



Copyright © 2015 McGraw-Hill Education (Italy), S.r.l. Via Ripamonti, 89 – 20141 Milano



Rights of translation, reproduction, electronic storage and total or partial adaptation by any mean whatsoever (including microfilms and Photostat copies) are not allowed.

Given the intrinsic features of the Internet, the Publisher is not responsible for any possible change in both the addresses and the contents of the mentioned Internet websites.

Names and brands mentioned in the text are generally registered by the respective

producers.Copertina: Rebecca Squires

Programme and Portfolio Manager: Natalie Jacobs Programme Manager: Marta Colnago Programme Manager: Daniele Bonanno Produzione: Donatella Giuliani

Prestampa e postproduzione digitale: digitaltypes.it

ISBN: 9788838694059

The virtuous circle Prooceedings of the Cumulus Conference, Milano 2015

The Virtuous Circle Design Culture and Experimentation

3-7 June 2015, Milano, Italy

Editors

Luisa Collina, Laura Galluzzo, Anna Meroni Publisher: McGraw-Hill Education Italy

Politecnico di Milano

Design Department School of Design Poli.Design Fondazione Politecnico

For further information on Cumulus Association: Cumulus Secretariat Aalto University School of Arts, Design and Architecture PO Box 31000, FI-00076 Aalto Finland E: cumulus@taik.fi W: http://www.cumulusassociation.org

ISBN 9788838694059



Conference Colophon

President of Cumulus International Association of Universities and Colleges of Art, Design and Media.

Conference Chair

Luisa Collina / Design Department, Politecnico di Milano.

Conference Manager

Laura Galluzzo / Design Department, Politecnico di Milano.

Scientific Committee Chairs

Ezio Manzini / DESIS Network Anna Meroni / Design Department, Politecnico di Milano.

Tracks Chairs

<u>Nurturing</u>

Eleonora Lupo / Design Department, Politecnico di Milano. Sarah Teasley / Royal College of Art Paolo Volonté / Design Department, Politecnico di Milano.

Envisioning

Giulio Ceppi / Design Department, Politecnico di Milano. Stefano Marzano / THNK, School of Creative Leadership. Francesco Zurlo / Design Department, Politecnico di Milano.

Experimenting/Prototyping

Banny Banerjee / Stanford University Paola Bertola / Design Department, Politecnico di Milano. Stefano Maffei / Design Department, Politecnico di Milano.

Incubating/Scaling

Anna Meroni / Design Department, Politecnico di Milano. Cabirio Cautela / Design Department, Politecnico di Milano. Gjoko Muratovski / Auckland University of Technology.

Assessing

Lia Krucken / Universidade do Estado de Mina Gerais. Pier Paolo Peruccio / Politecnico di Torino. Paolo Tamborrini / Politecnico di Torino.

Disseminating/Communicating

Elena Caratti / Design Department, Politecnico di Milano. Paolo Ciuccarelli / Design Department, Politecnico di Milano. Mark Roxburgh / University of Newcastle.

Training/Educating

Luca Guerrini / Design Department, Politecnico di Milano. Pablo Jarauta / IED, Istituto Europeo di design. Lucia Rampino / Design Department, Politecnico di Milano.

International Affairs

Anne Schoonbrodt / Design Department, Politecnico di Milano.

Visual Communication

Andrea Manciaracina, Umberto Tolino / Design Department, Politecnico di Milano.

Pictures Massimo Ferrari

Translations and English Editing Rachel Anne Coad

Graphic and Interior Design

Tina Fazeli, Elisabetta Micucci Rebecca Squires / Design Department, Politecnico di Milano.

International Review Board

The conference adopted double blind peer review.

Yoko Akama, Royal Melbourne Institute of Technology Jose Allard, Pontificia Universidad Catolica de Chile Zoy Anastassakis, Universidade do Estado do Rio de Janeiro Nik Baerten, Pantopicon Giovanni Baule, Politecnico di Milano Elisa Bertolotti, Politecnico di Milano Alessandro Biamonti, Politecnico di Milano Massimo Bianchini, Politecnico di Milano Luigi Bistagnino, Politecnico di Torino Sandy Black, University of the Arts London Spyros Bofylatos, University of the Aegean Gustavo Borba, Universidade do Vale do Rio dos Sinos Brigitte Borja de Mozota, Paris College of Art Clare Brass, Royal College of Art Caelli Brooker, University of Newcastle Graeme Brooker, Middlesex University London Sam Bucolo, University of Technology Sydney Daniela Calabi, Politecnico di Milano Barbara Camocini, Politecnico di Milano Angus Campbell, University of Johannesburg Daria Cantù, Politecnico di Milano Michele Capuani, Politecnico di Milano Michelle Catanzaro, University of Newcastle Manuela Celi, Politecnico di Milano Eunji Cho, Hunan University Jaz Choi, Queensland University of Technology Matteo Ciastellardi, Politecnico di Milano Carla Cipolla, Universidade Federal do Rio de Janeiro Luisa Collina, Politecnico di Milano Chiara Colombi, Politecnico di Milano Sara Colombo, Politecnico di Milano Marta Corubolo, Politecnico di Milano Vincenzo Cristallo, Sapienza University of Rome, Italy Robert Crocke, University of South Australia Heather Daam, Institute without Boundaries Toronto Chiara Del Gaudio, Universidade do Vale do Rio dos Sinos Alessandro Deserti, Politecnico di Milano Loredana Di Lucchio, Sapienza Università di Roma Jonathan Edelman, Stanford University Davide Fassi, Politecnico di Milano David Fern, Middlesex University London Silvia Ferraris, Politecnico di Milano Venere Ferraro, Politecnico di Milano Alain Findeli, University of Nimes Elena Formia, Università di Bologna Marcus Foth, Queensland University of Technology Silvia Franceschini, Politecnico di Milano Teresa Franqueira, Universidade de Aveiro

Carlo Franzato, Universidade do Vale do Rio dos Sinos Karine Freire, Universidade do Vale do Rio dos Sinos Marisa Galbiati, Politecnico di Milano Laura Galluzzo, Politecnico di Milano Giulia Gerosa, Politecnico di Milano Miaosen Gong, Jiangnan University Carma Gorman, University of Texas at Austin Francesco Guida, Politecnico di Milano Ashley Hall, Royal College of Art Michael Hann, University of Leeds **Denny Ho**, The Hong Kong Polytechnic University Stefan Holmlid, Linkoping University Lorenzo Imbesi, Sapienza Università di Roma Avelet Karmon, Shenkar - Engineering. Design. Art Martin Kohler, HafenCity University Hamburg Cindy Kohtala, Aalto University Ilpo Koskinen, The Hong Kong Polytechnic University Peter Kroes, TU Delft Peter Gall Krogh, Aarhus University Carla Langella, Seconda Università degli Studi di Napoli Yanki Lee, Hong Kong Design Institute Elisa Lega, University of Brighton Wessie Ling, Northumbria University Cyntia Malagutti, Centro Universitário Senac Naude Malan, University of Johannesburg Ilaria Mariani, Politecnico di Milano Tuuli Mattelmaki, Aalto University Alvise Mattozzi, Università di Bolzano Mike McAuley, University of Newcastle Lisa McEwan, Auckland University of Technology Stuart Medley, Edith Cowan University Western Australia Massimo Menichinelli, Openp2pdesign Cynthia Mohr, University of North Texas Nicola Morelli, Aalborg University Afonso Morone, Università degli Studi di Napoli Federico II Francesca Murialdo, Politecnico di Milano Andreas Novy, WU Vienna University of Economics and Business Marina Parente, Politecnico di Milano Raffaella Perrone, ELISAVA Escola Superior de Dissenv Margherita Pillan, Politecnico di Milano Francesca Piredda, Politecnico di Milano Marco Pironti, Università di Torino Paola Pisano, Università di Torino Giovanni Profeta, Scuola Universitaria Professionale, Svizzera Italiana Agnese Rebaglio, Politecnico di Milano Livia Rezende, Royal College of Art Dina Riccò, Politecnico di Milano Francesca Rizzo, Università di Bologna Rui Roda, University of Aveiro Liat Rogel, Nuova Accademia di Belle Arti Valentina Rognoli, Politecnico di Milano Margherita Russo, Università degli studi di Modena e Reggio Emilia

Dario Russo, Università di Palermo Fatina Saikaly, Cocreando Giuseppe Salvia, Nottingham University Daniela Sangiorgi, Lancaster University Daniela Selloni, Politecnico di Milano Anna Seravalli, Malmo University Giulia Simeone, Politecnico di Milano Michele Simoni, Università Parthenope Eduardo Staszowski, Parsons The New School for Design Cristiano Storni, University of Limerick Shehnaz Suterwalla, Royal College of Art Kate Sweetapple, University of Technology Sydney Virginia Tassinari, MAD Faculty Genk Carlos Teixeira, Parsons The New School for Design Adam Thorpe, Central Saint Martin Paola Trapani, Unitec Institute of Technology Auckland Raffaella Trocchianesi, Politecnico di Milano Federica Vacca, Politecnico di Milano Fabrizio Valpreda, Politecnico di Torino Francesca Valsecchi, Tongji University Beatrice Villari, Politecnico di Milano Katarina Wetter Edman, University of Gothenburg Robert Young, Northumbria University Salvatore Zingale, Politecnico di Milano

Nurturing Culture Nurturing Design

Eleonora Lupo, Associate Professor - eleonora.lupo@polimi.it Design Department Politecnico di Milano, Italy

Sarah Teasley, Head of Programme – sarah.teasley@rca.ac.uk Royal College of Art, United Kingdom

Paolo Volonté, Associate Professor — paolo.volonte@polimi.it Design Department Politecnico di Milano, Italy

Within the "virtuous circle" of design's relationship to culture, design's ability to explore the surrounding world and to learn from traditions, other cultures and other disciplines reveals opportunities for the future. Voracious, curious and critical design engagement with context, environment and parallel worlds generates new cultural production in what can be, when done thoughtfully and carefully, a virtuous and transformative circle from reflection to experimentation. Such a process enriches both new designs and, ideally, the overlapping and parallel cultures and environments engaged. This track focuses on the continuous process of nurturing that, our authors argue, is integral to ethical and effective design practice and pedagogy.

We might begin by articulating some of the key generative relationships between culture, broadly defined, and design. Culture nurtures design practices to form, develop and transmute in particular ways. Design practices and the products of design - physical and immaterial - shape and shade interactions of various sorts between people, things and the environment, further shaping culture. The impact of these relationships only splinters with each "rotation" of the circle, creating new design practices and products and new cultures, which then begin their own rotations. At worst, design engagement with culture produces superficial styling referring to clichéd or hackneyed ideas of tradition. At best, design that openly, open-endedly and open-mindedly engages with cultures on an equal footing explores lifestyle and common values and habits what Bourdieu (1984) would call habitus. It seeks to embed these within process of designing, as well as in the design, from a user experience perspective, and is prepared to have routes detourned by culture's agency in the process. Despite the complexity - and the deliciously 'wicked problem' aspects - of this continual and continually diversifying process, the generative relationship between design and culture is often treated reductively within design research, practice and education. The recent embrace of research methods such as design ethnography and democratic design methods such as co-design and participatory design implicitly and explicitly require designers to embrace culture's presence and

potential. More practically, design university curricula continue to expect that students will produce contextual work as part of the degree requirements.

And yet all too often culture is filed under 'context': an early stage in the design process to be ticked off the list and shelved once prototyping and iteration is underway, rather than an integral consideration throughout the design process that can be continually generative in its own right. Designers, design researchers and design educators too numerous to name here not only argue but demonstrate through their own work that engagement with culture is inseparable from creative design: that the latter without the former is an empty shell. Regardless, the fundamental messiness of culture - and the sheer danger of encountering contradictions, resistance or impossibilities from one's interlocutors, or of realizing that cultural specificities can limit and even negate a designer's power - presents a challenge that many would rather ignore. Addressing design practice's embeddedness in culture - let alone what design might learn from culture - may be admirable, but it also requires more effort. It can mean unpredictable outcomes, and it requires relinquishing power and control, for many designers an unnerving decision (despite the fact that complete control over any project is already an illusion, as actor-network theorists argue so convincingly, cfr. Latour 2005).

Papers in the 'Nurturing' strand present a plethora of resounding arguments for why design practice must address culture consistently from beginning to end in the design process, and for why engaging with cultures, context and environment produces richer, more resilient design. More to the point, perhaps, they articulate strategies and tactics for doing so, and discuss the challenges and fragility encountered in attempting to do so.

TOOLS AND APPROACHES FOR NURTURING THE DESIGN PROCESS

Design is not an "exact discipline". It does not rely on the standardised research methods of the hard sciences but on aesthetic experience. Therefore, developing innovative knowledge for design requires a different methodology from those typically used in scientific inquiry. Scientific research looks for explanatory models of "how things are". They are based on the observation of phenomena and the testing of hypotheses in order to produce scientific theories that aim to be objective, verifiable, repeatable and universal. Design research into "how things could be", on the other hand, is an act of creation that demands a more experimental and heuristic model.

At the same time, design practice is a form of reflection (Donald Schön in 1983 defined 'Reflection-in-Action', a technique for learning from practice experience) or an integrated process in which design theory and practice are indistinguishable. It leads often to practice-based theory "*not about explanations and justification (knowing why), but rather about establishing facts (knowing what) and instructions for actions (knowing how)*" (Grand, 2008). Many papers in this track focus on the virtuous circle through which design culture experiments and reflects in an instrumental approach, developing a critical practice that nurtures the design process with tools and methods often borrowed from other fields, contexts and disciplines.

Tools can be focusing on the metadesign phase (analyzing, understanding and visualizing problems and situation) or can support the design phase of conceptualising solutions: innovative culturally intensive products that learn from traditions and historical references, for instance, as shown in Tina Moor, Alexis Schwarzenbach, Andrea Weber Marin and Brigitt Egloff's paper. "Silk Memory"'s research is supported by a digital database of samples for inspiration. This archive of silk textile swatches, documenting a best-of selection of Zurich silks from 1800 to 2000, has been tested in the explicitly trans-cultural context of two workshops for collaborations between Swiss and Indian design students. Swatches from the Silk Memory Archive have been combined with Indian themes of cultural persistence and the free and transformative interpretation of symbols and meaning.

Different methodological approaches can both nurture the design process and serve as the final objective of design practice. In Maresa Bertolo, Ilaria Mariani and Giulia Ruffino's paper "Earthsploitation", the ludic paradigm is both method of knowledge and learning in the design process. The paper considers game design as a "result of technological transformation and significant cross-fertilization with other branches of knowledge", in order to nurture social innovation and specifically to reflect on the food production system (consumption resources and ecological consequences) and invite more reflexive, conscious behaviours.

Similarly, Francesca Piredda and Davide Fassi's paper "In a Garden" demonstrates that an interdisciplinary approach mixing spatial design with trans-media storytelling can be effective in engaging co-creation activities and conversations with neighbourhood residents for building identity and innovating the use of public spaces.

COLLABORATIVE AND COMMUNITY-CENTRED DESIGN PROCESSES

Collaboration has become a key word for design practice. According to Richard Sennett (2012), the techniques and politics of collaboration rely on "dialogic abilities": the social ability to manage differences among individuals and groups. The dialogic principle does not necessarily imply that a common position is achieved, but rather that participants engage in an exchange of reciprocal understanding in order to widen each side's previous area of vision.

Such improvements can be based on indirect exchanges, including those in the design process that take into account and observe context and cultures to address the specific needs of a community or place. They can also emerge from direct exchange, which in the design context could mean designers directly engaging a community in a co-design process (or participatory action) as a resource for assessing, contributing and improving the design outputs. Design exchanges might go further still, and devolve power and responsibility from the designer to the community itself, in an experimental process of design democratisation.

In these ways, collaboration is often intended and intertwined with communitycentred design processes, especially in social design and social innovation. In Renata Leitao, Anne Marchand and Cedric Sportes' paper "Constructing a Collaborative Project Among Designers and Native Actors", designers work with a First Nations community in Canada. The two projects described in the paper aimed to innovate visual heritage through a learning process defined as "long-term collective articulation of issues" and by doing so to address local development.

We should also discuss the balance/unbalance or symmetry of collaborative processes between designers and communities, or between design and local qualities. Solen Roth's paper "Northwest Coast Artware", critically assesses the simplification and standardisation of indigenous design in the context of massreproduction. In Xue Pei and Lucie Decker's paper "Rethinking about Fashion Design toward Cultural Sustainability", an ethical relationship is assumed to be established between local communities and fashion industries in order to build cultural sustainability and participative approaches.

Such issues around power, agency and ethics require a humanistic vision of design practice, nurtured by anthropology, sociology, ethnography, history, pedagogy, linguistics, cognitive sciences and human sciences in general. The Humanistic design approach described by Colombi and Lupo in "Culture-Driven Meta-Products" uses "applied humanities" to provide humanistic analytical methods and tools (defined meta-products) to examine or describe a context or a problem, serving as a starting point for design activity. The approach's focus on "design for humanities" also provides creative methods and generative tools to offer new possible points of view for in-depth humanistic research.

NURTURING (IN) THE DESIGN COMMUNITY

The design community deserves a special focus. Design as a discipline, industry and community has developed and changed tremendously during the last decades, sharing common developments across communities while also maintaining the heterogeneity of national and other localised design cultures. At the same time, globalization's pressures have broadened the reach of historically western design practices – conventional as well as experimental – to new geographies, and allows local concerns, conventions and practices hitherto not represented in global 'design' discourse to shape international conversations. An updated consideration of the community of design is needed. Social sciences like anthropology and sociology have a long tradition in the study of professional communities and worlds (for instance the "art world", cfr. Becker 1982), but have yet to produce a substantial and meaningful body of knowledge on the design world.

This gap makes designers' self-reflexive research on the topic even more useful. Bianca Elzenbaumer's Marxist view of the precarious working conditions of designers, presented in the paper "*Precarious Designers and the Transformative (Im-)Possibilities of Biopolitical Production*", offers one useful view. Elzenbaumer considers the precariousness experienced by many designers today as an expression of the capitalist economic system. She supports the idea that designers should repossess their lives by shifting their focus from working for the profit of others to questioning how wealth is produced and distributed in society. In other words, she argues, designers should perform a collective "refusal of work" which calls for a movement of invention that goes beyond capital.

The fact that design cultures and communities are heterogeneous is key to many papers in this strand. Loredana Di Lucchio, Lorenzo Imbesi and Mariana Amatullo's paper "Design Vectors in Design and Arts" introduces ReVeDA (Research Vectors for Design and Art), a new Cumulus working group focused on research in design that replaces the older group, CURE. Since design research, as the authors remark, is now booming, the working group's principal objective has been to promote a collective discussion about the leading trends in design research in design schools. ReVeDA is based on the idea that design research is not a fixed activity and/or a stable community, but a field driven by moving 'vectors' that push change and innovation in new directions.

Similarly, Elena Elgani and Francesco Scullica's paper "Hotels interior spaces" focuses on the importance of cross-fertilization in design, a profession that requires constant contamination with other disciplines. Yet design itself is already divided into several heterogeneous fields, from interior to product, from service to interaction, from communication to fashion and so on. Thus, the cross-fertilization needed to carry out complex design processes concerns not only similar and complementary disciplines, but also contamination across multiple sub-communities of designers.

Johnson Witehira and Paola Trapani's paper ("The Whakarare Typeface Project") clearly articulates the specificity of working between global and local cultures of design practice. The paper deals with the process of designing a proper Maori font. In such a process, two apparently opposite forces conflate, namely the universalistic one of western design culture and the local one of Maori culture. As the authors articulate them, the first is driven by the principles of Gestalt theory, the second by a cosmo-genealogical narrative about the origins of the world. As postcolonial studies show (Bhabha 1994), the meeting of western rational explanations with non-western local narratives produces a critical situation. Western universalism is at the base of the definition of design still dominant today. In this definition, design arose with industrialization and has become a leading force of modernization. As such, design could easily become a hidden force of western cultural imperialism. Local communities of designers in sites and cultures outside the generating centre of this discourse reside in the border between this risk and the chance to creatively innovate their own culture.

SOCIAL CHANGE

The practice of design is embedded in contextual developments that drive it at any given time towards new directions. The social context generates general concepts, attitudes, narratives and normative settings that frame the nurturing of design ideas, activities, processes and methods. Many novelties in the history of design are actually consequences of external changes rather than internal. Major turning points in design, for example, have been stimulated by cultural changes that boosted our interest in sustainability, by technological changes that nourish the open innovation approach and by an institutional change – namely the academisation of design – that launched the emergence of design research.

Three papers in this track deal with such contextual developments. In two cases it is about the fragmentation and hybridization of cultures in today's globalized world. Han Han and Francesco Zurlo in "New Approach to Look into Strategic Design for Luxury Brands" focus on the fashion system but draw upon the pedagogy of multiliteracies to suggest how strategic design could foster the working of branding strategies within the context of a globalized society. The authors tackle the issue of matching the luxury companies' brand strategies with the consumers' capability to decode variously the brand's value (meaning). They claim that enabling the consumers to master the multiplicity of communication channels and decode the mass of messages that overcrowd a multicultural society is a strategy to ease an expert understanding of the global brands' values (or meanings).

Similarly, design literacy in a multicultural environment is at the core of Francesca Valsecchi's paper, "Cultural Translations as Design Capability, on Communication Design Teaching".Valsecchi uses the concept of transculturality, rather than multiculturality, to underline the continuous and connected transformation of cultures when they unfold in a common space. Whereas multiculturality implies the idea of different static cultures that meet and must come to an agreement, the prefix 'trans' underlines how the differences melt, producing new identities at each encounter. She claims that embedding a transcultural awareness in research practice can facilitate the spread of a sustainability ethos in design.

We must also attend to non-human actors, whether our physical environment or the world of things. In "In the Cycle of Nourishment" Ajanta Sen and Ravi Poovaiah depict how embracing cultures that work their lives outside the "framework of the machine" typical of modernity can enrich the design process by introducing divergence. An analysis of the different worldviews that drive cultural decisions about nourishment lead Sen and Poovajah to argue that design should facilitate a reversal of our common idea of nourishment itself, which is distorted by industrialisation.

CONCLUSION

The papers within this strand explore the relationship between design and culture, within the context of design research, practice and pedagogy and from cognate or overlapping areas such as craft history. Humanities and social science research offers language, concepts and analytical frames for articulating culture's relationship to practice and practice's relationship to culture. Within design research and practice, ideas and approaches stem from very real concerns indigenous to design. They define and generate – then iterate through use – frameworks for design practice that are reflexive of culture, that incorporate cultural specificity or sitedness into process and product and, in some cases, grapple with thorny questions of power, authority and ethics.

Ultimately, through this strand we hope to help engagement with culture to move beyond "contextual" to "integral", and to advance its unconscious incorporation into design and research process. In other words, we hope to nurture change within the cultures of design itself.

REFERENCES

Bhabha, H.K. (1994). The Location of Culture. London: Routledge.

Becker, H.S. (1982). *Art Worlds*. Berkeley/Los Angeles: University of California Press.

Bourdieu, P. (1984). *Distinction: A Social Critique of the Judgment of Taste*. Cambridge, MA: Harvard University Press.

Latour, B. (2005). Reassembling the Social. Oxford: Oxford University Press.

Schön, D. (1983). *The reflective practitioner: how professionals think in action.* New York: Basic Books

Grant, S. (2008). Theory. In M. Erlhoff and T. Marshall. *Design Dictionary*. Basel: Birkhäuser.

Sennett R. (2012). *Together: The Rituals, Pleasures and Politics of Cooperation.* New Haven & London: Yale University Press.

THE VIRTUOUS CIRCLE

DESIGN CULTURE AND EXPERIMENTATION

Design comes out of the interaction between a practice, which seeks to change the state of things, and a culture, which makes sense of this change. The way this happens evolves with time: practices and cultures evolve and so do the ways they interact; and the attention that is paid at different moments to one or other of these interacting polarities also evolves. In the current period of turbulent transformation of society and the economy, it is important to go back and reflect on the cultural dimension of design, its capacity to produce not only solutions but also meanings. and its relations with pragmatic aspects. Good design does not limit itself to tackling functional and technological questions, but it also always adopts a specific cultural approach that emerges, takes shape and changes direction through a continuous circle of experimenting and reflecting. Because the dimension and complexity of the problems is growing, it is becoming evident that to overcome them it is, above all, necessary to bring new sense systems into play. This is ground on which design, by its very nature, can do much. Indeed, the ability to create a virtuous circle between culture and practical experimentation is, or should be, its main and distinctive characteristic. However, for this really to happen it is necessary to trigger new discussion and reflection about the nature and purpose of design practice and culture.