Rebooting (Dutch) Design

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ABSTRACT   The Netherlands Institute for Design and Fashion (Premsela), the Netherlands Architecture Institute (Nederlands Architectuurinstituut) and the institute responsible for digital culture (Virtueel Platform) are currently being subjected to a forced merger. The new – and as yet unnamed – institute that will result will be housed in the existing building of the (soon to be) former Netherlands Architecture Institute in Rotterdam. In the global context, similarly, we are today witnessing the hybridization of design-related fields such as architecture, design and digital culture. The institute currently in planning in the Netherlands could constitute a hybrid design institute (our proposed working title), which will correspond to the merging of the design-related professions. It will hopefully provide an interdisciplinary platform and hybrid laboratory that will foster innovation. The forced merger, an

element of current Dutch cultural policy, represents a unique opportunity for accelerating the design-related cultural industry. The rebooting and acceleration of this industry to meet the challenges of the post-industrial age could position the Netherlands at the forefront of cultural innovation. This paper discusses the potential of a hybrid design institute and speculates on its program. The background of this discussion is the investigation of the new field which is emerging from the fusion of the design-related disciplines. In the context of this emergent hybrid field, we want to introduce the notion of hybrid design. Below, we map out and place in a broader context hybrid design as a new field, which addresses today's cutting-edge design challenges. Hybrid design is more than its constituent parts (architecture, design, digital culture). Since this paper is appearing in *The Design Journal* (i.e. an international magazine read by design professionals), it takes the design perspective as its point of departure. An expanded version of this paper could provide a balanced account of the architectural and digital culture perspectives as well, but would not drastically alter its contents rather clarify it from additional points of view.

Hybridization of Practices

+ Following the logic of neoliberalism, the European continent as a whole is currently subject to severe austerity policies. As in the other European countries, budgetary cuts and so-called restructuring have hit the cultural sector in the Netherlands. As part of the restructuring of professional institutions in the creative sector, the Netherlands Institute for Design and Fashion (Premsela), the Netherlands Architecture Institute (Nederlands Architectuurinstituut) and the institute responsible for digital culture (Virtueel Platform) are being subjected to a forced merger.

These institutes – especially the Netherlands Architecture Institute and the Netherlands Institute for Design and Fashion – have extensive and highly successful international track records. For years, they have influenced professional discourse and practice, supporting and shaping the professional networks that surround them. The forced merger mentioned above, therefore, has been met with protest by the professional communities as well as by the institutes themselves.

The forced merger is being driven by the logic of economization. Despite this, a consolidation of the institutes dealing with architecture, design and media could unleash significant creative potential. Such an interdisciplinary platform would transgress the still narrowly defined professional fields, form a hybrid laboratory and foster innovation. The new institute represents an opportunity to reboot and accelerate design to meet the challenges of the post-industrial age, thereby positioning Dutch design at the forefront of design innovation.

The following paper discusses the potential of such a hybrid design institute that brings together the design-related professional fields into a new cultural industry. To begin with, we place the hybrid format of the new institute in the broader context of contemporary developments in the creative fields and in creative practices in general.

Today, we are experiencing a merging of creative fields. Since the late 1960s, contemporary art practices have transcended the boundaries of traditional artistic media, for example, of sculpture and painting, thereby entering the 'post-medium condition' described by Rosalind Krauss (2000). In contemporary art practices, painting and sculpture come together with video, film and sound, and various media fuse within a single artistic project. Medium-specificity is in no way determinative of artistic production – the art fields merge.

Another development characteristic of recent decades is the blurring of boundaries between autonomous art and the applied arts. Increasingly accepted as a practice is the (survival) strategy followed by artists who work simultaneously in the fine arts and the creative industry. Joep van Lieshout – with his Atelier van Lieshout – is just one Dutch example of such a 'hybrid artist' who works without constraints in applied fields such as architecture and design, as well as for the fine arts market. In an investigation on the 'hybrid artist' ('Hybride kunstenaar') carried out by van Winkel *et al* (2012), this hybrid artistic practice is characterized as typical of our post-industrial age and for the era of the creative industry.

But taking place today is an even more radical merger: creative production in its most various forms of expressions – whether music, graphic design, architecture, object design, video, etc. – is supported by a single tool, the computer. This universal instrument provides a bridge which connects these very different creative fields. Information and communication technology support networked intelligence in the creative sector.

The computer is an instrument designed to process complex data. The use of the computer for the sake of its primary quality – as a tool for processing complexity – enables us to design and control complex processionary structures. This makes possible the design and control of complex dynamic network systems.

Supported by these technologies, we are therefore experiencing a hybridization of environments, objects and services. This is the

background which promotes and enables this new merging of the fields connected to design.

A hybrid institute that brings together architecture, design and digital culture would correspond to this general trend of the hybridization of creative practices and fields described above, and could address these developments. It would focus on the applied arts, but at the same time remain open to hybrid expressions that participate in both the applied and the autonomous arts spheres – in recent years a common and accepted practice of the Dutch design related institutions.

A new institute would stand for a hybrid design approach that deals with the design of physical spaces, artefacts and media networks in an integrated way. Hybrid design is more than its constituent parts (architecture, design and digital culture). Instead, it considers objects, services and environments within networked systems of production, distribution, use and recycling. While industrial design concentrated on industrially mass-produced objects and followed the logic of the industrial age, hybrid design corresponds to the technological and cultural paradigms of the present.

Such a hybrid design institute could therefore address emerging themes of relevance in an integrative way. By transcending the narrow boundaries of the design professions, it could search for integrated and sustainable solutions in order to develop the models of theory and practice that will be required tomorrow.

After Consumerism

For large majorities in the developed world, the industrial age democratized access to products in rising quantities and at progressively falling prices. The logic of the industrial age was based on an economic model of indefinite growth. Today, this model – projected on a global scale – is proving unsustainable.

Through travel and tourism, internationalization of markets and media-based globalization, the world is growing together. In such a globalized world, exclusion from affluence for large segments of the world population is bound to result in social unrest and massive migratory movements.

The same applies to the inclusive version of a 'flattened' world that is conceptualized as a 'global level playing field' and described in Thomas L. Friedman's *The World Is Flat: A Brief History of the Twenty-First Century* (2005). Today, the formerly 'less economically developed countries' are catching up at a rapid pace. The projection of the industrial era consumerist model of indefinite growth onto these 'newly industrialized countries' and 'emerging markets' would lead to ecological collapse (and to associated social unrest and migratory movements on a global scale as well).

This situation forms the background for a larger discussion of sustainability and a multidisciplinary quest for models of 'prosperity without growth'; see, for example Tim Jackson's *Prosperity without*

Growth: Economics for a Finite Planet (2009). This interdisciplinary discussion transgresses professional boundaries – thereby influencing design discourse and practice as well.

Since (object) design was closely connected with a consumerist-based economic model, design activities and the design profession are being reshaped today significantly by this emerging (macroeconomics) of 'prosperity without growth'. Industrial design was intrinsically associated with the system of industrial mass production. With new technologies and digital media currently transforming not just production methods but society in general, design is being redefined in a new context.

A hybrid design institute should explore the potential for design within this changing world. Since the emerging design applications and fields of activity are strongly interconnected, any segmentation into separate fields of activity seems arbitrary. A hybrid institute should therefore focus on exploring interdisciplinary themes and creating the necessary common ground for such developments.

This paper represents an initial attempt to introduce relevant themes and concepts for hybrid design, and to sketch out briefly some possible programmatic tendencies for a hybrid design institute. In this context, we briefly highlight circuitry as a design strategy which addresses the challenges of sustainability. Next, we trace the emerging technologies (BANG) that will soon have enormous consequences for design practice, mapping the possible technological research dimension of a hybrid design institute. We then address participatory design systems – in the context of the networked society – an issue of relevance for the focus as well as for the format of the new institution.

We consider the role of such a hybrid design institute within society in general – as an open laboratory that empowers mass creativity – and place such a nationally funded institution within the international context. We close by pointing to the potential of such a new hybrid type of institute within the (dis)continuities of the Dutch design-related institutions.

Designing Circuitries

The hybrid design fields that are emerging through the combination and fusion of environments, objects and services are becoming increasingly relevant. The focus is shifting from designing products intended for consumption to programming – or 'designing' – processes for networks of people, enterprises and organizations – processes which represent a pool of possible sustainable futures.

A hybrid design approach, as characterized briefly above, considers objects, services and environments within their networked systems of production, distribution, use and recycling. It can therefore consider complex issues such as circuitry. A process-oriented design approach can take into account a multiplicity of cycles, including energy cycles (i.e. the energy needed for production and

transportation, objects as energy converters), as well as recycling with multiple-shift use and life cycles, creative recycling concepts of use and reuse, and 'cradle to cradle' solutions.

Under development are design applications that support effective communication regarding complex processes of production, distribution, use and recycling to the consumer and user. Such applications can, for example, enable the tracking of a product's 'ecological backpack' (meaning all of the natural resources used during its entire life cycle from production to transportation, use and disposal).

'Designing Circuitries' could therefore be a main programmatic area of the hybrid design institute. Such a focus would allow us to address the complex challenges of ecological and social sustainability in a more comprehensive way, embedding design development in the wider discussion of sustainability.

BANG Design Research

Technological developments are currently being accelerated by the fusion of information technology, nanotechnology, biotechnology and neurotechnologies (brain technologies), and their convergence in new hybrid technology platforms such as DNA computing, nano-biotechnology, synthetic biology and neuroengineering. These converging technologies are referred to as BANG (Bits Atoms Neurons and Genes) by the ETC Group (Action Group on Erosion, Technology and Concentration; 'ETC' is pronounced 'et cetera'; see http://www.etcgroup.org).

These converging technologies will enable us to generate materials with processionary qualities that serve as building blocks for objects and environments that interact with their users, modifying their qualities as they adapt to processes of use.

With a focus as well on high-tech materials research, the hybrid design institute could have a strong technological dimension. A research-oriented program dimension could be of significance for the financing of the institution, especially given the likelihood that public funding will be increasingly limited in the future.

Initiating design research and developing cooperations would enable the new institute to set an independent innovative research agenda with a commitment to society and the public interest. A hybrid design institute would approach technological developments from the perspective of the designer by 'inhabiting technology', i.e. transforming such technological developments in order to accommodate the way we want to live.

Designing Networks

Increasingly, politics, economics, warfare and culture are enacted within the spaces of information-communication, of media networks. These emerging digital networks are influencing and interacting with 'real' places, modifying the social, economic and cultural organization of our societies.

As demonstrated by Manuel Castells in his classic sociological analysis *The Rise of the Network Society* (1996), media networks are transforming our society. Currently, we are witnessing an acceleration of these developments due to the global proliferation of mobile media. Political uprisings such as the Arab Revolution, the Indignados, and the Take the Square and Occupy Wall Street movements are taking advantage of mobile media networks and social media tools. In their distrust of established political forces and parties, they contest the concept of the 'political expert'. Creating independent self-publication channels and demanding 'direct democracy', they are forming fluctuating networked political forces.

Media-supported networked systems are also transforming knowledge production: just think of Wikipedia, 'the free encyclopedia that anyone can edit'. Networked cooperation, co-authorship and open source publishing are to be found in many contemporary cultural expressions and phenomena, for example Wikimedia Commons, the free media file repository, which makes public domain and freely licensed educational media content (images, sound and video clips) available to everyone.

Aided by improvements in information and communication technology, users are increasingly developing their own new products and services, thereby 'democratizing' innovation. These users often freely share their innovations with others, creating user innovation communities and a rich intellectual commons. According to Eric von Hippel (2005), Professor of Management of Innovation and Head of the Innovation and Entrepreneurship Group at MIT, this trend toward democratized innovation can be seen in software and information products (most notably in the free and open source software movement), but in physical products as well. Examples of user innovation in action range from surgical equipment, to surfboards, to software security features.

The word 'prosumer' is used in this context to describe the type of consumer who becomes involved in the design and manufacture of products, allowing them to be made to her/his individual specifications. The word 'prosumer' blends the roles of producer and consumer, and was coined in 1980 by the futurist Alvin Toffler in his book *The Third Wave: The Classic Study of Tomorrow*.

Due to such a shift from mass production to individual customization and network-assisted production, the consumer/user–product relationship is being rapidly transformed. These developments also demand a new approach to design: from the design of singular prototypical objects for industrial mass production to the design of processes of production and distribution in interaction with users. This means a shift from centralized to distributed participatory systems with 'enabling solutions' that involve users.

One of the main issues being researched in this context is how future customers can be integrated as participants into development and production processes, thereby acquiring a new, central and

active role. Hybrid design deals with such participatory systems and investigates concepts for the transformation of products in media-based service environments. This includes the development of new interfaces between consumer and producer and new service environments that expand and transform the concept of the demand and supply system and of the shop.

By blurring and transgressing traditional professional boundaries, the design profession today is expanding into the fields of service design, one example being health care. In this context, participatory networks are indispensable and integral elements of a system which embeds design into a network of social relationships.

This includes solutions that 'enable' users to interact and platforms which support localized recycling processes or the participatory tools needed for local chains of 'symbiotic production' which allow the waste streams of one production process to become resources of others. Shared facilities can bring people together, strengthening socialization and reducing the need for material devices and infrastructures. Peer-to-peer exchange platforms for informal economies of self-production and non-monetary exchange can support collaborating communities with design services that allow people to relate and communicate, exchange and share.

Hybrid design's networked dimension is supported by media developments. But it is not limited to the high-tech design world. Networked participatory systems are also an integral element of 'green design', just think of emerging design projects in urban agriculture and other 'local tech' design applications. Such networked systems can function as infrastructures for ecological and social sustainability.

A 'Designing Networks' programme focus for the hybrid design institute could address these developments and connect the independent R&D work of the design professions to a general discussion, relating it to interdisciplinary research. The theoretical reference in relation to this emerging network paradigm is 'Network Science', which examines the interconnections of networked systems and analyses complex relational data in highly diverse fields of activity. This interdisciplinary approach can be regarded as a later development of the theories of complexity of the 1980s and 1990s. Network Science focuses on the complex networks of exchange and strives to develop an X-ray perspective, which allows us to understand how dynamic complex systems develop and function (see, for example, Barabási, 2004; Watts, 2007).

But 'Designing Networks' should be more than just a thematic program focus. The set-up and structure of the envisioned institution should take these developments into account as well. The potential of such innovative formats has already been tested by Premsela and the Platform21 program, which operated in Amsterdam from 2005 to 2010 as an innovative experimental 'incubator' which functioned as a combined exhibition and laboratory space. By continuing and

expanding this approach and incorporating networked participatory design systems, the hybrid design institute could be conceived of as an open laboratory, which integrates professionals and the larger public and empowers mass creativity.

The Society of Forced Leisure and Mass Creativity

This raises the issue of the possible role of the envisioned institute within society in general. The focus of the new institute should be wider than the question of the toolkits required to support bottom-up user innovation and to empower mass creativity.

The emerging creative economy and the society (of 'forced leisure'), one based on the affluence of networked creativity, will need to identify functional modes which differ from those which regard creativity as a scarce resource to be protected by copyright regulations (as in the industrial era). Many issues remain to be resolved, including the question of how bargaining is to take place within an interconnected intellectual commons. The emerging networked cooperation models described briefly above demand an approach to intellectual property which departs from those of industrial era copyright regulations and the protective logic inherent to the large-scale investments of industrial mass manufacturing (where the creative individual designed for the non-creative masses).

A discussion of these issues has been launched by Premsela. They have also been the focus of a series of conferences on Copy/Culture, which have taken place in Berlin and Beijing in 2011, and in Istanbul in 2012 (see http://www.premsela.org/en/designworld_1/copyculture-symposium_1/), and of publications such as *Open Design Now: Why Design Cannot Remain Exclusive* (van Abel *et al* (2011).

The new institute should continue and expand this discussion. This concerns not only a new approach vis-à-vis the intellectual commons. We also need new business models and social strategies designed to support the emerging creative economy and a society of networked creativity in a sustainable way.

As the prognosis of the leisure society becomes reality (not in the context of wealth but of economic implosion and unemployment), social strategies for upgrading 'forced leisure' as a meaningful experience are needed – for example services designed to support the informal economy and other relevant creative activities.

This calls for a general social debate. Such a discussion would transgress the still narrow boundaries of a professional field and could position design at the centre of a discourse, which addresses social issues in a broader way.

Glocality

The themes discussed here are of relevance for the international as well as for the Dutch local context. This raises the question of the commitment and reach of the new institute and its positioning within the local and global context. With a layered, networked structure,

the envisioned institute could provide a platform for international exchange as well as work on the local level.

In our globalized world, where global space is just a finger swipe away, the importance of belonging to a local environment and a local community is growing. In the future, the ecological and social footprint of our footloose society will require greater consideration. This will generate a new range of locally related media applications and environments and location-based services ('Facebook' to 'Spacebook'). Such hybrid environments, fusions of the real and the virtual, will focus on neighbourhoods, localizing services and linking them to the global, supporting innovation on the local level.

As the world grows together through travel and tourism, through the internationalization of markets and through media-based globalization, global culture is invading local environments. On the one hand, traditional cultural differences are being flattened out. But on the other hand, as the individual locality gains in importance, processes of cultural fusion are generating new possibilities for cultural morphing and powering the creative potential of cultural hybridizations.

Accelerated by the current economic crisis, we are experiencing the rapid decline of Western hegemony. Recently industrialized countries such as China and India are entering the international design market as new players. The emerging design cultures that are beginning to contribute to global design production and discourse will bring their own influences to bear on our common design heritage, fostering hybrid design movements in the process.

This is a general trend. Hybridization is becoming an increasingly important issue in the cultural field – just consider the attention currently accorded to world literature. Typically for our global postcolonial hybrid civilization, a cultural mix and fusion is emerging which subverts the former cultural hierarchies, which were dominated by the earlier colonializing culture. This fosters cultural hybridization, meaning the dynamic development of new hybrid cultural expressions.

In this context, a nation-based branding strategy for design such as the 'Dutch (Object) Design' of recent decades becomes questionable. Far more exciting and relevant are questions which relate to the specific design qualities of objects and spaces (physical and virtual) which manifest the spirit of our hybrid 'glocal' communities.

The envisioned hybrid design institute could develop into a productive actor within this process. Embedded in the highly developed design communities in the Netherlands, and with excellent potential concerning people and resources, it could provide a platform for encounters of European as well as global reach and relevance.

Rebooting (Dutch) Design
The Dutch design organizations have a long history of rises and crashes – the last crash occurred in 1999, when the institute stopped

functioning for several years, only to be relaunched in 2003. Deriving from ideological groups such as De Stijl, it has developed, encompassing a range of themes of current relevance. Under its two most recent directors, John Thackara (1993–9) and Dingeman Kuilman (2003–11), the institute's agenda was expanded to encompass broader interdisciplinary issues such as digital culture and ecological and open design. Initiated with notable success during these two periods were a series of interesting working formats such as the Doors of Perception conference, which placed these interdisciplinary innovative themes on the map as far back as the early 1990s, and the Platform21 laboratory, mentioned earlier.

Dutch design then, has the potential to overcome its recent deviation into iconic design and egocentric mediatization and marketing. In relation to this overcoming of the 'iconic', and in the context of its impending forced merger, The Netherlands Institute for Design and Fashion could negotiate successfully with its (larger) counterpart, the Netherlands Architecture Institute, which has opened and remodelled its program to include the innovation agenda of an 'Architecture of Consequence [that] shows that architecture can play a part in formulating solutions to widespread global problems, and help to build a more sustainable future' (see http://en.nai.nl/platform/innovation_agenda/item/_pid/kolom2-1/_rp_kolom2-1_elementId/1_823648).

The design-related institutes in the Netherlands are currently undergoing a crisis. The word 'crisis' (a word of ancient Greek origin) encompasses notions of disaster and catastrophe as well as of judgement and decision. Restructurings are always disruptive and painful. But as this paper attempts to demonstrate, the imminent forced merger harbours considerable creative potential. It represents a unique opportunity to accelerate the design-related cultural industry.

The proposed program areas of the hybrid design institute, as outlined briefly above, represent an initial suggestion. If it is to go beyond the narrow professional perspectives and logics of the traditional design professions and their interests groups, a hybrid design institute should begin by focusing on common ground. The first task of such an institute would be to concentrate on research in order to map and formulate these interdisciplinary issues and develop integrated design applications and activities.

This would have implications for the format of the institute – at least for its start, since it could adapt its organizational structure as it matures. A laboratory might be a productive format for the initial phase. Such an open and participatory system could integrate both professionals and the broader public, developing the links required for the transitional phase of restructuring.

Embedding design discourse in an interdisciplinary context in this way could strengthen reflections on the role of the designer in relation to the shaping and development of our environment. It could also provide a creative platform of encounter and propel a dynamic

design culture, thereby positioning Dutch design and the creative industries at the forefront of cultural innovation.

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Biographies

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