DEMOCRATISING GRAPHIC DESIGN: THE ROLE OF HUMAN-CENTRED PRACTICE WITHIN COMMUNICATION DESIGN PROJECTS

Kate CHMELA-JONES

Vaal University of Technology

Abstract

The paper reports on a number of human-centred design projects completed as part of the undergraduate graphic design programme at the Vaal University of Technology (VUT). The value of projects rooted in participatory design practice and social responsibility is discussed in the context of the multidisciplinary nature of graphic design and the opportunity provided by the Higher Education Qualification Framework (HEQF) to redesign existing programmes at Higher Education Institutions (HEIs) in South Africa. Upon reflection, the project findings indicate that the process allowed students to produce visual design outcomes which had value in terms of design as well as community engagement. However, to ensure success design students must be cognizant of well-structured design research methodologies that contribute to appropriate solutions in meeting societal goals.

Keywords: graphic design, human-centred design, design education, participatory design practice, social responsibility.

Introduction

The concept of the 'democratisation' of design has steadily gained in popularity in recent years. Warren Berger (2009) defines this concept as multifaceted problem-solving by, amongst-others, citizen-designers. This paper attempts to discuss this concept through the lens of graphic design education. Graphic design has been defined as a collaborative creative process that combines art and technology to communicate ideas through the use of tools such as image and typography (AIGA). Richard Buchanan's (2000, p. 22) definition of graphic design is most apt in context of this paper: "[D]esign is the creative human power to conceive, plan and realise products that serve human beings in the accomplishment of their individual and collective purposes". A significant aspect of this definition is that it focuses on service to human beings rather than on self-expression and market-led objectives, irrespective of the specific area of activity or specialist practice. Contemporary discussions of design in context of its societal associations have surpassed the limitations of typical marketing-led consumer input or considerations of accessibility to broader audiences. The three foremost design paradigms in current design discourse have been described as sustainable design, technologically-driven design and human-centred design (Giacomin 2012).

Human-centred design is considered a suitable methodology for the integration of a social dimension into the design process. Design academics are increasingly of the opinion that human-centred design and research methods should be an integrated component of the design process (Hanington 2005, p. 2). At the time of writing, Cape Town has been designated as World Design Capital (WDC) for 2014, the first city in Africa to be awarded this accolade. The WDC 2014 theme of *Live Design, Transform Life* offers a socially transformative agenda for the planned projects and events which are to take place. It is suggested that the WDC programme could be a catalyst for the ushering in of socially conscious design onto the local arena and offering local design talent an opportunity for showcasing their skills (M'Rithaa 2013). It is the premise of this paper that

socially responsible design practices such a human-centred design are fast becoming an integral part of multidimensional graphic design practice and that, in order for graduates to succeed in this environment, graphic design programmes must be re-conceptualised to incorporate the principles of human-centred design as a core philosophy of its curriculum.

This paper reports on two human-centred design projects completed as part of the undergraduate graphic design programme at a university of technology (UoT) in South Africa. The teaching and learning that took place is discussed and critiqued as a possible approach to design education and practice. Upon reflection, the students' experience of the human-centred design approach as applied to Communication Design projects was overwhelmingly positive and could be considered as validating the broader implementation of human-centred practices within graphic design curricula.

Background

As early as 1971, Victor Papanek called for designers to adopt a role of increased social and moral responsibility in his seminal text *Design for the real world: Human ecology and social change* (Papanek 2009, p.345). The role of the graphic designer is still being continuously re-defined in ways that attempt to challenge the outdated notion that design is 'merely' a service industry. In addition to economic approaches, design professionals are increasingly addressing a range of social, cultural and environmental challenges in their practice with constantly evolving design strategies and methodologies. Contemporary design academics have observed that in the twenty-first century "every designer is a citizen, and every citizen is, to some degree a designer" (Lupton 2005, p. 12). Therefore the concept of 'what design is' is changing, as the design profession is adapting to participate in new forms of practice that embrace multi-dimensionalism and the role of citizen participation in the design process.

An awareness of the importance of the socio-cultural role of design has existed for some time amongst members of the broader graphic design community, but this was seldom embraced in mainstream practice (Lupton 2005, Papanek 2009). The *First Things First* manifesto, initially published by designer and academic Ken Garland in 1964, was re-launched as the *First Things First 2000* manifesto by *Adbusters* magazine in 1999. The manifesto rallied against consumerism and attempted to promote a more humane approach to graphic design. The *First Things First 2000* manifesto further fuelled the debate amongst the international design community regarding the emerging schism between self-serving commercial design practice and socially responsible design. Consequently, Rick Poynor (2002, p. 10), one of the coordinators of the *First Things First 2000* manifesto and founder of *Design Observer*, criticised the premise of the manifesto and remarked that the majority of design products address corporate needs and therefore the role of graphic design is, in fact, primarily determined by economic considerations.

Nonetheless, diverse schools of thought exist; designers such as Yoko Akama (2008, p. 20) argue that design must be positioned as "an integral part of the political, social, cultural, environmental, commercial and technological world around us". This is, however, often not the case as Akama (2008, p. 20) is of the opinion that in design practice the role of socially responsible design is frequently addressed through simplistic solutions such as pro-bono work for charitable institutions or through environmentally responsible production. The role of the 'socially orientated' graphic designer remains a pressing topic amongst designers and academics, with several international educational institutions addressing key issues through curricula dealing with topics such as human-centred design, co-design, participatory design, service design, experience-based design, sustainable design, design activism and design thinking as key strategies for the viability of design products.

Design within higher education

While design education in South Africa must take cognizance of international developments in the discipline, it must also respond to peculiar national and institutional imperatives. In short, higher education in South Africa must equip graduates to contribute to the country's social and economic development and HEIs must fulfill the core functions of teaching, research and community engagement (Rosochacki & Costandius 2012, p. 166). Consensus has not been reached regarding the most effective ways in which Higher Education Institutions (HEIs) should address community engagement and social responsibility (Van Schalkwyk & Erasmus 2011, p. 58). One approach that has achieved some success and that has certain similarities to human-centred practice is service learning (SL). SL is an experiential, community-based reciprocal pedagogy often employed as a strategy for educational reform. The teaching of human-centred design within an SL framework delivers mutual benefits for both the understanding of human-centred design and for facilitating service learning (Zoltowski 2010, p. 9). In South Africa, SL has been embraced as one of the means of responding to the government's call for universities to engage with local and national developmental demands (Osman & Attwood 2007, p. 16). Another aspect of service-learning known as project-based learning (PJBL) could offer additional possibilities for the inclusion of human-centred design principles into design curricula. PJBL brings together intellectual inquiry, real-world issues, and student engagement in relevant and meaningful work (Barron, Schartz, Vye, Moore, Petrosino, Zech, & Bransford 1998; Blumenfeld, Soloway, Marx, Krajcik, Guzdial, & Palincsar 1991). While there is a dearth of scholarly literature on human-centred graphic design in South Africa, the field of service learning has been well documented since its inception at several South African HEIs in the 1990s. The concern that service learning may be practiced at a charitable level without genuine community participation and engagement (Mahlomaholo & Matobako 2006, p. 214) aligns with the concerns raised by academics involved in the discussion of human-centred design projects (Akama 2008, for example).

The manner in which human-centred design is taught at South African institutions, if at all, has not yet been properly documented. Internationally reputable programmes in human-centred design do exist (for example at Carnegie Mellon University, USA, d.school at Stanford University, USA, Emily Carr University of Art and Design, Canada). However, these are seldom situated solely within design departments, are often generic and serve students from a variety of faculties. In South Africa, human-centred design is taught mostly within the parameters of the user-centredness contained in architecture, product and interaction design, information technology (IT) and information and communication technologies (ICT) curricula. When included as a component in graphic design programmes the approaches differ depending on the historical context of the institution where, at universities, entrenched tradition provides opportunity for engagement with the philosophical and theoretical concepts associated with human-centred design whilst UoT's have, to a smaller or larger degree, retained some of the legacy of the technikon education system (possibly, in part due to the admission criteria which are far lower than for a 'traditional' university) by continuing to focus teaching on skill acquisition and vocational readiness. When taught at all, human-centred design is encapsulated in stand-alone modules or is taught under the umbrella of philosophical concepts such as Design Thinking (Cassim 2012, Rosochacki & Constandius 2012). Design thinking, a creative problem solving approach which incorporates many of the aspects associated with human-centred design is often suggested as a novel approach to design education. As design thinking and human-centred design are often referred to in parallel, misconceptions may arise as to the relationship between the two concepts. Whereas Brown (2008, p. 37) defines design thinking as "a discipline that uses the designer's sensibility and methods to match people's needs with what is technologically feasible", a human-centred approach focuses foremost on human and societal needs.

At the time of writing a mapping of what precisely encompasses human-centred design, and a systematic, indepth, comprehensive academic discussion of the teaching and learning strategies for human-centred design within South African design programmes have yet to take place. Fittingly, a major revision of the Higher Education Qualifications Framework (HEQF) is currently underway; this provides the opportunity for

appropriate programme review to take place. The objective of the HEQF is to locate all higher qualifications within a single framework and to ensure that qualifications are appropriate to certain defined qualification purposes and that they answer to the mandate of specific types of institutions. All HEIs are required to review their programmes and to re-structure and re-curriculate where necessary (Mthembu 2012, p. 188). Based on information gathered from two surveys (in 2012 and 2013) of design departments in South Africa, a number of departments are currently restructuring curricula to include a broader focus of social responsibility. However, as none of the departments surveyed had completed the process, it may be too early to ascertain whether any of these are actually considering the inclusion of human-centred principles as a core teaching and learning strategy, and concomitantly, whether key features recommended for human-centred design such as the integration of ethnographic research methods will be included. One instance of reconsidering curricular issues in light of the human-centred imperative is the inclusion of human-centred research approaches into Communication Design projects. This will be discussed below as the crux of the current paper.

Project description

The projects described in this paper take place within the graphic design section of the Visual Arts and Design department at the Vaal University of Technology (VUT), the former Vaal Triangle Technikon. At present, the graphic design programme at the VUT is being reviewed, in terms of meeting the requirements of the new HEQF and an institutional decision to concentrate on the development of diploma qualifications has been made. It is, of course, imperative that curricular re-conceptualisation is in line with the fast-and-ever changing needs of the graphic design industry. The graphic design section at VUT takes cognizance of a recent American Institute of Graphic Arts (AIGAb) discussion document on the strategic role of graphic design education and is in the process of re-framing the existing programme with the following concerns in mind:

- 1. The usefulness of the design outcome,
- 2. The usability of the communication product,
- 3. The desirability and or perceived benefits of the design outcome,
- 4. The sustainability and lifespan of the design products,
- 5. The feasibility of the communication in terms of production and distribution,
- 6. The viability of the design outcome and the potential for return on investment,
- 7. The complexity of the design outcome that must be achieved through means such as interdisciplinary collaboration and seeing design as a system-level activity,
- 8. The practice of responsible design designing for and with people (AIGAb).

AIGA proposes that new design curricula should be informed not only by the needs and wants of the client and the context of the graphic design brief but also by the practice of responsible design led by a deeper understanding of human behaviour (AIGAb). Furthermore AIGA has identified subjects as diverse as anthropology, computer science, psychology and engineering as being of particular relevance to future designers. Indeed, the introduction of certain modules grounded in these subjects is currently being considered at VUT. Similar concepts have been considered by other South African design educators with a growing awareness that "active learning" (learning being embedded in the context of culture, and being focused on practice, community, identity and meaning) is essential in the formulation of graphic design curricula (Duker 2011, p. 71). Duker describes learning activities in this context as being "engaged and dilemma driven" with an "emphasis on the transformation of the whole person" as opposed to the mere dissemination of factual information (2011, p. 71).

Although some aspects of human-centred design, such as the development of critical thinking skills and attention to collaborative engagement are presently included in the teaching of graphic design at VUT, this approach remains on the periphery of the broader programme and approach. Nonetheless, one should keep in mind that the institutional focus at the VUT is on "becoming an active role player in the community, society

and the broader context" (Johnson, Louw & Smit 2010) with an emphasis on entrepreneurial engagement and innovation. VUT's chancellor, Prof. Irene Moutlana has remarked that the mandate of HEIs, is the creation of knowledge, and through partnerships with relevant industry the transfer of this knowledge to the community (De Beer 2010, p. 90). Furthermore, Moutlana recognises that as part of the university's mandate, over and above teaching and learning, HEIs have a "public life" and need to make a social contribution. One could argue that embracing emerging trends in design practice such as a focus on human-centred design, coupled to the opportunity provided by the HEQF to redesign programmes, may facilitate the offering of graphic design programmes at VUT that address the national imperatives of social cohesion, job creation and community engagement and answer to multi-dimensional disciplinary challenges.

The graphic design programme at the VUT offers undergraduate (currently National Diploma and BTech) and postgraduate (currently MTech) qualifications in graphic design. The Diploma in Graphic Design comprises an undergraduate curriculum that has its roots in the vocational-type instruction formerly offered at most former technikons. As the great majority of first year students entering the programme have had no former art or design training, the first year of study consists of a foundation course in design with a large proportion of the instruction focusing on basic conceptual and technical skill acquisition. As part of this foundation all graphic design students are taught a typical process (summarised in Figure 1) in order to answer the design challenges posed within studio-based projects.

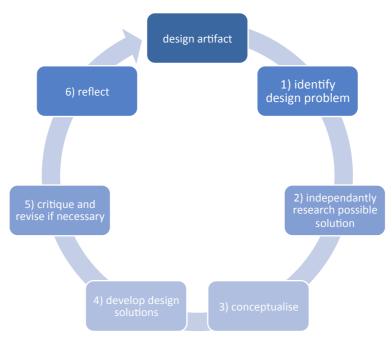


Figure 1: Typical design process

The above process places emphasis on the outcome which is the resultant design artefact. However, in order to apply human-centred design principles students must be cognizant of the contexts and meaning-making potential of the content of the artefact. This is important because in contemporary practice, the aspirations of design professionals are no longer solely focused on fulfilling the aesthetic expectations of a client but rather on formulating a holistic and strategic process where the products of design acquire new meaning which increasingly includes a socially responsible dimension. In a human-centred design approach the emphasis of the design process is on so-called 'design for social good' through participation and empowerment. Therefore, according to Kazmierczak (2003, p. 48), within contemporary design practice the content of a design is no longer sought in the artefact itself. It becomes a receiver's thought, which is constructed through the receiver's contact with a design. As such, it is created and owned by the receiver or audience for whom it is intended. In order for undergraduate students to understand audiences, meaning, value and participation in a human-

centred context, the methods applied to point 2 on the process illustrated in Figure 1 (*research possible solutions*) should be appropriate, flexible and framed within the parameters of design thinking.

Students are better equipped to deal with conceptual and theoretical aspects as from the second year and the inclusion of human-centred principles and factors is introduced in a limited number of studio-based projects. It is at this level that students are introduced to briefs which originate from actual clients who approach the VUT's graphic design section for assistance with design problems. This contributes to the development of particular types of knowledge that help to equip students for the purposes of direct interaction with actual people and 'real-world' problems. We hope that exposure to the basics of human-centred design at this level of study will assist in developing a passion in the students for advocating real-world problems, and for designing with real users and audiences in mind.

At third-year level at VUT students are exposed to human-centred design through an integrated 5-week module which includes theoretical and practical outcomes grounded in human-centred design philosophies. This module includes the following components:

- 1) An introduction to human-centred research methods including interview techniques, data collection instrument formulation, early-phase data collection techniques and on-going concept development.
- 2) An introduction to individual, social, cultural and emotive human factors that impact on design conceptualisation and development.
- 3) An introduction of participatory methods and collaborative design activities.

The project includes a student-led enquiry whereby students are given the opportunity to explore the above concepts in context. This step provides an opportunity for the students to engage in a consultative, immersive process with various stakeholders to investigate and explore the designer's role in enabling and facilitating stakeholder input in the design process. Thus, a more human-centred design process has been developed and is currently being applied to third year and BTech Communication Design projects at the VUT (see Figure 2). The students are required to identify a potential client within their communities and to collaboratively develop a brief which delivers or enhances design solutions to be used within a commercial application. The complexity of the design problem is determined by the student and client who work collaboratively. The problem identification phase requires students to conduct extensive research into the scope and depth of the design problem, because we believe that in order for the design to be applicable, the students have to gather as much information as possible regarding the user. The conceptualisation of possible solutions is a collaborative exercise which includes all stakeholders. The clients are encouraged to contribute to the final design artefact by providing significant input in the development of the design solution, in taking design-based decisions (such as choosing appropriate typefaces for example) as well as in contributing to the students' reflection-on-action by critiquing and commenting on the design prototypes. The students are made aware of the importance of the client/user participation throughout the process. Although this project has a commercial outcome, the foundation of human-centred design principles is laid through the incorporation of participatory practices, the focus on user-centred research and data collection methods, and the continual emphasis of the social dimension of design production.

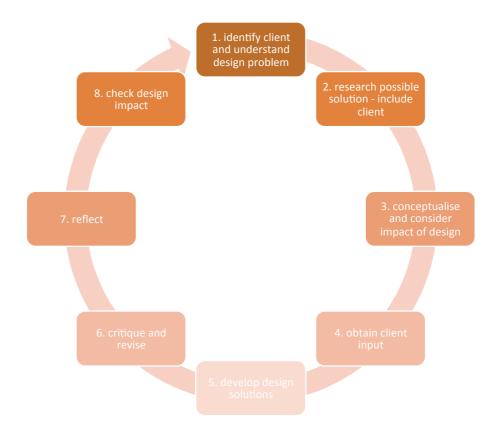


Figure 2: Typical human-centred design process as applied to Communication Design projects at VUT

Typically at the fourth year of study (at VUT this is at BTech level) students who participate in the humancentred design project have had prior exposure to the principles and philosophies of human-centred design as from the second year of study. Although the 5-week module follows a similar process as at the third-year level, the emphasis is on the social aspect of the design outcome. Here the students are encouraged to work individually or in small groups of two or three students in order to identify clients for whom the design solution would have a significant social impact. At the time of writing, sixteen students have participated in the project and all have opted to work in groups. As a result some of the projects identified include the development of a recycling campaign for a local school as well as the development of an awareness campaign for the local taxi association. One project (the development of a new corporate identity for a local NGO - a residence for mentally challenged patients which provides basic skills and training) resulted in students' ongoing involvement with the design and marketing of products produced by the residents of the facility. It is interesting to note that when reflecting on the project outcomes the participating students noted that they derived a greater measure of satisfaction from those projects which had the most perceived social impact. Importantly, when asked to reflect on the project from a holistic perspective students indicated that the application of human-centred, participatory research methods in context of 'real-world' problems, has replaced their previous negative perceptions associated with research-based work.

Conclusion

Contemporary professional design practice draws on advanced multidisciplinary knowledge that presupposes interdisciplinary collaboration, and that requires a fundamental change in the traditional approach to design education. In order to serve human beings properly, outstanding professional designers must master the art of human engagement based on ethics and care (Friedman 2012, p. 150). Additionally, in order for a human-centred democratisation of design to take place the power relationship between audiences and designers

must change. From a design education perspective, Cassim (2012, p. 19) suggests that "more attention needs to be given to the nurturing of design thinking skills within an educational context". The projects described above have informed the conceptualisation of the re-curriculated graphic design programme at the VUT. The importance of the inclusion of research methods for design at introductory undergraduate level has been the most significant impact of the reflection upon the teaching and learning processes which take place in these human-centred design modules. Furthermore, it is envisioned that in future the design curriculum at VUT will include core modules in human factors and design thinking which will equip future graduates with the skills, knowledge and disposition for creative, human-centred design outcomes in their practice.

References

AIGA n.d., A definition of graphic design, viewed 21 July 2011, http://www.aiga.org/definition

AIGAb n.d., Designer of 2015 competencies, viewed 23 June 2012, http://www.aiga.org/designer-of-2015

Akama, Y 2008, 'The tao of communication design practice: manifesting implicit values through human-centred design', PhD thesis, RMIT University, Melbourne, Australia.

Barron, BJS, Schartz, DL, Vye, NJ, Moore, A, Petrosino, A, Zech, L & Bransford, JD, 1998, 'Doing with Understanding: lessons from research on problem- and project-based learning (The Cognition and Technology Group at Vanderbilt)', *The Journal of the Learning Sciences*, vol. 7(3/4), pp. 271-311.

Berger, W 2009. *Glimmer: How design can transform your life and maybe even the world*, New York, Penguin Press.

Blumenfeld, PC, Soloway, E, Marx, RW, Krajcik, JS, Guzdial, M & Palincsar, A, 1991, 'Motivating project-based learning: sustaining the doing, supporting the learning', *Educational Psychologist*, vol. 26(3/4), pp. 369-398.

Brown, T 2008, Change by design: how design thinking transforms organizations and inspires innovation, New York, Harper Business.

Buchanan, R 2000, 'Human Dignity and Human Rights: Towards a Human-Centred Framework for Design', paper presented at the *Reshaping South Africa by Design* DEFSA conference, 22-24 June, Cape Town.

Cassim, F 2012, 'Hands on, hearts on, minds on: design thinking within an education context,' *The International Journal of Art and Design Education*, pp. 1-29.

De Beer, D 2010, 'Technology transfer at universities of technology – operating as "new generation" universities', *Universities of Technology – deepening the debate. Kagisano* vol. 7, pp. 89-112.

Duker, M 2011, 'From 'banking' to 'stockvel': a critical reflection on the development of literacies programmes for entrance level Theory of Art and Design students', paper presented at the *DEFSA 20/20 Vision* – Sixth International DEFSA conference, Johannesburg, South Africa.

Friedman, K 2012, 'Models of design: envisioning a future design education', *Visible Language: Envisioning a future design education* vol. 46.1/2, pp. 132-153.

Giacomin, J 2012, What is human-centred design? Viewed 19 December 2012, http://hcdi.brunel.ac.uk/files/What%20is%20Human%20Centred%20Design.pdf.

Hanington, BM. 2005. Research education by design: assessing the impact of pedagogy on practice. Paper presented at the *Joining Forces* conference, 22-24 September, University of Art and Design, Helsinki.

Johnson, B, Louw, A & Smit, J 2010, 'The new generation university: views on knowledge and knowledge generation', *Universities of Technology – deepening the debate. Kagisano* vol. 7, pp. 113-128.

Kazmierczak, E 2003, 'Design as meaning making: from making things to the design of thinking', *Design Issues* vol. 19(2), pp. 45-59.

Lupton, E 2005, Design and social life. Viewed 12 April 2010, http://www.designwritingreserach.com.>

Mahlomaholo, S & Matobako, T 2006, 'Service learning in South Africa held terminally captive by legacies of the past', *Alternation* vol. 13, pp. 203-217.

M'Rithaa, MK 2013, *The value of World Design Capital 2014 for (South) Africa*. Viewed 13 June 2013, http://sabs.designsa.org.za/article/value-world-design-capital-2014-south-africa-0

Mthembu, T 2012, 'Curriculum transformation at universities of technology: towards development of new generation universities', SAJHE, vol. 26(2), pp. 185-197.

Osman, R & Attwood, G 2007, 'Power and participation in and through service learning', *Education as Change*, vol. 11, pp. 15-21.

Papanek, V 2009, Design for the real world: human ecology and social change, Chicago, Academy Chicago.

Poynor, R 2002, 'First things first, a brief history', in M Bierut, W Drenttel & S Heller (eds.), *Looking closer four:* critical writings on graphic design, New York, Allworth Press.

Rosochacki, S & Costandius, E 2012, 'Social learning in visual communication design', in T Nairn & M Kalantzis (eds.), *The International Journal of the Humanities,* New York, Common Ground Publishing.

Van Schalkwyk, F & Erasmus, M 2011, 'Community participation in higher education service learning', *Acta Academica* vol.43(3), pp. 57-82.

Zoltowski, CB 2010, 'Students' ways of experiencing human-centred design', PhD thesis. Purdue University, Lafayette, Indiana, United States.