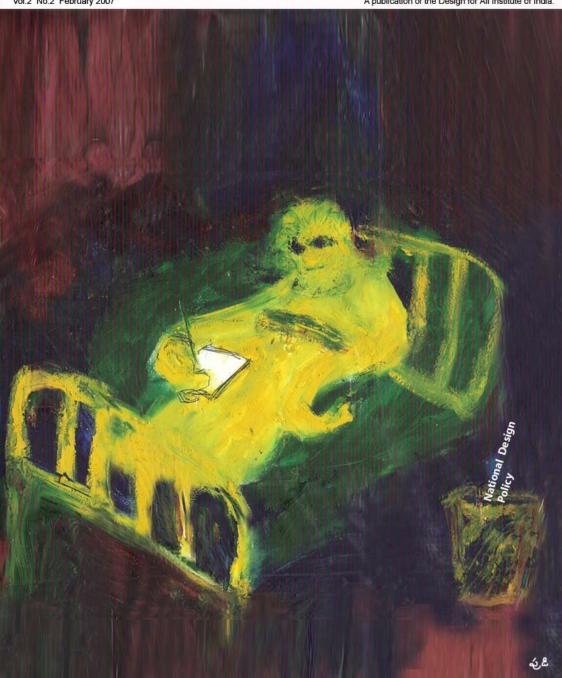
# Design for All



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Chairman's Desk:

Every person has personality and individuality. Personality is amalgamation of Id, Ego and Superego and in time and space anyone of these surfaces and dominants the rest. We normally judge the personality of the person by his qualification, physical appearance, age, sex and all mundane things are possessed and surrounding him.

By giving appropriate environments we can change the person's personality and the best example is Bernard Shaw's Pygmalion. Individuality is person's inner thing and it changes slowly and affects are visible at surface level at slow pace. Some people project their personality very pleasing and individuality is hollow in them. Some persons have high esteem of their individuality but personality is shallow. Individuality and personality should always be made complimented with one another and for individual to balance the both is not easy task.

We have persons like Michael Jackson who are icon and culturally uniting the United States and we talk his wealth and performances and his individuality surfaced as child abuser. When we compare with Abraham Lincoln and Bill Clinton we found the personality of Bill Clinton is very charming .He has beautifully encashed his personality and rose to the status of powerful man of the earth and his individuality is open when a insignificant woman of White House( Ms Monica) charged him with sexual abuse and forced him for impeachment. Other side Abraham Lincoln whose personality was very normal and was not highly qualified but as individual he has written a new history in USA and he is still most respected president among all. In modern era personality is dominating factor and individuality are inversely at very low role. In oriental time individuality was precious and even if personality was missing, they were recognized by people. The result is that we are blessed by people like Jesus, Buddha and many more.

Attitudes are a central part of human individuality. People are ready to die for their convictions. On the other side, even today people kill, prosecute and inflict sufferings because of misguided attitudes such as nationalism, racism or religious fanaticism. People love and hate, like and dislike, favor and oppose. They agree, disagree, argue, persuade and sometimes even convince each other. Everyday, each of us is exposed to countless attempts at changing or reinforcing our attitudes through communication, the mass media or the internet. Our editorial team has guite often gone under such conditions and at few moments they were disgusted and some time delighted and feel themselves at the top of the world. Both are peculiar states of minds .Our journey was from NOBODIES to SOMEBODIES .We suffer a lot and gain a lot. Sometime we question ourselves 'What are we doing? Is society ready to accept the change in their attitude? Is it not that our efforts will go unnoticed, unsung and without any much impact. We announced the International Conference in the month of

January 2007 in New Delhi (India) and we could not achieve what we were aiming and our basic purpose to organize the conference as a true international conference was defeated. People did not express their interest and enthusiasm what we were expecting from design and its allied community. We have come back to square "one" from where we have stated year and half. It has disheartened us and lowered our energy level to work for promotion of concepts of Design For All / Universal Design in India. We wanted to create significant impact in India and our voice should be so loud that the policy makers should have not ignored the importance of these concepts before formulating the new National Design Policy. We failed miserably and Government of India announced the policy without mentioning even a single word of Universal Design / Design for All/ and sustainability. (For detail National policy of Design, kindly click NATIONAL DESIGN

#### POLICY

The current issue of our newsletter February 2007, Vol-2, No-2 is continuation of our annual issue of part-1 (January 2007) is in front of your monitor. We have received tremendous overwhelming response and appreciation for our Part-1 annual issue of newsletter. Although it was lengthy and downloads time was long. The articles were so informative and innovative in nature that we did not compromise with their valuable contents. We have left it to the readers that let them feel difficulties of long downloading time. Their initial anger for us will change to praise if our contents are excellent. Our intuitions prove correct and readers appreciate our efforts.

We hope our current issue will meet your expectations and will prove informative and through a new light on your progressive visions.

Thanking you.

With regards

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Editor's Note:

The editor and staff of newsletter of Design For All Institute Of India proudly present the continuation of our annual issue part-2 February 2007 vol-2, no-2.

The respect and admiration Prof Ben Shneiderman enjoyed academicians and the similar interest he has among generated by writing foreword for our January 2007 issue of newsletter among our designers community. He is legion. We have received very high regards from our esteem readers by publishing the in depth article of Mr. Pete Kercher, President, EIDD- Design For All Europe and it added a new dimension in our enlightenment. We were aware that by publishing the article of Mr. Andrew walker, UK people will place our newsletter to that height what we can never imagine. Our sincere thanks to Dr. Rudiger Leidner, Germany for writing a such a wonderful article of ' Art and Exhibition for All' has made a new vision for our readers and it is the best gift the Germany has given us in a long, long time. Dr Daniel's article is a wonderful piece of writing itself; he maps a territory for subject that is full of new ideas, images and inventions.

Our readers were taken to shock and were aghast when they realized that Prof Russell Marshal and his colleagues have developed software based on the concepts of Design For All and readers were not mentally prepare to embrace the feelings. Our team read voraciously the articles for preparation of our current issue February, 2007 and eventually we were caught up in the caravans and saw ourselves as a visitor to the different world through different articles and unable to decide which are to select . We moved naturally though this fantastic world, a world of knowledge and wisdom, but nothing, absolutely nothing, distract us from our purpose of staying alive in the eyes of our vast base of readers.

We are please to present our current issue as informative as we have done in the past and hope you will continue to extend your support as you did in the past.

Editor Lalit Kumar Das Head Industrial Design Indian Institute Of Technology, Delhi(India)

Forthcoming Issue:

## MARCH, 2007, Vol-2, No-3

1. Strategic Design of Built Environments for Safe Ageing Prof. Jim Harrison, UK	
2. Inclusive Design: An investigation in the context of UK IndustryDr. Hua Dong	
3. Inclusive design: industrial case studied in the Netherlands	

## NEW YEAR REFLECTIONS

Professor Emeritus JAMES JOSEPH PIRKL, FIDSA, USA 2007 Quail Run Drive, NE Albuquerque, NM 87122 505.821.9221 jjp@trnsgenerational.org www.transgenerational.org

A quarter of a century has passed since the international movement to provide 'barrier-free' built environments for disabled people pricked our sensibilities and awakened a global conscience.

We've come a long way since the first public demands for 'disability rights' spread; attracted converts; coalesced into academic, governmental, and private centers of influence; effected legislation; and emerged with different names, in different countries, as an effective 'universal' instrument for change.

All involved can take pride in the movement's laudable successes in expanding focus, credibility, and influence far beyond the limiting boundaries of disability and nationality. Having outgrown the narrow confines of an early inauspicious public image, the movement continues to expand globally, increasing its capabilities, influence, and the expectations of those it serves.

Results, however, have varied. On one level, we've dramatically increased our knowledge base and ability to affect change. We've generated an impressive array of books, articles, principles, organizations, centers, seminars, conferences, newsletters, workshops, courses, and web sites—all producing and promoting systems, principles, guidelines and advice for designing products and environments that are usable by the widest spectrum of people.

But on another level, while the data clearly supports the arguments, we find that the message fails to receive the expected enthusiastic acceptance of those who make the important decisions to design, to produce, or to buy.

The question is, why?

Quite bluntly, the movement has been slow to: (1) recognize the growing global impact of human aging; (2) acknowledge the overlapping problems, issues, and concerns of aging and disability; and (3) enhance its effectiveness through a "universal" / "transgenerational" design alliance. Such a consolidation is long overdue. Two decades ago I wrote:

"For too long, people of all ages and abilities have had to adapt their bodies and minds to expedient product forms offered to them by an unresponsive technology. The time has finally arrived to extend industrial design expertise by developing a transgenerational environment in which the shape and quality of its artifacts and spaces provide an accommodating influence on the lives of all people, regardless of age."<sup>i</sup>

Some may be tempted to reject or minimize the problem. Yet, the fact remains that for the first time in our planet's history, the generational epicenter has tilted from youth to age. Throughout the world today, there are more people age 65 and older than the entire populations of Russia, Japan, France, Germany and Australia—combined. Moreover, older people are not only increasing in number; they are living longer, and aging into—and with—disabilities.

Most would agree, however, that it's time to recognize the increasing interdependency of aging and disability, and explore new ways to accommodate the interlocking needs of both. But achieving the required results requires one to first acknowledge the interconnections that link these truths:

- Young people grow old.
- Disabled people grow old
- Young people can be disabled
- Old people can be disabled.

The point is that developing a new generation of truly "universal" designs, which accommodate any or all of these four life situations, involves a mind-set shift from a 'utility' model: emphasizing function, accessibility, and adaptation—to a 'values' model: serving users' needs, wants, and desires. The difference is the key to answering the "why" question.

The 'utility' model produces designs for products and environments that focus on accommodating the special needs of disabled people or those with physical or sensory limitations. Such designs, of necessity, comply with 'topdown' governmental and organizational standards, and are prescribed framework of priority criteria based on а (dimensions, layouts, sizes. locations, orientations, clearances, etc.) imposed by laws, codes, regulations, and standards developed by and for architects, planners, and others responsible for ensuring physical and sensory accessibility. Because emotional, psychological, or sociological issues are not normally addressed, the 'utility' model tends to produce sterile solutions, often conveying negative connotations.

The 'values' model, in contrast, expands and builds upon the 'utility' model. It produces designs conceived using priority criteria imposed 'bottom-up,' guided by user expectations. Designs created using the 'values' model infuse the 'utility' with user-sensitive, model value-added perceptions, components, and features. It produces desirable products and environments, attractive to people of all ages and abilities, without penalizing any group. The 'values' model satisfies consumers' desire by translating their expectations into thereby maintaining positive reactions, self-respect, extending independence, and promoting satisfaction.

Vogel, Cagan, and Boatwright, in their book, "The Design of Things to Come," explain values this way: "Value is the connection of a user to a product in a way that augments his lifestyle and makes his activities easier and better. Value is the product's ability to fulfill wishes, to meet expectations of fantasy."

They divide the values model into seven discrete classes that they call "value opportunities."<sup>2</sup>

- Emotion (what expectation or fantasy do people expect?)
- Ergonomics (the sensor and physical interaction with the product.)

- Aesthetics (sensory interactions in experiencing the product.)
- Identity (the physical statement of brand identity.)
- Impact (societal influence connected to and addressed by the product.)
- Core technology (the functions that enable performance.)
- Quality (Manufacturing quality and expected performance over time.)

It should be apparent that, to be truly "universal," products and environments must integrate—seamlessly and holistically—the attributes of both the 'utility' model and the 'value' model. Designs that neglect 'utility' considerations typically discriminate against the needs of those who rely on physical and sensory accommodation.

On the other hand, accommodating designs that neglect 'value' considerations risk being undesirable, unattractive, stigmatized, and rejected by those for whom they are intended to serve.

Genuine "design-for-all" is only achieved by merging the 'utility' and 'values' models. And this happens through pragmatic innovation, which requires perforating the boundaries that separate traditional disciplines to permit the cross-blending of conceptual problem solving. It also requires integrating new enabling technology with the desires and expectations of both disabled and aging consumers. "Continue to rely on established standards and solutions," is the old way. "Explore innovative ways to provide an equitable total product or environmental experience," is the new way.

Such a "new way" example is "This Bold House"—what the AARP called "the world's most accessible house."<sup>3</sup> The magazine's featured article exposed the house's cutting-edge features to 30-milion aging readers, introducing them to the values of "transgenerational" design—offering aesthetic, innovative, transparent accessibility—a concept not being overlooked today by multi-national manufacturers.

Evidence shows that the 'transgenerational' message is contributing significantly toward accomplishing our global agenda. The world is listening to our collective messages. We see marketing and ergonomic researchers examining the aging/disabled consumer relationship; businesses identifying potential new integrated markets and redefining their business models; high-tech research labs stimulating the development of new accessible electronic communication solutions; municipalities improving the accessibility of the urban landscape; and global companies courting elder markets by adopting a 'transgenerational' design strategy.

But, much remains to be accomplished. We need: (1) expanded 'values' research and more business/university partnerships to translate consumer expectations into

desirable, accessible technology; (2) greater emphasis on educating consumers to look for, and recognize, 'values' in the products they buy; and (3) essential knowledge and information injected into the curriculums of all accredited academic programs serving the international design community.

Most of all, we need a new breed of pragmatic design innovators—in government, business, and academia—who support and accommodate the full spectrum of specialized consumer needs, wants, and desires; whose product and environmental designs are developed from user desires—not imposed by fiat; and who start with blank sheets of paper to conceive tomorrow's innovative 'transgenerational' products and living environments that will delight our senses, fulfill our fantasies, and gratify our soul.

Are we up to it?

It will be interesting look back and review our progress after another quarter of a century has passed.

<sup>1.</sup> Pirkl, James J., and Anna L. Babic. *Guidelines and Strategies for Designing Transgenerational Products*. Acton, MA: Copley Publishing, 1988.

- Vogel, Craig M., Johnathan Cagan, and Peter Boatwright. *The Design of Things to Come*. Upper Saddle River, NJ: Wharton School Publishing, 2005.
- 3. Luscombe, Belinda. "This Bold House." *AARP The Magazine*. (September/October 2003).

# Roundabouts for All:

Construction of Roundabouts also useable by pedestrians with visual impairment -Specifications and Requirements in Germany Markus Rebstock / Mathias Wilde Transport and Spatial Planning Institute University of Applied Sciences Erfurt, Germany

Roundabouts have been revived in Germany as well as in other countries over the last years. However, in contrast to roundabouts with large diameter, constructed until the nineteen-sixties, today the main focus lies on the construction of small and mini roundabouts. Roundabouts of this kind are commonly considered to be comparatively safe traffic facilities. For example, small and mini roundabouts exhibit a more favourable accident-balance compared to conventional junctions controlled by traffic lights. Additionally, they produce less serious accidents and a reduction in speed. Generally spoken, roundabouts, in differentiation to other types of junctions, calm down the traffic in the area of the roundabout as well as in the streets, which approach the intersection.

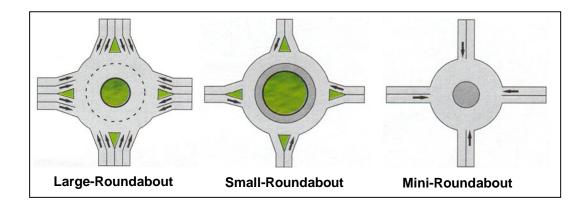
The article shows the state-of-the-art of science and technology in Germany in relation to the design of small and mini roundabouts, focusing on the specific concerns of people with visual impairment. Furthermore, solution types for an optimised barrier-free design of small and mini roundabouts in urban areas are presented. This was compiled by the Transport and Regional Planning Institute in co-operation with representatives with disabilities and is part of the project "Equal Opportunities in Transport Systems".<sup>ii</sup>

## The three basic types of roundabouts

In Germany urban roundabouts have been categorized in three basic types according to their dimension and performance. These types are based on the number of carriageways and size (fig. 1):

- Large-Roundabouts have more than one lane (typically two to four), an inscribed circle with a diameter larger than 35 meters and frequently have traffic lights regulating the traffic flow during the rush hours.
- Small-Roundabouts are equipped with tilled centre islands, no more than one lane around the central hub and with an inscribed circle diameter between 26 and 35 meter.<sup>ii</sup>
- Mini-Roundabouts as the tiniest type have traversable centre islands, only one lane like the small kind and an inscribed circle diameter between 13 and 26 meter.<sup>ii</sup>

Fig. Error! Main Document Only.: Basic types of Roundabout<sup>ii</sup>



The minimum circle diameter for small-roundabout with 26 meter provides more space so that large vehicles like busses or trucks can drive around the tilled centre islands without further complications. Due to the minimum measurement for regular double lane intersections the circle diameter at mini-roundabouts is set with 13 meters.<sup>II</sup> Traffic

lights usually installed at large-roundabouts are makes it easier for pedestrians to cross the carriageway. At these controlled junctions pedestrians with visual impairment also have fewer difficulties to find the pedestrian crossing and use it in a safe way since the traffic lights are equipped with acoustic orientation signals.

#### Roundabouts from the perspective of pedestrians

Contrary to the benefits of roundabouts for the traffic flow with a significant advantage in security it especially comes to substantial problems at this kind of intersections in urban areas for blind and visually impaired as well as elderly pedestrians. In spite of these problems for handicapped pedestrians there are no consolidated findings about the design of roundabouts, especially for barrier-free the security-needs of the blind and visually impaired pedestrians.<sup>II</sup> In complete contrast, a lot of scientific publications in Germany explicitly point out that the safety gain for pedestrians at roundabouts are particularly large. The safety gain is justified by generally slower traffic and a wellobservable circulation area for pedestrians.<sup>ii</sup> The German manual of the local traffic planning stated that the security level at roundabouts got a very positive evaluation and that overall there are rarely critical situations between the traffic flow and pedestrians at this kind of intersections. On the other hand, an interrogation of pedestrians in the same

manual also shows problems. According to the interrogation 70 % of the pedestrians at roundabouts in urban areas are feeling save and 90 % are content with the situation, but this outcome means also that 30 % of the pedestrians do not feel save and 10 % are dissatisfied with the solution at roundabouts. As a desire for improvement the majority of the pedestrians demand zebra crossings at all traversing places around the roundabout.<sup>ii</sup> All in all the official recommendation stated that pedestrians have serious problems no at roundabouts. However, the short distance to the roundabout lane makes it more difficult to judge whether a vehicle leaves the circulation area or not. Because of this it is recommended to install save crossings with pedestrian refuges and zebracrossings at every junction.

Nevertheless of the installation of safe crossings, roundabouts mean in particular a basic disadvantage for pedestrians with visual impairments. Like that it is difficult for pedestrians, particularly with visual impairment, to differentiate the direction of the traffic flow at roundabouts only by their acoustic perception. Furthermore, there are no silent phases in the traffic flow, as they for example exist at junctions controlled by traffic lights, which also means a special orientation problem through the absent of quiet periods in the traffic flow, which complicates the acoustic navigation. In this way small and mini-roundabouts are more or less producing a "No-Go-Area", such a taboo zone for pedestrians who are blind or visually impaired. This means in practice, that blind or visually impaired pedestrians circumvent roundabouts in large distances.

Overall the official information guide for roundabouts from the US Department of Transportations stated to the fact that "more research is required to develop the information jurisdictions need to determine where roundabouts may be appropriate and what design features are required for people with disabilities. Until specific standards are adopted, engineers and jurisdictions must rely on existing related research and professional judgment to design pedestrian features so that they are usable by pedestrians with disabilities."<sup>ii</sup>

Specifications and Requirements for barrier-free small and mini-roundabouts

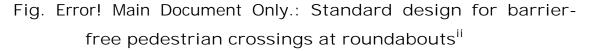
To solve the problems and difficulties for blind and visually impaired people at small and mini-roundabouts a passable solution was compiled in 2005 by the Transport and Regional Planning Institute in co-operation with the Thuringian association of blind and visually impaired people. This prepared specification refers to minimum standards and requirements for small and mini-roundabouts in urban areas.

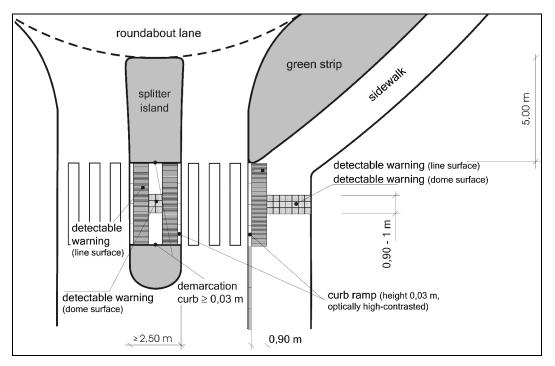
As a basic principle the general requirements for barrier-free footpaths have to apply for all public ranches as well as for footpaths at roundabouts. These requirements principally reflect the needs of the independent mastering of ways as well as safety and fearless stay in the public area for all pedestrians. It also means the independent finding and understanding of given information. Furthermore important is the possibility to use the transport systems, particularly the public transport. Also necessary is furthermore an adequate supply of possibilities for maintaining or regaining the wellbeing (e.g. benches) and there independent finding. Beyond this, the general construction standards of barrier-free footpaths consider above all the following points:

# the dimension, banking and surface condition of the footpath,

- the differentiation, levelling and zoning of the footpath,
- the condition for good orientation and a good path guidance,
- the provision of security as well as
- the design and equipment of the pedestrian crossings and traffic lights.<sup>ii</sup>

Beyond these general specifications, there are special requirements for footpaths and pedestrian crossings at roundabouts. Figure 2 shows an example of a barrier-free design of a pedestrian crossing at small and mini roundabouts. The details are to be introduced as follows.





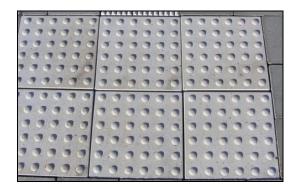
- 1. Pedestrian crossings for all relevant directions and relations with an identical design along the roundabout.
- 2. Outside the crossing has to be а well-prepared differentiation between lane and footpath. This means avoidance of curbstone subsidence outside of the pedestrian crossings as well as at the junctions in the range of the roundabout, in this case the minimum height of the curbstones is 10 cm. Grass stripes (or similar) are an additional separation between the circulation area and the pedestrian zone.

- 3. Good conditions of visibility at the pedestrian crossing are necessary. There has to be a balanced as well as nondazzling lighting, which sufficiently brightens and adapts to the surrounding. Avoidance of shadow zones is recommended. The providing of good observableness and visibility with an unrestricted and early view relation at the crossing is furthermore necessary for the pedestrian's security. This also includes the avoidance of parking facilities.
- Bicycle traffic routing on the carriageway. Combined cycle and pedestrian sidewalks should not be built; these are a potential danger for blind and visually impaired pedestrians.
- 5. The pedestrian crossing has to be built in a distance of five meters from the roundabout lane. A larger distance is not recommended because of the long detours and the difficulties of blind and visually impaired pedestrians to find the crossing. Because of a higher car speed there is furthermore an extended accident risk for the pedestrians at crossings which are in a larger distance than five meter to the circulatory lane.
- Splitter islands (pedestrian refuge) should be principally built at all crossings. On the splitter island the pedestrian crossing should be built with a distinction to the side by a minimum 3 cm high curb.

- 7. For blind and visually impaired pedestrians zebracrossings are fundamental for a safe and fearless crossing. Therefore, and in order to receive a clear regulation, zebra-crossings along all junctions are essential.
- 8. The holding points at the crossing as well as at the refuge should be equipped with detectable warnings. These detectable warnings should be placed on the footpath along the whole width of the walkway and directly in front of the curbs with a width of 900 mm. The surface of the marking paving tiles are configured with lines and aligned in the walking direction (fig. 3). For detectable and acoustic matters the line space has to be more than 20 mm.
- 9. Beside the detectable warnings at the walkway there are also detectable paving tiles to mark the correct crosswalk at every leg of the roundabout. These additional detectable warnings are placed along the whole width of the footpath in a depth of 900 to 1.000 mm. The paving tiles are with a dome configured surface (fig. 4). Those detectable warnings are right-angled to the middle of the warning strip at the crossing place; that means a "T"-shaped alignment of the detectable guiding system.

Fig. Error! Main Document Only.: Detectable warning - line surface Fig. Error! Main Document Only.: Detectable warning - dome surface





- 10. The detectable warnings and guiding lines have to be optically high-contrasted to the footpath. The ideal contrast for guiding systems is obtained with a bright detectable warning pavement and an additional dark strip beside the warnings.
- 11. The curbs along the whole crossing area and the pedestrian island have to be lowered to a curb ramp. The ramp at the walkway must have a height of 3 cm (10 % tolerance). In Germany this height is a settlement between wheelchair- users and people with visual impairments. Wheelchair-users are able to negotiate this height with no further complications and, on the other hand, for visually impaired people the height of the curbs is sufficient to detect the separation between the lane and the footpath.
- 12. For safety reasons, bus stops and parking lots should be located as far away from the pedestrian crossing as

possible. In addition to the arrangements structural and/or traffic-legal measures have to be proved in order to avoid vehicle stops at the walkway.

## Conclusions

Roundabouts have been revived over the last years. However, for blind and visually impaired pedestrians roundabouts are a special challenge. In order to enable handicapped people to move independently in public areas it is necessary to provide them with as much assistance at roundabouts as possible. The presented specifications and requirements for barrier-free roundabouts are an agreeable solution to achieve an accessible environment for all pedestrians. Nevertheless, in order to plan the construction of junctions, benefits, strengths and weaknesses of roundabouts and junctions controlled by traffic lights have to be balanced.

The presented specification for barrier-free small and miniroundabouts are actually edited by the Thuringian Representative for handicapped people and is available on the homepage of the Thuringian Ministry of Health, Social and Family Affairs.

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# Design for All in Italy: the results of an interdisciplinary workshop

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## Introduction

The paper reports the main results of an interdisciplinary workshop (see Appendix), organised at Milan, Italy, by the Italian Ergonomics Association to discuss the Design for All approach, and coordinated by Pier Luigi Emiliani, Italian National Contact Centre of the European network EDeAN and by Isabella Tiziana Steffan, European Ergonomist.

At a very general level, the aim of the Design for All approach is to improve the quality of life of all people, irrespective of their personal characteristics and environmental factors. It therefore cuts across much professional expertise and many sectors of application, for example, transportation, public parks and gardens, the design of buildings, rooms, furniture and objects, education, and, more recently, the emerging complex ICT environment. Moreover, legislation, policy and economy are involved.

In Europe, the ICT environment has been an important support for an understanding of the Design for All approach at a political level. Indeed, the European political push towards the development of an Information Society accessible to all has put Design for all at the core of technological development. In particular, in Italy, legislation (Law 4/2004 - "Disposizioni per favorire l'accesso dei soggetti disabili agli strumenti informatici") has been enacted which defines the minimum accessibility levels to information and information systems to be guaranteed to public employees and citizens. Even if it starts from the need to grant accessibility to people with disabilities, this legislation aims to improve the quality of information services for all citizens and to constitute a model for private enterprises in their interactions with clients. One

of the main features of the legislation is a built-in flexibility to match the continuously varying needs of users.

Therefore, in order to improve the application possibilities of this principle, it has been considered important to compare the different experiences, discuss the underlying concepts, and present, whenever possible, concrete applications in I taly and in Europe.

The ergonomic environment appeared particularly suitable for an interdisciplinary discussion between experts who are apparently very disparate as regards the nature of their professional work, which ranges from industrial design to telecommunications and information technology. In fact, the final goal in all sectors is to produce objects, systems, and services that are easily usable and enjoyable by the final user. Ergonomics, as a bridge between human sciences and physical sciences, provides a common ground for discussion.

## Design for All: the conceptual level

It is interesting to consider the connections between Design for AII, ergonomics, and design in general, as emerges from the recent conceptual developments in ergonomics and the new methodological instruments produced by WHO as the ICF classification "International Classification of Functioning, Disability and Health", published in 2002, and the normative instruments set up by ISO with the standard 20282 "Ease of operation of everyday products".

The convergence between Design Ergonomics and Design for All starts from a special attention to the characteristics and needs of a real user within a specific context of use, choosing which type of ergonomics deals with any specific intervention. Its approach to design requires a change in emphasis from the definition of standardised user profiles, traditionally defined as the correspondence between specific needs and physical and cognitive characteristics of the users, to the identification not only of real user needs, but also of their requirements and preferences. This implies surpassing the traditional evaluation of the "ability/disability levels", which is insufficient to capture the inherent differences between human beings, and aiming at a design approach that is centred on the real needs and expectations of people with different ages, levels of autonomy, and health conditions, which may change during their lifetime (see Workshop Program – Tosi)

For example, in the architectural design of the city environment and in the industrial design, the Design for All approach does not represent a new modality of design, but identifies a process and a cultural attitude that aim to use diversity as an added value. From the second part of the 60's on the European cultural approach, but also the Italian one, moved from the idea of Design for special needs (special products conceived for special users) and the idea of an Architectural Barriers Free Design (focused on removing existing barriers) to a more holistic concept of design such as "Inclusive Design", "Universal Design" and "Design for All". Unlike in Anglo-Saxon and Scandinavian countries, in Italy, in the 50's and 60's architectural barrier free design and accessibility was not a widespread matter. The first approach was taken in 1965 when two associations in Rome organised an international conference in Stresa (on Lake Maggiore) considering "architectural barriers"<sup>ii</sup> as the main topic of discussion. Since then the field of architectural design attentive to the handicapped features in Italy a wide legislation. In Italy the referring technical legislation is about architectural barrier free design: D.P.R. 384/78 (replaced by DPR 503/96) was a legislative cornerstone in the area of public buildings and spaces and those open to the public, even though it was ignored for many years by operators and public In addition to dealing with public and administrations. private means of transport, art. 24 of Law 104/1992 also governs building aspects and accessibility of public walkways and pedestrian crossings as well, including with acoustic traffic lights for the blind and signs installed in a manner not to impede crossing. Also important are Law 13/1989, which

extends the field of application to both private and public residential buildings, and the decree implementing it, DM 236/1989, which, with DPR 503/1996, is now the reference point at state level for all public and private places [1].

Ergonomics as a multidisciplinary and interdisciplinary approach is connected with Design for All thanks to its attention to concrete applications and to its characterisation as a User-Centred design approach. In this specific application environment, the DfA approach aims to implement physical spaces, products, services and organisational modalities that:

- can be used in complete autonomy and with a minimum of adaptation, while offering security and comfort;
- satisfy the needs of the maximum possible number of users without the need for adaptations or a specialised design.

In order to comply with the above requirements, it is important to:

- include in the analysis all possible users, including those who up to now have been excluded or insufficiently considered;
- offer alternatives through a design that take into account the needs, requirements and preferences of users who are disabled or differ in some way from the average user;
- merge the concept of accessibility with those of usability and usage satisfaction;

- emphasize the importance of a multi-sensorial approach and of the expressive and aesthetic aspects;
- involve users in the design and evaluation. (see Workshop Program – Monzeglio)

It is important to take into account the fact that Design for All must not be only concerned with the design of objects and systems, but must also aim to develop learning methodologies accessible to all, especially by taking into account people with cognitive disabilities (see Workshop Program –Ippoliti). In Italy, due to the application of Law 68/99, an increasing number of people with disabilities are being integrated into the private industrial sector. At present, the problem is to conserve working positions by means of continuous training. Within this environment, the Lombardy Region and the Province of Bolzano (with the cooperation of the Regions of Campania, Latium, Liguria, Marches, Sardinia, Sicily, and Aosta) have started a project aimed to dealing with the continuous training of people with disabilities who are working in industry.

As regards ICT, the aforesaid general concepts are the final conclusion to a long development that started from the need to give people with disabilities access to information technology, equipment, and applications and to telecommunications services [2]. The main difference is that, when an interest in information technology and telecommunications for people with disabilities arose, а variety of equipment (e.g. personal computers) and terminals were already available. They had been developed for "average" users, that is, for users with well-defined physical abilities. Therefore, the and cognitive only possibility available was to make them available to users with disabilities by using ad hoc adaptations (Assistive Technology), which involved problems connected to the high cost and the delay with respect to those for other users. Consequently, the Design for All approach was considered to be a good opportunity to identify product specifications by taking into account the needs, requirements and preferences of all potential users, and thus to meet the needs of most potential users without the necessity of specific adaptations. However, when it is attempted to transfer this approach for the environments in which it was developed (architecture and industrial design) to the development of equipment, services and applications in ICT, certain problems arise. This is true in the design of human-computer interfaces, where the idea of designing an interface which is valid for all appears simply utopian, but is particularly critical when the new development of the Information Society is taken into account. According to pertinent documents of the European Union the [3], intelligent environments are supposed to emerge. Social environments will evolve that will integrate computational systems which permit interconnected intelligent devices embedded in a physical environment to support activities

mediated by technology and access to services. These environments are supposed to exhibit increasing "intelligence" for support of users, depending on their characteristics and on the contexts of use. In fact, some of the foreseen features are starting to be incorporated in the emerging telecommunications services, which tend to be reconfigurable in real time in order to accommodate varying needs and contexts of use, to mix functions of access to information and interpersonal communication, to be interactive, multimedia and multimodal in order to address different sensorial and motor abilities, to enable cooperation between users themselves and users and their representatives (agents and/or avatars). This requires the use of Design for All concepts in order to simplify the necessary interactions, by increasing the complexity of the systems at levels that are not visible to the users and by offering interactions that use known metaphors in order to be easily understood and managed by most potential users.

As discussed in the following section, one possible solution to the problem is to introduce enough intelligence into the devices, systems and services to make them automatically adaptable to the different users and contexts of use and adaptive to the way in which they have been used.

## DfA in practice

A first, interesting example of the Design for All approach presented at the workshop is the design of an object for everyday use, namely a door handle, as an object meant to satisfy the requirement of being able to move freely in the home without encountering physical and psychological barriers (see Workshop Program – Bianchetti). It has an innovative form, which makes the object pleasing to the eye, easy to grasp by people with apprehension problems, and usable by people of different heights, children, adults, and people in wheelchairs.

An interesting example of application of the Design for All at the system level is in the environment of tourism where, starting from the design of accessible spaces for people with disabilities, it has become clear that, in addition to clarifying user needs, it is necessary to consider the organisation of tourism and reception as a complex system that takes care of all the needs of all potential clients. The system is made up of the following subsystems:

- design and management
- reception
- information and communication
- education and training

and requires the integration of different disciplines. It is an interesting example of synergy between industrial design and ICT.

This field of activity has received a lot of attention at the Italian and European levels. Examples of this are:

- the "Albergo in via dei Matti n.0" project (funded by the European Project Equal [4], which deals with inclusion, reception and accessibility in a hotel environment;
- The C.A.R.E. Project (funded as a part of the European Interreg-Cadses Project), which is aimed at sharing common strategies for the development of accessible cities;
- The "Assoviaggio" Project (supported by "L'altra Romagna" in the frame of the European initiative Leader+), whose objective is the production and dissemination of information for promoting localities, buildings and services accessible and/or usable by all.

An interesting example mentioned of design according to the Design for All approach is a hotel in which there are no special rooms with dedicated bathrooms for people with motor disabilities, but each bathroom is adaptable according to the abilities of the user.

In ICT, the situation is more complex from the perspective of application. It is clear that in considering, for example, the problem of the human-computer interface, it is impossible to use a technical approach like the above-mentioned one used in the design of the door handle. No single human-computer interface will be good for everyone. Therefore, a different conceptual and technical approach has been proposed, according to which "Design for All" implies the production of intelligent architectures that are able to adapt the information content and the human system interface to the needs of the individual users. Therefore, everyone is served, because the system is able to offer to each of them the needed individual representation of information and interface.

The question is whether this is possible or a utopia. Several projects have been carried out within the framework of the research programmes of the European Union. In the ACCESS project [5], it has been shown that it is possible to design adaptable and adaptive human-computer interfaces. In AVANTI [5], the interfaces have been implemented and the approach has been generalised in regard to the information contents of Web services. In Palio [5], the approach has been generalised regard to mobile systems in and to а consideration of the context of use.

Moreover, "ambient intelligence", where adaptivity is a general feature that characterises the environment, appears to be the prevailing paradigm in the development of the Information Society, thus confirming the soundness of an approach based on adaptability and adaptivity. The use of available technology to make possible an increased integration of all citizens has also been presented (see Workshop Program – Zoels). Examples of this are:

- Integration of the mobile telephone with orientation and navigations systems;
- The "Access!" service from Nokia, which uses the cell phone and the web to distribute relevant information for moving around. It is possible to download multimedia information that shows how to overcome physical obstacles or helps in planning the trip.

### DfA in Europe

In order to favour comprehension of the Design for All approach, the EDeAN network (European Design for All e-Accessibility Network, http://www.e-accessibility.org) has been set up in Europe, and includes at the moment more than 160 organisations. Its objective is to favour discussion and the exchange of information regarding related topics and to disseminate the relevant knowledge in public and private environments. The network activity is based on a complex and efficient information and telecommunications infrastructure, which makes an accessible support available for.

## Conclusions

Dissemination results as an essential aspect in order to increase the application of this approach. Therefore any event, such as meeting, conference, or workshop, aiming to discuss even only some particular aspects of this approach can give a positive contribution. Moreover, as this approach can be used in a large number of sectors, in which is very difficult to find a common language, the comparison among implementations in different fields of applications is to foster, because it demonstrates how the same principles can o must be apply or modified in order to meet different needs of the context.

In order to carry on this discussion, a second workshop will be held in Milan, in February 2007. This workshop, organized by Italian Ergonomics Association- sezione Lombardia, the Faculty of Design of the Politecnico di Milano, the Italian National Research Council and the European Design for All eAccessibility Network), will investigate the relationship between Ergonomics and Design for All in Italy and in Europe.

#### References

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[2] EDEAN - European Design for all eAccessibility Network Italian Network web-site – Technical documents section– <u>http://www.it-edean.ifac.cnr.it/EDEAN/ documents/db-srv-</u> results.xsp?type=technical

[3] Ducatel K., Bogdanowicz M., Scapolo F., Leijten J., Burgelman J-C. (2001). ISTAG - Scenarios for Ambient Intelligence in 2010 – Retrieved February 24, 2005 from http://www.cordis.lu/ist/istag.htm

[4]EQUAL

http://ec.europa.eu/employment\_social/equal/index\_en.c fm

[5] EDEAN - European Design for all eAccessibility Network Italian Network web-site – Projects section - <u>http://www.it-</u> edean.ifac.cnr.it/EDEAN/ projects/projects.xsp

NEWS: 1.

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11 February 2006
Workshop "Design for All"
(coordinated by Isabella Tiziana Steffan and Pier Luigi
Emiliani)
Introduction
          I. T. Steffan, P. Emiliani
DfA in the European Society e in the Design world.
          (Francesc Aragall - Beppe Benenti Design for All
Foundation)
Design for All in the world of associations: Italian Institute of
Design and Disability
          (Marcella Gabbiani, President IIDD)
Design for All in the world of associations : European Centre
of Research and Promotion of Accessibilità
          (Leris Fantini, Vice-president CERPA)
Design Sector
Ergonomics and Design for All
          (F. Tosi, Professor Politecnico di Milano)
DfA approach in urban design, Architecture and objects
Design.
          (Eugenia Monzeglio, Professor
                                              Politecnico di
Torino)
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Forniture for All and urban scene

(Marcello Balzani, Professor University of Ferrara, Department of Architecture)

Tourism for All: product, environment, information

(Leris Fantini, Association Si Può – National Lab for accessibile tourism)

DfA application in an object of daily use

(Fabrizio Bianchetti, designer)

Information Sector

Italian Legislation in Design for All

(R. Ridolfi, CNIPA member and President of the Government commission for the use of ICT in favor of disabled and disadvantaged people)

Design for All in the Information Society

(Pierluigi Emiliani, Director of the Institute for Applied Physics of Italian National Research Council) The EdeAN European Network

(Renzo Andrich, SIVA - Isabella T. Steffan, IIDD) Interactive products

(Jan-Christoph Zoels, Experientia)

Design for All in the design of learning methodologies.

(Isabella Ippoliti, SIS Consortium System Social Company)

Discussion and conclusions

2. 12th International Conference on Human-Computer Interaction

jointly with:

Symposium Human Interface (Japan) 2007 7th on International Conference on Engineering Psychology and 4th International Conference on Cognitive Ergonomics Universal in Human-Computer Access Interaction 2nd International Conference on Virtual Reality 2nd International Conference Usability and Internationalization on 2nd International Conference on Online Communities and Social Computing 3rd International Conference on Augmented Cognition 1st International Conference on Digital Human Modeling

What's new:

On-line registration is available through the CMS – early registration period ends 27 January 2007. The Conference Advance Program is available Professor Takeo Kanade is the keynote speaker for HCI International 2007. The guidelines for the preperation of the camera-ready papers and the extended poster abstracts are available. Conference contacts General Chair Constantine Stephanidis University of Crete and FORTH-ICS, Greece Email: <u>cs@ics.forth.gr</u>

Scientific Advisor Gavriel Salvendy Purdue University, USA and Tsinghua University, P.R. China

Conference Administration Email: <u>administration@hcii2007.org</u>

Program Administration Email: program@hcii2007.org

Registration Administration Email: <u>registration@hcii2007.org</u>

Student Volunteer Administration Email: <u>sv@hcii2007.org</u>

Communications Chair and Editor of HCI International

News Abbas Moallem Email: <u>news@hcii2007.org</u>

Organizational Board, P.R. China Chair: Patrick Rau

Tsinghua University, P.R. China

Department of Industrial Engineering

Email: rpl@mail.tsinghua.edu.cn

Bo Chen, Zhongsuo Xiaolan Fu, Chinese Academy of Science Zhibin Jiang, Shanghai Jiao Tong University Congdong Li, Jinan University Zhenjie Liu, Dalian Maritime University Mowei Shen, Zhejiang University Yuanchun Shi, Tsingua University Hui Su, IBM China REsearch Lab Linyang Sun, Xian Jiao Tong University Ming Po Tham, Honeywell Labs Ben Tsiang, Sina Online Jian Wang, Microsoft Research Asia Guangyou Xu, Tsinghua University Winnie Wanli Yang, Lenovo R&D Shuping Yi, Chongqing University Kan Zhang, Chinese Academy of Sciences Wei Zho, Siemens China

3. e-Sangathan Newsletter Volume 1 available on web page

www.esangathan.eu

Dear Colleague,

Project eSangathan - virtual work spaces for those aged 45 and over - started in the fall of 2006. This Euro-Indian project is about to conduct an innovating virtual experiment with employees aged 45 and over wishing to continue working longer or wishing to start working professionally. The advantages of the virtual work space are quite evident in The Netherlands with regard avoiding train and freeway congestion. eSangathan is financed by the European Commission and will continue until late 2008. Ten Newsletters will be published. The link to Newsletter number 1 can be found above.

A note for your agenda for 2008: a European Congress and an International Congress in India.

Two Good Practice pilots - Two long-term Good Practice pilots are being set up (via Mayetic Village / MS Sharepoint) in a virtual work space - a so-called CWE, a Collaborative Working Environment - in order to research how the 45 and over work and produce in virtual work spaces. This will be conducted using various special IT tools and dedicated process technologies such as Inquiring Systems Thinking, The Socratic Dialogue, Team Syntegrity and Kubusnet. A virtual working environment supports

people (e.g. E-professionals) in their individual and cooperative work, aiming to enable innovation and promotion of SMEs. The knowledge gained in the project will ultimately be documented in a Business Plan. Partners - The Dutch partner, the Age Proof Agency, was contracted for their expertise in age-related policy making and its many facets which relate to age and employment. The other contracted organisations have expertise in the fields of eWork, ICT, CWE and telework. Pilots are being conducted in Sweden and in India . Denmark , The United Kingdom and France (as coordinator) are also involved in this project.

Do you wish to stay informed? - We have you noted as being a well-respected colleague of Marianne Ziekemeyer of the AgeProof Agency and/or of Prof. Kees Knipscheer gerontology, who is also involved as a Dutch advisor in this project. We will e-mail you again when the next Newsletter is published. We also invite you to talk with us about everything experienced during the project. We are on the lookout for organisations, groups, and political parties interested in the design and the development of virtual work spaces for the 45 and over.

Should you not wish to receive the Newsletter please let me know as soon as possible.

Yours truly,

Marianne Ziekemeyer

AgeProof, experts in leeftijdbeleid

bureau@ageproof.nl

www.ageproof.nl

T/F +31 20 6766050

Amsterdam

4. Global Aging Program: Events Calendar

Reinventing Retirement Asia March 2007 Tokyo, Japan

Conference Website:

www.aarp.org/retirementasia

# 5. NATIONAL DESIGN POLICY

THE UNION CABINET TODAY APPROVED THE NATIONAL DESIGN POLICY. THE DETAILS ARE AS UNDER :

The vision for a National Design policy envisages the following:

i. preparation of a platform for creative design development, design promotion and partnerships across many sectors, states, and regions for integrating design with traditional and technological resources; ii. presentation of Indian designs and innovations on the international arena through strategic integration and cooperation with international design organizations;

iii. global positioning and branding of Indian designs and making "designed in India" a by-word for quality and utility in conjunction with "Made in India" and "Served from India";

iv. promotion of Indian design through a well defined and managed regulatory, promotional and institutional framework;

v. raising Indian design education to global standards of excellence;

vi. creation of original Indian designs in products and services drawing upon India's rich craft traditions and cultural heritage;

vii. making India a major hub for exports and outsourcing of designs and creative process for achieving a design-enabled innovation economy;

viii. enhancing the overall tangible and intangible quality parameters of products and services through design;

ix. creation of awareness among manufacturers and service providers, particularly SMEs and cottage industries, about the competitive advantage of original designs;

x. attracting investments, including foreign direct investments, in design services and design related R&D; and

xi. Involving industry and professional designers in the collaborative development of the design profession.

achieve this vision would focus The strategy to on strengthening guality design education at different levels, encouraging use of designs by small scale and cottage industries and crafts, facilitating active involvement of industry and designers in the development of the design profession, branding and positioning of Indian design within India and overseas, enhancing design and design service creating enabling environment exports, and an that recognizes and rewards original designs.

## ACTION PLAN

The Action Plan for implementation of the National Design Policy will have the following components:

(i) Setting up of specialized Design Centers of "innovation Hubs" for sectors such as automobile and transportation, jewellery, leather, soft goods, electronics/IT hardware products, toys & games which will provide common facilities and enabling tools like rapid product development, high performance etc. visualization, along with enterprise incubation as well as financial support through mechanisms like venture funding, loans and market development assistance for start-up design-led ventures, and young designers' design firms/houses.

(ii) Formulation of a scheme for setting up Design Centres/Innovation Hubs in select locations/industrial clusters/backward states, particularly in the North East.

(iii)Preparation of a plan for training of trainers and for organizing training programmes in specific processes/areas of design and continuing education programmes for practicing designers from Design Centres/Innovation Hubs.

(iv) Preparation of a mechanism for recognizing and awarding industry achievers in creating a brand image for Indian designs through the award of a India Design Mark on designs which satisfy key design criteria like originality, innovation, aesthetic appeal, user-centricity, ergonomic features, safety and eco-friendliness.

(v) Encouraging Indian firms and institutions to develop strategic alliances with design firms and institutions abroad to gain access to technology and know-how improving Indian design.

(vi) Creating mechanisms for sustainable quality improvement in designs in India.

(vii) Laying special focus on up-gradation of existing design institutes and faculty resources to international standards, particularly the National Institute of Design (NID) and its new campuses/centres. With a view to spreading quality education in designs to all regions of India, four more National Institutes of Design on the pattern of NID will be set up in different regions of the country during the 11th Five Year Plan. The possibility of new models for setting up of such institutes, in keeping with the current economic and educational paradigms, will be explored. In this context, the public-private partnership mode could also be an option.

(viii)Initiation of action to seek "Deemed to be University", or 'University' under section 3 (f) of the University Grants Commission Act, status for the NIDs, so that they can award degrees of B.Des and M.Des. instead of just diplomas as at present.

(ix) Encouraging the establishment of departments of design in all the Indian Institutes of Technology (IITs) and all the National Institutes of Technology (NITs) as well as in prestigious private sector Colleges of Engineering and Architecture.

(x) Upgrading quality of engineering design, machinery design, process design, design materials, environmentally sound and socially and culturally relevant designs.

(xi) Encouraging the teaching of design in vocational institutes oriented to the needs of Indian industry, especially small scale and cottage industries, in primary and secondary schools as well as tertiary educational institutions.

(xii) Introducing short-term training courses and continuing education programmes by NID and other design institutes targeting on needy sectors and catering to the diverse sectors including agricultural and artisanal sectors.

(xiii) Organising workshops and seminars to create more awareness than at present among industrialists, particularly in small scale and cottage sectors, in different parts of India especially on the intangible aspects of design processes.

(xiv) Sustaining and strengthening India's traditional knowledge, skills and capabilities while being sensitive to global heritage so that our shop floor workers, craftsmen and artisans could be engaged in manufacture of innovative products and contemporarisation of traditional crafts for broad spectrum of uses and niche markets.

(xv)Facilitating the establishment of a Chartered Society for Designers (on the lines of the Institution of Engineers, the Institution of Architects, the 'Medical Council', the Bar Council, etc.), to govern the registration of Design Professionals and the various matters relating to standardsetting in the profession. (xvi) Setting up an India Design Council (IDC) with eminent personalities drawn from different walks of life, in particular, industry, whose functions, \*inter alia\*, would be as follows:-

Undertake design awareness and effectiveness programmes both within India and abroad;

Act as a platform for interaction with all stakeholders; Undertake R&D and strategy and impact studies;

Accredit design institutions;

Develop and standardize design syllabi, etc. for all institutions in India imparting design education;

Conduct programmes for continuous evaluation and development of new design strategies;

Develop and implement quality systems through designs for enhancing the country's international competitiveness;

Coordinate with Government to facilitate simplification of procedures and systems for registration of new designs;

Assist industries to engage the services of designers for their existing and new products;

Encourage design and design-led exports of Indian products and services including outsourcing its design capabilities by other countries;

Take effective steps towards "cradle to grave environmentfriendly approach" for designs produced in India so that they have global acceptance as 'sustainable designs'; Enable the designers in India to have access to global trends and market intelligence and technology tools for product development and innovations; Encourage close cooperation between academia and industry to produce proprietary design know-how while encouraging creation of new design-led enterprises for wealth creation; and

Encourage and facilitate a culture for creating and protecting intellectual property in the area of designs.

Letter :

1. Dear Dr. Bhatia,

thank you very much for your mail: you did a great work indeed!

I will read all the articles carefully.

To start with, you could add (if you haven't already done) these in your mailing list:

Laura Burzagli, CNR - Istituto di Fisica Applicata "Nello

Carrara": L.Burzagli@ifac.cnr.it

Pier Luigi Emiliani, director CNR - Istituto di Fisica Applicata "Nello Carrara" and responsable of the Italian NCC National Contact Centre of the EDeAN European Design for All e-Accessibility Network, (http://www.eaccessibility.org).: <u>P.L.Emiliani@ifac.cnr.it</u> Best regards, Isabella Steffan - Studio Steffan, Design&Research (about accessibility and ergonomics) e-mail: <u>info@studiosteffan.it</u>

#### 2. Dr. Bhatia-

I think that you have been able to garner very interesting articles for your issue. It is long and I need to print it out to read the whole thing off of the computer. You have a common challenge: How to explain your name with respect to your content, and perhaps some of your other word as well. For example, we are called the Center for Universal Design, but we do work in UD as well as with accessible design and assistive technology. People can get confused into thinking that accessibility (narrowly focused, disability oriented design) is the same thing as UD (mainstreamed and integrated usability features). This is one of our big challenges moving forward. People need to understand that UD won't meet everyone's needs, but it should require less accessible design, less assistive technology, and less costly alterations of places to accommodate particular needs. Because UD arose from work in the last half of the 20th Century on disability and accessibility, people still think of it as just?related to disability issues.

As you might hope, Oct-Nov 2007 are not yet booked for me.

Topics might include the reconciliation of UD,?Design for All and other related concepts.

UD/Design for All versus Accessibility

UD and Social Equity

The Cost of UD

UD versus Code Compliance

Codes versus Performance Standards

You said that you had funds to pay for travel to you

conference?

Regards,

Dick Duncan

3. Dear Dr Sunil

Wonderful article!

Please keep the momentum on for such benevolent cause Best Regards

Dr. Nina Sharma

4. Dear Sir , it is really a great experience to see the output of the newsletter . one sometimes is taken away by the articles which gives refreshment to all design processes which otherwise gets decayed in the day today activities.

thanking you again for the effort being made from your side and the team supporting you. and keeping us on the list for design insight.

wishing all the best for the growth and prosperity of the same.

with warm regards.

Sumer Singh

Assistant Professor Product Design Centre M S Ramaiah School Of Advanced Studies Gnanagangothri Campus, New BEL Road, M S R Nagar, Bangalore 560 054

5.Dear Sunil Bhatia,

Congratulations on the excellent content of the first part of your January 2007 issue of your annual Newsletter. I enjoyed reading the articles and applaud your selection of authors. The combined content is excellent and will undoubtedly be used in a wide variety of research citations. With regard to the Newsletter's announcement of my article in the next issue, I request that you correct two errors. First, the title of my article is, "New Year Reflections" not "New Reflections." Second, my name and country should be

"Professor Emeritus James J. Pirkl, FIDSA? USA" not

James Pirkl UK. Thank you for correcting these errors.

My best wishes for continued success and your Newsletter becoming an increasingly important global influence. I look forward to the possibility of collaborating with you again in the future.

My best regards.

James J. Pirkl, FIDSA Professor Emeritus jjp@transgenerational.org www.transgenerational.org

6. Dear Mr. Bhatia,

please notice that my name is MARKUS REBSTOCK, not

like you wrote in the annual newsletter. Thank you very much!

Best regards M.Rebstock

Dipl.-Geogr. Markus Rebstock University of Applied Sciences Erfurt Transport and Spatial Planning Institute phone: 0361/6700-655 mailto:rebstock@fh-erfurt.de

7. Dear Prof Bhatia Thank you for the latest newsletter. It is very inspiring and I particularly like the broad coverage and the effective illustrations. Best wishes Andrew Walker

Dear Dr. Bhatia,

I sent the latest copy of the Design for All newsletter to Dr. Peter Storkerson, editor of Design Research Quarterly.

You might like to know about each other's publications -- and perhaps share information on the respective publications with your readers.

The email address for Dr. Storkeron is:

peter@drsq.org

With best regards,

Prof. Ken Friedman Institute for Communication, Culture, and Language Norwegian School of Management Oslo

Center for Design Research Denmark's Design School Copenhagen

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The views expressed in the signed articles do not necessarily reflect the official views of the Design for All Institute of India.

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