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# HOW THE VISUAL COMMUNICATION SKILLS OF GRAPHIC DESIGN AND INCLUSIVE DESIGN'S CO-DESIGN METHODOLOGY CAN HELP SHELTERED WORKSHOPS CREATE VIABLE BUSINESS MODELS

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Abstract: This paper explores how the visual communication skills of graphic designers aligned to inclusive design methodologies can create new economic, creative and social opportunities for marginalised communities in sheltered workshops. Graphic design has adapted to technological and social changes over time developing into a multi-disciplinary practice with relevance to the commercial, public and non-profit arenas. Allying this flexible design discipline to a structured co-design process as with inclusive design, new forms of socially-responsible graphic design practice can be realised. The paper introduces four collaborative projects from Japan, Croatia and Bosnia which show how designers, the staff and disabled beneficiaries of sheltered workshops worked together to co-design and prototype new portfolios of commercially viable design goods. The paper highlights the potential of a new socially-inclusive approach for graphic design whereby designers and their design partners can have an equal stake in positively changing society.

Keywords: Graphic Design, Inclusive Design, Sheltered Employment, Social Empowerment

#### 1. Introduction

Changes in the age demographic, legislation and a greater understanding of the civil rights of socially-marginalised and ethnic minority groups over the past century have forced many countries to acknowledge the importance of diversity and difference. Designers, too, have been encouraged to design with a wider spectrum of the population in mind, expanding their practice from a market-led arena to the social one. We live in an era where it is not only about what we design, but who we design for, with increased focus on the design context and beneficiaries themselves. Designers have left their studios to work directly with their clients and users, using co-design methodologies such as inclusive design to utilise their design skills effectively for the social good.

Throughout history, graphic design has evolved as a discipline by embracing a variety of media in relation to technological and social developments. As a practice, the focus has been less on physical objects but on how best to incorporate effectively its visual communication skills in the social arena through the creation of a coherent visual language, which can have multiple applications and functions. From image creation to art direction and branding, it has an array of visual communication

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skills at its disposal, showing great potential for use in a co-design process and different social contexts. By incorporating graphic design's skills within inclusive design's participatory process, a new form of socially-responsible graphic design practice can be established that benefits designers and the people they are designing with alike.

# 2. The new "social" approach to inclusive design

Inclusive design is a collaborative design process whereby those often excluded from commercial design processes, or those belonging to socially marginalised groups, work with designers to create effective design solutions for a broader span of the population. Inclusive Design as a term was first used by Roger Coleman in a conference paper in 1994 (Coleman, 1994). Coleman describes inclusive design as: neither a new genre of design, nor a separate specialism. It is a general approach to designing in which designers ensure that their products and services address the needs of the widest possible audience, irrespective of age or ability. (Clarkson & Coleman, 2003)

To achieve such products and services, inclusive design encourages designers to design "with" people, focusing on the importance of designing for the needs of the wider mainstream market whilst simultaneously understanding those on the extreme end of the usability spectrum such as elderly or disabled people. In order to create true inclusiveness and innovation, designers should understand these extreme scenarios to bring benefit for all involved. When designers identify the specific problems, issues and aspirations of these users and simultaneously find commonality with those in the mainstream market, it is possible to create truly inclusive products and services for all (Cassim, 2007). Inclusive design is characterised by two main features. Firstly, improving the ergonomic characteristics of a product, service, interface or environment through the active and timely involvement of users at the extreme end of the usability spectrum in a practice similar to Universal Design or Design for All. The second relatively new approach is where inclusive design's collaborative co-design/co-creation process methodology allied to mainstream design practices is used as a means to empower socially and economically marginalised groups. In this paper, the second approach will be explored, highlighting the importance of the skill set of the graphic designer and inclusive design methodologies as a means to empower sheltered workshops and those working in them both socially and economically. Case studies from projects carried out in Bosnia and Herzegovina, Croatia and Japan will be showcased.

#### 3. Why is graphic design relevant to inclusive design's co-design process?

Elizabeth B. N. Sanders noted that designers have moved increasingly closer to the future users of what they design for in the last sixty years. User-centred design has developed from understanding user needs via data and statistics to the direct tactic of active collaboration, whereby designers and users contribute to the design solution (Sanders & Stappers, 2008). This has meant that an understanding of the design context and design issues have become crucial to the creation of truly inclusive design solutions. Sanders defines this stage as the pre-design stage, also known as the 'fuzzy front end', where many activities take place simultaneously to understand and explore the design context.(Fig.1)

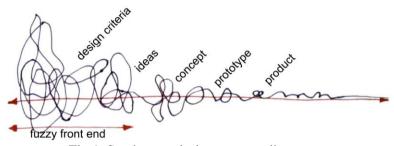


Fig 1. Sanders co-design process diagram

Similarly, in inclusive design a clearly defined design brief is vital, if the design outputs are to succeed in their aims. Thus, the 'fuzzy front end' of the design process is crucial in defining both the limitations and possibilities inherent in the design context and the issues that have to be tackled by the

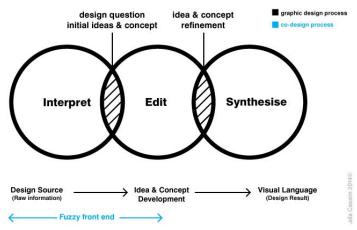


Fig 2: The Graphic Design process and how it relates to the co-design process

designer and their design partners. This can be a complex process especially in social contexts where there is little or no understanding of design as a tool and process and where the design partners, sometimes do not understand the issues they have to tackle. Therefore, a great deal of information and resources must be obtained and organised at this stage. Graphic design is a discipline where the designer handles a variety of design sources that are not their own. Design sources refer to information, visual imagery, physical materials and so on, which are provided or available to the designer within the design context they are designing for. They must organise and utilise this diverse mix of design sources provided or available to them to create an effective design solution. Irrespective of whether it is in advertising, branding or editorials, graphic designers must employ three key skills to achieve this – they must interpret, edit and synthesise the design sources and create a coherent visual language and communication method from them (Fig.2). As in co-design, the early stages of the graphic design process are crucial since how you interpret the design sources defines the direction of the design result. These are not simple design criteria but rather, complex pieces of raw information, which must be analysed and edited in depth - determining what to or what not to utilise to create a coherent concept and visual language that can be easily interpreted and used. Furthermore, due to constant technological developments, graphic designers must create a visual language across a wide range of platforms - print, textiles, film, digital media and so on. It means that more design considerations must be made in the pre-design stage to create effective design solutions. Using a multi-disciplinary design discipline that can handle complex information and the challenging fuzzy front end of the co-design process is vital for the inclusive design process. Graphic design has the ability to create a multiplicity of design solutions via visual communication and art direction skills, which I believe, can contribute greatly to the co-design process, as seen in the case studies section.

#### 4. The Design Context: the realities of sheltered workshops and their need for design

In recent years, changes to disability legislation and its implementation have been seen worldwide to ensure equal opportunities for disabled people. Twenty-two countries in the European Union including the UK, Croatia and Bosnia and Herzegovina signed the UN Convention of People with Disabilities in 2006. This urged equality for disabled people to "promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity" (UN Convention of People with Disabilities, 2014). Sheltered workshops are one such place where equal human rights and the enjoyment of life including training and employment, creative activities, social interaction and independence can be provided for many of the most vulnerable disabled people, such as those with learning disabilities. From simple component assembly work to creative crafts, they are places that employ people who would otherwise have difficulty in participating in the mainstream work environment. The increasing costs of caring for ageing populations have stretched the care and welfare systems in many countries. Similarly, disability rights activists have focused on employment as the ultimate benchmark of social equality, putting greater pressure on disability organisations and facilities to ensure social inclusion and economic stability for this marginalised population. Many countries such as the UK and Japan have

also seen changes in legislation regarding sheltered workshops in recent years. For example, in February 2013, in a report commissioned by the UK government, 36 out of 57 Remploy workshops, the major government-run sheltered workshop network in the UK, were deemed 'not viable' for government subsidy on economic grounds. The recommendation was that their funding should be diverted to other employment schemes such as Access to Work (McGuiness, 2013). In Japan, the Disabled Person's Independence Support Law (Shogaisha Jiritsu Shien Ho) established in 2004 was renewed as the Disabled Person's Unified Support Law (Shogaisha Sogo Jiritsu Shshin Ho) in 2009, raising the percentage of money disabled people had to pay for their care or rehabilitation facilities and services from 5 % to 10% of the total cost. (Ministry of Health Labour and Welfare Annual Report, 2014). These legislative changes show that authorities are being proactive in tackling issues relating to disability rights and sheltered workshops. However, although implementations have been made, there has been very little structural support or models of good practice from government or local authorities in how to achieve the targets and goals set for sheltered workshops to be more productive and economically stable in the future. Many sheltered workshops continue with low-level, low-paid contract piecework as before. This is neither economically sustainable nor profitable and does not serve to increase the income of their beneficiaries in the long run. New methods of generating a sustainable income are needed that can help them get out of this legislative and economic bind by utilising their existing skills and resources more creatively. The answer could lie in a codesign co-creation design process, which can socially and economically empower these people through a design-led social enterprise model.

## 5. Case Studies: Graphic Design x Inclusive Design Projects

#### 5.1 Case Study 1: All Inclusive Sarajevo

Design Context: Held in May 2009, *The All Inclusive Sarajevo Workshop* was the first inclusive design workshop, using inclusive design's co-design methodologies in socially and economically challenging contexts. As a multinational project, it aimed to establish a collaborative network with sheltered workshops or organisations employing deaf workers in three countries of the former Yugoslavia and the UK. Due to cost-cutting legislative changes by the Bosnian government, who made amendments to the *Law of Social Protection* in 2009, deafness was no longer defined as a disability on the grounds that this population are more than physically capable of working in a mainstream work environment(Cassim & Perkovic, 2011). Organised by Kulturanti - a local NPO, with financial and logistical support and expertise from the British Council and the Helen Hamlyn Research Centre at the Royal College of Art in London, the workshop aimed to create new income streams for four such workshops, through the creation of design products. Four design teams were established, each led by professional designers from the UK, working with craftsmen from one of the four teams; the *Association of Deaf and Hearing Impaired Persons*', the *Centre for Self Reliance* the *Librag* metals workshop, and reprographics workshop *Pismolik*. The results for *Team Pismolik* led by graphic designers Gero Grundmann and the author will be introduced here.

#### Team Pismolik

#### Team Leaders: Gero Grundmann / Laila Cassim Regional Leader: Kenan Zekic

**Design Partner:** For fifty years, Pismolik has supplied reprographic goods such as signs and stamps for a competitive local printing market. They receive no financial support for employing their disabled staff, who, although highly skilled, felt unable to fulfil their creative potential, working from pregenerated images and templates to create simple reprographic products.

#### **Design Brief:**

- Create a series of graphics and high-quality designer products that actively exploit the production capabilities of Pismolik and the technical and other skills of Pismolik's employees
- Create a effective marketing plan and set of design guidelines for Pismolik to follow, based on the products, to be used for developing further ones and modifying existing ones.

**Design Approach & Result**: The team found the majority of existing goods in the local market were craft-based souvenirs with little design input and no reflection or relevance to Bosnia's heritage or daily life. Devising a simple concept of using waste material, the team created a sub-brand *Superlik* 

(meaning 'Super character' in Bosnian) designing a variety of simple everyday products, which could be sold locally in Sarajevo. These included products for work and home, fashion items and accessories including organic fruit bowl, photo frames, lampshades, pen holders and decorative name signs as well as a range of contemporary T-shirts inspired by Bosnia's craft heritage (Fig 4.) The lead designers wrote a set of creative and brand guidelines as is the case in commercial practice, to ensure that Pismolik's future outputs were consistent and sustainable.



Fig 3: The Superlik product range co-designed and developed by the designers and design partners.

#### 5.2 Case Study 2: Extra Ordinary Design Workshops 1 & 2, Zagreb & Osijek, Croatia

**Design Context:** This new inclusive design workshop model was then taken to Croatia under the name *Extra Ordinary Design Workshops 1 & 2* organised and funded by the same partners. Two five-day workshops were held in Zagreb in 2011 and Osijek on 2012 to enable the sheltered workshops there to expand their business and creative outputs. The following case studies will show the results from two graphic design teams organisations employing young adults with learning difficulties – UPI (Association of Promoting Inclusion) in Zagreb, and ZVONO (Bell Association of Children & Youth with disabilities) in Osijek.

**Design Brief**: The common brief for both workshops was to co-design and produce a new sustainable product range and accompanying visual identity and design guidelines in five days. The aim was to enable the organisations to become more economically self-sufficient and compete with the design market more efficiently, creating links with the vibrant Croatian design community.

#### Extra Ordinary Workshop 1 - Team UPI

#### Team Leader: Gero Grundmann Regional Leaders: Natasa Perkovic and Mirna Reinprecht

**Design Partner**: UPI is a non-profit organisation helping its beneficiaries with their personal development, communication and social skills. At its centre in Zagreb, beneficiaries and staff create textile-based goods for the home along with a range of souvenir items, most with embroidered designs. Staff prepare fabric with pre-made designs, which members embroider and colour with fabric and batik paints. The existing products were formulaic and did not represent UPI's friendly warm atmosphere and personality.

**Design Approach & Results**: Unlike Pismolik, UPI members did not have high-level technical skills. To help create quality products, the team adopted two approaches incorporating basic graphic design principles – establishing visual direction and a grid-based system.

The visual direction of the products was established through discovering and utilising the drawings of Ratko Koletic, one of the artists at UPI who is autistic. His unique flora and fauna drawings such as Giraha— the zebra called 'giraffe', were utilised in various signature products to establish UPI's new visual brand 'Jupi by UPI.' A new range of graphic products, such as soft toys, textile pattern accessories and laptop bags were created as part of the new brand. The establishment of the grid system in products ensured quality control—one of the most difficult aspects for workshops

employing people with learning difficulties because of variations in their concentration levels or emotional capacity. By employing a dotted grid system, the beneficiaries could embroider within the dots freely without losing consistency or quality of finish (Fig 4). This grid approach was utilised in a variety of materials such as ceramic brooches and stamps, which were applied to clothing and accessories on which the beneficiaries embroidered. This enabled the team to keep within the concept of free energetic expression without having to compromise on quality or style.



Figure 4: Jupi by UPI visual identity and product range including the dotted grid system

Extra Ordinary Workshop 2, Osijek, Croatia - Team Zvono

Team Leader: Gero Grundmann Regional Leader: Dino Smrekar

**Design Partner**: ZVONO (Bell Association of Children & Youth with Disabilities) is a day centre and creative hub for young people with learning disabilities in Belišće near Osijek. Run by local designer Mira Anić, its aim is to use social and craft activities to create a sense of community, enabling beneficiaries to lead increasingly independent lives. In addition to the Belišće workshop, they also work at Citadela, a rural summer retreat with its own lavender and herb plantation.

**Design Approach & Result:** Unlike UPI there were no 'star players' whose drawings could be used to establish visual direction or graphic products. Instead, the design team observed that beneficiaries enjoyed the process of mark-making, creating energetic patterns, which no trained illustrator or designer could emulate. Small details taken from this personal mark-making became the basis and inspiration for new designs (Fig 5). Referring to local architecture and landscape the team created a colour palette unique to the region and Zvono as part of the new visual brand. Utilising the handwriting of one of the beneficiaries, the team created the brand's overall identity *Ijuju!* - a new label of design goods for the home created by the artists and makers of *ZVONO*. The logo's lettering was made into an *inclusive\_design\_one* font and used for various graphics and packaging products. Under *Ijuju*, three product ranges were established:

- Unique objects and small-batch products made at ZVONO by the beneficiaries;
- Small-batch products made at Zvono by staff, originating in the work of the beneficiaries
- Larger-scale production goods, inspired by beneficiary work, produced outside ZVONO



Figure 5: Ijuju! Visual identity and product range

The products included easily-assembled brooches and accessories, home goods such as cushions and soft toys, and printed textile patterns, which could be licensed and sold online, establishing various new income avenues for *ZVONO* beyond in-house production.

### The Hinamatsuri Project – Team Tokyo

Team Leader: Lead Author

**Design Context**: The Hinamatsuri (Doll's Festival) project was established to showcase different cultural interpretations on Japan's traditional girl's festival. Three teams from Bosnia, Portugal and Tokyo worked simultaneously in producing design and craftwork inspired by the festival from their own unique cultural and social perspective. The results were exhibited at the Shimadai Gallery, Kyoto in February 2014. The Tokyo team, led by the author, worked with local sheltered workshops, Himawari-en and Yazaike, part of Adachi-no-Sato, a welfare organisation in Adachi Ward, Tokyo. Design students from Tokyo University of Arts led by three professional designers worked with Himawari-en's staff in a three-day workshop to create graphic-based products.

**Design Brief**: The overall brief was to reinterpret the Doll's festival via the cultural or social context of each team, using design and/or traditional craft skills. The Tokyo team focussed on how to realize this and new income streams for the beneficiaries and the workshop structured by the author based on past workshop experience.

**Design Partner**: Both facilities provide work and recreational activities to 90 beneficiaries over 18 years of age, most with learning difficulties. They receive an average wage of 10,000 a month (below the national average for sheltered workshops). Weekly art classes take place but are not supervised by any art-trained staff and are held as therapeutic activities with no income generated from the beneficiaries' drawings and artwork.



Figure 6: The Hinamatsuri Product range along with original design sources, and the project identity

**Design Approach & Results**: Focussing especially on the pre-workshop process, the team leader visited both workshops weekly for a month to work with beneficiaries taking part in art classes. The focus and intention was firstly to ensure that all members were involved in creating material, regardless of drawing ability and secondly to generate high quality "graphic" material that could be used. The intention was that their personal style of drawing and mark-making could be developed to its maximum potential and become the basis for a new product range —thus helping the personal and artistic development of the beneficiaries along the way. Templates replaced standardised colour ones in books, strengths spotted were expanded upon and appropriate material and media were provided to fully bring out each individual's artistic character (Fig.6). Participating students visited the facilities prior to the three day design workshop to talk to staff and beneficiaries to understand the design context before the workshop. During the workshop, staff and designers brainstormed goals and concepts - "beneficiaries taking the lead".

A *Hinamatsuri* party goods range was designed from plates, cup holders and packaging which could be assembled in the workshop, to outsourced products such as patterned wallpaper and licensed imagery (Fig 6). Focussing on the pre-workshop period helped immensely with the three-day

workshop flow. As the designers understood the design context and had ready-made design material prior to the workshop, designs were constructed efficiently without compromising on quality, creating products that were both realistic to *Himawari-en* and the mainstream market.

#### **5.2 Post Workshop Design Impact:**

Pismolik in Sarajevo has seen the greatest transformation in its economic fortunes alongside changes in attitudes among its hearing-impaired staff since the workshop in 2008. Under the new byline "Pismolik has been taking care of your character (image) for 50 years," Pismolik no longer describes itself as a 'reprographic company that is professional even though they employ deaf people,' but as a professional graphic design company employing deaf people. Attracting the attention of the local market, they continue to produce and develop design products based on Superlik's portfolio alongside their core print business from the city of Sarajevo. This has enabled them to invest in new equipment, and expand their business and design prospects. It demonstrated how graphic design's basic concept development, branding and art direction skills can be used as a catalyst for social and economic changes in a sheltered workshop. UPI in Zagreb has also seen growth, expanding and creating new product ranges due to the clear brand and grid system, with ongoing help from local designers. However, for ZVONO in Osijek, it has been the most difficult as there has been no local design infrastructure to continuously support their design prospects. Keeping this in mind, the author visits the Himawari-en workshop in Tokyo weekly, continuously working with them to realise sustainable in-house production, enabling various income streams to established and a multi-functional social enterprise model created for sheltered workshops in the region. Some designs are in commercial production talks.

#### 6. Conclusion: The future use of graphic design be used in the social context

All of the case studies demonstrate many reasons why graphic design can work within a challenging context by structure and plan a visual language based on an underlining concept that allows for the creation of a product family with an overall brand. Further, they demonstrate that graphic designers can become great contributors at various levels of inclusive design's co-design process, even where the base material that is available for use is diverse, of widely ranging quality and difficult to synthesize into a coherent range. Graphic designers are like conductors in an orchestra, assessing each player's abilities, defining hierarchy, ensuring that the creative outputs are not scattered but consistent and controlled. By encouraging the use of its visual communication and art direction skills across various stages of the co-design process, a new form of graphic design practice can be realised beyond the role of "image maker" for the realms of advertising, branding and editorial design – establishing it as a great contributor in creating social change at every stage of the design process.

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