in London.*

them in market for their crafts pieces in a well-being way to make them to save their value and their economic sustainability. In doing so, designers not only help these communities but also play their role in saving a culture because arts and crafts are main elements of a culture. These elements of culture are under threat because of mass production of industrial goods and common current commercial design.

The UNESCO is also actively working on the laws and agreements between many countries around the world to save the heritage and culture. In 2003, the UNESCO Convention of Safeguarding Cultural Heritage[18] made a recognition that creative communities in particular, indigenous communities, groups and in some cases individuals play an important role in the production, maintenance and re-creation of cultural heritage thus helping these people can enrich cultural diversity and human creativity. Like adopting culture as a policy in Burkina Faso, discussed above in 4th Chapter, where the fourth biggest source of economy is arts and crafts. These crafts communities are playing a tremendous role in improving the economic circumstances of the region.

These types of policies can be adopted in other countries too where culture is a very strong fabric of everyday life. Non- industrialized countries who has still rich craft culture heritage in all continents can adopt these policies to develop and support their arts and crafts and to provide opportunities to their local craftsmen and artisans to improve their values, morale and local economic conditions.

7.2 Contribution of Design

Acting responsible in professions and practicing laws is not the only way through which designers can act responsible, but they can act responsible on a personal level as well. They can integrate themselves with the communities that have skills but no resources and industrialization is culminating their chance to earn their living. “Design Activism” is a solution. In this regard many non-profit

[18] The United Nations Educational, Scientific and Cultural Organization conference in Paris on 29th September 2003 till 17th October 2003, this conference mainly addressed the issues of safeguarding and promoting the intangible cultural heritage throughout the world.

organization like Cause/Affect[19] and Advertisers Without Borders[20] associate designers with them that work on social issues and spread awareness about them in the society.

The real power of the design is that the professionals and the laypeople can work together to create not only new products, but systems, experiences and collaborations that can bring positive change. They can collaborate with the creative communities, including people who have skills but no professional strengths to deal with the business within global-mind set, to be economically and socially active.

A bridge can be built between craftsmanship and technology. That can create a balance between the industries and domestic enterprises. Co-design and Co-creation approaches can be incorporated to empower the craft communities that are suffering economically from the boons of industrialization. Projects should be introduced on national and international levels where designers and artisans can collaborate to create and innovate artifacts which are a heritage of cultural identities. These word-wide thoughts, generated by the help of study-case conducted in Multan city of Pakistan, are also suggested for word-wide similarities.

With this collaboration sustainable economic, social, cultural and environmental development can take place. Re-created and upgraded crafts can be promoted into contemporary markets as an alternative to the pace of industrialization. In doing so, the issues related to mass consumerism can be addressed too by drawing the attention of a consumer to the quality hand made products and their value and increased life cycle in comparison to machine made products in low-quality having short life-cycle creating trash in the world.

[19] Cause/Affect is an international organization based in San Francisco, USA. They organize and celebrate the work of individual designers that are positively impacting the society and raising awareness around the world on social issues.

[20] Advertisers Without Borders is an international community of individual designers and communication professionals who share the true passion for social cause and are determined to bring the change in the society.

The local and anonymous knowledge of artisans, based on traditional values and habits differentiates from the conventional design knowledge. Contemporary design knowledge and abilities contain experimental, entrepreneur approaches (in ideal). By combining that differentiates of these two creative communities, the designers and artisans can learn from each other's. Also these communities of artisans and craftsmen can prosper with the benefits and true value of their skills. They can improve their living conditions, especially in countries like Pakistan, Turkey, India and Africa. There is an obvious economic crisis in the world and it is affecting the non-industrialized countries most that leave a great impact on these craft communities. The solutions proposed by co-designing and co-creating can be established where these communities can collaborate with design communities to compete the demands of contemporary markets. Designers can improve the products and support the artisans to uplift their crafts.

Cultural and social sustainability is important for the growth of economy in any region and its inhabitants. It can only be achieved by eliminating the social and financial barriers between communities and bringing them together, encouraging them to work with each other. Even though culture gives a unique identity to communities, it is not being subjected to a great extent to catch attention of designers. Specially, in the countries where culture is a very strong element of everyday life, it can be propagated in a positive and productive way for the benefit of society. Here designers can play an important role; they can incorporate cultural bits into contemporary designs. This will help to keep these cultures alive for upcoming generations.

A designer working for cultural sustainability is a recurrence of art and history; it can be improvised easily from the history of design where Arts and Crafts moment empowered the craftsmen and artists. Design can help craft communities in improving their crafts that will automatically generate cultural, social and economic sustainability. At the end the conclusion of this thesis it can be safely stated, "empowering creative communities, especially the non-designer, craft communities, can empower the social system, culture and economy of any region".

This thesis intends to spread awareness about the power of responsible design and design activism that can lead to co-designing and co-creation. The

main research idea of this thesis can be implemented into practice. However, there are some reservations to this practice in terms of sudden economic benefits; this process of innovation of craft can take a long time. Also it will take time, for customers to acknowledge the new status of these crafts and for masses to adapt to the innovation of traditional crafts and know. Industrialization and mass production is a great barrier for the promotion and availability of these crafts in the present-day markets. This can be addressed by educating more and more people to become artisans and learn crafts and skills from which they can benefit. Also by empowering these craft communities with new technologies which can support the efficiency of the production process.

This can also make a statement for mass consumerism. Contemporary design is impulsive and it urges buyers to invest more and more because everyday there is something new in the market. Current design trends are followed and traditional and cultural elements are sometimes disregarded. By combining traditional and contemporary design, abreast contemporary design markets demand and traditional crafts and cultural identities can be saved by transformation too.

This thesis is dedicated to draw attention towards the possibilities and opportunities to practice the responsible design and design. To find simple and sustainable solutions to and provision the indigenous craft communities and societies to sustain economically, socially and culturally by co-design.

8. FOR FURTHER STUDIES

The suggestions presented here are based on the research and analysis of the literature, case study and interviews conducted to build this thesis.

The role and responsibilities of designers towards the society, communities and culture is accountable of change. The practice of laws in respect to these responsibilities can bring a positive change. The critical evaluations of roles and responsibilities can help improve the chances of responsible design practices.

Additional research in the direction of co-design with creative craft communities can open up more possibilities and ways to realize this collaboration of design and crafts. There are some reservations in the research for "responsible design and co-design for creative craft communities" because the design projects, which reflect upon these issues relating to craft communities are not very common. There is not enough strategic literature that can propose a system or a model through which the collaboration of designers and craftsmen can be realized on international level.

There are organizations like Craft Galleria but they do not come to forefront because of lack of resources and hardships in access to international design communities. Also there is a problem for cultures and traditions being ethnic to their demographic areas. That can be understood and developed by designers who have understanding of crafts and are motivated to work on them. These designers can support in establishing these crafts projects over international boundaries by mobility of ideas, communication with design and craft communities in other countries and exchange of skills.

Projects can be proposed to integrate and safeguard the cultural heritage between two countries that share the same historical and cultural significance of crafts. For example, Pakistan and Turkey share almost the same aesthetics and process of producing handmade pottery. The pottery from Iznik, Turkey and the pottery from Multan, Pakistan have somehow almost the similar style of painting and production, with a difference in the ethnic styles of patterns and colors. These two styles of pottery can be combined to re-create their esthetics and enrich their cultural value which can claim the elements of culture and traditional crafts from

both countries. Combing two cultural styles and techniques can make these crafts pieces unique and can save them for future. It will create a synergy and with co-design learning from each other through mobilization would be possible. The cultural ministries and the art institute's can collaborate together to exchange group of young design students between universities and organizations like Craft Galleria, who are interested in working on the subjects of crafts.

It may provide international collaborations (projects, exchange programs and etc.) in education for design students in Pakistan. In this way, they can be mobilizing to develop their craft and design experience. For example; Design students can visit Turkey to do research and learn the significance of the pottery of Iznik to do a collaborative research and learn the characteristics and significance of the pottery of Multan.

Co-design can be conducted through different cultures. This can be stimulation for safeguarding the cultural heritage of countries through co-design. It can help the craft communities between countries to improve their crafts and collaborate with designers to create something unique yet based on the lines and understanding of traditional crafts. Such project will not only save the craft of traditional crafts of both countries but will also strengthen the cultural and social relations between both countries.

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CURRICULUM VITAE

Curriculum Vitae

Personal Data

Amama Farooq (Pakistani)

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Education

03/2015 to present — **RheinAhrCampus / Hochschule Koblenz, Remagen, Germany**
www.hs-koblenz.de — Business and Intercultural Communication (ERASMUS, Academic Internship)

09/2013 to present — **Yasar University, Izmir, Turkey**
www.yasar.edu.tr — Department of Arts & Design, Masters of Art and Design (5th Semester, Thesis)

2004-2008 — **Multan College of Arts, Bahauddin Zakariya University, Multan, Pakistan**
www.bzu.edu.pk — Bachelor of Design (four years honors in Graphic Design with distinction)

Work Experience

09/2009 to present — **Craft Galleria, Multan, Pakistan**
www.facebook.com/craftgalleria — Designer / Owner (working on the revival of indigenous crafts)
craftgalleria@gmail.com

2009-2011 — **Multan College of Arts, Bahauddin Zakariya University, Multan, Pakistan**
www.bzu.edu.pk — Part Time Teacher (Art and Design Softwares / Folk Arts)
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Curriculum Vitae

2007-2008 **Sabz Associates, Multan, Pakistan**
Furniture Designer

05/2008-08/2008 **Decent Furnishers, Islamabad, Pakistan**
www.decent-furnishers.com Assistant Furniture Designer (internship)

Conference(s)

07/2014 **International Conference on Social Responsibility, Yasar University Izmir, Turkey**
Let's Plant Paper: An Environmentally Responsible Project at the Faculty of Art
and Design (Speaker)

Additional Skills

Languages Urdu (Native Speaker)
English (Native Speaker)
Turkish (basic)

IT Knowledge MS Office (excellent)
Adobe Photoshop (excellent)
Corel Draw (excellent)
Adobe Audition (excellent)
Adobe premier pro (excellent)
3D Studio max (excellent)
Macromedia Freehand (basic)
Dreamweaver (basic)
Macromedia Flash (basic)

Arts Skills Painting (excellent)
Oil / Water / Mix Media (excellent)
Craft Design / Innovation (excellent)
Drawing / Sketching (excellent)
Colour Aesthetic (excellent)
Furniture Design (very good)
Interior Design (very good)
Photography (very good)
Clothing Design (basic)

APPENDICES

APPENDIX 1 - Interview Leghari & Khokar

Khokhar, S. (2015, November 16). How Craft Galleria helped provide economic and financial sustainability to the artisans? (A. Farooq, Interviewer)

Leghari, F. (2015, November 15). How Craft Galleria incorporated design activism into entrepreneurship to amplify crafts communities and build cultural and social sustainability in the region? (A. Farooq, Interviewer)

Organization Title: *Craft Galleria*
Founded: *September 2009*
Location: *Multan, Pakistan*

Overview: Craft Galleria is responsible for bringing in the social change among the life of creative communities of the city; Multan located in the south of Pakistan. The city is known for its fine creative crafts industry and is home of many creative communities holding different skills and master craftsmanship of indigenous crafts. But due to the present economic condition of the country these communities of craftsmen are decreasing in numbers because their crafts practices have been the same for the centuries and are not educate to meet the standards of modern markets and contemporary lifestyle. The city was once a hub of arts, crafts, architecture and cultural activities for a long time but due to growing industrialization the modern production vicinities took over the local traditional ones and city started losing its element of traditions and beautiful craftsmanship.

The craftsmen in the city are forced to do menial jobs and have no money to practice their craftsmanship and carry the legacy of the forefathers. There is no economic sustainability for these communities and it is affecting the cultural and social sustainability of the area.

Craft Galleria took initiative to help in maintaining the cultural sustainability in the area by using design as a tool for helping these communities to develop their crafts and skills by working alongside fresh design graduates. The project proved to be a success within first two years and helped almost 20 artisans and fresh graduate design students in first two years to stabilize themselves economically by providing them a platform to practice their design skills and helping the crafts men to in innovation of their crafts to meet the standards of contemporary markets.

The motto of Craft Galleria is: "***Keeping Traditions Alive***"

The organization has received award in 2014 for providing best services to in crafts innovations and helping these creative communities to sustain and grow economically and socially.
In the following interview the founding Director of Craft Galleria talks about the journey of the organization and its achievements in terms of providing cultural, social and economic sustainability to these local creative communities.

Interviewees: Founding Director of the Organization: ***Mrs. Fatima Leghari***
and Business and Marketing Director: ***Ms Sundas Khokhar***

Interviewer: ***Amama Farooq***
Interview conducted through Skype on 15th, November, 2015. Time 12:30 German UTC + 01:00.

Sundas Khokhar: SK
***Fatima Leghari*: FL**
***Amama Farooq*: AF**

AF: ***How did you arrive at the idea of forming an Organization to help the creative communities?***

FL: In 2009, I was working as an advisor in the Bahauddin Zakariya University's arts

college; “Multan College of Arts”. I realized that the fresh graduate designers especially girls had not many opportunities to work in the city and most of them were not allowed to go to other cities to get jobs because of the conservative culture of the region. So I decided to create a platform for them to practice their design knowledge and make a living out of it. On the other hand, I wanted to promote the local crafts industry and the craftsmen because Multan city is known for its traditional crafts and rich culture. But unfortunately this culture and crafts were dying as people are more interested in modern and contemporary things. This was the reason which pushed these craftsmen to leave their crafts practices and do menial jobs to earn their livings and to support their families.

These two factors gave me the idea of combing the both, I thought about the project where fresh graduates of design can work together with these artisans to innovate their crafts with their design knowledge and also learn from these artisans their traditional crafts skills. This would save these crafts from dying and will sustain the cultural identity that is associated to this region.

At first we started in September 2009, with one designer; Amama Farooq, business and marketing graduate; Sundas Khokhar and me. I offered these girls to have a business venture with me where I would provide them with finances and they can use their knowledge and skills.
We begin with learning the crafts like kashigari, camel skin lights and blue pottery with the help of the artisans who are masters of these crafts. It was important for us to understand the heart and soul of these crafts. We dig into the books and resources to study the practices of these crafts in history.
The second phase was blending these traditional crafts with modern aesthetics but in a very careful way so that they don’t lose their traditional identity.

AF: ***How did you use “design” as a tool for innovation of the local crafts?***

FL: We begin with learning the crafts like kashigari, camel skin lights and blue pottery with the help of the artisans who are masters of these crafts. It was important for us to

understand the heart and soul of these crafts. We dig into the books and resources to study the practices of these crafts in history.
The second phase was blending these traditional crafts with modern aesthetics but in a very careful way so that they don't lose their traditional identity.

We gathered all the artisans who were interested in the innovation of their crafts and wanted to peruse their crafts practices for living. We held workshops for blue pottery where these artisans had sittings with designers to understand and brain storm the needs and demands of contemporary markets and we sorted out what elements of crafts can be modified with design to make the acceptable and valuable for a modern consumer.
We also arranged pattern training and drawing workshops for artisans and the new craftsmen where designers researched the traditional patterns of blue pottery and blended them with contemporary shapes. Pattern training workshops proved to be a great initiative to draw these artisans and their families back into the business of crafts. Many artisans enrolled their children into these training classes, who before, did not wanted their children to learn these crafts or become artisans like themselves. They had lost hope in the traditional crafts because it was not earning them their bread and butter.

Another most remarkable recreation of crafts that we have achieved so far is camel skin lights. Multan city is also famous for its camel skin lights this craft is produced here for centuries. But the artisans of camel skin lights had the problems with marketing and selling their lights because the lights were not functional enough. They could only be used for decorative puposes as the artisans were using oil pigments on the camel skin and it was blocking the light to pass through the skin. We changed that by using natural pigments that are translucent and allow light to pass through them.
You (the author) have worked with the lights you did the designs and paintings for the lights with the artisans, you know how it worked with the lights a completely new thing.

AF: Yes I know. The lights were our complete innovation of camel skin lights. We also changed the way they were utilized. They have always been side table lights but we

switched them into ceiling and wall lights and this worked in an amazing way.

FL: Yes totally!

AF: What was your strategy to provide economic stability to these creative communities?

SK: To provide the economic stability to these craftsmen and to the designers we created the marketing strategy to sell "crafts pieces as art pieces", that increased their value in the market much higher than the ordinary crafts. We promoted and sell these crafts pieces as art pieces by holding the exhibitions in the well-known art galleries of Pakistan. Our team and designer worked very hard to give a new face to the pottery without losing its traditional value and identity. That is uniquely designed but gets its roots from centuries old traditions of kashigari. This was our unique selling point that caught the attention of art society and art appreciators in the big cities of Pakistan. In the end it helped to increase the price of the product because of its increased value and we succeeded to give the fair monetary value to these pottery pieces and to the artisans, almost double the price per piece they were earning before. That was only possible by quality control and innovation in design process that made our crafts pieces unique and valued.

FL: The idea of selling crafts as arts pieces caught the attention of high class art appreciators who had money and were ready to spend it on art products that they can also use in their daily lives like pottery.
We held many exhibitions since 2009; we had five exhibitions in Pakistan, three exhibitions in London and one in Turkey. These exhibitions were successfully arranged. We also started our online sales just by a Facebook page that directly caught the attention of international buyers who appreciated crafts and were happy see the crafts products which can compete the standards of modern markets and have unique traditional identity at the same time. Our first online order was from Hawaii, USA, and since then we have exported to places like Australia, Hongkong, England, India and Canada.

Q3. How do you see the progress of your organization in providing cultural sustainability in the area?

FL: In terms of providing the cultural sustainability we have succeeded in saving these crafts by creating their market demand. Arts and crafts are a part of heritage and culture and they should be saved for upcoming generations to enjoy their traditions and culture. Craft Galleria claims to "keep the traditions alive". Traditional arts and crafts are a great part of the culture for any region in the world. Blue pottery and other crafts are culture of the region Multan. The artisans are keepers of the culture and the designers can help them keep it alive through time by their innovative design thinking.

SK: We made these traditional crafts a daily part of one's life by producing pottery which is not just a souvenir but can be used everyday like other utensils. But what made it different from others is that we sell it with its traditional value with a culture painted on it. We have story of these products that we have in the form of brochures that are being given to customers and visitors so that they can have a look of the whole process of manufacturing of the product that they hold in their hands and also its history and origin stories from the old times. This way the customer gets closer to the product and with a knowledge and background information values it more than the other products.

AF: ***Do you think "design" can help improve the quality of life and social sustainability in society?***

FL: I think design is the main drive and force for any system. If the design is good, compatible and sustainable it can provide sustainability to other element depending on it. It can improve the life and living conditions of society and its people. For example in architecture and industrial designing the models of sustainable structures can be implemented to sustain the buildings and the products over time. Enterprises and design establishment should work together to find new ways to fight consumerism as we are trying to do with Craft Galleria. This is a good business model with the strong sense of

social responsibility. The collaboration of designers with artisans is unique and interesting.

There are some problems also because such kind of projects here in underdeveloped countries do not get due support from the government bodies. The educational institutions should also contribute where designers should be trained to take the responsibilities to improve the social conditions and cultural identities of the region they belong to. Not all fresh graduate designers want to work in this setup because it takes a lot of responsibility and working with non- designers which makes it hard for them to practice their conventional design styles and techniques. But it is not impossible.

SK: Quality of life and social sustainability depends upon the financial and economic stability in the society. If people will have enough to eat and a good place to live only then a sustainable society can be created where everyone is satisfied but to achieve that everyone needs to contribute to the society. We all have to work together towards sustainability.

AF: How do you control the quality of your products and how your organization use resource?

SK: We use local resources to cut down the costs, but we make sure that the quality of those resources is not compromised. We experimented with the slip casting of red clay and different types of white clays which are available within our region. We researched and redefined the old process of molding and casting by experimenting with the weight and consistency of clay. That helped us decrease the weight of the clay which used to be two times than it is now. So we use less resource and more production from the same amount of resource than it used to be.
One more reason we use local resources is that they are in abundance and specially the red clay. Also they are more environments friendly because they are natural and are not being processed by chemicals or any other artificial methods. They are safe for human consumption and do not emit harmful gasses into the environment.

The color pigments that we use are made by natural minerals and stones and we make sure that they are not processed by any chemicals. Our artisans make these pigments themselves so they are free from any type of harmful lead. We also use the slow baking kilns which are energy efficient because they are made of bricks and have been designed to insulate the heat and require less energy resource.

AF: ***Are there other organizations working with the same strategy in different parts of the country to help creative communities?***

FL: No, not many organizations are working in Pakistan. But some independent designers and business bodies sometimes try to connect with these communities. Some fashion designers are also working with these communities and using the same techniques of blending traditional embroideries and stitching techniques into their contemporary designs.

AF: ***What's next?***

FL: The next step of Craft Galleria is to collaborate with the international communities, markets and designers. We are looking forward to have collaboration with international crafts markets with the programs where artisans and designers can go on exchange and share their skills and learn new things about other cultures and crafts.

APPENDIX 2 - Interview Wajid

Wajid. (2015, November 10). How Craft Galleria has help Mr. Wajid in design innovation of his traditional blue pottery and how it has helped his small business? (S. Khokhar, Interviewer)

Interviewees: Artisan of Craft Galleria: ***Mr. Wajid Kashigar***

Craft expertise: **Kashigari** (Blue pottery illumination)

*Interview conducted in person via **Sundas Khokar** on behalf of **Amama Farooq** on 10th, November, 2015. Time 10:00 Pakistan UTC + 05:00.*

Sundas Khokhar did this interview on behalf of Amama Farooq because of the availability of the artisan and the difference in the time zone of countries.

Sundas Khokhar: SK
Wajid Kashigar: WK

SK: How long you have been working as an artisan?

WK: I have been working since I was 12 years old. My father was a Kashigar (illumination master) and I use to sit with him while he used to paint on the pottery and tiles and make things with clay. I wanted to paint and draw like he did. I also wanted to go to school and learn but my family was not that rich to send me to school so I started working with my father in his small workshop. It has been 45 years now.
In all these years I have just been a Kashigar.

SK: Have you had been always working in the city Multan?

WK: Yes this is the city I was born and lived my whole life. I went to different parts of countries to work with other artisans. Like Sindh and Lahore and Islamabad. But I always

lived in Multan and worked in the same workshop that my father worked in. It is actually a part of my house.

SK: So you live in the same place where you work?

WK: Yes the ground floor of my house is my workshop and I live on first floor with my family.

SK: How many Children you have? Do you want them to do the same craft of Kashigari?

WK: I have two children ne daughter and one son. No I don't want them to do it as work. They go to school and they are getting education. I want them to become doctor or engineer.

SK: Why you don't want your children to be Kashigar?

WK: Because it won't earn them good money. They won't have good living standard. It is not a regular income that one gets every month. Some times when I am lucky I sell more pieces and sometimes I could just pay my bills and feed the bread to my family. But I want them to learn it. It is not that I am not proud of it but I am realistic.

SK: How many people are working with you in your workshop?

WK: I have 5 artisans working in my workshop. They are also all my family members. They also dint learn anything in their lives except doing kashigari and making pottery. This art is running into my family, my father, his father and my great grandfather and his grandfather were all Kashigars. My great great grandfather actually did the Kashigari on the famous shrines of the saints Shah Rukn e Alam and Bahauddin Zakiriya. The titles he made centuries ago are still intact.

SK: That is really amazing work.

SK: When did you start working with Craft Galleria?

WK: I started working with Craft Galleria in 2009 September. When they were a new company. They all wanted to learn Kashigari. Their team members, Amama Farooq, You (Sundas Khokhar) and Fatima Leghari used to come to my workshop every day and learn how to draw patterns and make colors with natural stones and pigments. They also learnt how to make clay to make pots. How the pots are painted what bases are used how they are polished and all. It was really good to see young girls who were university graduate were working and learning with us like artisans.

After that they offered me to work with them and told me what they wanted to do with supporting artisans and promoting the crafts and saving all the dying crafts. It was very interesting and hopeful for me. I was very happy and excited to work with the new people. I talked to my artisans' team and they all agreed to work. And why not it was a good opportunity to earn good money for us.

SK: What do you mean by good money? How much you earn with Craft Galleria?

WK: Craft Galleria offered us to work with them and agreed to pay the double amount of price on every piece that we sell in the market. Also they did all the designs of the pots and patterns new , it was less of work for us with good earnings.

SK: What was the system of working with you and designer?

WK: The designer from Craft Galleria makes the pattern and design of the pieces on the computer. Then we sit together and study the shapes and work on the colors of the design. They make patterns out of the old traditional patterns that we are using for centuries but they make them more contemporary and add other elements to them so that they are different from the traditional pottery patterns but they look close to the traditional ones.

Once the pattern and designs are done we make a sample piece together with a designer, until the best results come out. When the sample is final then we use it for further production as our reference product.
It is different for us (the artisans) we see how the patterns that we use can be used in different ways. We learn how to play with pattern and spaces. It is all new for us before we use to follow all the styles that are done by our forefathers. Now we also think more about how to put a pattern on the piece and how many colors we should use and which colors.

SK: Do you see any big difference in your crafts business after you worked with designer form Craft Galleria?

WK: Yes it made a lot of difference. The understanding of design that I learnt while working with designers to innovate the designs of traditional pottery, has helped me improve my sales and the company has provided me a platform to experiment with young designers. I learn from them how do design and they learn from me how I work with my painting brush and I tell them about patterns and their significance.

SK: Thank you so much Mr. Wajid.

WK: Shukriya (Thank you).

APPENDIX 3 – CV Fatima Leghari

Personal Data

Date of Birth : April 1968

Nationality : Pakistani

Contact no (cell) : +92300-8630656

Contact no (res) : +9261-4572297

Email Address : fatimaleghari@yahoo.com

Postal Address : 90, Qasim road Multan cantt, Multan, Pakistan.

Senior Cambridge from Lahore Grammar school in fine arts 1985.

Intermediate in fine arts from Queen Marry College.

Fine arts Courses in 1989 from Shakir Ali museum taught by Mussarat Hassan.

Workshops:

Workshop attended on Energetic of healing attended by a scholar Caroline Myss in 2005

Workshop attended on sacred contract and anatomy of the spirit by scholar Caroline Myss.

Workshop attended on psychology (Karl Young) studied by Sheikh Llewellyn Lee in 2009.

Diplomas:

Diploma in Esthetician Advanced course from Steiner England, 1998.

Tony and guy education academy diploma award Advanced cutting and technical course in the 2002.

Technical education diploma Wella institute of London, 2009.

Work experience:

Head of Multan chapter Amman ji development organization, 2008- 2009.

Hold Eye camp and general health camp every year. 2005- 2008.

Flood relief camps in Kot Mithan, Basti shero and in different schools of Multan, Pakistan, 2009.

Voluntarily working with Multan College of arts, Bahauddin Zakariya University Multan since 2008 sponsored first thesis show and MCA plantation project, planted 500 trees in and around Multan College of arts, 2008-2009.

Advisor Multan College of Arts, Bahauddin Zakariya University, Multan, Pakistan, 2010-2011.

Director Craft Galleria saving the crafts of Multan and its surrounding areas, working in collaboration with MCA graduate student and IMS graduate student and all the artisans of Multan, 2009 till present.

Saving the dying crafts of Multan and its surrounding areas, innovating these crafts and promoting them into national and international markets, 2009 till present.

Crafts Exhibitions done in Lahore, in London, England and in Ankara, Turkey, 2009, 2010, 2011 respectively.

Working in collaboration with Nomad Art Gallery Islamabad, Pakistan, for promoting our traditional crafts on national and international level, 2009 till present.

Working in collaboration with Huaz Khass art gallery Lahore, Pakistan, promoting our traditional on national and international level, 2009 till present.

APPENDIX 4 – CV Sundas Khokar

Khokhar House, House Number 46,
next to Alquraish Colony
Sher Shah road, Rehmat Town
Multan, Pakistan
+923333933340
sunduskhokhar@gmail.com

SUNDUS AZIZ KHOKHAR

OBJECTIVE

To excel in a growth oriented organization where I can achieve personal and organizational goals on the basis of an appreciable academic and professional background in the domain of Business and IT.

PROFESSIONAL SKILS

Software development using VB, VB.Net, C/C++, ASP, ASP.NET. Java Script and similar technologies.

Management and administration of software systems in Windows environment.

Have sound knowledge of Analysis, design, development, coding and testing under windows, client server environment.

Have knowledge of XML, MSSQL, HTML/DHTML

STRENGHTS AND ABILITIES

Exceptional versatility and adaptability

Dedication and drive as a hard-working individual

Superlative communication and team-building skills

Ability to manage.

Abilities in public speaking

Team and time management

Decision making abilities

EXPERIENCE

BUSINESS MANAGER, CRAFT GALLERIA

2011 to date

As a business manager at craft Galleria I am responsible for managing sales, production, marketing and finances of the company. In a way I direct the overall operations of this privately owned businesses. My Responsibilities include supervising staff, analyzing data, planning operations and making crucial business decisions plus day-to-day tasks like purchasing, hiring, training and quality control. I have been organizing exhibitions inside and outside country for the company.

VISITING FACULTY, BAHAUDDIN ZAKARIYA UNIVERSITY MULTAN

2009

Taught Business in IT, Electronic Commerce and web design to BBA.

VOLUNTAIR WORK, CHARITY SUPPORT TRUST

2009 to date

I have been s voluntarily working with this NGO and have arranged quite a few food and health camps to support the effectees of natural disasters like floods.

EDUCATION

BAHAUDDIN ZAKARIYA UNIVERSITY MULTAN - MSC ELECTRONIC COMMERCE

Year 2004-2006

Achieved gold medal and the software that was developed as part of degree was implemented in university.

BAHAUDDIN ZAKARIYA UNIVERSITY MULTAN - BBA-IT

Year 2001-2003

BEACON HOUSE GIRLS COLLEGE MULTAN - INTERMEDIATE IN COMPUTER SCIENCES

Year 1999-2001

BEACON HOUSE SCHOOL SYSTEM - MATRIC

Year 1997-1999

ACADAMIC PROJECTS

Attendance system:

Company: Bahauddin Zakariya University Multan, Pakistan

Tools used: VB.NET at front end and MSSQL at rear.

Description: The main task was to design fully automated attendance system for Commerce department at BZU Multan as final project of MSC. Electronic Commerce, which was implemented in the department.

Sales System:

Company: Pakistan state oil

Description: The main task of this project was to develop a fully automated sales system for PSO as part of final project of BBA-IT.

INTERESTS

Reading, Painting and Sculpting