CONTRIBUTORS

STEPHANIE BATTISTA
Guest Editor
Senior Design Program Manager Wearables, Modern Edge

ASHWINI ASOKAN
Founder Mad Street Labs

PRIYA KHANCHANDANI
Development Manager, The Victoria and Albert Museum

YVONNE LIN
Co-Founder, 4B

PATRICIA A. MOORE, PHD
President, MooreDesign Associates LLC

RIE NORREGAARD
Creative Director, Tres and Co-Founder, OMHU
The subject of Universal Design, which can be understood as design with an emphasis on accessibility and usability for all people, has begun to garner increased attention in recent years, and only now in the 21st century making greater inroads in the area of product design. While many might gain further insight by gleaning the wiki page on the subject, I would urge those of you seeking a greater understanding to peruse the writings of both Robert Mace, who coined the term “universal design”, and Selwyn Goldsmith, who authored the seminal work Designing for the Disabled in 1963, which to this day remains a primer for understanding the subject. The fact that both of these men dealt with their own disabilities as a result of polio gave them an acute insight into the daily issues affecting disabled people.

While the roots of this movement go back to the 60s, the question of how far we’ve come and how much further we have yet to go remain subjective and open-ended. It does seem clear that on the architectural front over the past fifty years, much greater strides have been made in contrast to the area of product design, due in large part because of the laws and regulations have been enacted (usually on a national level) that established baselines which had to be adhered to.

As a direct result of legislation (such as the Americans with Disabilities Act in the U.S. for instance), a series of standards was put into effect, which has been a more pronounced effect in public spaces and buildings over the past few decades. Patricia Moore, who has been at the forefront of this issue since the 70s, has remarked that many of the existing standards are woefully inadequate and would receive a “D” were she asked to give out a letter grade. She further articulated her frustration at the relatively slow, incremental pace of change in the design community and would like to see an awakening or critical mass reached in the design field as a whole.

Patricia Moore’s views were formed early in life when she saw the difficulties her grandparents experienced when growing up. As a young designer she conducted an experiment where she portrayed an elder woman from a range of socio-economic levels. There were nine distinct characters utilized in the research for nearly four years. This in turn led directly to her book about the subject, Disguised: A True Story, and reinforced many of the core principals she adheres to in the present. One of the more notable of her many achievements were her contributions to the renowned OXO product line, which rethought and re-imagined everyday kitchen and household implements. She remains active and most recently has been involved in a rail transportation project in Asia. Patricia is also regarded as an authority on the subject and is often sought out because of her extensive knowledge and sensibility about universal design honed throughout her long career.

As mentioned, the area of architecture has seen a greater implementation and actualization of universal design. A prime recent example of this being realized with very positive results can be seen at The Victoria and Albert Museum.
While this building and institution may conjure up images of rigid tradition and a resistance to change, in actual fact it stands as a showcase on how even older historical buildings can be retrofitted and updated to be both barrier free and inclusive. As articulated by Development Director Priya Khanchandani, they offer facilities for both the hearing and visually-impaired. In addition to accommodating those with mobility issues, they have gone a step further by offering speech to text scanning pens and screen-reader software. The recently redesigned New Europe 1600-1800 galleries stand as a showcase to their forward looking commitment in this area having tapped the noted London design group ZMMA. The galleries now boast an open floor plan having removed some 70s built walls and partitions and make greater use of natural lighting by uncovering long obscured windows. The museum has also shown a receptiveness to feedback and input from the general public most notably through the use of focus groups to determine how to better accommodate its patrons. A glance at the current program of events also illustrates a willingness to examine issues regarding social activism, dissent and desire for social change in such exhibitions as “Disobedient Objects”, “A World to Win (Posters of Protest and Revolution)”, and “Russian Avant Garde Theater: War, Revolution and Design”. If a venerable institution with a history dating back to 1852 can embrace a forward-looking and inclusive approach into its very modus operandi, then we should view this as a model for how other institutions and the design community as a whole can potentially move forward.

What has been conveyed and should be easily understood is how designs that might key in on those with disabilities can have broad-based value for everyone. This point can be easily understood when looking at something as innocuous as a light switch, where something as simple as a rocker switch would be preferable to a toggle by the vast majority of people, regardless of whether they have any form of disability. A recent example of a commercial breakthrough product line is the OXO good grips kitchen tools, which were introduced at the beginning of the 90’s, that over the years have garnered great acclaim and won numerous awards. This still stands as a prime example of how applying the principles of universal design can not only achieve broad-based interest and commercial viability, but how a well thought out and well-designed series of products using the principals of universal design can achieve mass appeal.

The aforementioned Patricia Moore was one of the key industrial designers involved, and it should also be mentioned that OXO has the theme of universal design written into its corporate charter. I still reflect back on my first experience with an OXO pizza cutter and can opener some years back and remember not only being impressed by the actual kitchen implements, but also thinking about why this hadn’t been done years earlier.

Another noted industrial designer who also had a hand in the OXO good grips series is Rie Norregaard, whom I had the pleasure of talking with very recently. Her modern rethinking of the traditional walking cane introduced a few years back brought a heightened sense of style in to an often-ignored area of industrial design.
RIE NORREGAARD
Creative Director, Tres and Co-Founder, OMHU
The cane is made of lightweight aluminum, is available in numerous colors, and can be perceived as a stylish and attractive accessory much the way glasses are worn today. She also remarked that universal design might not be entirely viable or practical for every product and that there are cases where this may not be desirable. I almost immediately thought of how in the world of clothing, the term “one size fits all” would evoke derision, if not outright laughter. Rie, as Creative Director of the firm OHMU, has been at the forefront of products consciously designed with the elderly and disabled in mind. I mentioned to her the plethora of products that focus on the first years of life that have flooded the market in the past several years and how in recent years I’ve noted numerous baby carriages that seem both well designed and aesthetically pleasing; although we both found amusement in the almost sports car-like design sensibility that has influenced baby carriage design in particular. She also seemed somewhat disappointed that we have not crossed a threshold or reached an epiphany in regard to a greater awareness or mass acceptance of universal design. When thinking of the huge demographic of baby boomers reaching their retirement age in recent years, I would like to think the market would be more receptive to accommodating the increasing population of older and often moneyed people who would be natural consumers, but this has yet to happen. It does seem clear that designing for peoples’ later years is less attractive to many in the field, although OHMU is helping to fill the void in this area.

Often an accepted standard or default design in a commercial product line not only falls well short of being universal, but also is often clearly designed for use by the male gender. Yvonne Lin, Co-Founder of 4B, who not long ago had the opportunity to redesign some medical devices that were clearly designed with taller males in mind with almost athletic amounts of hand strength required to operate the devices, noted this point. The issue of numerous products having been designed by men for men reflects the gender bias that exists to this day that proliferates the industry. A further bias in the design industry as a whole is a tendency to favor products that are perceived as fast moving, cool or aerodynamic often with less regard for usability and practicality. At its most blatant we can sometimes see the sports car or jet plane aesthetic brought to bear in wide range of products where this might seem out of character or inappropriate. The very fact that in the U.S, the ratio of men to women graduating with a degree in industrial design is nearly equal but the industry itself has a five-to-one ratio of male to female designers speaks to this issue. Although we are aware that a significant amount of these women work in the product design field, many are relegated to roles other than industrial designer.

It should be further stated that most of the designers I spoke with brought up instances of actively being discouraged and undermined by male colleagues, and in the case of Yvonne, an attempt to steer her to a supporting role in the field at a formative point in her career. What also deserves attention is that the lack of paid family leave in the U.S. has had a direct effect on hindering women achieving upward mobility in the workplace, and to this day women in numerous professions are often told that they must choose between having a career or having a family. Until the industry embraces both greater diversity and gender balance, efforts toward fully actualizing Universal Design in the 21st century will be diminished and rendered less effective.
YVONNE LIN
Co-Founder, 4B
While I would favor certain types of legislation that might spur a wave of interest and greater attention on this side of the Atlantic (just as the 2004 EIDD Stockholm Declaration had in Europe), we also realize the U.S remains the most market-driven of all societies. The recently announced closure of Smart Designs San Francisco studio illustrates just how beholden to commercial considerations even the more socially conscious among us are, and more importantly the uphill battle of educating people and enlightening the culture. All the developed and developing nations on our planet will be facing aging populations, longer life spans, and the host of social and economic issues accompanying these realities as the century progresses. How the design community responds to these challenges in the decades ahead will directly affect the quality of lives for millions of people worldwide.

The market and the design community here have a chance to do the right thing for the wrong reasons in that the profit motive that might be the prime incentive can potentially usher in an era of products designed with the principals of universal design to reach this steadily expanding part of the global population.

It was the economic struggles of the early 21st century and the stock market crash of 2002 that caused Stephanie Battista to stay the course and not let the limited industrial design opportunities sway her long term desire to being a designer. She started a consultancy shortly after college, specializing in start-ups in lifestyle products and wearables. She successfully ran Laf, Inc. for over a decade and established her name and reputation. In this sense she personifies the rugged individualist, striking. She is now applying these same principals of universal design to wearable technology programs at Modern Edge in Portland, Oregon. In what is widely regarded as a market poised for steady and continued growth in the future. Stephanie has been engaged and surrounded by fellow designers and professionals who engage and practice Universal Design and apply the principles and philosophies to their architectural commercial spaces and products they design. She has led numerous research and strategy health care programs focusing on disease management for the elderly, medical device design, and socialization in wearables. Incorporating inclusive standards within wearables is one area I would like to continue impacting, especially within the health care space.

Being able to effect change in any existing culture can be a long and difficult struggle. India-born Ashwini Asokan, who worked in design, media, and user experience in the West Coast for over a decade, recently returned to India. While there, she has reflected on the issues of being able to justify the very aspirations of seeking to rise to the top of what we might term a relatively new profession in a country where women’s roles until very recently were often very circumscribed. Her start-up focuses on bringing AI into devices, making them at once more intuitive and human. While she applauds the new dynamic that has come into being in India during her ten-year absence and feels more opportunities exist for today’s younger generation of Indians, she acknowledged that issues regarding gender inequality are still very ingrained. (It should also be noted that India, like the U.S., has no formal family leave policy.)
STEPHANIE BATTISTA
Guest Editor
Senior Design Program Manager Wearables, Modern Edge
ASHWINI ASOKAN
Founder, Mad Street Labs
Like the other women mentioned in this article, she too has struggled with the demands of family balanced with her professional career and knows firsthand that many issues facing women are universal, whether in the States or in India.

As recent pronouncements by Microsoft CEO Satya Nadella would suggest, even in the year 2014 a significant cross-section of people in power in both the design and tech professions are either oblivious or completely removed from the realities of gender inequality in what should be, ironically, areas imbued with forward thinking and social progress. The very fact that fields of architecture and product design in the early 21st century have failed to be at the forefront, but are still mired in 20th century thinking on many issues, will continue to act as a weight for those of us wishing to accelerate towards a future of greater inclusiveness. While greater gender balance and diversity in the profession as a whole would not be an end all in itself, it would, in my opinion, push us in the industry further along toward the goals of accessibility and Universal Design.

We have come a long way since the 70’s when Patricia Moore, as the sole woman in a room full of men, would sometimes be asked to convey the women’s viewpoint on a product, design or idea (as if this in itself was a monolithic view). These days, she is seen as an iconic first tier designer often sought out for her expertise globally as a consultant or designer on numerous projects and an authority on the issue of Universal Design. Rie Norregaard continues to focus on bringing new perspectives to both the aesthetics and functionality of products at OHMU, and Yvonne Lin continues to raise awareness of continued gender bias in product design and the large body of existing products that could potentially be greatly improved if re-designed within the context of Universal Design. The efforts of Priya Khanchandani and others at the The Victoria and Albert Museum show that even institutions founded and rooted in the 1800’s can be at the forward thinking vanguard of the 21st century, all the while applying the inclusiveness and accessibility in their daily operations. Stephanie Battista has the advantage of working in the space of relatively new products, such as medical devices and wearables, where Universal Design can be effectively implemented in the design process. Ashwini Asokan is optimistic that the recent economic dynamism in India in can directly impact greater social change in years ahead, and the recent crossing of the gender barrier for women in the Bollywood makeup profession is suggesting that the country is starting to move forward. Her efforts to humanize artificial intelligence devices reflect another not fully quantified aspect of Universal Design being fully realized.

It remains vital that we not pat ourselves on the back and content ourselves with the progress made thus far. As the subtitle of this article “The Long Road Ahead” suggests, despite the progress of the past four decades, an even longer road lies ahead of us, and it remains vital that we not pat ourselves on the back and remain contented with the advances that have been made, but emphasize the even bigger tasks at hand.
If asked to give a letter grade to the aforementioned people in this article, I would without hesitation give them an A (and Patricia Moore arguably an A+ for her decades in the trenches at the forefront of this issue). As for the design industry as a whole in regard to its ability to live up to the principals of Universal Design, I would grudgingly give it a C and would hope that the greater product design community fully embrace the core idea of accessibility as a default in future product design.

We should applaud the forward thinking efforts of 4B, Femme Den, Modern Edge, MooreDesign Associates, OHMU, OXO, Smart Design, Tres and others who have been front and center of this issue in the area of product design and hope they might further influence the greater design community. In the past few years, the 60’s era madmen suits have made a resurgence in the area of fashion design. It’s imperative that the pervasive attitudes of that era’s business culture – which were regressive, chauvinistic, and decidedly tunnel vision – forever remain a thing of the past.

I propose that a charter or declaration of the ideas and principals of Universal Design be drawn up, with those who stand in support of it would sign as a reflection of their continued commitment to this issue.
From the Guest Editor, Stephanie Battista

"As a designer the one consistent ingredient I have found to be true is that people of all abilities are unique, regardless of their age, ability, gender, or social status in life and to have the opportunity to DESIGN FOR ALL is such a pleasure."

A Special Thank You

I'd like to personally thank the forward leaning designers and contributors of this article: Ashwini Asokan, Priya Khanchandani, Yvonne Lin, Patricia A. Moore, Rie Norregaard, for their efforts within Universal Design.
STEPHANIE BATTISTA
Guest Editor
Senior Design Program Manager Wearables, Modern Edge

Stephanie is the Senior Design Program Manager for Wearables and is part of the Leadership Team at Modern Edge. She directs medical and wearable technology programs and is responsible for project management, materials, sourcing, client management, and studio culture. For over a decade prior to joining Modern Edge, Stephanie was the principal of her own product design and development firm specializing in lifestyle product design, soft goods, and wearables for technology-driven start-ups. Stephanie brings expertise in hand-held and wearable devices, materials, and technology. She is an Industrial Design graduate of Savannah College of Art + Design.

She is the Guest Editor of the January 2015 Issue on Universal Design. This will be the fifth special issue on different occasions in conjunction with IDSA, USA.

www.modernedge.com
s.battista@modernedge.com

ASHWINI ASOKAN
Founder, Mad Street Labs

Ashwini Ashokan is the founder of Mad Street Labs, a UX Think Tank in India that works with companies around the world to craft exciting and meaningful experiences for their consumers. Ashwini recently returned to India from California after more than a decade, inspired by the potential to innovate for the local market there. Her roots as designer-dancer led her to explore the relevance of culture and society in the design of technology. She drives extensive discussions in the tech community on the role of people inspired Design in building startups and nurturing innovation. She has also widely published on this topic.

Ashwini is also the co-founder of an Artificial Intelligence startup, Mad Street Den which she launched with her husband less than a year ago. Until recently, Ashwini managed the Mobile Experience Portfolio as part of Intel Labs’ UX organization in California. She has years of experience leading teams of designers, social scientists and engineers working together at the cutting edge of innovation.

When not working or plotting the building of an ‘all-woman’ UX empire in India, she’s busy blowing bubbles with her preschooler and tending to her newborn in the hot Madras weather in the South of India!

www.madstreetlabs.com
ashwini.asokan@gmail.com

PRIYA KHANCHANDANI
Development Manager, The Victoria and Albert Museum

Priya works full-time at The Victoria and Albert Museum as a Development Manager responsible for strategizing, managing and maximizing funding for the acquisition of new design and art objects. She is also a Trustee of the Chisenhale Gallery. She has an MA in the History of Design from the Royal College of Art, where she received the Montjoie Prize (2012) and the final Dissertation Prize (2013), and an undergraduate degree from Cambridge University. She writes regularly about the arts, most recently contributing to Bloomsbury’s forthcoming Encyclopedia of Design. She also writes short fiction; her story A Done Deal was published in the Asian Writer’s anthology Five Degrees and won her a nomination for the Asian Writer Award (2012). Before pursuing her creative interests full-time, Priya was a lawyer at a Magic Circle law firm.

http://www.vam.ac.uk/
pdkhanchandani@gmail.com
YVONNE LIN
Co-Founder, 4B

Yvonne Lin is a design strategist and an expert at considering gender in developing compelling and functional solutions to complex design problems. She is one of the founding members of 4B, www.four-b.com, and the Femme Den. She was named a Master of Design by Fast Company. Previously, she was an Associate Director at Smart Design. She is the inventor on more than twenty patents and has designed products and experiences for companies such as Nike, Under Armour, Johnson & Johnson, Hewlett-Packard, American Express, Lego, Pyrex, OXO and Nissan. She has a BA in Visual Art and a BA in Engineering from Brown University. She also spends a lot of time skiing, rock climbing, and putzing around her apartment making small art projects.

Four-b.com
yvonne@four-b.com

PATRICIA A. MOORE, PHD
President, MooreDesign Associates LLC

Patricia Moore is an internationally renowned gerontologist and designer, serving as a leading authority on consumer lifespan behaviors and requirements. For a period of three years, Dr. Moore traveled throughout the United States and Canada disguised as women more than eighty years of age. With her body altered to simulate the normal sensory changes associated with aging, she was able to respond to people, products, and environments as an elder.

An international lecturer and author, Dr. Moore holds undergraduate degrees in Industrial & Environmental and Communication Design from the Rochester Institute of Technology, completion of Advanced Studies in Biomechanics at New York University's Medical School & Rusk Institute, graduate degrees in Psychology and Counseling and in Human Development (Social Gerontology) from Columbia University.

Moore was named by ID Magazine as one of The 40 Most Socially Conscious Designers in the world and was selected in 2000, by a consortium of news editors and organizations, as one of The 100 Most Important Women in America. Syracuse University selected Moore for a 2012 Honorary Doctorate for serving as a “guiding force for a more humane and livable world, blazing a path for inclusiveness, as a true leader in the movement of Universal Design.” ABC World News featured Moore as one of 50 Americans Defining the New Millennium.

http://en.wikipedia.org/wiki/Patricia_Moore
DesignMoore@cox.net

RIE NORREGAARD
Creative Director, Tres and Co-Founder, OMHU

Rie is the founder and Creative Director of TRES. TRES investigates design solutions, understanding that simple movements can be transformative, and that universal accessibility is not just a design or marketing angle, but a fundamental right. At TRES Rie Norregaard and her team are expanding upon OMHU’s mission to enable people’s changing abilities through life "with great care". In 2010 Rie Co-founded OMHU, a boutique designer, manufacturer, and seller of award-winning mobility products. As the creative director and CEO of OMHU, Rie developed all products, managed production, brand, identity and marketing initiatives for OMHU. OMHU has been featured on ABC News, and in numerous publications from Design Boom to New York Times.

Rie started her career working for Lego in Copenhagen. At Smart Design in New York, Rie developed the identity and retail packaging system for OXO, that is on display at retail world wide today. As Creative Director at Arnell Group, Rie developed brand strategies and communication programs for international clients from Chanel to Samsung. When Rie returned to Smart Design as Director of Communication Design, she led programs for Cisco, Microsoft, HP and Nike. As Creative Director at Organic, Rie served clients including American Express, NBC Universal, TED and Vogue. And at Frog Design, Rie lead programs for Neutrogena, Sprint, and Virgin Mobile among others.

tresmatter.co
rie@tresmatter.co
DR. SUNIL KUMAR BHATIA, PHD
Chief Editor
Founder and Chairman Design for All Institute of India
13, Lodhi Institutional Area,
Lodhi Road, New Delhi-110 003 India

www.designforall.in
newsletter@designforall.in

CHARLES AUSTEN ANGELL
CEO of Modern Edge, and Chair of IDSA

Charles Austen Angell is the founder of Modern Edge, Inc., a strategic industrial design firm based in Portland Oregon. Modern Edge is globally known for original work in the fields of health & wellness, mobility, home products, and experiential environments.

Mr. Angell is the Chair of the Industrial Designers Society of America (IDSA & IDEA), and was an original trustee for the Design Foundation, a public charity in support of design education and social responsibility.

www.modernedge.com
a.angell@modernedge.com

DAVID MAZOVICK
Writer, Design Engine, Inc.

Design and Technology Writer, Futurist, Policy Consultant. David, contributes articles pertaining to technology, design, and engineering with an emphasis on new innovations, breakthrough technologies and products that are or will be brought to manufacture. David advocates the use design, technology and engineering for improving the world and the human condition. He welcomes open ended creative work situations that focus on novel approaches to bring about positive change that would help people in a direct way. David recognizes the value on unconventional ideas and cross fertilization of different disciplines as key to advancing society and improving the quality of life for all people.

http://design-engine.com/
davidmazovick@hotmail.com