

Designing for Cultural Diversity: Participatory Design, Immigrant Women and Shared Creativity

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Abstract

Immigration and multiculturalism are realities of the globalized world that has given rise to subcultures, which possess specialized knowledge and language that is not shared by the main culture. This increasing interaction among people from diverse cultures has produced a complex ethno-cultural mosaic that presents formidable challenges for visual communication designers' as well to other designers. Complexity has always been part of human environments that comprises of mutually dependent social relations. Cultural diversity of designers and audience of messages in a design scenario brings complexity in the design research process.

This research study explores an effective visual communication language, through the medium of the poster, for culturally diverse audience of immigrant women in Edmonton, Canada. The decision, to investigate the effectiveness of a visual message through the medium of the poster was informed by triangulated results from a pre-workshop survey, interviews with the staff and discussions with the immigrant women who are either interested or in need of services of the centre, *Changing Together*. While designing messages for a culturally diverse audience, participatory design exploration approach assisted in developing a framework for research methodology. A participatory design workshop was planned, for the Centre for Immigrant Women in Edmonton, to investigate possible visual vocabulary for an ethnically diverse group. The workshop results were synthesized in the form of three poster prototypes, which represented the needs and realities of those immigrant women. Prototype poster designs were tested to examine the results of the mutually identified visual concepts. Based on the observations and synthesis of research findings, it is concluded that user-centered participatory approaches of design can work effectively for developing a visual vocabulary for an audience of culturally diverse women.

The research direction of this project is based on the concept of shared creativity of ethnically diverse immigrant women, through collaborative design exploration workshops. The concept of shared creativity is also harmonious with the spirit of multicultural pluralism, which forms the basis of the Canadian culture. This role of a designer to identify problem-oriented activity, and to develop participatory strategies to address those real issues provided a chance to contribute to the social process concerning cultural diversity in a constructive and sustainable manner.

Key Words

Participatory design approaches, Collaboration, Design process, Rhetoric, Interdisciplinary, Design and society, Human / user-centered design, Learning, Social and cultural studies,

Cultural Diversity

The United Nations World Commission on Culture and Development Report titled 'Our Creative Diversity' defines "culture" as the whole complex of distinctive spiritual, material, intellectual and emotional features that characterize a society or a group. It includes creative expressions, community practices and material or built forms

Multicultural ethnic diversity in first world cities has created subcultures. Micro-communities fed by these sub-cultures possess specialized knowledge and language that is not shared by the main culture. World development organizations around the globe are developing culturally sensitive approaches to strengthen community projects' planning and programming effectiveness and create conditions for ownership and sustainability. United Nation Population Fund's (UNFPA) 'Cultural Lens' is an example of one such promoted approach, which recognizes the importance of the socio-cultural capital of various micro-communities and emphasizes community participation and people centered approaches in community project design and development. This approach recognizes that acknowledging, appreciating and working with the social capital in these communities can create conditions of ownership and sustainability, which can lead to strength the main culture.

Immigration and Immigrant Women in Edmonton, Alberta, Canada

People of different religions and cultures live side by side in almost every part of the world, and most of us have overlapping identities, which unite us with very different groups.

— *Kofi Annan, Former Secretary-General of the United Nations*

According to the Oxford Dictionary, Encarta and Wikipedia, immigration in general, refers to the movement of people among countries, or it is the act of entering a country with the intention of remaining there permanently.

The Report of Auditor General of Canada (Fall 2009), states that immigration plays an important role in the economic, social and cultural development of Canada. Statistics Canada indicates that immigration accounted for two thirds of Canada population in 2006. Alberta reports the highest percentage of immigrants/visible minorities of the three Prairie Provinces.

The 2006 Census enumerated 527,030 immigrants in Alberta representing 16.3% of the total population. Between 2001 and 2006, Alberta's immigrant population increased by 20.2%. This was more than two times higher than the non-immigrant population, which grew by 8.7% during the same period.

There were slightly more females than males in the immigrant population of Alberta. In 2006, out of 100 immigrants residing in the province, 52 were women. About 31,930 immigrants in Alberta were children under age 15. This represented 6.1% of the immigrant population.

As of 2006, 143,335 immigrants call Edmonton home and 52% of these immigrants are women. In late 1990's Statistics Canada reported that nearly 20% of women living in Canada were newcomers to the country and on average these immigrant women were more highly educated as compared to their Canadian counterparts but they usually survive on low income. This is due to various reasons, the discussion of which is beyond the scope of this paper, but it clearly suggest there are barriers that prevent the successful participation of immigrant women in the mainstream culture.

It has repeatedly been declared in a variety of Government of Canada's Statistical reports that diversity is one of the defining characteristics of Canadian society. Over the last two centuries, the linguistic, cultural and religious make-up of the country has significantly changed in the wake of various waves of immigrants, first, mostly from Europe; and more recently from a wider range of societies including many non-European countries.

The diversity that marks Canadian society has had a positive effect on the country as new skills and ways of looking at the world have been adapted from succeeding waves of newcomers. The diverse nature of the country, however, can also introduce tensions into the social fabric as different groups struggle to adjust to their new social milieu while at the same time trying to maintain their cultural identity in a rapidly changing environment.

In 2006 UNFPA-IOM (United Nations Fund for Population and International Organization of Migration) jointly organized an expert group meeting to formulate a set of recommendations for action by governments, international organizations and civil society, as a contribution to the high-level dialogue on international migration and development to mainstream female migrants' needs and rights into the agenda. All participants agreed that women's migration or immigration had received too little attention rather it stated:

Insufficient attention to female migration in its different aspects violates the human rights of the people concerned, holds back development and reduces the possibilities for achieving the Millennium Development Goals.

— UNFPA-IOM (2006)

Visual Communication Design for Social Change

Victor Papanek (1974) in the opening remarks of his book *Design for the real world* states that design is basic to all human activity. Niesuma (2004) argues for alternative design scholarship, which offers designers an opportunity to think about how their work might be directed at social change and well being of marginalized social groups. Sifting through the discourse about design, Fuad-Luke (2009) admittedly says design plays a comprehensive role in suggesting or setting new values and inculcating a societal change. Communication design research is defined by its interdisciplinary complexity as the problem content always comes from another disciplines as emphasized by Strickler & Neafsey (2002), Frascara (2002) and Fuad-Luke (2009). Poggenpohl (2002) goes further by saying that 'Design envisions the future' by taking a felt need or problem or for what is often an abstract idea and making it tangible so that the various stake holders in the idea can imagine together, socially, creatively and interactively to give the abstract some shape.

Frascara (2002) argues that social relations are complex and the introduction of people in a design equation introduces further complexity. According to Patton & Woodhouse (2004) the inherent nature of design as a human activity is that it is generally, deeply socially oriented. It encourages human participation at various stages of design process from contextualization of problem, ideation, and conceptualization, making, use and reuse. Participation in design, as mentioned by Stairs (2005) meets the human ideal of mutual support or altruism. Which is agreement with Buchanan (2001) when he says that the implications of the idea that design is grounded in human dignity and human rights are enormous and they deserve careful exploration.

Centered on the Users

As in today's globalised world there is a highlighted trend toward specialized audiences, McCoy(1995) pointed earlier, that focused messages and eccentric design languages tailored to each audiences unique characteristics and culture, need to develop. Buchanan (2001) adds that the quality of communications, artifacts and interactions and environments within which all of these occur is the vivid expression of the cultural values.

While addressing cultural plurality and related issues by the development of visual vocabulary for a diverse cultural audience for communication of a social message has diminished the focus on homogenized audiences that used to be the focus of the designers in the recent past. Elizabeth Sanders (2001) very rightly predicted about the evolution and emergence of new design spaces in response to user's needs for everyday creativity, which requires the designer to understand the experience domains of people. Sanders predicted that in future as designers involve the everyday user in the design process, tools, rules and methods for research and design would begin to blur. This will result in research becoming more creative; and design becoming more rigorous and complex.

Participatory design is a high-level feature of design methods that can be implemented in a myriad of ways. It is not a single and integral design method. I consider the following dimensions: domains of human activity, roles of stakeholders in a design; types of shared design representations, the scope and duration of participatory interactions and the relationship of users to the design activity with respect to changes in their knowledge and skill. I believe these dimensions have important implications for some of the fundamental issues that have been raised regarding the effectiveness of participatory design methods. (Carroll 2006, p 3)

Effective communication can contribute in strengthening the communicational power of the messages being developed for the female immigrants globally and specifically in Edmonton for the proposed research project. According to Bonnie Sadler Takach (2003), effective communication results from meaningful interpretation of well-designed artifacts and that context, purpose, and individual experiences affect that interpretation. She maintains that to produce effective results, we must work continually with members of the public to assess and calibrate our actions. And as established by Fuad-Luke (2009, p 347) one of the fundamental premise of co-design is that it 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.

Designing Posters for Immigrant Women

A publication by Statistics Canada about 'Women in Canada: A Gender Based Statistical Report published in March 2009, states that these immigrant women may also have to overcome many of the gender-related inequalities, which women in Canada have traditionally experienced. In this scenario, it is very likely that foreign-born women face a particularly more complex set of hurdles in their attempt to adapt to Canadian society. On the one hand, they have to cope with all the problems associated with adjusting to, what for many, may be a completely new lifestyle. Language has been identified as one of the main barriers for many immigrant women, by various surveys conducted by the Alberta Government and Non-Governmental Organizations that are offering services to

immigrant women. Lack of ability to speak any of the two official languages i.e. English or French; compounds the social navigational problems of these women.

A year ago while volunteering for Community Service Learning at University of Alberta, I was introduced to “Changing Together – A Centre for Immigrant Women”, which is the only organization in Edmonton that focuses exclusively on the needs of immigrant women of all ethnic backgrounds. The Centre has grown significantly in the last 23 years and is ready to expand its outreach by employing culturally appropriate mediums and messages to serve the community of immigrant women in Edmonton.

The decision, to investigate the cultural sensitivity of a visual message through the medium of the poster, was informed by a short survey form filled by the staff and some of the immigrant women clients of the centre. Thus starting the cooperative design or participatory design journey of user inclusion within the development team, as J.M Carroll discussed in his paper *Dimensions of Participation in Simons Design*.

In an age of transmission and computerized technology, it is surprising that the poster continues to flourish as a significant form and primary means of communication (Timmers, 2003).

Timmers articulates that an effective poster is a dynamic force of change, in the social context. She continues by stressing that the means by which a poster’s messages are conveyed are crucial to its effectiveness, as they are intended for varied segments of the society. The accessibility and adaptability of the poster communication through its graphic vocabulary makes it a popular medium for social messages. She makes a strong argument for the poster, as a communication medium, which can by changing its tone and vocabulary, reflect shifting cultural values and codes of behavior.

Interviews with the professionals of the Centre for Immigrant women also supported the idea that the initial communicational material of the facility should be supplemented with a poster to get a better outreach response from the culturally diverse audience of immigrant women. From the initial seminal research a number of questions emerged, for example; is there a real need for clear visual communication message for this culturally diverse audience? Why does this need exist and who identifies this need? How can the issue of uniformity within diversity be addressed in the design of these visual communication messages for the medium of a poster? Some of these questions helped in refining the following final research question of this exploratory research project, which sets the direction for future design explorations for this important community of immigrants in Edmonton, Canada.

How to Explore an Effective Visual Communication Vocabulary for a Culturally Diverse Audience of Immigrant Women?

Due to an earlier volunteer interaction with a few social organizations, nationally and internationally, there was personal awareness of certain visual communicational challenges that need to be addressed while designing messages for culturally diverse audiences. I agree with McCoy when she says that while dealing with this kind of an audience, the entire equation of sender-message-receiver needs to be reconsidered. Frascara further stresses it by highlighting the importance of the inclusion of receiver component in the design equation. In his following statement, while addressing the designers particularly those who are working in the social domain, he drew attention to an important aspect of listening to those for whom we design.

One of the valuable resources of creativity and skill is our ability to listen and learn from those for whom we design. (Frascara, 2000)

Krippendorff (2006) further elaborates that for designers, listening may take several routes from engaging in ethnographic research to inviting those interested to participate in a development team. He professes that participatory design starts with overcoming the voiceless user.

Susann Vihma in her essay about design semiotics compares design, which is a sort of symbolic system, with verbal narrative and storytelling. She explores the reason for associating [visual] forms with speech and verbal communication. She suggests that form in material and visual presence always expresses something to somebody. As Krippendorff mentions three concepts that are central to the semantic turn; the concept of human beings in human-centered design, the concept of knowledge and the concept of culture that nourishes design. The project research premise here is that:

- there is a need for a culturally effective and appropriate visual vocabulary for immigrant women of ethnically diverse backgrounds
- and that immigrant women themselves (for whom the poster is being designed) can contribute positively in developing an effective visual vocabulary

Research Methodology

The aim of this participatory and collaborative design research project was to explore an effective visual vocabulary for posters, being designed for an ethnically diverse audience of immigrant women in Edmonton, Canada. This research study was planned in collaboration with a community service provider, a Centre for Immigrant Women. An attempt was made to understand the wisdom embedded in respective cultural discourses, which could inform the overall learning outcomes of the project.

The project follows the basic design research process model, which involves the steps of problem identification, investigation, analysis, planning, synthesis and evaluation. However the research study employs different methods of design research techniques including observational research, a short visual analysis and a participatory design research workshop.

The research methodology combines visual ethnographic methods, observation techniques, and participatory design workshop approach into visual symbol development for the poster, which supports and utilizes the diverse cultural context of the users. (Fig.1)

The research in this situation is not market research or an audience study but rather practitioner-based participatory design research in which the engagement actually enables insights that contribute to the ongoing development of visual communication elements and the practice of collaborative design techniques. The initial focus is not the provision of data or information. Rather it is an attempt to work with the stakeholders to create an opportunity for a longitudinal study not only of the practice and reflection on the practice, but in order to build iterative cycles in information and communication design processes that, over time, will support the accounts of phenomena in the field and also provide a deeper understanding of the complexities of communication design for multicultural communities, in this case the one in Edmonton, Canada.

Project Participants

Immigrant Women

Immigrant women, who come from all over the world and represent diversity in cultural and linguistic backgrounds and form more than 50% of the immigrant population in Canada. Immigrant women from the centre 'Changing Together' were identified as a group for the participatory design workshop. Women in this study were females from 25 to 65 years of age. The focus on this group was not intended to generalize this wide age group, but rather to allow for opportunities to work with authentic groups that may include individuals between those ages faced with the challenges of immigration and language barriers.

Criteria for selecting the group

After discussing with the 'Changing Together' professionals, it was suggested that selecting a mix of new and experienced immigrant women from different groups of classes being offered at the centre might lead to more authentic outcomes. Collaboration with these identified student and teacher groups from ESL (English as Second Language) Basic Computer Literacy and Seniors Social class were sought.

Informed consent

Consent forms were administered to each participant. For those who not very comfortable with English language, the forms were translated to their own spoken language where necessary, with help of a fellow colleague translator.

Defining

Formative stage of my exploratory research defines my research and the design problem. The significance of research problem was established, based on the information gathered from the brainstorming, reframing, visual analysis, and observational research. The basic challenge was to handle the multicultural aspect of the visual communication vocabulary for the ethnically diverse target audience with varied literacy levels. Approaches based on different cognitive devices were employed to develop an understanding of the social design problem to define the design exploration.

Diverging

Divergent research approaches were applied to help develop an understanding of the problem, basic quantitative and qualitative data about the immigrant women was gathered and then strategy was devised to explore a commonly understandable vocabulary of images and symbols. Different methods for inquiring into the stakeholders' concepts and motivations were employed, these included unstructured interviews, observational methods like photographing different activities at the centre, visual ethnography by converting photographic data into digital stories and stakeholder participation in the design process through participatory design exploration workshop. As Krippendorff (2006) articulates that human-centered design methods, therefore weave available knowledge of how meanings arise within relevant stakeholder communities into the design process in order to assure that a design encourages the meanings that lead to reliable interfaces.

During this participatory design process, the focus was on generating words and images which were understood across various cultures, for the poster. It helped the image bank development and the ideation for the final interpretation of the poster. It also

helped in creating an emotional resonance in the prototype designs, which were later taken back to the group for testing and evaluation.

Visual symbols and Images were explored and developed through the technique of adjective attribution to concepts of *immigration* and *Changing Together* during the participatory design exploration workshop. All the adjectives and synonyms contributed by participants, who came from varied cultural backgrounds, were written on flip charts for recall during the later visual concept sketching exercise. The group was also encouraged to explore the agreed upon adjectives in the form of *an act*, for example how can we all together show *Changing Together*. And the group of participants responded by first holding hands and then they tied their colorful scarves to make a circle of different colors while holding them together (Fig 2). An image bank emerged from which symbols and images could be applied in the prototype posters. (Fig 3)

The above discussed, diverse steps helped to clarify, root and expand the range of options for designer's imagination but these were guided by how the stakeholders conceptualize the effective visuals for the poster. The next stage was about what designers traditionally do to synthesize apparently disparate elements into a new unity. So accordingly based on the identified visuals from the participatory workshop, three poster prototypes were designed. (Fig 4 a, b and c)

Earlier, a visual survey of the public spaces, which are frequently shared by the identified audience, was also conducted and shared with the group. This helped in identifying and agreeing on the channels of distribution for the poster. According to Timmers research (2003) one important factor in understanding the continued power and appeal of the poster is the accessibility of its physical deployment.

Transforming

Once a substantial amount of information, from the above-discussed modes of research, was collected it was synthesized into rough prototype designs for three posters. A testing session with the same audience of stakeholders was conducted where the poster designs for their visual vocabulary were tested in the form of a written evaluation of individual poster symbols and their comparative visual analysis was also made (Fig 5). This step in the research brought the stakeholders back into the process to test the extent to which the design and visual vocabulary was effective. While the posters were being tested, participants were encouraged to think aloud and their responses and observations were noted down for further analysis. As noted by Krippendorff (2006) data obtained through the method of Protocol analysis (Newell and Simon 1972) provides the design analyst with records of correlation between verbal accounts of what users see and think about their interactions. Which leads to adding valuable specificity to the otherwise 'meaning-dry' observational record on the one hand and abstract verbal accounts obtained during interview on the other

These initial findings will be used for the design of further poster iterations and to achieve a set of culturally agreed upon visual images, which have effective messages for a diverse audience, through the resultant poster design.

Triangulation of methods like protocol analysis with visual ethnography and observational methods offered an opportunity to overcome uncertainties afforded by the use of a single method. Based on the observation of research findings it is concluded that user-centered approaches to design can work effectively for developing a visual vocabulary for a culturally diverse audience.

Observations about prototype poster designs

Prototype posters served as carriers, and realizing these shared experiences facilitated communication in the evaluation and testing phase. Stappers (2007) in his essay on *Doing Design as a part of Research* maintains that Prototypes speak the language of experience, which unites us in this world. The method of knowledge generation through the design of working prototypes based on participatory design exploration session, helped in gaining fundamental understanding of a multicultural group. (Fig 4 a, Fig 4 b, Fig 4 c)

All together, the exploration in the formative and summative stages was successful and confirmed some of the assumptions that were made at the beginning. Most of the testing session participants responded positively toward the proposed prototypes and contributed in generating a succulent discussion on the merits and demerits of the chosen visuals. Interesting patterns were observed in the choice of prototype design.

- Mostly participants who were the staff members (of diverse cultures) had a preference for the Poster C and agreed that a knot of different colors is a symbol which accurately represents the concept of engage, encourage, empower which in turn symbolizes immigrant women's lives.
- Staff participants also identified with a circle of hope in the Poster B, but the black color was strongly disagreed upon by most of the participants.
- Images of Poster A, were found highly representative of the concept and almost 90% of those who represented the audience /users found this option the most convincing.
- Regarding the Centre's identity, mostly commented that the overall Poster Design was the centre's identity, and they don't see the logo a separate element.

Discussion of the Findings

Based on the observations and synthesis of research findings, it was concluded that user-centered participatory approaches of design could work effectively for developing a visual vocabulary for an audience of culturally diverse women. The user participation in the generative research stage definitely provided invaluable information in understanding the users perceptions, dreams and needs. This helped in creating a basic image bank, which was mutually agreed upon and was well accepted by a large representation of various cultures.

Some contradictions surfaced to the earlier assumptions from before this research exploration activity. The main assumption that displaced women would have a preference for nostalgic images and colors were proven completely wrong.

The majority of people in a group had preference for a certain visual, thus creating patterns of behavior. As in the case of Poster A, most of the participants who were ESL (English as Second Language) or basic computer literacy students, could relate to the symbol of butterflies and threads more than any other visual. Clearly the visual preference had two highlighted poles. i.e. Poster A and C. However a complete consensus in cultural sensitivity towards colors and symbols was found.

Concluding Reflections

The nature of this study was exploratory from the beginning. It also demonstrated the effectiveness of using generative, participatory methods in design research that helped in creating a sense of ownership and responsibility in the end users by making them stakeholders and design participants. Additionally it gave the design researcher, the opportunity to initiate a capacity- building process in a social services scenario, which can offer sustainable solutions for collaboration in the design-for-social-change process. The project outcomes reinforced Manzini's (2004) concept of "designing to enable people" rather than "designing to solve problems."

The method of knowledge generation while developing community collaborations, through the design of working prototypes based on participatory user-centered exploration session, assisted in gaining a fundamental understanding of the audiences' responses and needs.

This study also established that communication design could play an essential role in motivating and facilitating the social development and integration process of immigrant women in Edmonton, Canada. The research direction in this project until now has been based on the idea of shared creativity. This implies a deep transformation in the user's role as well as the designer's role of taking social responsibility. UNFAP-IOM jointly acknowledged, that Women's immigration has received very little attention, which apart from having other social consequences also holds back development. So the process of design where a subject facing a problem is not only 'the part of the problem' but 'also a part of the solution' contributes in building confidence of the participant stakeholder. One positive occurrence that was witnessed was significant increase in vocal skills and confidence level of the stakeholders. Many women from *participatory design workshop* and the *testing session* shared that they felt more important and respected when they were asked for an opinion or independently entrusted with a 'responsible' task such as that of visualizing a poster the centre.

The participatory design research methods can be seen as concrete steps towards the participation of these immigrant women in the local social development process while simplifying the cultural complexes.

A more immersive and reflexive role for the designer was explored – that of participating in a social process to facilitate in the emergence of effective communicable visual ideas for a local multicultural micro-community of immigrant women in Edmonton, Canada. This concurs with Poggenpohl (2002) when she says that it leads to the development of knowledge gained through pragmatic observation that is actionable. The role of a communication designer to identify problem-oriented activity, and to develop participatory strategies to address the real issues will provide a chance for them to contribute to the social process concerning cultural diversity in a constructive and sustainable manner.

The research project also helped in developing insight firstly, about of the role of multicultural user participation in the design process, in addition to identifying visual representations that communicate to a culturally diverse audience. And secondly it demonstrated that embracing diversity of human experiences facilitates in the emergence of focused visual messages for multicultural immigrant community. The project promoted awareness of contemporary social issues of immigrant women from the perspective of a design research student, in today's global village scenario, where we are striving to understand the wisdom embedded in respective cultural discourses. Future investigations can lead to design communication projects, which can improve

various services for these social groups of culturally diverse communities of immigrants in Edmonton. It has to be seen whether such graphic communication design projects can change patterns of behaviors, acquire knowledge and empower these diverse communities while fostering their creative expressions, in the long run. If yes, then can the above discussed project methodology serve as a model in that scenario?

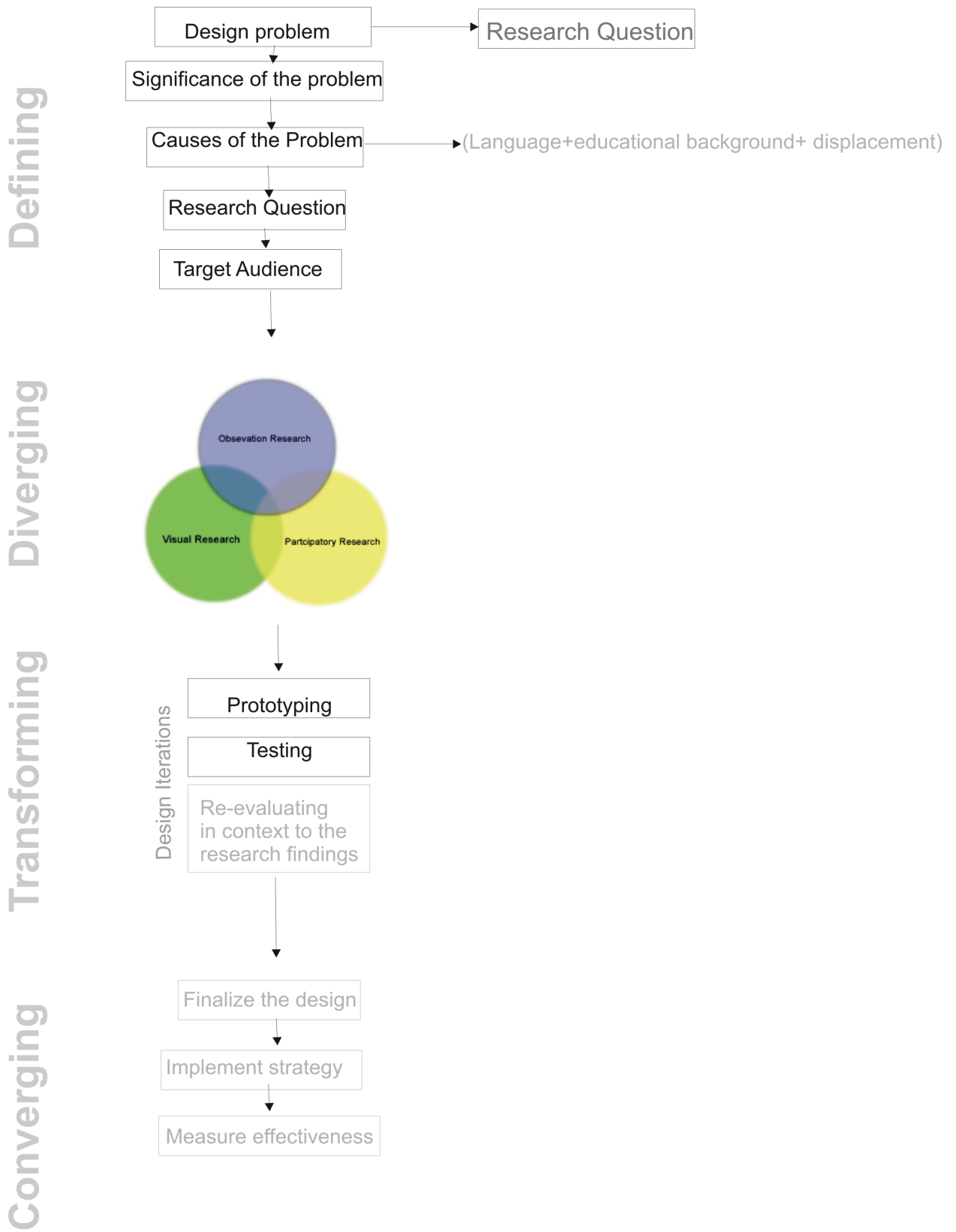


Fig 1: Research Methodology

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Author Biography

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She is a Graduate candidate in Visual Communication Design at University of Alberta, Edmonton, Canada. Being a visual communication designer/instructor, community volunteer and an active citizen, her teaching, practice and research interests are grounded in the notion that design can influence social transformation. She intends to explore sustainable collaborative design methods and generate new knowledge to discover and harness the power of design within the field of 'design for community development' in a diverse cultural context. Her work considers endless possibilities of affecting change through the focused use of design and powerful conceptualization, which she also experimented-with during her teaching 'Visual Communication Design' at a Women University in Pakistan.

In her ongoing graduate research project she is focusing on collaborative/participatory design methods through digital story telling process with an aim to contribute and nurture creative expression while accessing critical knowledge and perspectives in relation to immigrant communities' identified socio-cultural health services access problems.