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# The Contributions of Women in Design for All/ Universal Design

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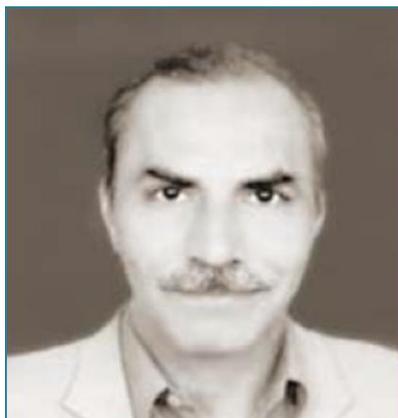


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## **Chairman's Desk:**



**Dr. Sunil Bhatia**

**Why do we feel woman is from some different planet? Truth is that we cannot ignore her contribution in making our world worth living since she is major dynamo for existence of human life. She is anatomically different from man and has been gifted from the nature for progress of life and it is such a unique purpose that no man can compete with her. I have witnessed in my family that women are contributing silently with all their power, hard work, and patience .They quietly absorb all adverse conditions for creating favorable circumstances .Such elements are missing in man. Certain characters are universal in woman and it does not alter by her background of being a rural or urban, illiterate or literate. She may belong to any caste, creed, class or religion but demonstrates certain unique character of such a high quality which is indigestible to man and astonished when she does not hesitate in sacrificing her life for upholding the culture and traditions of the society .That makes him to believe she is from different planet. Man of course enjoys natural**

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**physical power where as women are submissive by nature. This unfair characteristic of nature has destroyed the real psychology of woman.**

**It was civilizational mistake for our forefathers for suppressing & ignoring the role of woman against the man. Man has designed the social pressure to control her in such shrewd way that it is beyond imagination of sane individual. Women were living under tremendous pressure before the concept of design of toilet and bathroom within the premises. Real revolution at the social level has come in her life with the concept of design of toilet and water pipe line within the house. It has made the woman free from bonded life forced by man. Before these designs women were forced to wake up before the dawn for morning routine of defecating in open otherwise it was difficult for her to go in sunlight. It was deliberate attempt by man to control the woman to allow fetching the water from distance. Design of religion has further harmed the interest of woman by segregating and developing distinct entity from man. Influence of religion is diminishing in modern life so woman is not the same what it used to be.**

**Why does woman the makeup or carry different size of purse matching with her dress and personality? It is still mystery for me. In modern times that gap is narrowing but it still needs lot of efforts to eliminate that. Social changes are progressing slowly but technological changes are working quickly to narrow this gap. Wherever role of physical power is diminishing woman is proving her merit. The first credit that has revolutionized the thought process of the woman and gave the confidence to think beyond house chores goes to design of typewriter. It does not require**

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**manual strength for typing because its keys were so designed that women with common sense and normal education were able to type. It was responsible for the era of surfacing of woman presence in the 20<sup>th</sup> century in commercial world. Modern women are gradually learning the techniques of new environments & adapting new challenges in the best possible ways because of improvement of technologies and her notable part appearing, guiding & experienced by all. 21<sup>st</sup> century is witnessing better efficient computer that replaced the 20<sup>th</sup> century manual typewriters and this transformation is well fitting to women and they are gradually proving their mettle.**

**In the beginning of automobiles era vehicles were so designed where physical strength was required for handling the steering wheel for management but its present design of power steering wheel has made vehicle driving easily for woman. Concept of self-starter in vehicle from manual ignition of engine further helped the woman. Another big revolution has come to the area of Kitchen where many appliances have made the job of traditional housekeeping easy and woman can manage house and work outside for earning. Dishwasher, Micro wave oven, LPG/PNG gas pipe line, food processer, refrigerator and latest is rotimatic have taken over a lot of burden of woman. These appliances are designed to execute the work in few minutes what it used to take hours manually. It is easy to operate and does not need male's manual power. It was designed for operation with ease & comfort by any sex but introduction of concept of universal design has further widen the scope of operation and any age of sex can operate with ease. All the appliances are initially designed keeping in mind the possibilities of**

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woman and gradually man is adopting new environment. All are soft, easy to handle and need little common sense to operate. Gender gap is therefore fast diminishing. A new concept of unisex is popular among current generation and it is in high demand .There is no need to design as we did in past for designing the handkerchiefs or socks, jeans pants or sweaters for different sexes. Why should handkerchief or sock be smaller for woman?

As the fable goes Adam was aimlessly wandering in the paradise. It was the Eve who was responsible for making him realize the objective of existence. For a very long time man had been a hunter in primitive times and woman was responsible for taming the man and made him to stay in where his offspring and mother were living. It is my strong hypothesis that 'rural civilization' was designed by woman and man played supportive role in realizing her dreams. In village everything is at small scale as compared to urban and it is definitely designed for woman and urban area appeared to me a design of frustration of man to prove his superiority or importance. That is why calm and peace in the world as on today are missing. Chaos & manly vibrant energy are not properly channelized is reflected in the urban world. Women subconsciously like to live urban life and if ask any man his preference will be rural area. It is nothing but result of attraction for the opposite.

What we see today's modern man is result of partnership of woman in his life. The problem of food was essential for survival and various factors were against for acquiring and most important was vagaries of weather and fear of harm by wild animals. This was solved by woman by designing alternative means that are less risky and shifted focus from animal hunting to agriculture. It is my strong

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**belief that woman initiated the design of agriculture because she was closer to the nature and identified that one kind of grass that had bunch of seeds and in modern time we call it wheat. Seed has longer shelf life because it is in high form of potential life. She had understood that fire was possible because of dry branches of tree that fell on ground in its own weight and cutting the green tree would not serve the purpose. She designed the house closer to water resources and understood the importance of water in life and somewhere in corner of her mind concept of cleanliness was germinating. Woman compared to man are more sensitive toward change in climate and weather. She gets easily affected with slight change in weather and she needs extra protection. The covering of body part might be idea of woman and designed the different clothes according to seasons. Private parts are more sensitive and these had attracted attention for covering by woman. Gradually exposing to weather brings drastic changes in her behavior and she reacts in different ways compared to nudity. Over the time covering of body parts has changed the human behavior & set pattern of it is called by shame in modern world. I have observed that in coastal areas where modern development has not yet made its mark, man and woman one maintain long hair. It might be because of heavy wind that forces them to maintain long hair and tied either by twirling hairs or by using band for tying. It means concept of tying is designed by both sexes. She might have designed the net to trap the fish from water reservoirs. Design is a natural in her behavior. She has better manipulative knowledge the world around her to create function and order, as well as to fulfill basic needs without disturbing the purpose of other living beings.**

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**It is general perception that women had traditionally fulfilled supportive roles in serving the society and gained their greatest joy and sense of accomplishment from being wives and mothers but reality is different. They have inner wish and it reflects in different form like painting, performing art, even in cooking and interior design of household and in product design. Woman is a born designer and capable to design something functional from available resources. To counter the harsh cold they might have designed the cotton filled blanket or used the bunch of dry straws of wheat as mattress as well used for roofing thatch. Some forms of fire are indeed designed. I am sure idea of clay stove is product of woman mind. We do not know who had designed comb, mirror but it appears that man is genetically not interested in the use of such items. Idea of covering the body parts has come to the existence for woman and journey from fig leaf to modern clothes is interesting because of woman. Anatomy of woman is different and managing those areas was upheaval task for her. Greatest revolution for woman was design of diaper for managing the difficult days of menstrual cycle and I am sure it is designed by woman from absorbent material to jelly field pad. Design of bra is product of man because it is reflecting the imagination of man how the woman should appear to him. How to make silk from silkworm is all possible idea of woman. Idea of grinding of hard items to turn to soft for easy management is definitely product of woman. Biggest achievement of woman is shifting of focus of man from animal hunting to exploration. Those were physically strong designed the boat for venturing into sea in search of new lands and others few who were physically weak indulged in investigation of secrets of black magic and helped in enhancing our knowledge, vision & scientific**

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temperament. What roles are women designers playing in today's world? Are they taking a more leading part in the design field as compared to primitive woman? Do women and their male counterparts differ in anyway? To continue with this spirit we wish to focus on woman designers in year of 2014. The role of women designers is completely in their own hands unless they create a self-fulfilling prophesy. An encouraging sign is the changing industrial design industry itself, which is taking a more holistic view of products that includes everyone from ethnographers to experience designers. It's evolving in a way that might be more appealing to women

Woman locks her motive within her bosom and man takes that her desires do not exist. Woman celebrates resistance and the pursuit of one's dreams. Modern woman is still under the influence of the tradition of Eve who was independent and rebellious. Why does not this character surface in her behavior? She moves with caution and cover her real motive under some activities that attract others. Why is man capable of the greatest generosity as well as the fiercest cruelty? How does his behavior switch from altruism to violence? Woman on other side understands more and lives with the view of either other person as friend and if time demands she does not hesitate to sacrifice her life or once somehow idea strikes her that other person is enemy and she looks for all possible means to harm and never believes there is other possibility of category of relation exists. She has binary character in relationship. Designers have frequently used such attitude in designing the house hold products. In fact they have used at the optimum level. Our electricity switches are on or off button, vacuum cleaner have on- off button. Food

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processor has many piano buttons but basic principle is binary. Similarly latches can operate either by twisting the knob clockwise or anticlockwise or by sliding the bolt left or right. Water taps or toilet flush all, are on binary design. Wherever complications are arising in interfacing woman confronts difficulties and look for assistance of man. These appliances infuse new confidence among women in fulfilling many roles in a day and she is able to manage little time for her own. I salute women of the world for their achievement so far is their own efforts and never received any encouragement from other quarters. It is high time we acknowledge their practical wisdom and are powerful livings being factor.

There are certain quarters where woman are making hue and cry of 'free yourself' and in this process they wish to reflect their rebellious character either by burning bra or something else or imitating the man. I always say from every possible platform that there is no need to imitate man. Woman is biologically different entity and her body are much superior that of man. Women should feel & realize their best selves in their own ways. It is the modern man voice 'You live what you feel and let man should live in his own way'. In this year 2014 we are focusing on the role of woman designer and let the world should know what she believes and thinks and how beautifully executes her ideas. We are not indulging on politics but with the help of cause and effect anyone can understand what women deep rooted desires are as to how should world be designed. They are harbingers of new era, capable in generating new lives. Nature has made her as mother to look after her child. Many women designers should seek through their work to generate a new world with creativity & caring. Their presence is still limited but it is improving

**for better change. Their transformative virtues & potential should be given all importance in shaping bright future of mankind.**

**Why virginity of women is given all out importance? Why is man painting woman as negative energy in all possible platforms? Is man afraid with potential of woman? Why is woman considered as an object rather we should respect & admire that she is capable to create better similar human but not identical objects to increase the chance of survival? I call natural design has some objects but man made social design has intermingled with that and has ruined the real prospects of woman. She is real carrier of copying the DNA and mutates to produce the better. Woman is victim because of her superior quality. Tyrants of cruel armies target & women victimize them and carry forward the genes of winning soldier and live with shame & degenerating character. To destroy the woman means destroying the culture & disturbing the mutation of achieving the superior humans. John F Kennedy replied in press conference after the nuclear test 'We did because we wish to protect our woman.' He might have spoken in keeping everyone in good humor but it is hard truth. The design of collective living in individual house to protect the boundary of state is nothing but design of security for woman. I can say this is idea of woman that was germinating from the primitive times. Woman lives under pressure to look beautiful since she attracts untoward incidence. Protection of woman is utmost priority of an individual as well as collective responsibility. This is further strengthened by technology and designed of street light or close circuit televisions in public places are deterrent as well protecting the woman. Mobile phone is good asset in emergency where help is within her fingers. Age of denial for woman by man is**

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no more welcome and a new dawn is at horizon where she is making her strong presence in the world of caring and creativity.

We are thankful to Ms Imma Bonet Executive patron of Design for All Foundation; Barcelona, Spain who were the first few among recognized our potential and signed agreement with us for future collaboration and accepted our invitation to be Guest Editor for our inaugural issue of our declared year of woman designer 2014. We are glad that she has justified her role in best possible manner and we are feeling proud for our inaugural issue of year 2014.

*With regards*

*Dr. Sunil Bhatia*

*Design For All Institute of India*

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## **Forthcoming Issues**

### **“Women Designer year of 2014”**

**February 2014 Vol-9 No-2**

**Dr. Lalita Sen** Professor Urban Planning and Environmental Policy  
Ph.D., Northwestern University SPA/COLABS  
BLDG SUITE 402F

**Areas of Specialization: Accessibility, Accessible Transportation and Mobility for Seniors Disabled, Housing, Accessible Tourism, Universal Design, Emergency Management of Vulnerable Population, Application of GIS in Spatial Analysis and Community Development, International Policy on Accessible Transportation, Smart Growth and Health Service Planning, International Policy on Accessible Transportation**



**March 2014 Vol-9 No-3**

**Dr. Margaret H. Teaford, PhD, Honors Director, Associate Professor-Clinical, School of Health and Rehabilitation Sciences, The Ohio State University** would like to focus on assessing the needs of women in designing environments and applying Universal Design. And she will be the Guest Editor of special issue



**Valerie Casey** is a globally recognized designer and innovator. She is the Founder of the global social impact NGO, The Designers Accord, and the CEO of the US-based innovation consultancy, Necessary Projects. Casey was named a "Guru" of the year by *Fortune* magazine, a "Hero of the Environment" by *Time* magazine, a "Master of Design" by *Fast Company*, and one of the "World's Most Influential Designers" by *BusinessWeek*. The World Economic Forum has honored Casey as a "Young Global Leader." She will be Guest Editor of this issue focusing on women, design, and social impact.



**May 2014 Vol-9 No-5**

**Rachna Khare** is a Professor of Architecture and the co-ordinator of Centre for Human Centric Research (CHCR) at School of Planning and Architecture, Bhopal. Prior to this she was Senior Research Fellow, Jamsetji Tata Universal Design Research Chair at National Institute of Design, Ahmedabad. Rachna is a recipient of the Fulbright Doctoral Fellowship and was affiliated with Georgia Institute of Technology, Atlanta, USA during her PhD in Inclusive Design. Her interest in the field of 'Universal Design' has earned research grants and awards nationally and internationally. She has published extensively and is one of the authors of *Universal Design India Principles* released in 2011.



**June 2014 Vol-9 No-6**

**Josyane Franc** is the Director of the common Department of International Affairs for the Cité du design and Saint-Etienne higher school of art and design (ESADSE). France



**July 2014 Vol-9, No-7**

**Mitzi Bollani** Architect, Sculptor & Product Designer. She runs her own Architectural & Design Practice based in Piacenza since 1978, and focuses her work on the research of the psychological well-being for the users of her projects, acting as a primary target accessibility and safety for all individuals.



Mitzi Bollani is one of the founders of the “Design for all” concept that she applied the first time in Genoa: “CivisAmbiente – Accessible mobility in the Historical Centre”: starting from the needs of people with activity limitation such as physical, sensory and mental or cognitive limitation, spaces, buildings and products were designed to be easily accessible to all, without losing the aesthetic value and above all without incurring in additional costs.

**Ms. YasmeenAbidMaan**, Assistant Professor, City and Regional Planning Department, LCWU Lahore College for Women University (LCWU), Jail Road, Lahore, Pakistan, is nominated as a Guest Editor and key Note will be by Prof Atiq Ur Rehman



**Ar.YasmeenAbidMaan**. Assistant Professor at Department Of City & regional Planning, Lahore College for Women University, Lahore, Pakistan.( Registered Member , Pakistan Council of Architects & town Planners.

With over ten years' experience in architectural design, I have exceptional skills and experience in planning, detailing, designing and coordinating projects both in the public and private sectors. My communication, problem-solving and leadership skills, combined with knowledge of theory and practical subject teaching, make me a highly valuable instructor in both Architecture and City & regional Planning department.

**September 2014 Vol-9, No-9**

**Prof Lylia Meister**, Dean of the faculty of design at Estonian Academy of Arts, Estonia, will be the Guest Editor. This issue will be about Design for All field research and outcomes in Estonia.



**Guest Editor:**



**IMMA BONET** *Executive Patron of Design for All Foundation has accepted the invitation of Guest Editor for our inaugural issue of our declared new series for highlighting the contributions of women in social movements of Design For All/ Universal Design.*

## **Editorial**

*By Imma Bonet, Executive Patron of the Design for All Foundation*

### **We are all equal because we are all different**

**The tradition that the woman is responsible for the children and the man for the protection of the clan stems from the period in which humans lived in wild surroundings where threats from predators were constantly present.**

**At a slightly more evolved time in which human beings were able to build in order to protect themselves from natural dangers, the male sex was unable to forget its wild side, and the phrase “man is his own worst enemy” was coined. There were constant fights over territory and plundering, and women were considered a desirable commodity.**

**Fortunately, in general, our societies have evolved considerably since then, although it must be remembered that women’s right to vote has been recognised in many countries for less than a hundred years.**

**However, women have always been relegated to the domestic sphere and, in the majority of cases, left without access to culture, sciences, education or work outside the home.**

**It was the great wars of the last century which brought women out of the home, due to the absence of men, allowing them to demonstrate their ability to undertake any task which until then had been reserved for the male sex.**

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**Women are of course different from men, but that is not to say that they are all the same. There are maternal women and women who are not maternal. There are women who have greater physical strength than men just as there are many men who are better cooks than many women. We must respect and celebrate this diversity, as it enriches us all.**

**But in order to do so we must adapt the social environment, given that it is untrue that women demonstrate limited capability to undertake jobs with higher responsibility, but rather that our societies, still controlled in the majority by men, limit women so that their point of view is not fully evident in our society.**

**Hence women tend to receive lower salaries than men for doing the same work, and when they reach retirement, their pension, in the few countries where they have a right to one, is often smaller, as years dedicated to having children are not counted as working years.**

**In addition, in the poorest countries it is they who must make more effort towards their upkeep.**

**To improve the current situation it is necessary for men to evolve. They must conquer the insecurities which they demonstrate in wishing to be overprotective or feeling ashamed if their partner attains higher social prestige.**

**In the same way that we have gradually accepted that a person of another race, religion, age, or capacities different from our own could be an efficient colleague or a friend, men and women must also accept that people of the opposite sex can be associates and friends.**

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**Moreover, we must remember the Yin-Yang of Taoism and recognise that no one is completely masculine or feminine, but rather than we can only become complete through the balance of these two aspects.**

**Balancing progress to a greater extent between the masculine and the feminine in our society would possibly bring us more tolerance, less competitiveness, less violence and more creativity.**

**It is an honour for me to have the opportunity to be the editor of the new series of Design for All India dedicated especially to women.**

**To this end, I have selected articles by various women, all of whom are outstanding in their field.**

**✚ *Prof Catharine Ward Thompson*, "Green space quantity, stress and wellbeing"**

**✚ *Cathy Caroff*, "Design for All: from theory to application"**

**✚ *Anne Guenand and Natalia Vila*, "Overcoming Eldery Lomeliness: The role of co-design"**

**✚ *Rosa Ortiz Gimeno*, "TIBIDABO Amusement Park"**

**The issue ends with a brief description of the Good Practices presented to the 2014 Design for All Foundation Awards.**

## **Green space quantity, stress and wellbeing**

### **By Prof Catharine Ward Thomps**

***OPENspace Research Centre***

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***c.ward-thompson@ed.ac.uk***



**This research was part of the Scottish Government’s GreenHealth project. It investigated whether there is a link between the amount of green space in the residential environment (such as parks, woodlands, gardens and street trees) and the health and wellbeing of residents of deprived urban communities in Scotland. The study found evidence of a link between green space quantity and both perceived stress and mental wellbeing.**

### **Main Findings**

- ✚ Perceived stress and mental wellbeing were both linked with green space quantity. The strength and direction of relationships varied by gender and likely amount of time spent at home.**
- ✚ In men, lower self-reported stress was associated with increasing amounts of residential green space, particularly for those likely to spend more time at home. There was no association between mental wellbeing and green space quantity for the total study sample of men; however, for a sub-group of men who were likely to spend more time around the**

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home, higher mental wellbeing was associated with increasing amounts of green space.

- ✚ The relationships between green space quantity and stress and mental wellbeing were more complicated for women: only some showed the same patterns in self-reported stress and mental wellbeing as described for men.



*Low levels of residential green space vs.*

## **Background**

The international evidence suggests that contact with nature and exposure to green or open spaces has a beneficial effect on health and wellbeing. Higher levels of residential green space have been associated with lower mortality rates, lower blood pressure and obesity levels, and better self-perceived health (e.g. Maas et al, 2006). Previous studies also suggest that increasing the availability of green space in the neighbourhood environment in areas of deprivation may help to reduce health inequalities (see Information Note no. 1). The GreenHealth 'Household Survey' study sought to investigate the links between stress and mental wellbeing and the amount of green space in the residential environment in deprived urban communities in Scotland. Two key self-reported measures of health were used: (i) perceived stress, and (ii) mental wellbeing.

## **Research undertaken**

**Four deprived communities were selected for the study, based on levels of deprivation and relative green space coverage: two in Edinburgh, and two in Dundee. Approximately 100 participants were recruited from each site; however, perceived stress scores were significantly higher in one of the Edinburgh communities compared to those reported at the other three sites, and mental wellbeing scores were significantly lower, suggesting that it was an unusual case. For this reason, one community was excluded from the pooled data analysis, giving a total sample of  $n = 305$  for the results reported here.**

**Stress levels were measured using the Perceived Stress Scale (PSS) and mental wellbeing was measured using the shortened version of the Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS). Four measures of green space quantity around each participant's home, of differing resolution and composition, were used:**

- (i) Ward (CAS Ward – parks, woodlands, scrub and other natural environments, but no private gardens included);**
- (ii) Zone (Scottish Data Zone, as for Ward green space, but based on smaller area units and with private gardens included);**
- (iii) Zone 300m Buffer (data as (ii) but for a 300m radius area around the home); and (iv) PAN 65 Zone (Scotland Green Space Map typologies: public open space, gardens, and roadside grass and trees).**

**Relationships between variables were examined using multiple linear regressions, and separately for men and women and key sub-**

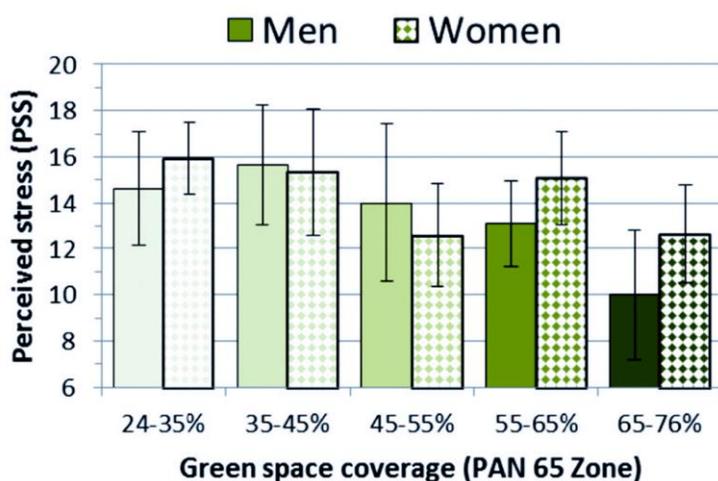
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groups such as those likely to spend more time at home (identified on the basis of 'work status', namely those (i) looking after the home/family; (ii) retired; or (iii) long term sick or disabled).

The research also took into account factors other than green space that might influence stress and mental wellbeing, such as age, income, and deprivation. In all cases described below, these potential confounders have been controlled for in our analysis. Affluence was assessed using a four point 'Income Coping' measure, and deprivation using the Carstairs Index.

## Stress

Lower perceived stress was associated with increased green space coverage for both men and women (Figure 1), but green space quantity was only a significant factor for men, accounting for about 5% of the variability in perceived stress levels. Men's stress scores were on average 1 point lower on the scale for every 4% increase in green space coverage.

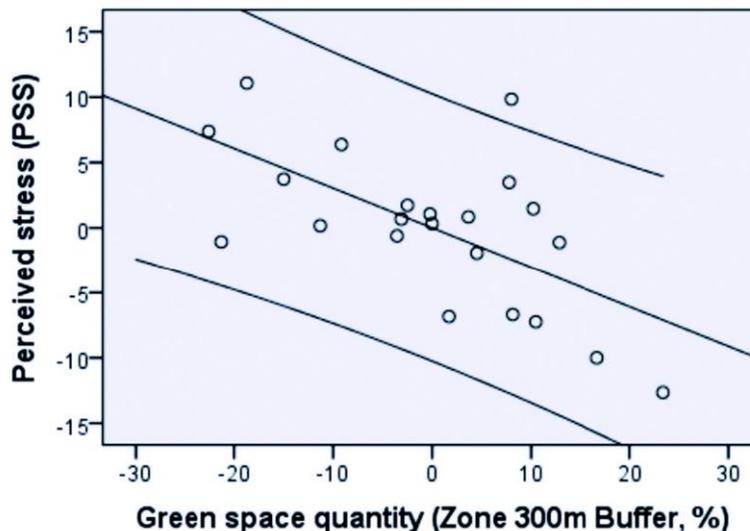


**Figure 1.** Mean perceived stress and green space quantity for men ( $n = 101$ ) and women ( $n = 130$ ). Error bars are two standard errors (bars for highest and lowest mean perceived stress (PSS) do not overlap for men, indicating significance, but do for women).

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The relationship between perceived stress and green space was much stronger for men considered likely to spend more time at home, however, with green space accounting for up to 34% of the variability in perceived stress (Figure 2), depending on the measure of green space quantity used. In addition to the Zone 300m Buffer green space measure (Figure 2), the PAN 65 Zone measure was also a significant predictor, accounting for 21% of the variance in perceived stress.

The stress scores for these men ranged from 2 to 18 (a higher score means greater stress). Green space coverage ranged from 26–69%. The regression coefficient for Figure 2 indicates a lower stress score by 1 point on the scale for every 1.6% increase in green space coverage.

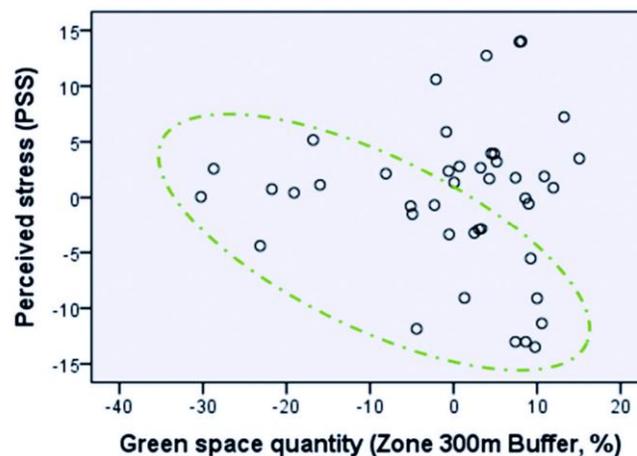


**Figure 2.** The relationship between perceived stress and green space quantity for men estimated to spend more time at home ( $n = 22$ ; Retired 77%, Disabled or long-term sick 23%), expressed as a partial regression plot. The y-axis shows PSS increasing from bottom to top, and the x-axis shows green space quantity (%) increasing left to right. Confidence intervals shown are 95%.

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For women, the relationship between perceived stress and green space quantity was more complicated than for the men (Figure 3), with a greater range of stress scores, from 0 to 27. Whilst lower perceived stress appeared to be associated with higher green space for some individuals, as for the men (individuals inside the oval in Figure. 3), there was a number of women living in areas with high green space coverage who had some of the highest perceived stress levels recorded (individuals falling outside the oval, Figure 3).

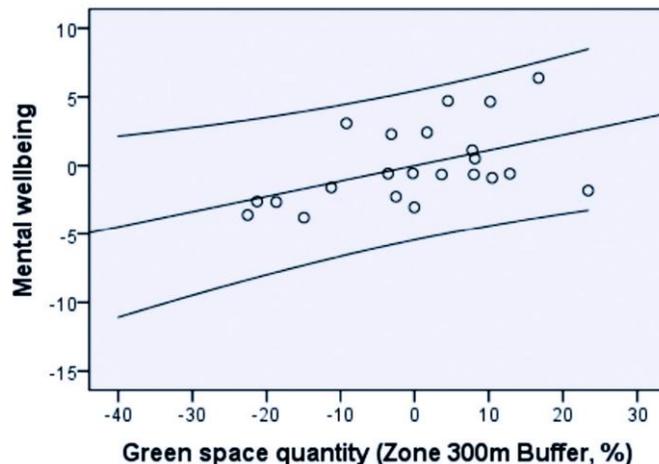
Based on visual inspection of Figure 3 and theoretical understandings, preliminary analysis of the two groups (those inside and outside the oval) suggests that stress experienced by women in the high green space/high stress group (those outside the oval) was more strongly influenced by significant recent life events and poorer reported life conditions compared to the other women in the study.



**Figure 3.** *The relationship between stress and green space quantity (%) for women estimated to spend more time at home (n = 43; Looking after the home/family 41%, Retired 50%, Disabled or long-term sick 9%), expressed as a partial regression plot. The y-axis shows PSS increasing from bottom to top, and the x-axis shows green space quantity (%) increasing left to right. The oval identifies individuals for whom perceived stress appeared to be lower as green space increased, as for men.*

## **Mental Wellbeing**

There was no association between green space quantity and mental wellbeing for the total sample of men in the study. However, for the sub-group who were likely to spend more time at home, higher mental wellbeing was associated with increased levels of green space (Figure 4).

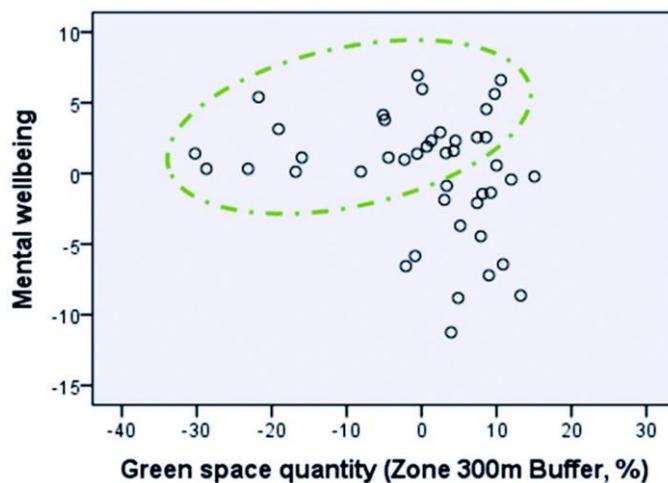


**Figure 4.** *The relationship between mental wellbeing and green space quantity for men estimated to spend more time at home (n = 22; Retired 77%, Disabled or long-term sick 23%), expressed as a partial regression plot. The y-axis shows mental wellbeing increasing from bottom to top, and the x-axis shows green space quantity (%) increasing left to right. Confidence intervals shown are 95%.*

Only one green space measure, Zone 300m Buffer, was a significant predictor of mental wellbeing, accounting for 14% of the variability in such wellbeing scores (Figure. 4). Mental wellbeing scores for these men ranged from 19 to 35 (a higher score means greater mental wellbeing). Green space coverage ranged from 22–69%. In contrast to the observations for men, for the total sample of women in the study, lower mental wellbeing was associated with higher levels of green space, with green space accounting for about 8% of the variability in such wellbeing. Again, only the Zone 300m Buffer measure significantly predicted mental wellbeing. As with the analysis of stress in women described above, the relationship between mental wellbeing and green space quantity was complex. For some women, it appears that mental wellbeing may be higher with increased levels of green space, as for men.

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However, there was a number of women living in areas with high green space coverage who had some of the lowest mental wellbeing values recorded (Figure 5). It is likely that the pattern observed in Figure 5 largely reflects that shown in Figure 3 (and thus for those individuals outside the oval, mental wellbeing is influenced more strongly by other factors). Mental wellbeing scores ranged from 17 to 35, and green space coverage 22–69%.



**Figure5.** The relationship between mental wellbeing and green space quantity for women estimated to spend more time at home ( $n = 43$ ; Looking after the home/family 41%, Retired 50%, Disabled or long-term sick 9%), expressed as a partial regression plot. The y-axis shows mental wellbeing increasing from bottom to top, and the x-axis shows green space quantity (%) increasing left to right. The oval identifies individuals for whom greater mental wellbeing appeared to be associated with increased green space, as for men.

## **Conclusions**

This cross-sectional study cannot show a causal relationship between green space and health and wellbeing. Nonetheless, it suggests that the amount of green space in the residential environment is a factor contributing to the health and wellbeing of residents of deprived urban communities in Scotland, particularly those who are likely to spend more time in and around their home or neighbourhood. The study suggests that increasing green space

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coverage in deprived areas where there is little could contribute to reducing stress levels and increased wellbeing for some; however, other aspects of green space which impact on perceptions and use, such as quality and safety, must also be taken into account.

### **Policy relevance**

This work has relevance for those involved in planning, designing and managing green spaces, and for those involved in protecting and improving population health in Scotland.

- ✚ Increasing green space coverage in areas with low coverage in deprived urban communities may help lower stress and improve mental wellbeing for some residents, especially those who spend more time around the home.

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*This paper is the second in a series of six briefing notes prepared for the Scottish Government by the GreenHealth research project team. It was written by Professor Catharine Ward Thompson and Lynette Robertson (Edinburgh, UK) and relates, specifically, to research undertaken within GreenHealth by the OPENspace research centre at the Universities of Edinburgh and Heriot-Watt, in collaboration with the University of Glasgow. It was first published on <http://www.greenspacescotland.org.uk> in September 2013. For more information on GreenHealth, led by the James Hutton Institute (Aberdeen, UK), see <http://www.hutton.ac.uk/research/projects/green-health>*

## **Design for All: from theory to application**

*By Cathy Caroff*

**Editor of the website:**

[www.conceptionuniverselle.com](http://www.conceptionuniverselle.com).



### **Abstract**

**I have created this website mainly to be able to condense and share all the researches I was doing on universal design or design for all.**

**My background is unusual as I have leaved in different countries, worked in different fields: tourism, communication and architecture and, in another side, I always have been very much involved in topics related to design, disability, aging in place.**

**I am a deep believer than, using the ability developed by people with disability, enables us to be so much more efficient in our process.**

**From my experience, it has always been easier to find a solution to a problem when I was able to directly ask the final user what was going wrong.**

**So for me, the best way to get a reliable feedback is still to observe or ask those who are concerned, and take into account those who have great capabilities and those with different way of thinking.**

**I have discovered Design for All few years ago, and it really makes a huge echo in my way of seeing things. I was really stupefied as for once "others" were using this technic, this concept, taking into account the large variety of users. Moreover, they were a big**

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**community and they were practicing for quite a while. Data, results, failures and success compile either way on books, reports, thesis...and the more important tangible cases and process.**

## **Urbanism, architecture and design...**



**At this time, I was working in architecture. And agencies were pretty reluctant about accessibility laws. For many reasons, but for me the main reason was, and still is, misunderstanding about what means differences, variety.**

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**What is hidden behind? How some situations can be easily facilitated with proper reflection and how come simple bad choices of materials, lights, angles can make life so harder on us?**

**When you talk about differences, there is always a part when people feel uncomfortable because there is this kind of idea that we are built on one single model and this other idea than variety is a synonym of minority. When you have a look at the Design for all concepts, you realize all the potential of improvement which can be brought to people in their life and so all the potential of development there is in so many fields: Design, architecture, TIC, learning, communication, health, etc....**

**So few years ago when I came back in France and I started working with architects and urban planner. At this time, sustainable projects were still on the emerge phase and accessibility laws were perceived like new constrains.**

**Urban planners, architects and landscapers have to comply with already a lot of legal obligations, technical evolutions and economical concerns from their clients, either way from publics or privates markets. And a big part of their work is to keep up to date about all of those constrains. A very good analogy about accessibility is to see the evolution of mentality regarding sustainable development. I think it will take the very same path. First, incredulity, then avant-gardist, and last but not least, being able to offer solutions for a large variety of users in our environment.**

**When you think about it, you can make a perfect room, its non sense if you can't reach it or leave it because other parts of the place you**

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are in is not practible. And you can go on... You can create an excellent building, doing the very best of yourself, its non-sense if you can't get out or get in from the airport, railway station or the bus stop nearby. And then, at this bus stop, you still have to read the name of the bus stop, or locate it, then to call the driver. Did you find the map easy to read? Where the information easy to be understood? Did you found the appropriate tools at the appropriate height, once in the bus, to call the driver? Etc...

This is at this time you realize Design for all can be applied to any kind of project because the essence of it is to check again and again with users. And the benefits are shared with all the population.

## **New technologies**



The screenshot shows the website 'JPAQ: des jeux vidéo à buts sociaux'. The main content area features a red header with the site name, a navigation menu on the left, and a news article titled 'Création de jeux vidéo pédagogiques... à destination des personnes en situation d'exclusion so'. The article includes social media icons for Twitter, YouTube, and Facebook, and a logo for CDEC (Centre de développement en éducation) and NDG (Nouveau Développement Global). The text below the logo reads 'Restez informé en vous abonnant à notre bulletin de nouvelles. Écrivez "inscription" à l'adresse su'.

***Inclusive-video game - source: <http://www.jpq.ca/>***

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**It is easy to understand the importance of technologies. In a constant renewal, they enable us to project a future with so many interesting interactions. Of course, it can be very frustrating when you can see the potential of something but they still need improvement. Once again especially on internet they have been, I find very much in advance. Let's take an example, regarding website. Websites are not just a window on your company or what you do. It's as well a powerful tool to communicate. And this powerful tool communicates either way inside your structure thru an intranet or thru the outside world. From the inside or the outside, who are the users? Both side of course.**

**When you check the recommendations to have an accessible website you realize as well all the benefits it brings you in terms of visibility. And this makes life of your marketing department a lot of easier. Marketing department, and customer service, etc...**

**Potential, this is potential hidden behind. And all fields are concerned. And the same process needs again to be applied.**

### **A team work**

**Right, so from then we agree, we cannot be a specialist on all of those subjects, because it's a mix of so many different competencies: Designers, architects, communication, marketing, human engineering, wholesalers, customer service department, etc....**

**Nevertheless, to get all those competencies to work together you still need one asset and this one is a variety of "users". If you want to do something good ask users' tester, if you want to do something really good ask all kind of users...Open your mind!**

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And these kinds of action require that you are able to maybe have to integrate an additional phase or another team member in your project that you did not planned at the beginning. Like for example a human engineering or someone else who generally take part in the project a bit later.

To ensure the success of this approach you have to make sure the all team understand the advantage of working this way. Time saving, energy saving, etc.... You have to let them know you do not have doubt about their specialty. You just want to be certain if you go on the right direction or if there is something which can be revealed from the users' perception.

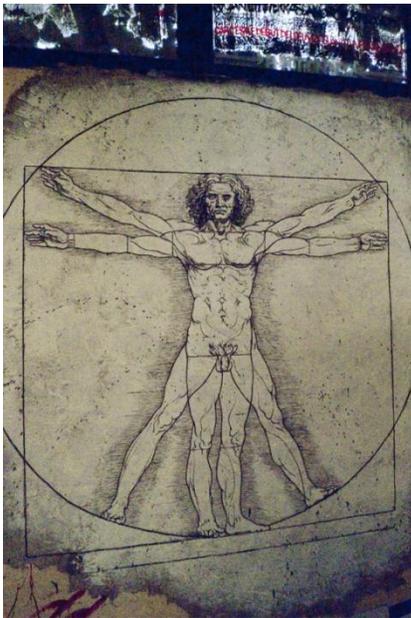
This is where communication takes place...and this is where you realize "users" are as well the one working on your project.

## **Communication**

**Communication is a big part, and pedagogy!**

Because most part of the time the reply you get is: "We know our job and we don't really see what the point to integrate a variety of users. Our work is not dedicated to such target."

The full comprehension of your team about the all interest of opening our mind to this kind of concept is not so easy. But you need it to ensure they take into account comments and feedback. You need it as well to make them think about a large variety of users and not only what they have been taught. To break the collective imagination human being is the exact representation of the Le Corbusier "Modulor".



***We use the "Modulor" as a reference about human proportion in architecture. You have as well the "Vitruve Man" from Leonardo De Vinci.***

***And pedagogy is still the best way to use. Provide data about return on investment, energy saving, consumers' perception, on specific cases, etc...***

**We have seen communication inside the team, but then you still have work to do. Communication in an appropriate manner about what you have realized, what is your offer. And this part can again be a challenge because once again for a lot of professional working in marketing or communication "variety" or "a large range of users" can be misunderstood.**

**How to explain it can be used by a wide range of user without being stigmatizing?**

**You can ruin a lot of effort by choosing the wrong path, by being too obvious. Subtlety and analogy, once again are your best friends.**

**Good communication should give you as result, than your team appropriates to themselves the concept of universal design as an opportunity and not anymore as trying to adapt a project to a variety of minority.**

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**Communication means being able to explain your way of seeing Universal Design approach to your team member. For so, your primarily user is your team.**

### **Conclusion**

**Architecture, urbanism, landscaping, design products, news technologies, communication are the different themes I developed on my website. With a focus on what is going on outside France. As, even if it's very much interesting to try by ourselves such and such experiences, there is as well a lot which has been done all around the world to empower a wild range of human being.**

## **Overcoming Eldery Lomeliness: The role of co-design**

**By Anne Guenand**  
**Industrial Design & Innovation**



**Natalia Vilà**  
**User eXperience Design**



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**Research Center Pierre Guillaumat**  
**60203 COMPIEGNE Cedex France**

### **Abstract**

**This paper presents a human/world interaction design method applied to innovative design project, a method for designing for elderly people, based on the co-emergence of product and the experience that is given possible by the product.**

**The method focuses on the user pleasurable experience as a key for guaranteeing the acceptability of the product. It shows how to mobilize, in a convergent way, skills in the design of socio-technical systems, computer science and humanities.**

**The application case is the design of a multi-sensorial communication device. The device helps seniors to stay connected within their immediate community and to be able to interact with it in real time. A state of the art has identified the originality and relevance of the concept in relation to the needs of this population. Demonstrator has been made and tested by elderly people, in order**

to identify the key factors of usability and enjoyment, and to provide technical specifications of the final product. Results are discussed and proposals are presented.

## **Introduction**

The population of senior citizens in industrialized countries is greatly increasing in number and percentage. As the generation of baby-boomers reaches old age, the identity of this social group is changing rapidly in ways that are difficult to measure and to understand [1]. Our conventional perspectives of old age are being challenged more than ever.

Issues surrounding aging and information technologies are of critical importance within the domain of human-computer interaction [2]. Nowadays there are a lot of medical products such as care systems, emergency calls devices or health control systems [3 - 5] focused in their wellbeing, but there are not a huge number of devices for elderly community in the market intended for making their daily routine easier and amusing. Currently, there is a gap in the market where it is necessary to develop products which distract and gladden seniors so that they forget about loneliness and which support existing social relationships of people who are geographically or physically separated. In addition, what is really needed for our senior citizens is to offer them the experience of being part of a social group but without attending it physically, adding surprise aspects or incorporating innovative functions, which led people into sensations of presence. This experience allows elderly inhabitants to improve their mutual acceptance, to give support and

comprehension to their neighbours and to take care of them when needed.

People over sixty five years old are less likely to use technology such as computers or cell phones because they have specific needs [6]; mainly within products' interface and ergonomics due to their disabilities, limited movements' ability and their lack of strength.

Since living alone is a popular and important option, since research on assisted living solution for aging is a way to comprehend individual and collective needs, we propose a contribution through a method which aims at revealing emerging needs and in the same time bringing solutions that help elderly staying connected and keep in touch with their community.

In the present paper, we present an interaction centred design method for breakthrough innovation, dedicated to elderly people, providing a socio-technical system helping to keep in touch within a close community.

A preliminary state of the art on HCI research and on gerontology is presented in next section. In section 4, the method is performed detailing the steps of the study based on group interviews and discussions with elderly people. We expose successful results in materializing users' real needs in an interactive table top (PPAP). The sections 5 and 6 are committed to discussion and conclusion.

## **State of the art**

### **HCI Research and Solutions**

As [7] mentions in the context of interaction design, the aim is "*for the user to interact not so much with the instrument but rather with*

***the (real or virtual) environment via the instrument". The authors consider it is crucial to understand the process of appropriation, between "the initial moment when the instrument/tool is viewed as an object that is distinct from the user, and the moment when the tool has been appropriated thus opening up perspectives for novel relations with the environment".***

**To design while considering this state of disappearance of the tool requires the designer to explore the process of appropriation which conditions the possibility that the tool may support a new lived experience.**

**Much research in HCI is focused on monitoring an elder's wellbeing for health and security reasons [8], rather than focusing on interconnectedness and casual communication with others. However, there is much we can learn from these devices, because we share the common goal of introducing technology into the home and into the lives of other people, who are typically non-users. Some examples of these kinds of projects include the Eldertech Project [9], the Portal Monitor [10], or the Digital Family Portrait [11]. These examples helped us to establish a set of design goals, developed during the project with regards to our research and interviews we had with potential users.**

## **Literature on gerontology and elderly living**

**Gerontology research has produced some surprising results, which challenge existing models of the aging. For example, [12] found that Italian elders, who tend to live with their families, reported higher levels of loneliness and less social integration than Dutch elders,**

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who tend to live alone. To better model the dynamics of elder relationships, [13] present a detailed sketch of what social relationships among the aging are like. In their findings, they evaluate elder relationships using three different criteria:

***Reciprocity and Asymmetry*** - Older parents continue to offer significant support to their adult children, be it home maintenance, babysitting grandchildren, or financial assistance. Asymmetry is not only accepted but is expected in family relationships and it is not detrimental to relationship satisfaction. In friendships, however, asymmetry is detrimental, even when a senior is receiving more assistance than they are giving. This alters the self-concept of the senior by implying incompetence or a sense of dependency.

***Autonomy and Dignity*** - Maintenance of autonomy and living independently are key factors in how seniors view their self worth. Seniors often sense that their children are becoming over protective and avoid being on the receiving end of assistance as seldom as possible to maintain their dignity.

***Renegotiating Relationships*** - Roles in the families are altering quickly in terms of the amount and type of support given. When the adult children of elders have children of their own, time is spread thin among relationships. Elders are often regarded as socially stable, but can still often find themselves in roles that are in transition, negotiating obligations and willingness to help with their families.

As researchers in design for interaction, we must be conscious of such needs like dignity, as well as provide additional motivations

besides what we perceive as "necessity" to encourage the adoption of the resulting device.

## **Method and Results**

We propose to base this study on both literature on elder's wellbeing, to understand the way elders have been able to appropriate existing devices, and co-design sessions with elders to comprehend new experience that is given possible. As potential users, seniors will be involved in the early steps of the design process, and be asked to experiment new lived experiences through the appropriation of different instruments/prototypes designed for that purpose. The co-design method starts with the production of concepts for new interactions implying new interface ideas. Three concepts have been materialized and they have been presented to a group of elders, through a first study done throughout four sessions during six months led by three designers and ergonomists. The second study, which is the contribution of the present paper, is presenting the co-design steps for pleasurable interaction and the resulting design proposal.

### **4.1 First study: UNDERSTANDING SOCIAL NEEDS BY PLAYING GAMES**

The first study has been focusing on interaction criteria and how elderly would like best to go and communicate with peers. The human factors has been studied and integrated in the design of three sketch-models, to permit seniors to enjoy the interaction in a way that seems natural and pleasant to them.

Encouraging playfulness has been an important aspect of design, firstly, playfulness allows the device to be engaging and would

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encourage the elder to use and explore the functionality of the device and secondly elders are typically familiar with competitive social games such as card games. Elders find this competitive interaction to be rewarding [12].

The results are described in the paper [14] helping uncover the behaviour and the emotions of potential users, as well as define the criteria of variability in the experience of living within the potential users.



*Figure 1. Presentation of the first cardboard-model to the seniors*

This first group of experiments, focused on the early step of the design process, was dedicated to the determination of the user's needs, and aimed at supporting the co-emergence of the user needs with the product/through the development of low fidelity prototypes. It helped to uncover the behaviour and the emotions of potential users, as well as define the criteria of variability in the experience of living within the potential users. We visited elder women of a local social club, and conducted interviews and sketched quick-and-dirty card-board models to solicit feedbacks from these potential users.

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After that, we conducted three more user tests with 8 women, using low fidelity prototypes to discover ways to align the developed prototypes with the behaviour and emotions of the interviewed potential users, to try and integrate as much features defined by paying attention to human factors. We established a set of design goals, developed along the interviews with potential users. We focused our attention on 5 points which have been found as constitutive of the lived experience. The detailed design goals of the study are consigned in the table 1 above.

*Table 1. Aspects of Interaction taken into account by the system*

<b><i>Symmetry</i></b>
The design proposal promotes symmetry in the social interactions by inviting interaction and equality in communication, while neither discouraging nor forcing social interactions. → people can either contact people or be contacted.
<b><i>Control</i></b>
As among users, there are people who do not have a good understanding of technology, the device gives them the sense that they are in charge of the technology. → Affordance and transparency in the coupling between functions and action is central in the design.
<b><i>Playfulness</i></b>
A theme echoed in the literature is the idea of adding play to the communication devices to encourage the use and adaptation of these devices. Designing for playfulness is an important aspect of designing for elder adults in two different contexts: → it allows the device to be engaging and encourage the elder to use and explore the functionalities → it integrates the fact that elders are typically familiar with competitive social games such as card games or lexical-based games, which are rewarding.
<b><i>Privacy</i></b>
Broadcasting information about the senior could not only be embarrassing, but also potentially dangerous. → A function should exist to allow clearly understanding what is happening to the personal information and how users can adjust their settings.
<b><i>Increasing Human Interaction &amp; Meaningful Relationships</i></b>
Increasing Human Interaction and Meaningful Relationships by providing means for more interaction and communication, which will lead to visits and face-to-face interactions and conversations. → Each vignette is "a representation" and it is "actionable".

## **4.2 Second study : DESIGNING PLEASURABLE INTERACTION**

Following the first study resulting in highlighting the needs of Symmetry, Control, Playfulness, Privacy and Increasing Human Interaction & Meaningful Relationships (see table 1), and design answers given possible through sketch-model manipulations and verbalizations, we developed a radar-based system named PPAP which means "People Perception for Acting in Proximity", see (fig. 2) taking cues from [15] principle of physicality.

As shown on figure 2, the horizontal, circular screen displays photos of senior's contacts such as family (direct or indirect), friends, personal health assistance (hospital, physiotherapy, ...), posts' employees, transport (taxi, bus, ambulance ...), others services (supermarket, pharmacy, ...). These contacts are visualized on vignettes which position on the screen represents their real location relative to the device, located at the senior's home. The vignette is the virtual representation of a real person (a real mobile phone), Every vignette has two different states: it can be completely still, representing a person at home; and it can move harmonically through the screen when the person is moving.

***Proposal: Circular interactive tabletop***



***Figure 2. PPAP technological prototype***

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All the positioning and locating system works thanks to GPS technology connecting the mobile phones of user's contacts with the device. This device is adapted to people with visual or hearing disabilities by the following elements:

- *magnifying graphically the effect feedback on each vignette to highlight an action occurring with a contact,*
- *each contact is related to a different natural sound while moving, expressing its proximity and velocity,*
- *the sound's frequency is directly related to the velocity of the movement of a contact,*
- *vignettes have high definition pictures and high contrast,*
- *there is a vibratory vignette's detection system while touching the screen.*

The interaction with the system occurs using physical devices, which allows to clearly communicating the state of the system, and gives users a greater sense of control. The device consists in a circular interactive table top.

### *First investigation line*

The *first investigation line* of this second study is to understand how the design of a coupling device connecting a human with another human and/or a human with the world (near environment) can contribute to the emergence of new individual and collective capacities among seniors. To achieve this goal to make new capacities appear, we give people an operable demonstrator, able to be seized and to test the coupling between actions and functions. Two interview sessions with demonstrator manipulations have been led and ended with an aptitudes' list (see table 2) above.

**Table 2. Identification of seniors' aptitudes and capacities during the first test**

<p><b><i>Exercise 1. Assimilation and comprehension of the concept.</i></b></p> <p>There is a variability in the users answers: 1) Some seniors who already use Skype and know computer programs, do not see the advantages of the device ("why do I need to buy this product if I already have my computer and my cell phone"). 2) There are others who do not have the courage to use it: fear they do not know how it works ("I'm too old for using new technology!"). 3) Some seniors love the device: "It is an improvement of the telephone", "It is a good system. Now, you have to improve it! You should put more technology and, that's all!" 3) Other interviewed persons made some interesting comments like: "I can already see people walking near my house because I have an intercom with a camera and I can see the person before opening the door", "your system allows to expand my camera capacity, I like it!", "deaf people must remain all the time looking at the screen". Some seniors mention "we don't need to change the phone by a device like PPAP", "PPAP can be a complement!" Users have no problem to identify how to turn on and they always use it when needed. Looking to the first demonstration with impersonal photos, some seniors mentioned they do not have identification with the product ("the product is very impersonal"). They have no emotion or feeling towards the contacts, vignettes with pictures of unknown people. In addition, the vignettes' pictures are not clear enough.</p>
<p><b><i>Exercise 2. Exploration through the interface.</i></b></p> <p>Proper identification between "my home" and the middle of the interface, the vignettes (contacts) are walking around. There is a difficulty to see the middle of the interface as being actionable (reluctance to touch it... obstacle to easily regulate their availability?). Users doubt a little before the explanation of the space distribution for the complete understanding of the position of the vignettes. There is a big knowledge difference between users (there are some elders who never manage to answer when asked "Where is this person?". The other elders respond quickly and correctly). Users have no problem to identify the movement of vignettes without explanation. Correct identification between the sound of different birds and the movement of the vignette. The hands of users are outside of the screen when the exercise finishes (perhaps for the large area which is around the screen to</p>

<p>modify a square screen in a round screen). There are many users experimenting and looking in the same time and they look at each other without trying to use PPAP spontaneously.</p>
<p><i>Exercise 3. Adding a new contact.</i></p>
<p>Seniors identify, without explanation, the process to add a contact and they normally use it. The vignette with the query to add a contact is clear. Seniors use that option to create new contacts without an explanation. Seniors easily add contacts (choosing a picture). However, they have no emotion or feeling towards the images of anonymous people appearing in the new vignettes.</p>
<p><i>Exercise 4. Regulating our availability.</i></p>
<p>Good understanding of contacts "available" but complicated understanding of contacts that do not appear on the screen ("not available"). Proper assimilation of the concept of the door open or closed towards one's availability. There is a need of graduation (we dismiss the binary system). Seniors have a good opinion of the function ("it is very useful"), but there are also negative comments like: "we can spy! ", " You can know if someone tells you a lie by comparing what you saw on PPAP with what he/she told you".</p>
<p><i>Exercise 5. Calling</i></p>
<p>Seniors identify without explanation the method to call and they usually use it. The concept of clickable vignettes is clear. They recognize the different stages of the call correctly by identifying the different colours on the interface. Firstly, seniors are approaching to the table-top to speak. They reject the option of placing the microphone on the ring. The use of mobile phones to talk (using the microphone of the mobile phone) seems not to be a good solution because nobody wants to use PPAP with the mobile phone next to them.</p>
<p><i>Exercise 6. Being called.</i></p>
<p>Seniors quickly identify the income call, but there are few people who want to get the call. Problems: 1) Because they have seen before that calls are already registered (not real calls), they want to have a real conversation. 2) The caller is a contact they do not know yet ("impersonality"). They recognize the different stages of the call correctly by identifying the different colours in the interface. Firstly, users are approaching to the table-top to speak.</p>

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**The system is remodelled and tested again to compare previous and subsequent attitudes, individually and collectively.**



*Figure 5. Test of the 2nd prototype with seniors.*

**The prototypes, starting with simple cardboard models during the first study and ending with a touchable screen with a technical interactive interface are adapted to throughout modification in shape and functions, in order to fit to real needs. Every prototype has been modified, adapted and improved after the analysis of each test carrying out a new experience with future potential users.**

**During this second study, two experiences were done in the seniors' Club with the new technological model in order to validate conceptually, ergonomically and sensitively the prototype by analyzing the experience of use while doing some simple and intuitive exercises, some of them without any previous explanation.**

**There, we presented the technological device to ten women and one man.**

**During the tests, some activities and simulations were carried out by using a tactile screen with a simplified communicating interface. We observed:**

- ***Assimilation and comprehension of the concept.***

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- **Exploration through the interface.**
- **Adding a new contact.**
- **Regulating own availability.**
- **Calling (fig.6).**
- **Being called.**



1. Choosing a contact  
screen and acoustic environment

3. Talking

4. Ending phone-call

5. Main

**Figure 6. Calling process performed by a senior spontaneously.**

## **First investigation results**

**After conducting the activities, we repeated again the tests to compare seniors' behavior after a first interaction with the device with their behaviour after a second interaction.**

**By analysing the exit in the use of the product while doing simple and intuitive exercises (that means to study seniors' capacities and aptitudes, see table 2), some use and comprehension errors were detected made because of a lack of prior knowledge about the interface (see table 3).**

**Table3. Problematic situations during the first test**

<b><i>Exercise</i></b>	<b><i>Misunderstanding</i></b>	<b><i>Strategy</i></b>
<b>Calling for the very first time without explanation</b>	<b>The senior does not touch the vignette, she points some buttons outside the interface (design problem).</b>	<b>The menu of the system should not be visible, make visible only the useful User Interface, not the designer's interface.</b>
<b>Hang up when having a conversation</b>	<b>The senior pushes the ON/OFF button (comprehension problem).</b>	<b>Extend training phase and explore meaning of the ring in action.</b>
<b>Regulate the availability</b>	<b>The interface is not clear enough.</b>	<b>Another interface has to be proposed with a simple and gradual design.</b>

**Seeing these errors and listening their comments aloud, we obtained a list of possible improvements to ensure a clear interface and an easy manipulation at the end (see table 4).**

**Table 4. Prototype's improvements after the first test**

<b><i>Prototype tested</i></b>	<b><i>Improvement</i></b>	<b><i>Next prototype</i></b>
<b>Seniors have some problems to correctly see and identify the vignettes.</b>	<b>Modify the appearance of the pictures in the vignettes.</b>	<b>Photos in High Definition. Contrast.</b>
<b>Binary and complicated method for the regulation of the availability (door open = I am available; door closed = I am not available).</b>	<b>Simple and gradual regulation.</b>	<b>Simple interface for the regulation of the availability.</b>
<b><i>Prototype tested</i></b>	<b><i>Improvement</i></b>	<b><i>Next prototype</i></b>
<b>General contacts (unknown)</b>	<b>Personalization</b>	<b>Seniors' family and friends photos instead of impersonal images.</b>
<b>Touchable screen with the ring option</b>	<b>Only touchable</b>	<b>No modification to verify the ring use.</b>

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<b>Simulated conversations and calls (no real calls).</b>	<b>Improve technology</b>	<b>Real calls.</b>
<b>Simulated movements of the vignettes (no real displacements).</b>	<b>Improve technology</b>	<b>Insert the GPS detection.</b>
<b>Much noise in the test room</b>	<b>Execution of the next test in a quite room</b>	<b>An alternative room available.</b>
<b>Lot of people testing at the same time</b>	<b>Test one by one</b>	<b>To have enough time.</b>
<b>Inaccurate screen</b>	<b>Exact touchable screen</b>	<b>Solve technical problems.</b>
<b>Too much useless space around the useful screen.</b>	<b>Round screen</b>	<b>Test a new technological touchscreen.</b>

## ***Second investigation line***

**The *second investigation line* has been led through two sessions at 3 weeks of interval after the first test, in order to be able to improve the interaction display at each time. The first test was done with the tactile table top.**

**All experimentations were recorded using a video camera pointing the prototype's screen (participants remain anonymous) so experts can analyze gestures and comments made during the film and concentrate on the answers of testers, comments and suggestions made during the test. The exercises of each session were performed twice with an observation of an improvement of the seniors' ability in the gestures by increasing experience (disappearance of common errors such as confusing buttons or precise function's misunderstanding).**

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**During the sessions with seniors, the visual style, ergonomics, components and functions of the prototype were refined. Every co-design session enriches and improves the final product.**

**Through the experiences we realized that a big percentage of seniors are able to participate in touch screen experiences as well as younger adults and, the most important thing is that they want to do it.**

**The emerging functions are as follow:**

- *"adapting its own privacy" like closing a door more or less completely, through a graphical door which can be moved through tactile action.***
- *"looking around" who is at home by sliding finger on the vignette.***
- *"having a brief verbal exchange" by clicking the vignette.***
- *"feeling someone's presence" by visualizing the animation of other's vignettes.***

**Another goal at that stage has been the personalization of the device by incorporating personal contacts with private family pictures and simulating vignettes' movements to authentic usual displacements in real time to make the virtual reality as similar as possible to real life. As testers used natural movements (similar movements in the physical world) on the screen to manipulate and interact with the digital interface, users were extremely enthusiastic with the manipulation of the device because they got a subjective identification with the product, a real love link.**

**An unexpected observation was that the testers expressed the desire to play, much like we have seen in the literature and in our**

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own notes. We confirm the functional requirement of pleasurable interaction, which is constituted by:

- *Multi-sensorial solicitations (visual, audio) offering the adaptability of the system to a variability of situations and diseases.*
- *The possibility to adjust the system to its own privacy requirements depending on the situation.*
- *The possibility to be "part of a community of presences", being able to feel and to act within the community, feeling the presence of other people and their life activity, as well as being able to act and interact when needed. This function is extremely important because it relocates the responsibility of people within a community: seniors are not more excluded from real life when they are living alone. Their activity is becoming visible to other seniors living close to them, who become "in charge" of sensing that everything is going well; through, the perception of micro-variations in other seniors' habits.*
- *The possibility to express their feelings and emotions through the direct interaction. Usually, people having fun are used to show their true feelings or emotions aloud by using their attitudes and capacities and it allows experts to evaluate the true impact product causes on customers. Therefore, the concepts of "toy" or "game" [16] have been kept in mind in the development of the final system.*

## **Discussion**

From tests' analyzes, interesting results have emerged. First of all, the experiments done in the Club of elderly people have allowed us

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to verify the feelings of loneliness and sadness. This has been possible due to the recording of verbal expressions such as *"with it, you're less isolated, that's it!"*, *"people we know, they often tend to disappear..."* or *"there are some days that we are very isolated"*. Those experiences also permitted us to comprehend seniors' opinion toward new technologies and communication devices' uses, and the variability of the prior experiences toward technology, the surprising combination of prior learning induces variability in the senior's abilities regarding existing systems such Skype, Intercom, Phone memory (*"we can use Skype!"*, *"today everything is stocked on the phone; there are my numbers in the phone memory!"*, *"I pick up the intercom and I can see the person! You can see the people walking ... "*, *"I prefer the touch... I do not like the mouse"*, *"I am already too old"*).

Thanks to the enthusiasm that some seniors had shown towards the use of the PPAP device, we did an evaluation of the performance's change (improvement) comparing the first and the second time in PPAP use. Analyzing seniors' gestures during the tests, we have examined the use of PPAP to call and be called easily (main function) and we faced with secondary functions unexpected movements of the user. With discussions about certain tasks and unexpected explanations, the comprehension and the importance of several functions from user's point of view had been studied (such as adding a contact or setting its location).

After a development based on the co-design committed with seniors, we have insights about the relationship between one elder and another elderly person through the use of the system. The first interactive and tactile prototype with predetermined images shows

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**the importance of integrating the personal environment of each tester in order to deepen the user's experience and needs, and finally to support the emergence of new individual and collective capacities of action.**

**Next step will be dedicated to the development of a set of similar prototypes that will be located in few elder's homes and in the Club, in order to observe in real situation the appropriation of the system and the real use among elders.**

### **Conclusion**

**With the certainty that the use of new technologies by the elders in the world is increasing, we put forward the co-design as a method to contribute to approach elderly people with limited mobility and limited understanding of high-tech devices, and to make the co-emergence of needs and product that satisfy these needs, through the use of materiality, i.e. the design of low fidelity to high-technological prototypes.**

**The iterative confrontation of elders with materialized concepts (prototypes) aims at stimulating the co-emergence of needs and desires, through the manipulation of the prototypes, in order to create a support of an experience and to increase the capacity for user's action. The method focuses on the user pleasurable experience, as a key for revealing new needs and practices and for validating and guaranteeing the acceptability and coherence of the materialized product. This process gives insights about how to mobilize, in a convergent way, skills in the design of socio-technical**

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**systems, computer science and humanities in order to face real needs, in this study, elderly loneliness.**

**We can show with the example of PPAP that the co-design of a communication device connecting an elder with another elder or with the world (his/her near environment and his/her own social network) is a mean for the emergence of new individual and collective capacities among elderly people. By using the co-design, this research process has been able to identify real and complex needs - needs of Symmetry, Control, Playfulness, Privacy and Increasing Human Interaction & Meaningful Relationships- and to suggest a system that makes the experience possible. This looped methodology allows us to validate the acceptability and the coherence of the PPAP concept in cooperation with potential users expected experience.**

**The primarily state of the art has been useful to highlight the gap that can be found between the real elder's desires and medical devices found in nowadays market and focused on their wellbeing. These devices, turning around their health, looking how their body is aging and losing important abilities, are necessary but not sufficient for helping people to stay longer at home. Products like PPAP can change certain detrimental attitudes by giving the possibility to feel the others co-presence, and to create enjoyable and pleasant experiences.**

**With the two campaigns of tests, we started to uncover the real behaviour and needs of seniors, and we get a feedback from the potential users that allowed us to validate our proposals.**

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**Finally, going regularly to the Seniors' Club and talking to elderly people we realized that they have lots of interesting ideas to provide to scientific community because of their huge life experience and huge desire to share. The co-design with seniors is a methodology for designers allowing to really understand how the elders as potential users think, act and perceive, and to materialize in an iterative way a proposals that make possible the user experience.**

### **Acknowledgments**

***We would like to thank the members of the Seniors Club «René Soiron» for their engagement and the richness of their feedbacks and discussions, which make this study exhilarating. Authors acknowledge support from the Conseil Régional de Picardie - France and Sensovery, a start-up which develops the device.***

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## **TIBIDABO Amusement Park**

***By Rosa Ortiz Gimeno***

***Executive Director***

***Ms. Rosa Ortiz Gimeno, began his career in the public company BSM as Director of the Nord bus station for six years.***



**From 2002 he became Executive Director of Tibidabo Amusement Park. During this period he has served as Director of Marketing, Business and Customer of BSM and currently directs the Tibidabo and directs the *Olympic Ring* of Barcelona. His management style is based on incorporate people in the management, customers, employees and suppliers. In 2012 the Amusement Park was certified EFQM model, a label that recognizes organizations working excellence in all areas and of course the most important, persons.**

***Tibidabo Amusement Park can, without doubt, be considered one of the most charming and symbolic parts of the city of Barcelona. The centennial park, which opened on the 29th October 1901, is one of the oldest amusement parks in the world. It's spectacular setting, on the top of Tibidabo Mountain, making it a magical and constantly evolving place with spectacular views of the city of Barcelona, with the Mediterranean sea as a backdrop.***

**All of the above, together with its appealing range of attractions and rides for all ages, entertainment, bars and restaurants, make the park a true jewel in the history of Barcelona and the city's number one leisure attraction.**



***Panoramic view of Tibidabo Attraction Park***

***Fostering accessibility has always been an essential strategic component of all activities in this exceptional cultural landmark. Tibidabo Amusement Park SA (PATSA), is owned entirely by the City Council and managed by the public company Barcelona Serveis Municipal and for this reason the organization devotes significant efforts and resources in order to incorporate the values of sustainability and social inclusion into their daily activities, integrating them naturally into the strategy and culture of the organization across all departments and management areas. In this respect, it is worth mentioning its role as founding member in the creation of the Design for All Information Exchange Europe (DAIEE) Foundation, and member of the International Network of Design for All Foundation since 2002, with the aim of adapting the environment to the needs of people with disabilities, thus helping to create a more just and equal society.***

***Since the beginning of the new millennium, PATSA has strengthened its solid working strategy in order to achieve the highest level of accessibility in all services and facilities available to the public. The***

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significant results that they have achieved have made the park one of the leaders in its field today in terms of accessibility and safety.

2004 was a particularly important year in regard to improvements made to the infrastructure in the field of accessibility. *With the construction of two panoramic lift, fully adapted for people with disabilities*, it was possible to connect all the levels that make up the park, providing an effective solution to internal accessibility problems caused by complex terrain. The work was a large-scale operation and has a certificate from the company Applus certifying that the lifts strictly comply with current regulations and are accessible to all.

### **Access to the lower area of the Park.**

In 2005, two new important improvements to the facilities were made which consolidated Tibidabo Amusement Park as an institution committed to achieving its aim to promote accessibility. Firstly, there was the access ramp to the Lookout ride which adapted the access from the Park entrance to the panoramic viewing area. This work also gave access to the panoramic lifts built the year before. Secondly, the Station Bar, which is one of the main restaurants, was revamped. The available space was reworked and now provides full access to disabled persons.

In 2006, only a year after the work done to the Lookout ride and the Station Bar, a new *platform was built to provide access to the symbolic Automaton Museum*. When it was finished, full access was then available for everyone, especially disabled persons who could now enjoy 100% problem free entrance to the attraction.



*Access to the Sky Walk at Tibidabo*

**This was also the year that the new access to the car park at the top of Tibidabo was opened, at the same time *eliminating all existing physical barriers and installing new properly adapted ticket offices.* All this has helped towards decongesting the other available park accesses and reducing waiting time for visitors. Through a totally adapted pedestrian area open during park hours, this work has connected the car park to the entrance at the lower part of the park.**

**There were more improvements to the facilities at Tibidabo in 2007, amongst which it's worth pointing out *the lower funicular railway station.***

**This project aimed *to provide easy and comfortable access to disabled people.* It is also noteworthy of mention that one of the platforms has a ramp with a gradient of only 20% which improves accessibility significantly. The work will conclude in 2014 with the construction of the second platform. However, given the characteristics of the access, a second person is required to help push the wheelchair to the adapted areas.**



***New lower Funicular station at Tibidabo***

**2008 ended with the addition of a new Roller Coaster at the Park. It's one of the star attractions at the park, and is 100% accessible thanks to a new access ramp with a gradient of only 7.5%.**

**2009 was an excellent year for improvements and innovations, starting with the total update and renewal of the Tibidabo website ([www.tibidabo.cat](http://www.tibidabo.cat)), that as well as significant changes in terms of design and being user-friendly, it achieved an AA category level of accessibility for being 100% accessible for those with visual and auditory disabilities.**



***New Roller Coaster at Tibidabo***

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In addition to the new items that were introduced in the areas of digital communication, the Sky Walk, in the northern area of the Park, also experienced a substantial change and this was built to be like *a pleasant walk which connects, without architectural barriers of any kind, the access point that is situated alongside the Florida Hotel with the main entrance of the Park*



*Dream Square at Tibidabo*

During this period, *Dream Square*, which can be found in the middle of Tibidabo, also underwent significant work, which allowed it to *eradicate all of the physical barriers that could obstruct access to the different adjacent rides*, such as the Hall of Mirrors, the Automaton Museum or the Puppet theatre. In addition, this special area has been built to be like an open-air stage where numerous shows and cultural events take place.

In 2009 the adaptation of the historical building situated alongside Dream Square was undertaken; where *at present people with reduced mobility are able to access the multi-event room, the puppet*

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***theatre and the legendary "Witches and Wizards cave" in a comfortable and pleasant way via a special ramp with an 8% gradient. It's worth highlighting that until now, the only way of accessing this emblematic attraction was via stairs.***

**The road adaptation work that was carried out during the same period made it possible to create *two special parking spaces located a few metres from the main entrance of the Park, which were reserved for people with disabilities.***



***Access to the "Witches and Wizards cave" attraction.***

***In 2010, the top station of the Funicular incorporated a new lift platform which provided full adaptation, turning this iconic centenary mode of transport into a fully accessible way of getting to Tibidabo Theme Park. In the same year, the construction of two new lockers located at the bottom of the Park also took places, which are adjacent to the neighbouring Florida Hotel, designed to comply with current legislation and to guarantee total accessibility to all visitors.***

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**At the end of the year 2010, 67% of the attractions and 83% of the restaurants and bars at Tibidabo could be considered 100% accessible according to the existing legislation, the fruit of *more than 10 years of constant effort and investment in resources to promote accessibility and inclusion.***

**2011 was the year that led to the necessary refurbishments in order to make the toilets area located on level 4 of the Park to also become an adapted zone that is accessible to all the general public.**

**In 2012, they began to carry out one of the most ambitious improvements in recent years, which contributed to eliminating all of the architectural barriers that were present in the main square at the entrance to the Park, turning this key area into *a large space at the same level, whereby everyone can move about without difficulty. Stairs were eliminated, ramps were introduced to enable access with wheelchairs* and access to the symbolic attraction of the Carousel was adapted. The inauguration of this new 100% accessible square took place on 1<sup>st</sup> March, 2013.**



***Special Day: "A Summer without Barriers"***

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**Beyond the multitude of activities carried out over recent years, Tibidabo Amusement Park provides discounts of up to 80% on the total price for people with a 33% degree of disability. What's more, the disabled person`s companion gets in for free. In 2013, 16,637 people took advantage of this reduced ticket scheme.**

**Among the events to promote accessibility organised by the park, it's important to highlight the 18 years of "Summer without Barriers", an open day event held annually in which Tibidabo presents the improvements it has made in terms of accessibility and mobility in the park. Every year, the event opens its doors to everyone who wants to join in, but especially those who are physically challenged.**

**Since the first year, more than 25,000 people have come to the event to enjoy the day and get experience the improvements that the Park has carried out in its services and facilities.**

**All the actions presented here have received wide recognition over the years and this has contributed to generating answers to many challenges in terms of accessibility that were put forward in the first years. The expectations of visitors have been met and Tibidabo's strong social and ethical goals have been reached while showing its commitment to overcoming barriers and building a fairer and more inclusive world.**

**Among the awards received, we'd like to highlight the *Commitment to Design for All - 2005* and the special recognition by the Barcelona Council for its continual endeavour to improve the accessibility to the city with the award that same year "*Design for All Foundation*".**

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***Receiving the Commitment to Design for All award in 2005***

## **Good Practices presented by women to the International Design for All Foundation Awards 2014**

*By Imma Bonet*

*Executive Patron*

**Perhaps the challenge of preparing this issue of the Design for All India newsletter caused us to reflect; perhaps it was the experience of previous years or the fact that the majority of the Design for All Foundation team is now made up predominantly of women. But the fact is that this year, for the first time, a completely different selection process has been used for the International Design for All Foundation Awards 2014.**

**Until last year, the system for awarding trophies was very similar to that used in other competitions. A pre-selection of the most interesting entries was made, and these entries were sent to an international jury who made the final selection of winners and finalists.**

**While the winners were justifiably recognised, it was inevitable that both the finalists, who came so close to reaching the top prize, and the other candidates, would feel frustrated.**

**This also had the consequence that many notable projects, products and services went unnoticed by the general public, who also tend to focus principally on the winners.**

For all of these reasons, we introduced a new format for this edition.

Candidates can use a self-assessment test

(<http://designforall.org/new/test.php>) to find out whether their entry meets the criteria established by the Foundation in order to be recognised as a good practice:



- 1. Improvement and optimisation of access to and use of the product or service in comparison to the existing situation or to the competition.***
- 2. Consideration of the requirements and wishes of users and/or clients and their participation in the design process.***
- 3. Standard of the actions or initiatives, products, services and projects in accordance with design for all criteria, environmental and sustainability principles.***
- 4. The solution adopted must follow one of the following strategies***
  - A single solution for all.***
  - Adjustable.***
  - Range of options.***

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- *A solution which is compatible with commonly used accessories.*
- *Premises/product + complementary service.*
- *An alternative option to that used by the majority which offers similar services.*
- *A personalised solution.*

Having checked that their entry fulfils the established criteria, a candidate can send it to the Foundation at any point during the year. If, following the Foundation's evaluation, it is selected as a Good Practice; it will be recognised by a certificate at the Good Practice logo, which the candidate is free to disseminate.

The Design for All Foundation newsletter will also be used to publicise the different products, services and projects which have been awarded this distinction.

At the end of the year the international jury of the Design for All Foundation Awards will select the five Good Practices which they think are most relevant for that year, as much for their high standard as for the contribution towards showing the way for the future development of design for all/universal design.

Among the Good Practices this year, we have selected those which were presented by women:

**Category 1: Project proposals, studies, methodologies**

<b>Project title</b>	<b>Submitted by</b>	<b>Country</b>
<b>Service for heart-arrhythmia self assessment</b>	<b>Eija Lipasti, Laurea-ammattikorkeakoulu</b>	<b>Finland</b>
<b>Board Game for first-year college students, part of the Yhdessä (Together) project</b>	<b>Tuija Marstio, Laurea-ammattikorkeakoulu</b>	<b>Finland</b>
<b>Project title</b>	<b>Submitted by</b>	<b>Country</b>
<b>Sustainable Business Cluster in Western Uusimaa County</b>	<b>Tarja Meristö, Laurea-ammattikorkeakoulu</b>	<b>Finland</b>
<b>BOAT project</b>	<b>Tarja Meristö, Laurea-ammattikorkeakoulu</b>	<b>Finland</b>
<b>Pumppu project</b>	<b>Tarja Meristö, Laurea-ammattikorkeakoulu</b>	<b>Finland</b>
<b>Social Media in Adult Training</b>	<b>Sanna Partamies, Laurea-ammattikorkeakoulu</b>	<b>Finland</b>
<b>Making Electronics Accessible to People with Learning Disabilities</b>	<b>Kate Allen, University of Reading</b>	<b>UK</b>
<b>Voimaa taiteesta (Arts for Empowerment)</b>	<b>Anne Karkkunen, Laurea-ammattikorkeakoulu</b>	<b>Finland</b>
<b>Brazilian universal kitchen</b>	<b>Érica dos Santos Malheiros Campanha</b>	<b>Brazil</b>
<b>My Green Services</b>	<b>Brigitte Trousse, INRIA Sophia Antipolis méditerranée</b>	<b>France</b>
<b>Developing experiential shopping centre</b>	<b>Hanna-Riina Vuontisjärvi, Lapin Yliopisto</b>	<b>Finland</b>
<b>Using Service Innovation Corner (SINCO) as development platform</b>	<b>Hanna-Riina Vuontisjärvi, Lapin Yliopisto</b>	<b>Finland</b>

**Category 2: Project proposals, studies, methodologies**

<b>Project title</b>	<b>Organisation or individual</b>	<b>Country</b>
<b>One-Handed Ponytail Device and Learning Kit</b>	<b>Sara D. Uhrig</b>	<b>USA</b>
<b>Accessible concert by the Chamber Choir of Pamplona</b>	<b>Marcela Vega Higuera</b> , Calícrates	<b>Spain</b>
<b>Toy adaptation workshop</b>	<b>Marcela Vega Higuera</b> , Calícrates	<b>Spain</b>
<b>Easy-to-read club, Pamplona</b>	<b>Marcela Vega Higuera</b> , Calícrates	<b>Spain</b>
<b>The League of Accessible and Historical Cities</b>	<b>Silvia Balmas</b> , European Foundation Centre	<b>Belgium</b>
<b>Design and manufacture of integrating playgrounds</b>	<b>Marta Herva</b> , Galopin Playgrounds	<b>Spain</b>
<b>Couleur sur mesure</b>	<b>Marie Reine Portailier</b>	<b>France</b>
<b>Disability Housing Design Panel (DHDP)</b>	<b>Orla Mc Cann</b> , Disability Action	<b>UK</b>

**To know more about the Good Practices visit**  
<http://designforall.org/new/awards.php>

## BOOK RECEIVED:

### Managing Emotion in Design Innovation

**Author/Affiliation**  
Amitoj Singh

This book presents an emotion centered research framework titled "emoha" for design innovation. It defines emoha and underlines the importance of the developed framework in culturalization of technology and thereby design innovation. The book explains the detailed research on product styling which leads to the creation of "Emoha" and how to use it in product design.

**Key Features**

- Outlines the 'emotion centered segmentation' of product ownership experiences
- Provides a research framework for methodical assessment of product styling
- Demonstrates the cultural impact on design in connection with emotional factors of the user
- Bridges the divide between design practice and design theory
- Addresses design innovation in a huge market of motorbikes in India

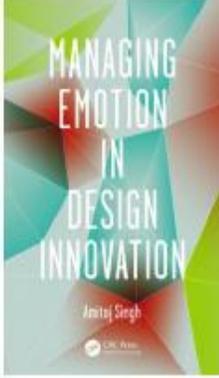
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## **A New eBook from UniversalDesign.com**

### **Universal Design Tips: Lessons Learned from Two UD Homes**

**This new electronic book from UniversalDesign.com is filled with tips and ideas that will help guide anyone through the process of designing and constructing their own Universally Designed home. The book was co-authored by John Salmen, AIA, the publisher of *Universal Design News* and founder of UniversalDesign.com, and Ron Knecht, whose durable, energy efficient Universally Designed house was featured in the [January 2012 issue](#) of *Universal Design News*.**

**The first section of the book deals with the planning process, providing insight on how to choose a location for the house, consider activities of daily living during planning, best use various types of design professionals, finalize a floor plan and develop a building schedule.**

**The rest of the book is organized according to different areas or elements of the home (i.e. exterior doors, bathing, and kitchen counters, just to name a few.) Whether designing a whole house or simply remodeling one area, *Universal Design Tips* makes it easy to quickly refer to the relevant section and find valuable tips that ensure success. Each of these sections includes design tips, photos and important lessons that the two authors learned through their personal projects.**

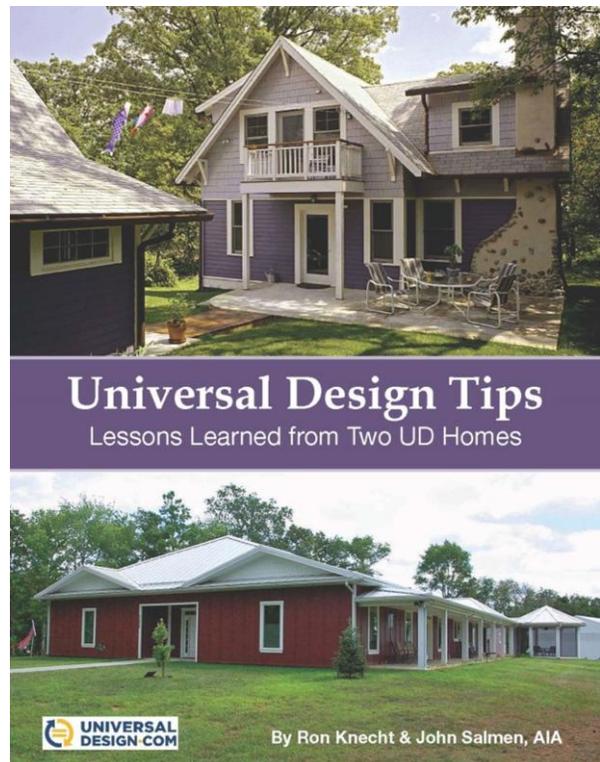
**John Salmen has been working in the field of accessible architecture and Universal Design for over 30 years, and he put this expertise to good use when remodeling a historic property to create the Universally Designed house he and his wife hope to live in for many years. Salmen's "Home for the Next 50 Years" has been featured in various media outlets: including *The Washington Post*, *Fine Homebuilding*, AARP's television show *Inside E Street* and the book *The Accessible Home: Designing for All Ages and Abilities*. Now, readers will be able to explore Salmen's home in even greater detail and apply his experience to their own Universally Designed home projects.**

## *Design for All Foundation*

Ron Knecht's experience with Universal Design started after his wife of 46 years became ill with cancer. As her health worsened, Knecht learned first-hand the importance of accessibility for maintaining independence, safety and one's quality of life. Before Knecht's wife passed away, she extracted a promise from him that he would move to a Universally Designed house located closer to their daughter. Knecht was underwhelmed by both the houses that he saw on the market and the UD house plans that he found online; he realized that he would have to plan and build a custom house in order to fulfill his promise.

Knecht and Salmen were mutually impressed with the thoughtful Universal Design details present in each other's homes, and eventually they decided to co-author a book that would draw from their experiences to provide guidance for anyone planning to build or remodel their home for enhanced safety, comfort, independence, convenience and aging in place.

The eBook is available from [UniversalDesign.com](http://UniversalDesign.com) as a downloadable PDF, for \$20. A short excerpt of the book is also available for preview prior to purchase. To buy the eBook or view the preview visit [UniversalDesign.com](http://UniversalDesign.com).



## **NEWS:**

### **1.- Student develops 'Roshni' indoor navigation system for people with vision disabilities**

**Dhruv Jain dreams of making systems and devices that enhance mobility and communication for people with disabilities. And it is not an idle dream; he is well on his way to realizing it. 23-year old Dhruv with hearing disability, is an IITian and a trekker, and was a competitive swimmer in his school years. Born in a family of doctors, he successfully fought against the odds to make it to the IIT. But he well knows that many others with disabilities fail to wade through myriad challenges of life. Little wonder, then, that he chose to be part of an assistive technology group in Indian Institutes of Technology (IIT) Delhi after his graduation.**

**His project is Roshni, a mobilephone-based indoor navigation system for people who are blind or low vision. The device, funded by Korean cellphone major Samsung, is likely to hit the market in the next six months. "Our department was frequently visited by people with vision disabilities. We spoke to them and found that one of the major problems they faced was difficulty in independent indoor navigation. That was the trigger that started this project," Dhruv said.**

**After two years of work, the navigation system, which consists of wall sensors, a waist-worn device to receive and detect signals, and a user interface in the form of a mobile application, have been installed and successfully demonstrated at Bharti, the building which houses the computer science department of IIT Delhi.**

**The device talks to the user with the help of the mobile handset that uses variants of the Android operating system.**

**Now the six-member team at Delhi IIT's computer science department, led by Dhruv and guided by Prof M Balakrishnan, is giving final touches to Roshni. With the help of the National Association for the Blind, the research group has tested the device with two dozen people with vision disabilities from different age group and got satisfactory responses.**

## *Design for All Foundation*

**“Initially there were battery backup issues. We have now sorted that out. We hope to launch the device commercially in the next six months,” said Abhinav Saxena, a project associate, who handles the hardware aspects of Roshni.**

**“This product is meant not only for people with vision disabilities, but also for others. It is especially useful at places such as museums, where there is very little light,” he said.**

**The team will soon install the updated version of the Roshni prototype at the National Science Centre in Pragati Maidan in the Capital.**

**“In countries such as the US, it is mandatory to make public buildings accessible for people with disabilities. If such a law comes into force in India, this device will have a great market,” said Saxena.**

**Dhruv and his team are in the process of filing for a patent for the technology. “It is a little early to talk about it,” he said. Besides Samsung, which funded one year of research and development, Indian Angel Network, a community of start-up funders, has shown interest in supporting the project, and the IIT team is in talks with them.**

**Dhruv, who wants to pursue his higher studies in assistive technology, believes that it is important to inculcate a spirit of independence so as to boost the confidence of people with disabilities.**

***(Source: Hindustan Times)***

**2.- Twitter's new look: a better, universal design Twitter has changed its web interface to look more like its mobile apps. The first conclusion is obvious: we are moving towards unified interfaces. Publisher**

**Social Social Networks Web In depth Twitter has changed its web interface to look more like its mobile apps. The first conclusion is**

## *Design for All Foundation*

**obvious: we are moving towards unified interfaces. The second: Twitter was ugly.**

**For social networks, aesthetics are important. Your profile is a mirror, a calling card. It needs to shine. If a social network can't deliver, not only are we not going to spend much time there, we also won't be recommend it to other. This is what leads to decline in a social network. Naturally, Twitter can't allow that to happen.**

**Twitter's classic design as viewed from the desktop browser was nothing special. It was functional and to some extent light, but hardly renowned for its looks. Profile pages in Google+ are much easier on the eye. G+, for example, displays a large profile picture at all times. It serves as a constant reminder of who we are.**

**In the new design, Twitter gives greater prominence to the 'calling card', a combination of name, profile picture, background, and clearly visible numbers. It's like looking at ourselves in the rear-view mirror. In the world of social networking, ego is the fuel, and seeing ourselves in a nice setting increases self-confidence.**

**The second consequence of Twitter's redesign is not new: all the best services are currently aiming to unify their interfaces. There's no reason why using Twitter or Facebook on a desktop PC should be significantly different to using them on a phone or tablet. Some formatting changes, maybe, but the experience should be the same.**

**This convergence shows the browser as an information viewer, a window in which to load hypertext, but also a small operating system inside another operating system. The pages we use every day look like applications because they are: they no longer look different from the apps we use on our phones.**

**Twitter's announcement was met with sarcasm by many users**

**Now, combining interface unification with usability and attractive design is difficult. Twitter seems to have made the right decisions, but it should be very careful with any design changes: one false move and you've broken millions of 'social mirrors'. What do you think of Twitter's new design? (*Source:SocialSocialNetworksWeb*)**

## **2.- Translator's commentary on the "Brazilian Study of the Profile of Tourists with Disabilities"**

English Translation ver. 1-18-2014

### *Brazilian Study of the Profile of Tourists with Disabilities Technical Document - 2013*

Original title: *Estudo do Perfil de Turistas – Pessoas com Deficiência  
Documento Técnico – 2013*

Translation by Scott Rains, [srains@oco.net](mailto:srains@oco.net)



**With this study of travel by Brazilians with disabilities Brazil joins an elite group.**

**To date Australia, Brazil, and the USA have undertaken national studies of the travel behavior and preferences of travelers with disabilities. It would be unfair to hold this small-scale non-quantitative study of only 68 respondents in too close a comparison to Simon Darcy's groundbreaking 1998 study "From Anxiety to Access" or SATH/Open Door's 2002 Market Study of Americans with Disabilities. However, undertaking this study manifests a good-faith commitment to Inclusive Tourism and Inclusive Destination Development on a small scale by two consecutive presidential administrations. This, the "Brazilian Study of the Profile of Tourists with Disabilities" (Original title in Portuguese: "Estudo do Perfil de Turistas – Pessoas com Deficiência"), is a valuable preliminary to a more comprehensive and actionable study which we hope will follow.**

**In a certain sense this study, because of its limited sample size and geographic restrictions, could also have been called "Setting a Research Agenda for Understanding the Market That is Brazilian**

## *Design for All Foundation*

**Travelers with Disabilities.” Other countries wishing to undertake a similar study would do well to imitate the methodology that uses both in-depth interviews and focus groups. Focus groups were reserved for what the study calls “real” tourists – those who had traveled within the past 12 months. In-depth interviews were given to respondents who were considered potential travelers but had not traveled in the past year. Holding these information-gathering sessions at five locations around the country was critical to sampling regional differences.**

**However, other countries wishing to undertake a similar study would also do well to consider running a separate and parallel set of interviews with regional travel and hospitality suppliers. This would provide a binocular view of venue accessibility and the levels of competency of staff to accommodate travel by persons with disabilities. Such a two-party source of initial data would facilitate what must be the next step for Brazil. This next step would look like the sort of consumer and industry listening and planning sessions undertaken by Darcy across Australia in 2005. Further detail on that methodology is available in “Setting a Research Agenda for Accessible Tourism” ( <http://www.sustainabletourisonline.com/137/universal-access/setting-a-research-agenda-for-accessible-tourism> )**

**None of the findings of this study are surprising to those familiar with the systemic global lack of reliable tourism product, accurate and relevant information, or training of tourism professionals in the rights and consumer preferences of travelers with disabilities. What stands out to me as different by way of degree was the apparent unanimity around what the Asian disabled traveler cohort influenced by the decades-long tradition promulgated by the United Nations ESCAP would call “rights-based tourism” – a clear and unyielding rejection of discrimination by the travel industry (including being charged extra for medical equipment.) Also noteworthy as a Brazilian emphasis is the high frequency of friends (rather than family, personal care assistants, or business colleagues) being identified as travel companions and travel-influencers.**

## PROGRAM & EVENTS:

### 1. 'Typography and Culture' <http://www.typoday.in/>



Typography Day will be organized for the seventh time on 28th Feb, 1st, 2nd March 2014 at the Symbiosis Institute of Design, Pune in collaboration with the Industrial Design Centre (IDC), Indian Institute of Technology Bombay (IIT Bombay) with support from India Design Association (InDeAs) and Aksharaya. **The theme for this year's event is 'Typography and Culture'.**

### 2.



### **3. CALL FOR ENTRIES: POSTER DESIGN COMPETITION**

You are invited to design poster for ICSID interdesign 2014 workshop  
Contest Theme:

## **Humanizing the Metropolis**

### **Background**

**Under the theme Humanizing the Metropolis, the Interdesign workshop aims to design solutions to address critical service issues in the metropolis. The goal is to enable the city to become self-reliant on its resources, as well as increase its citizen's sense of pride.**

**"In the context of emerging economies, Mumbai presents numerous opportunities for a dialogue about infrastructure, housing, sanitation, mobility, education and health care to name but a few. It demonstrated the challenges of this densely populated city and a desire to work towards the betterment of its communities through an inclusive process. In selecting their proposal, we hope to help the city bring forward a substantial level of affordable solutions to address some of these critical issues."**

**The competition calls for poster that expresses the interdependence of city's services, its resources and the people.**

### **Awards**

**First winner Rs. 100,000. (One lakh) with citation)**

**Second winner Rs.50,000. (Fifty Thousand with citation)**

### **Grand Jury**

**The member of the Grand Jury panel comprise of leading designer, thinkers and communication experts. People who love Mumbai.**

### **Participation Eligibility**

**Entry to the contest is open to all Professional designers, design students living in India**

**Participation is open to teams and individual submissions.**

**Submitted designs must be original and not currently in publications.**

**Submit the design with a brief write-up of around 150 words.**

### **Specifications**

## *Design for All Foundation*

**Dimension of the final poster: 420mm X 600mm only in portrait format**

**Resolution: 300dpi**

**File type: JPEG or PDF**

**Colour mode; CMYK**

**Your Contact Information**

**Name, Postal Address, E-mail, Telephone no. Cell No**

**Last date of Submission of your entries**

**Friday June 21, 2013, 4pm.**

**If you have any queries, pl. do not hesitate to contact us:**

**SudhakarNadkarni**

**[nadkarni36@yahoo.com](mailto:nadkarni36@yahoo.com)**

**or Anand James Dev**

**[anand.dev@welingkar.org](mailto:anand.dev@welingkar.org)**

**Send Entries to:**

**ICSID Interdesign 2014**

**Business design**

**weschool,Matunga,**

**Mumbai-400 019**

**4.**

**12th Global Conference on Ageing**  
**10-13 June, 2014**  
**Hyderabad, India**  
**"Health, Security, and Community"**

 **12<sup>th</sup> GLOBAL CONFERENCE ON AGEING**

<http://ifa2014.in/>

**IFA**  
INTERNATIONAL FEDERATION OF AGEING ASSOCIATIONS

**Calling For Abstracts, Papers, Workshops,  
and Symposiums!**

5.



IFA 12th Global Conference on Ageing  
"Health, Security, and Community"

10-13 June, 2014 Hyderabad, India

Keynote Speaker



Prof. Muhammad Yunus,  
Founder, Grameen Bank  
Recipient, Nobel Peace  
Prize 2006

Calling For Abstracts!

----->

<http://ifa2014.in/>

Conference  
Subthemes:

Health  
[Non-Communicable Disease](#)  
[Telemedicine](#)

6.



2013-2014 BIOMIMICRY STUDENT DESIGN CHALLENGE

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FORWARD MOTION:  
Life-Friendly Transportation Solutions



## Transportation connects us all.

Whether it's simply getting from home to work or using products shipped over distances near and far, in every region of the world transportation impacts our daily lives.

At first glance, transportation may simply appear to be about the movement of people and goods. But looking deeper, it's also closely linked to equality, access to healthy food and good schools, and wildlife impacts, for example.

As the mobility demands of people and freight have grown, so too has the need for products, systems, and services that will make the transportation sector more life-friendly, for both people and the planet.

### **Registration is now open**

Learn biomimicry and how to apply it while competing for cash [prizes](#) with students from around the world.

[Register](#) your team for immediate access to the [biomimicry design resources](#) and start developing your design solution today!

## 8. International Design for All Foundation Awards 2014



The 5th edition of the International Design for All Foundation Awards recognise achievements in the field of design for all, great and small, by governments, businesses, not-for-profit organisations and professionals from all over the world. In so doing, they aim to demonstrate that the

## *Design for All Foundation*

implementation of design for all/universal design in any form contributes towards improving quality of life for everyone.

At the Design for All Foundation we believe that our awards should not be a competition, but that we should recognise all examples of good practice which arise from identifying a need or problem and satisfying user requirements and expectations. Hence from this edition onwards we will honour all "Good Practices" which meet the [criteria for excellence](#).

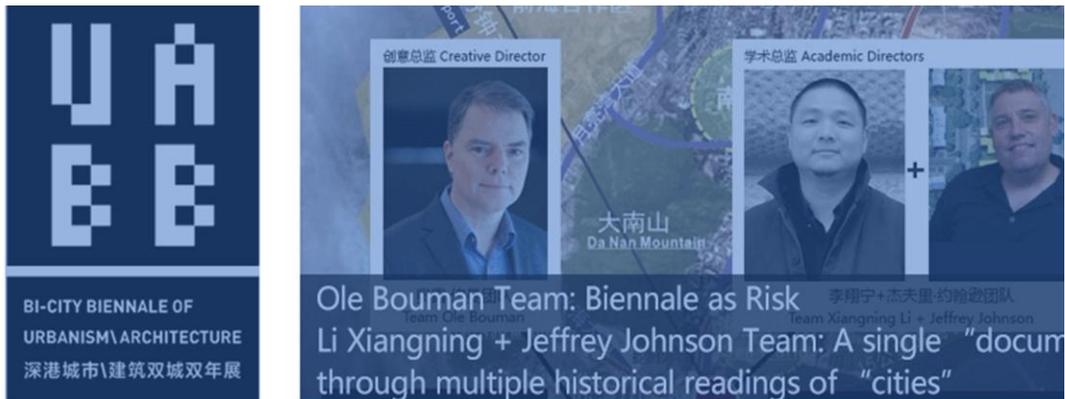
However, each year an international jury will select the 5 "Best Practices" out of all the Good Practices submitted to be presented with the International Design for All Foundation Award. These will be the examples which stand out in terms of their impact and which indicate the way ahead for better implementation of design for all/universal design.

1. **2 January 2014:** Deadline for submission of entries for the 2014 Awards (Ended)
2. **12 February 2014:** Award ceremony, which will take place as part of [Urbaccess: the European accessibility and universal design exhibition](#) in Paris.
3. **Candidates for Good Practices selection and participation in 2015 Awards are already accepted.** Go to [designforall.org/new/awards.php](http://designforall.org/new/awards.php) for further information.

9.



10.



11



12.



# HCI International 2014

22 - 27 June 2014, Creta Maris, Heraklion, Crete, Greece

13.



London | 2014  
uxpa  
conference

UXPA2014 is 21-24 July, 2014. Be part of it.

14.

## 'INCLUSIVE DESIGN FOR CULTURAL INTERFACE IN PILGRIMAGE SITES'



*EQUITY BY DESIGN*

**Introduction:**  
In Indian community, traditions are deeply rooted despite modern lifestyle. Children learn these traditions from their parents and pass them on to their future generations. One such traditional practice is pilgrimage that almost all religions follow, in one form or the other. A pilgrimage is a journey of spiritual conviction and faith, and it is practiced all over the world. Generally, it is a visit to a holy place of significance to a person's beliefs and faith. It is strongly believed that one must visit such sites at least once in their life time. In India, there are several associated temples, shrines, hotels and stays with these sites, and a number of people visit to pray for good health and well being. This includes a lot of people with disabilities, elderly, children and women. This also includes rural people (poor and illiterate), The School of Planning and Architecture, Bhopal, an autonomous institution of MHRD, Government of India, is premier institute of National Importance. With a commitment to support social, cultural and environmental sustenance in the community, the school organizes a 'National Student Design Competition' on 'Design for All/Universal Design' every year. This year 2013-14, the school plans to launch this design competition with an aim to promote universal usability in pilgrimage sites in India.

**Objectives of the competition:**  
Many universal design questions will make up the studio investigation: What facilities exist for the pilgrims in the site and how they support equal access and usability to include elderly, women, children, and people with disabilities? Holy places offer a unique mindset about 'divinity' and 'sacredness' to able, disabled and poor people, and how that perspective frames universal design of facilities in these sites? While universal design's "independence for all" focus is well grounded in western lifestyle of people living independently, what role does universal design play in India's inter-dependent society where most people live with others? There are good international examples of universal design; how universal design can be implemented in existing culturally rich pilgrimage sites? The students are expected to develop inclusive, human centered, innovative, and contextual designs for any one pilgrimage sites in India. The site should be largely visited by pilgrims and can be located anywhere in the country, it may be government or private owned, or may/may not be from any particular religion.

**Important Dates:**  
Launch of the Competition: 14<sup>th</sup> October' 2013  
Last date for the Registration of Teams: 31<sup>st</sup> December' 2013  
Last date for the Final Submission: 31<sup>st</sup> January' 2014  
Competition Judgement, Universal Design Workshop and Exhibition: 1-3<sup>rd</sup> March'2014

**Eligibility for participation:**  
Teams consisting of a maximum four students enrolled in degree/diploma/entering colleges in India are invited to participate. Proposals may include consideration of more than one discipline and may include: architecture, engineering, industrial design, interior design, interior architecture, landscape architecture, architectural conservation, urban planning, environmental planning, urban design or any environmental design discipline. Multi-disciplinary teams are strongly encouraged. The student teams need to register prior to the competition.

**Award:**  
1<sup>st</sup> Prize - ₹ 50,000  
2<sup>nd</sup> Prize - ₹ 30,000  
3<sup>rd</sup> Prize - ₹ 20,000

Students of all shortlisted entries will receive travel, accommodation and free participation to the Universal Design Workshop, the culmination of National Student Competition, to be held in March'2014 to showcase and disseminate the generated knowledge at School of Planning and Architecture, Bhopal.

**Contact Information:**  
NSDC Team  
School of Planning and Architecture  
(An Autonomous Institution of MHRD, Government of India)  
Sports Complex, NANIY Campus, Bhopal, Madhya Pradesh (M.P.), INDIA-462051  
Email: nsdc@spabhopal.org  
Web Link: <http://nsdc.spabhopal.org/INHOME.aspx>  
Phone : 2670910, 2670946, 2670108

NATIONAL STUDENT DESIGN COMPETITION - 2013-14



## **15. Designing for the New China Online Workshop The Design Community College**

Sunday, January 19, 2014 from 9:00 AM to 12:00 PM (PST)



**16.**



## **17. Illinois-Iowa Center for Independent Living will host a free Universal Design Seminar**

From 1 to 3 p.m. Feb. 13, at Community Health Care in the Community Auditorium located 2750 11th St., Rock Island.

Guest speaker will be William Gorman, executive director for the Illinois Statewide Independent Living Council.

A variety of topics will be covered, such as Functional & Flexible approaches to housing design, Demographic Changes in America, Principles of Better Living design, and much more.

To register, call Illinois-Iowa Center for Independent Living 309-793-0090.

## **18. Typography Day 2014**

28th Feb, 1st, 2nd March 2014,

Symbiosis Institute of Design, Pune with support from InDeAs and Aksharaya

<http://www.typoday.in>

Theme:

Focus on 'Typography and Culture'

### **Registration Open**

Participation in the conference and workshop 'Typographyday 2014' on 28th Feb, 1st, 2nd March 2014 requires registration. Do register early as the seating is limited to 400 participants. More details at <http://www.typoday.in>

## **19. Craft: A Contemporary Vision**

**IICD - One Day SYMPOSIUM on Crafts (20/2/2014)**

**FOLLOWED by IICD Convocation on 21 February 2014.**



Call for Participation - Registration required

Indian Institute of Crafts & Design, Jaipur (J-8, Jhalana Institutional Area)

One Day Symposium

Theme : Craft : A Contemporary Vision

Date : 20th Feb. 2014 / Venue : IICD, Jaipur

## **20.**

DESTINATIONS  
POUR TOUS | FOR ALL  
MONTREAL 19 - 22 OCTOBRE 2014

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ONE WORLD FOR EVERYONE!

Photo courtesy PhotoAbility.net - Photographer Sherrie Badstrom

## **Job Openings:**

### **1. Job Title: Branding & Web Design Manager (CMS\_IT\_ADM\_2013\_01)**

**Company: ETI Dynamics (www.etidynamics.com)**

**Location: Delhi**

**Role: Full time (part-time or consulting positions can be considered for exceptional candidates)**

**About the role: The role entails managing all creative and design needs of the company across various channels.**

**The group has more than 5 entities each with its separate website.**

**Date of Joining: Immediate**

**Detailed Job Description: Supervise and deliver all design efforts including logos, websites, presentations, flyers, documents, brochures, videos etc**

**Work on the branding requirements of ETI Dynamics and its other entities**

**Develop and execute long term design strategy**

**Coordinate work to meet deadlines for events, newsletters and other collaterals**

**Skills Required:**

**Excellent design skills**

**Strong communication skills (both oral and written)**

**Understanding of corporate design concepts and branding**

**Good networking and marketing skills**

**Qualification Required:**

**Must be qualified in HTML 5, CSS, Javascript,**

**Trained in using advanced design tools, like Photoshop, Adobe toolkit, Corel, Dreamweaver, flash etc**

**3-5 year experience**

**How to Apply**

**Interested candidates should send their CV to [careers@etidynamics.com](mailto:careers@etidynamics.com) with the relevant Vacancy Code as the email subject.**

## **2. Communication Internships at Auroville**

**Auroville Consulting provides multi-disciplinary expertise for ecologically responsible development projects. We also manage the Auroville Collaborative projects where we explore innovative and sustainable solutions for integral living at Auroville in partnership with internal and external experts. We have various projects related to sustainability with a strong communication component.**

**We are looking for two graphics design interns with background in illustration and audio/video production to join our team in developing, designing and producing brochures, mailers, web pages, book layout, info-graphics and flash animations. The project duration varies but is usually between 2 – 5 months and requires intense team-work with a multidisciplinary and international team. Our projects are suitable for Master's thesis students or fresh graduates seeking working experience.**

**Interns could be provided dormitory accommodation and food at community dining hall and have to bear their own travel expenses to Auroville. We are a non-profit organization and traditionally do not offer any honorarium but we gracefully acknowledge the spirit of giving and good will.**

**Auroville is an international community of about 2000 residents from over 40 countries located near Pondicherry in South India. It offers a unique experience in sustainable living. Every year many students and young professionals from various countries work as interns/volunteers in diverse areas such as education, forestation, farming, architecture, design and others. Besides the project challenges, interns/volunteers experience serene forested surroundings, a multi-cultural international social life and ecologically conscious living.**

**If you are a post graduate student or a young professional interested in the internship, please send by email: 1. A one page CV (pdf file) with photo 2. Short descriptions of projects along with a web link to portfolio 3. Two references from a client, professor or supervisor.**

**Contact Details:**

**email: [martin@aurovilleconsulting.com](mailto:martin@aurovilleconsulting.com)**

**contact number : 0413 2622571**

**3. We are a Healthcare IT services organization and are expanding our UI footprint.**

We are keen to leverage associations and partnerships with organizations/individuals with a demonstrated strength in the UI/UXP field.

Please drop me a note on shobhit dot bhatnagar at emids dot com to explore further.

**4. We at Naukri.com (Info Edge India Ltd.) are expanding our team of interaction designers and we are looking for a highly motivated individuals for the following position:**

**Interaction Designers (for 99acers.com & Shiksha.com | 4 positions)**

**Job Description and Responsibilities:**

**1-4 years of experience in web and mobile UI**

**Plan and execute research to cultivate design insight**

**Plan and organize design requirement from concept to implementation**

**Developing design studies and user workflows for web and mobile solutions**

**Develop high level detailed storyboards, mockups, and prototypes to effectively communicate interaction and design ideas.**

**Convert wireframes into clean user interfaces.**

**Developing design studies and user workflows for web and mobile solutions**

**Requirement:**

**Powerful and exemplary portfolio of project work done.**

**Familiar with Adobe Creative Suite, Axure, Visio etc. tools**

**Education:**

**Graduate or Masters from institute like NID or IIT with an excellent portfolio in the field of Interaction Design.**

**Please apply with full CV, cover-letter and portfolio to [Savita.Sharma@naukri.com](mailto:Savita.Sharma@naukri.com), [ankita.saxena@naukri.com](mailto:ankita.saxena@naukri.com), [nitin.sethi@naukri.com](mailto:nitin.sethi@naukri.com), [aman.mehta@99acres.com](mailto:aman.mehta@99acres.com), [ashish.mehra@naukri.com](mailto:ashish.mehra@naukri.com),**

**Sr. Interaction designer**

**Naukri.com | Infoedge India Pvt Ltd.**

**5. Bosch UX Studio in Bangalore is on the expansion path. We have the following openings and so read on if you are interested**

**1. Senior User Researcher**

**For creating the best of product experience we need to know the users pretty well. You will be primarily responsible for all research**

## *Design for All Foundation*

and user testing activities involved in user centered design of hardware and software products and systems.

### **Responsibilities:**

- Collaborate with Bosch business units, Product Management, Design and Engineering teams to design and undertake user research as well as usability testing activities
- Determine the most appropriate research methods, create research tools, recruit participants, perform secondary research/competitor benchmarking, and conduct primary design research
- Communicate findings to design team and other stakeholders in a clear and impactful manner in order to build domain knowledge, and empathy towards end users
- Analyze findings along with design team, to come up with actionable insights, design principles and opportunity areas
- Evangelize user research and user centered design principles internally and externally
- Formulate strategy for marketing of UX services, coordinate with Global teams and roll out activities planned
- Promote design best practices within Bosch

### **Job qualifications**

- Background in Human Computer Interaction, User Research and Usability, Design Research, Human Factors research or related field
- Experience level 6-10+ years
- Outstanding portfolio to substantiate experience and skill level
- Understanding of qualitative data gathering, analysis, specification, verification and management practices
- Attention to detail as well as superior and clear verbal/written communication with strong interpersonal skills
- Knowledge of relevant software like Adobe Creative Suite, TechsmithMorae and others

## **2. Senior Interaction Designer or Visual Designer**

Since we are bringing in the best of user experience for all Bosch products we need people to lead projects, guide and mentor fellow team members and above all someone who can step in and do hands-on work as well.

### **Responsibilities:**

- Collaborate with Bosch business units, Product Management, Design and Engineering teams to design, evaluate, and iterate concepts
- Deliver high quality design output for various phases of product development

## *Design for All Foundation*

- Provide project leadership, mentoring and guidance to other team members
- Provide artifacts like sketches, story boards, mock-ups and prototypes of varying fidelity as per the need
- Adhere to product style guide and color palette
- Communicate design concepts and strategies to stakeholders
- Promote design best practices within Bosch

### **Job qualifications**

- Background in Human Computer Interaction, Interaction Design, Visual Design, Fine Arts or related field
- Experience level 6-10+ years
- Outstanding portfolio to substantiate experience and skill level
- Understanding of latest design trends, technologies and tools
- Focus on user centered design methodology
- Expertise in Adobe Creative Suite and other graphic software

### **3. UX Designer/UX Trainer**

If you have the flair for design and the passion for teaching design then you should get in touch with us. You would primarily be carrying out the role of a trainer for the UX Academy trainings as well as supporting projects as a UX Designer.

#### **Responsibilities:**

- Collaborate with Bosch business units, Product Management, Design and Engineering teams on design as well as training side
- Plan, organize and conduct UX Academy training modules along with the training team in various locations of Bosch, as per the training calendar
- Promote design best practices within Bosch through project work and UX Academy trainings
- Communicate design concepts and strategies to stakeholders
- Deliver high quality design output for various phases of product development
- Provide artifacts like sketches, story boards, mock-ups and prototypes of varying fidelity as per the need
- Adhere to product style guide and color palette

#### **Job qualifications**

- Background in Human Computer Interaction, User Research and Usability, Design Research, Human Factors research or related field
- Experience level 4-8+ years
- Outstanding portfolio to substantiate experience and skill level
- Keen interest in design as well as imparting design education through training programs

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- Attention to detail as well as superior and clear verbal/written communication with strong interpersonal skills
- Knowledge of Adobe Creative Suite, Balsamiq and other relevant software

All the positions are for our Bangalore Studio. Please send your resume + portfolio (pdf/url) to [fixed-term.Sonia.Jaidev@in.bosch.com](mailto:fixed-term.Sonia.Jaidev@in.bosch.com)

**6. Qualification: Graduate from a reputed Interior Design School/Design School (hard goods/furniture)**

**Experience: App 4-5 years of projects experience, handling materials, clients, vendors etc.**

**Role: To develop and manage our customised projects business for residences, institutions and design firms. This is a key role in Baaya Design and the person will be involved in overall strategy creation and growth of the company.**

**Qualities: Must be a highly confident communicator, with fluent English speaking and writing skills, be good at managing people and projects with efficiency and good planning. Must have a can-do attitude and be willing and able to learn and adapt quickly.**

**Understanding of craft and materials like wood, metal, clay and skills like carpentry and surface finish is required. Must have proficiency in photoshop, corel draw and cad software.**

**Salary: As per background and experience of the applicant.**

**Baaya Design offers customised art & craft solutions to map contemporary interior requirements. We make murals, wall art, art furniture, partitions, mirrors, wash basins, artefacts and more for interiors. Our range speaks of an eclectic, vibrant and natural styling. We offer a young, creative and learning environment to work in.**

**Send us your CV at: [baayadesign@gmail.com](mailto:baayadesign@gmail.com) or to [shibani@baayadesign.com](mailto:shibani@baayadesign.com)**

**Tel: 02265210165, 02224979463**

**7. Leadsquared is looking for freelancers Visual Designers who can design application icons, color scheme & also help us improve the Look & feel of the product.**

**The nature of this engagement will be fixed price/hourly. Please share your work samples/portfolio on [careers@marketxpander.com](mailto:careers@marketxpander.com)**

**8. The Purple Turtles, Bangalore is looking for product designers with 2+ years of experience in designing and production.**

Please send in your portfolios to Radeesh at [thepurpleturtles.in@gmail.com](mailto:thepurpleturtles.in@gmail.com)

**9. Arihant industries ([www.arihant.com](http://www.arihant.com)), Mumbai is looking for a 3-4 years experience Industrial Designer with Architectural background. Preference will be for graduates from NID or similar reputed Design institutes. Salary will be best in the industry.**

Those who are interested for an exciting career in our kind of company profile should mail your CV's to Dinesh Kumar Dandapat ([dinesh.dandapat@arihant.com](mailto:dinesh.dandapat@arihant.com))

Manager ( Innovation )

Contact No. +91-9922726002, +91-9844517481

Arihant Industrial Corporation Ltd

Tel + 7507778271/74 Fax + 912239167231

**10. Full time Faculty Positions at School of Fashion & Design, GD Goenka University**

GD Goenka School of Fashion & Design is now half way through its first year of operation, and is now looking for recruiting full-time faculty for the next year for its communication, interior and product design programmers at Bachelor, Masters and Doctoral level. The teaching and laboratory facilities at the school as also the details of courses can be accessed at the following links:

<http://www.gdgoenkauniversity.com/schoolofdesign/>

<https://www.facebook.com/pages/GD-Goenka-School-of-Fashion-Design/436852256360642?fref=ts>

<https://www.facebook.com/gd.goenka.9?fref=ts>

Applications are being received now and the interviews will be scheduled between Mar-May. Selected faculty will be expected to join between June-July.

Please help us spread the word.

Applications/Letters of interest may be sent to

[deanoffice.design@gdgoenka.ac.in](mailto:deanoffice.design@gdgoenka.ac.in)

**11. Urgently needed someone who could simulate an interface in flash. The intricacy of work might be a little high, imagine bringing the Iron Man HUD to life. The graphics and concept are being developed by a dedicated team, we need someone to turn them into a product (for traditional and touch based interfaces)**

The person should be based in Delhi, and be able to join immediately. The project is a month long venture for a prestigious client, and might lead to a long term collaboration.

Interested candidates can send in their work/references at my email id. References are also welcome :) [iayushjain@gmail.com](mailto:iayushjain@gmail.com)

## **12. Job Description- Sr. Accessibility Consultant**

The Sr. Accessibility Consultant is responsible for planning and executing a strategy to verify the accessibility of various Web and mobile channels. This person must be able to identify accessibility barriers based on the W3C WCAG 2.0 standards & Section 508 regulations.

A strong background in common assistive technologies including how they are used as well as how they interact with UI coding frameworks (HTML, CSS, JS, jQuery, ARIA) is required.

### **Key Responsibilities**

Be well-versed in a variety of common digital information accessibility barriers people with hearing, physical, speech, cognitive, and vision disabilities experience

Have a strong understanding of the user experience when assistive technologies and techniques are used to perceive, comprehend and interact with digital information

Be capable of conducting comprehensive accessibility testing against the WCAG 2.0 Level A, AA & AAA success criteria and other requirements under US / Australian laws using the following methodologies: visual analysis; automated scans; assistive technology reviews; color sampling; keyboard only input and code reviews

Understanding of dynamic UI coding and design for Web and mobile devices

Be able to work collaboratively and productively with diverse teams and alone

Have excellent organizational skills and a strong command of the English language in written and verbal communications

Prepare detailed documentation of accessibility testing methodologies & audit

Conduct analysis of reports from automated accessibility scans

Interface with key stakeholders to explain digital information accessibility barriers in everyday language as well as tech speak

This position requires frequent travel and/ or a long term stay in Australia

**Experience/ Educational Requirements:**

**8+ years of accessibility experience, preferably in large and highly dynamic environments**

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**B.S. or Masters Degree in information technology, human computer interaction, or related field considered an advantage. Equivalent experience accepted.**

**Assistive technology knowledge and experience with JAWS, NVDA, Window-Eyes, VoiceOver, ZoomText and other tools used by people with disabilities**

**Basic knowledge of HTML, DHTML, ARIA, JS/jQuery, AJAX & .net coding techniques**

**Solid knowledge of digital information requirements under US ADA, Section 508, and 21st Century Communications Act laws**

**Intimate familiarity with the W3C WCAG 2.0 standard**

**Experience with Compliance Sheriff will be an additional advantage**

**Strong communication, critical thinking, and creative problem-solving skills required.**

**Strong techniques and methods for group facilitation**

**An understanding of accessible user interface design practices and principles a bonus—better still if you can demonstrate experience relating to digital information usability/accessibility research**

### **13. Required Manager- Design Projects for our retail store & studio in Raghuvanshi Mills, Mumbai**

**Qualification: Graduate from a reputed Interior Design School/Design School (hard goods/furniture)**

**Experience: App 4-5 years of projects experience, handling materials, clients, vendors etc.**

**Role: To develop and manage our customised projects business for residences, institutions and design firms. This is a key role in Baaya Design and the person will be involved in overall strategy creation and growth of the company.**

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**Salary: As per background and experience of the applicant.**

**Baaya Design offers customised art & craft solutions to map contemporary interior requirements. We make murals, wall art, art furniture, partitions, mirrors, wash basins, artefacts and more for interiors. Our range speaks of**

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an eclectic, vibrant and natural styling. We offer a young, creative and learning environment to work in.

Send us your CV at: [baayadesign@gmail.com](mailto:baayadesign@gmail.com) or to [shibani@baayadesign.com](mailto:shibani@baayadesign.com)

Tel: 02265210165, 02224979463

#### **14. Philips Design is looking for a Usability expert in Bangalore**

The candidates should be fully conversant with current practices in the field of usability testing, research and human factors. The person should have studied Design and have 2-4 years experience in similar capacity.

Philips Design offers engaging work, inspiring environment and opportunity to become part of global team of usability experts.

Director, Philips design, India.

mail: [abhimanyu.kulkarni@philips.com](mailto:abhimanyu.kulkarni@philips.com)

#### **15. Leadsquared is looking for freelancers Visual Designers who can design application icons, color scheme & also help us improve the Look & feel of the product.**

The nature of this engagement will be fixed price/hourly. Please share your work samples/portfolio on [careers@marketxpander.com](mailto:careers@marketxpander.com)

#### **16. Designer cum Merchandiser**

Salary: Negotiable

Qualities: Should be passionate / hard working / can dabble in multiple things/ good communication skills

Location: Delhi

Experience:0-6 months

Interested? Send you CV and portfolio to [izelhomes2011@gmail.com](mailto:izelhomes2011@gmail.com)

## Contact information:

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