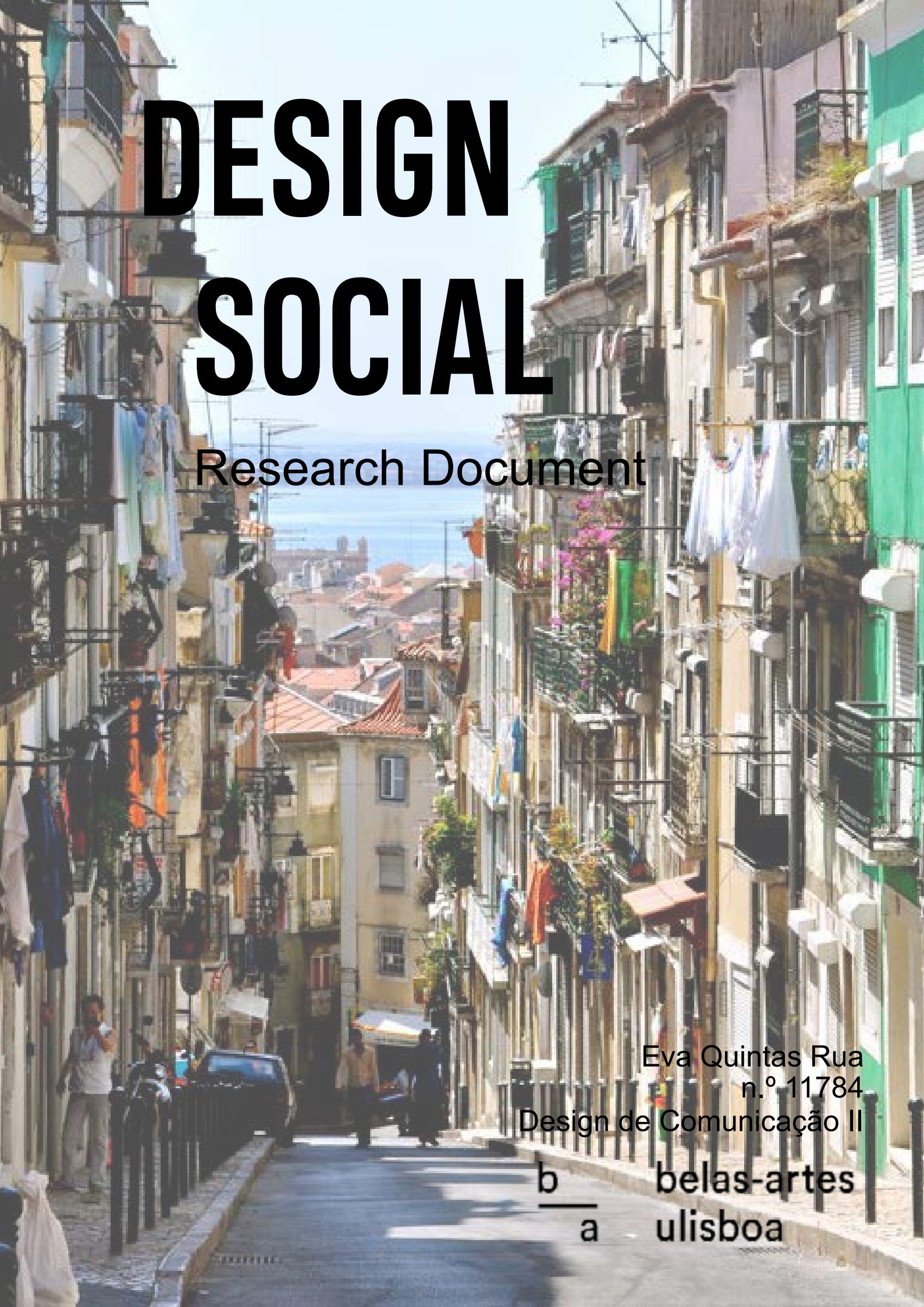


DESIGN SOCIAL

Research Document

Eva Quintas Rua
n.º 11784
Design de Comunicação II

belas-artes
ulisboa

Bibliografia

Activity-centered design_Geri Gay, Helene Hembrooke

ARQA, arquitetura e arte_Set/Out 2010

ARQA, arquitetura e arte_Maio/Jun 2013

Bright minds, beautiful ideas_Bruno Munari, Charles & Ray Eames,

Martí Guixé, Jurgen Bey

Design and the social sciences: making connections_Jorge Frascara

Design for the real world_Victor Papanek

Design like you give a damn_Architeture for humanity

Design for social change_Andrew Shea

Ideas+buildings: collective process_2008/Volume .01

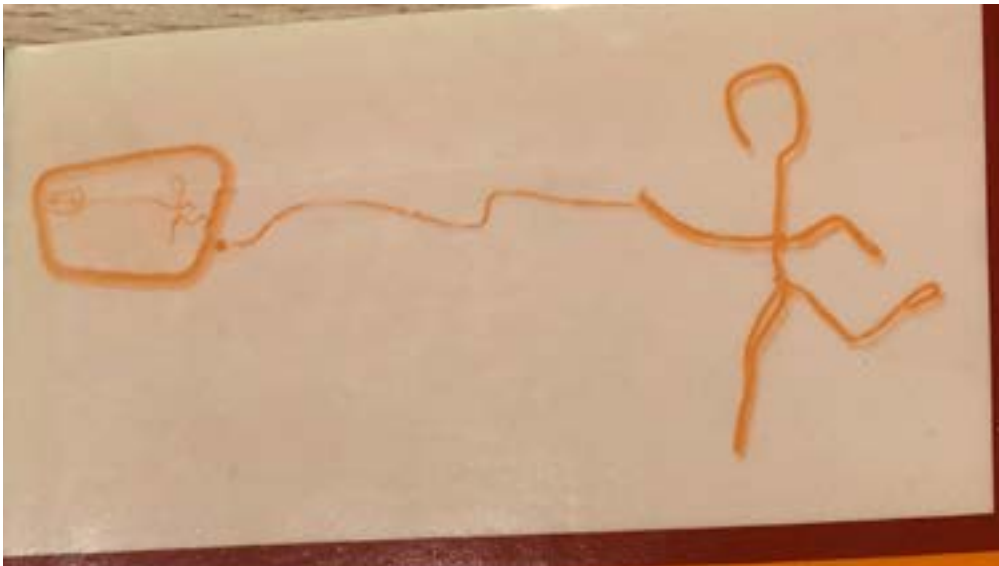
Lapiz, revista internacional de arte_N.º 275 Ano XXXI

Problem solved_Michael Jonhson

The green imperative_Victor Papanek

This is service design thinking_ Jakob Schneider

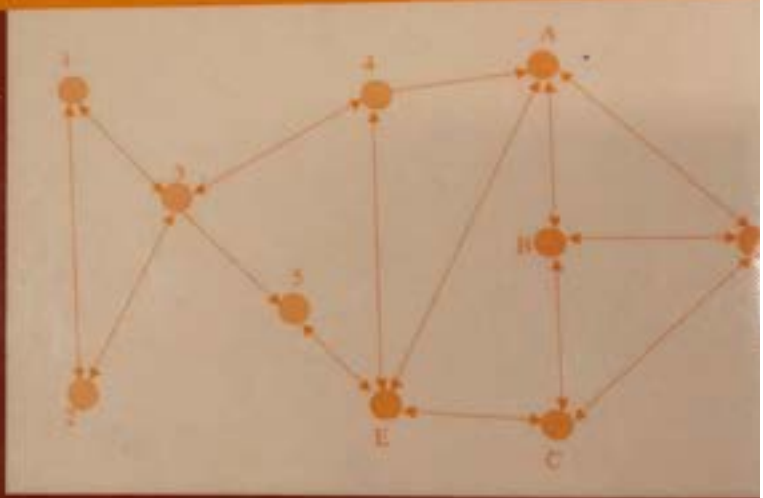
What is design today?_George H. Marcus

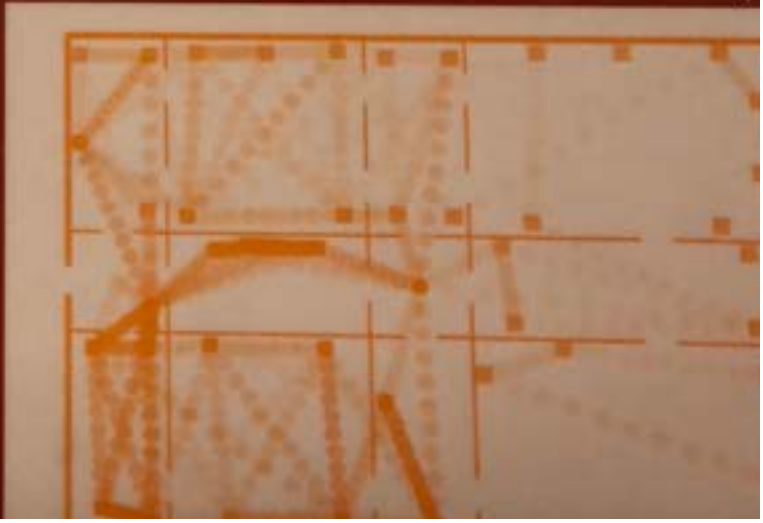


ACTIVITY-CENTERED DESIGN

An Ecological Approach to Designing Smart Tools and Usable Systems

Geri Gay and
Helene Hembrooke





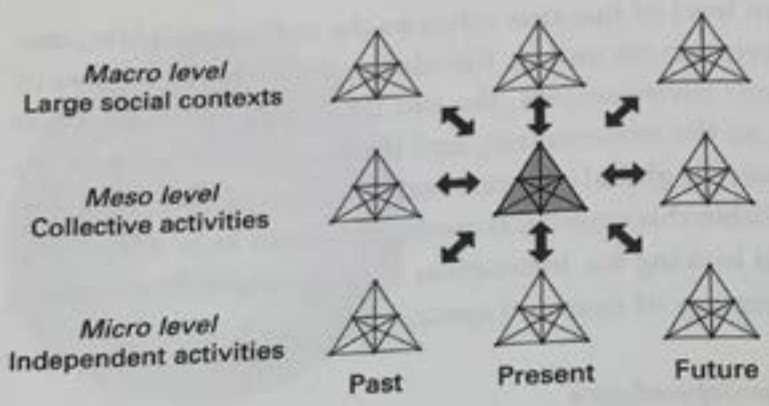


Figure 1.4
Temporal interconnections and "situatedness" of an activity (adapted from Boer, van Baalen, & Kumer, 2002)

Primacy of Time and Space

In addition to the physical network of activity systems, their temporal interconnectedness needs to be examined (Pettigrew, 1990). Activities develop through time, stimulated by the tensions that develop within and between them at various levels (Leont'ev, 1978). "Processes observed at different contextual levels of analysis are often observed to have their own pace and rate" (Boer, van Baalen, & Kumar, 2002, p. 92). Activities from the past are alive in the present and also help shape the future. An activity system is not static, and the developments and changes within the system need to be described and analyzed by locating changes in the past, present, and future (Boer et al., 2002). The dynamic nature of ecological systems hinges on their situatedness in time and space (figure 1.4). Thus, parameters of time and space are the initial critical contexts to which designers need to attend.

Integration of Activity Theory and Ecological Principles

Integrating activity theory with ecological principles involves understanding an outcome (such as a specific technology or user need) at a particular point in time in the context of interacting systems (micro, meso, exo, and macro). The primacy of time and space is particularly crucial because all systems evolve over time and understanding occurs in both historical and

contemporary contexts. Activities are "multilevel, multidimensional, dynamic, collective, context-sensitive, and mediated by cultural artifacts" (Boer et al., 2002, p. 8).

The interaction between actors in an activity system is mediated by the object of activity, by language and tools, by a division of labor, by conventions, and by social rules. Participants are involved in a social process as they attempt to accomplish some goal or objective and as they use diverse combinations of signs and tools to create meaning. An activity system can be decomposed into a network of several detailed activity systems—the original setting and increasingly broader contexts (Boer et al., 2002). For example, when analyzing how distributed work teams collaborate on a design project, researchers would look at the history of the work teams and also zoom out to the organizational settings, social settings, and larger social contexts and levels in which these distributed teams operate. The activity system is not only "affected by activity systems at other contextual levels but also exerts influence on them itself. In fact, an activity system can be conceived as a system of distributed cognition" (Boer et al., 2002, p. 6).

The iterative design cycle that is shown in figure 1.5 illustrates the cyclic process of change that is anticipated by activity theory. First, researchers and designers must examine current practices and activities. Needs are identified through scenario-based design techniques, interviews, and observations. Next, tensions, controversies, and conflicts within and between activity systems are identified. Then a period of search and questioning begins as new models and metaphors are considered and new solutions and designs are developed. After the initial series of trials and testing of designs in actual settings, new priorities and approaches emerge, followed by periods of reconceptualization, revision, and redesign. Ultimately, the entire cycle is repeated until some resolution, new stability, or closure is achieved. Increasing agreement among the groups is indicated by a narrowing of disagreements during each iteration, with the resulting central point representing a shared conceptualization or closure (Pinch & Bijker, 1987).

As people begin to address the tensions, conflicts, and breakdowns that are features of their activity systems, they begin to create a collective force for change and innovation (Blacker, Crump, & McDonald, 1999). These breakdowns as well as points of change and development can be used to study activity. The activity-theory approach emphasizes the incoherencies,

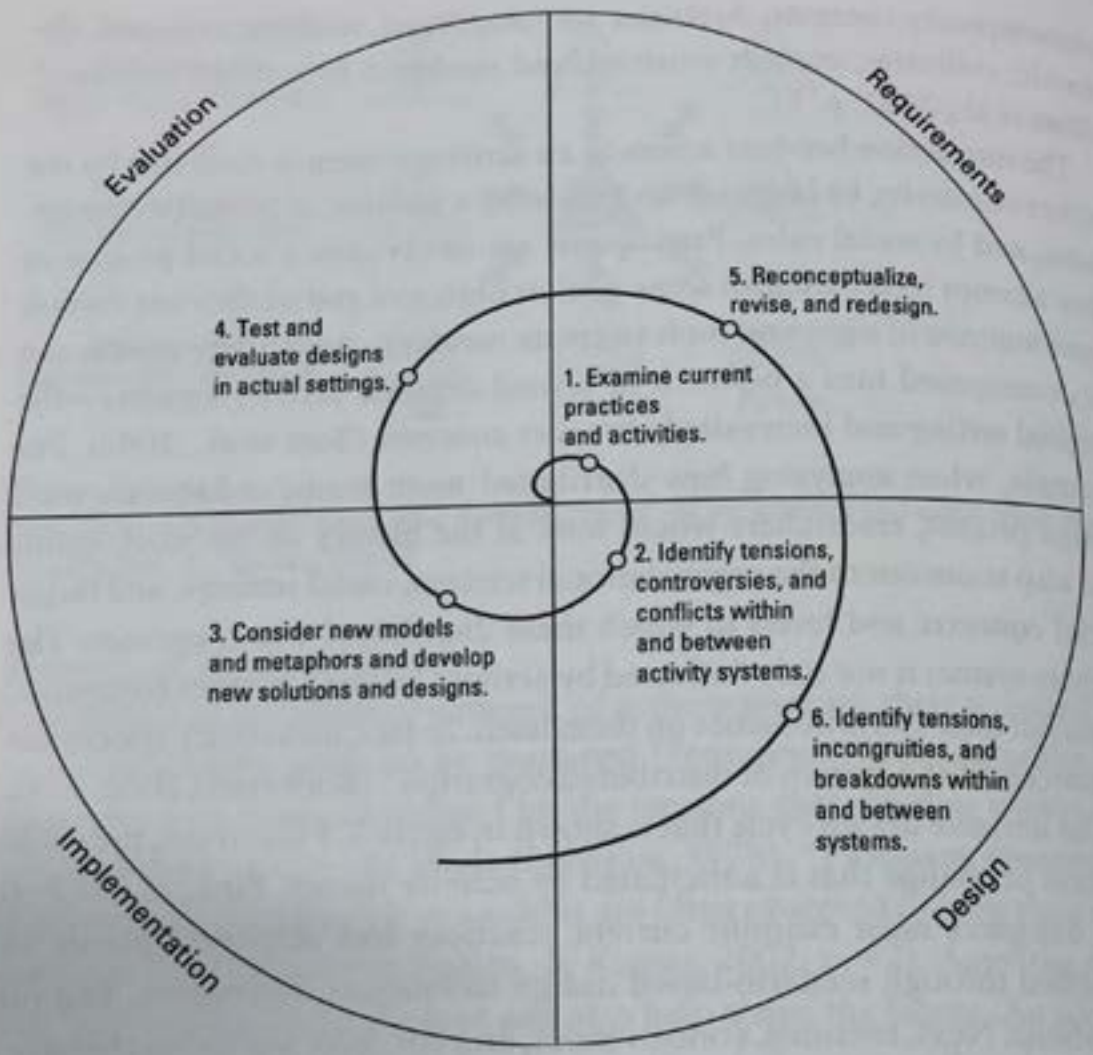


Figure 1.5
An iterative design cycle

tensions, controversies, and conflicts that exist among components in the system (Blacker et al., 1999).

Activities such as technology construction should not be perceived as statically structured entities but rather as dynamic processes that are characterized by ambiguity and change. Construction and renegotiation reoccur constantly within the system. The entire iterative design process rests on dynamic interactions between order and chaos, steady states and breakdowns, harmony and controversy. The activity system is constantly working through tensions within and between its components (Blacker et al., 1999). The tensions and breakdowns that occur within activity sys-

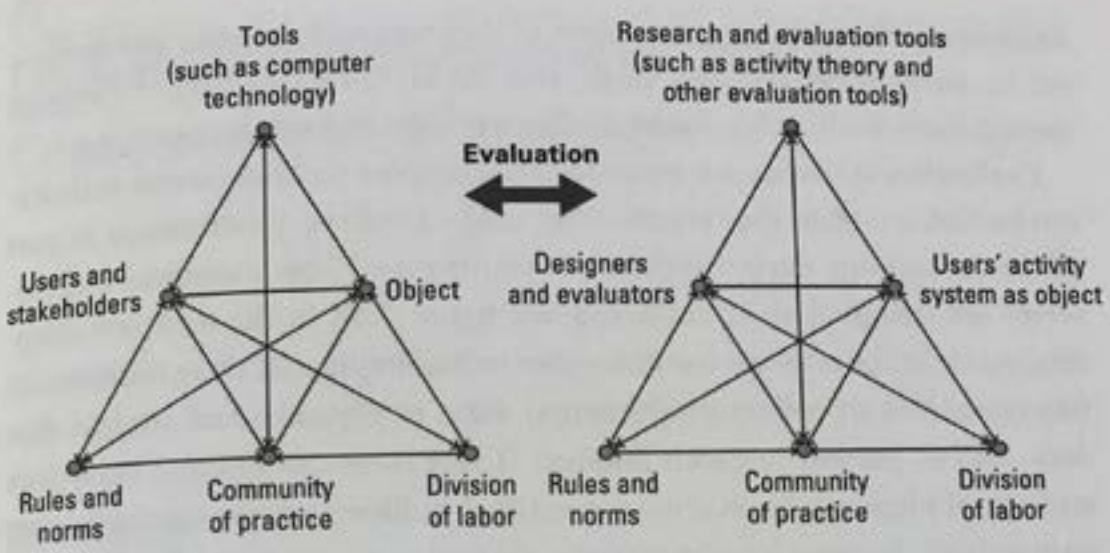


Figure 1.6
The mediating role of evaluation in technology design

tems can be used as points of reference for studying the social construction and design process (Boer et al., 2002).

Within these nested environments are systems that function dynamically and thus enable us to examine how they change over time. Within any design ecology, some systems are perceived as stable and thus require less attention from the designer, while others are perceived as being in flux and become the focus of design research or development. When a new tool is introduced, for example, designers usually focus on user requirements for design (at the micro level), establish these requirements, and then move on to understand the interactions between the new tool and practices in a larger context (meso level).

Toward Reflection in Action

Activity theory cautions us that any tool has the potential to transform the activity in which it is used and, reciprocally, that tools have the potential to be transformed as they are used. Responsible evaluation professionals need to reflect on those potentials and on the ethical considerations that are involved in assessing tool designs, user programs, and evaluation instruments (figure 1.6). Evaluators and designers need to document and analyze uses of technology in program settings and in evaluation activities to

2

Understanding Perspectives: Social Construction of Technology

Introduction

Social interactions play a large role in the development of technology, and they contribute to the inherent ambiguities of technology design (Abowd & Mynatt, 2000; Bødker 1997; Bødker & Petersen 2000; Engeström, 1999a; Hasan, Gould, & Hyland, 1998; Nardi, 1996a, 1996b). The social construction of technology (SCOT) framework considers the multiple social perspectives that surround the development of new technologies (Pinch & Bijker, 1987). SCOT, which evolved out of studies of the sociology of scientific knowledge and the history of technology, examines the multiple "branches" of a technology that coexist to meet the needs of multiple social groups (Edwards, 1995). It explores the ways that individuals, due to their various histories and positions, construct the components and objects of an activity system in different ways.

SCOT theorists describe the social processes that impact technological development and identify the social groups that are responsible for shaping technological artifacts (Bijker & Law, 1992). Fundamentally, as Edwards (1995, p. 212) notes, "technological change is a *social process:* Technologies can and do have 'social impacts,' but they are simultaneously social *products* that embody power relationships and social goals and structures." Like activity theory, SCOT emphasizes multiple social perspectives, social construction, and the use of tools in specified contexts.

A social constructivist approach is ideal for examining the design and development of a technical system (Pinch & Bijker, 1987). Using this approach,

the researcher or designer examines the conceptions that are held by the various social groups that are involved in a technology's development and then follows the social construction of each group's technology to examine how the group reaches closure—that is, how that social construction is conceptually frozen in the view of the group and across multiple groups (Pinch & Bijker, 1987). Rather than trying to determine whether the respective conceptions from multiple parties are inherently true or false, the social constructivists situate these conceptions within the context of each group and observe how group members negotiate these conceptions.

The SCOT model encourages designers to consider the interactions, ambiguities, and complexities of the various groups that are defining and developing digital environments and to consider the multiple social perspectives that surround the development of new technologies. This holistic approach contrasts sharply with standard practices in technology development. For example, many designers of computer hardware and software systems tend to isolate the design process from the social and political structure in which they are planned (Kilker & Gay, 1998). Simple measurements of technological performance (such as number of hits on a particular page) are inadequate when isolated from data about the social structure within which the systems are designed or for which they are planned. One of the complex interrelationships among system elements that designers must consider is the impact of various perspectives (Pinch & Bijker, 1987).

A primary assumption of the SCOT approach is that activities are socially co-constructed and mediated by human communication and interaction. Communication and collaboration between subjects are processes that are critical for coordinating different versions of the design and other components of the system. In the early days of networked information, "build it and they will come" may have been a sufficient model of user interest and behavior. Increasingly, however, designers are proactively addressing the particular needs and challenges of their intended users. Ultimately, different versions of a design and various perspectives must be resolved, resulting in consensus or conflict. Through an iterative design process, various stakeholders will reach closure or some agreement (Pinch & Bijker, 1987).

SCOT Concepts

The social construction of technology framework of interpretative flexibility addresses the various notions that are held by each relevant social group. The three main SCOT concepts are relevant social groups, interpretative flexibility, and closure. These concepts—as well as an evaluation of them—are discussed below and further explored in the case study presented later in this chapter.

Relevant Social Groups

Trevor Pinch and Wiebe E. Bijker (1987, p. 30) define *relevant social group* as a group whose members "share a set of meanings attached to a specific artifact." Various relevant social groups can derive very different meanings from a single technology. For example, some of the first SCOT researchers examined the design of early broadcast media and found that relevant social groups' concepts of early radio included radio telegraphy, radio telephony, and broadcasting (Douglas, 1987). Those meanings or interpretations of use create expectations that can lead to alterations in the design of the artifact and to the acceptance of one version of a technology over another. As the radio studies showed, interpretations of the meaning of the proposed technology are shaped by the different disciplinary and organizational cultures to which the project participants belonged.

The multiple actors in a technical development project go through a process of enrolling each other in the enterprise and tailoring the project to meet the different goals of the various actors (Latour, 1987). Relevant social groups differ not only in terms of experience, technical expertise, and goals but also in their ability to influence the final project. The goal and challenge for SCOT theorists is to define the boundaries and relevancy of these social groups.

Interpretive Flexibility

When a technology is first created, it goes through a state that SCOT theorists call *interpretive flexibility,* in which the technological artifact is "culturally constructed and interpreted" as it is being developed and even as it is being used (Pinch & Bijker, 1987, p. 40). Interpretive flexibility describes how different groups perceive a technology and also how these

A Social Constructivist Approach to Design and Evaluation

As with any useful analytical approach SCOT's ultimate benefit lies in its ability to help researchers reframe the problem under study and to help designers understand the goals of important stakeholders (Kilker & Gay, 1998). This approach emphasizes the importance of social interactions in the design of technology, uses an interpretive framework to understand inconsistent results, resists premature closure of the design process, considers the ways that relevant social groups are mediated and their differing levels of influence on technology, and approaches iterative design and evaluation as a socially constructed and negotiable process.

We found that our primary function as evaluators was to promote communication among the relevant social groups participating in the design process and to help those groups understand the differing needs of all the stakeholders in the process. Evaluators can serve as closure mechanisms by acting as intermediaries between the users and other relevant groups involved in design. As demonstrated by the Handscape needs analysis, the shortcomings of traditional evaluation models can be overcome by adopting a group-centered design for collecting, analyzing, and reporting evaluation data.

The relevancy of a social group to a technology is not static but can change over the course of a project. For example, the influence of museum patrons on hand-held technology design can increase as systems are installed and tested, as evidenced in the museum case study presented in this chapter. Groups can also render themselves more (or less) relevant by participating in (or opting out of) the design process. Stakeholders' beliefs about design, interactivity, and the museum experience itself have shaped both the design process and final product.

The technology reflects what the relevant stakeholders (museum professionals, system designers, and museum patrons) believe is useful, appropriate, and, in fact, possible, and the design process is one of constant negotiation among group members with different backgrounds, strengths, and goals. While museum patrons might prefer to see more user participation in the design of software for mobile technology devices, museum professionals might be reluctant to involve others in decisions about how the museum presents itself. Programmers and designers might see technical challenges and opportunities but neglect to take into account complex political and economic issues.

A challenge with implementing a framework that employs a social construction of technology framework is to define the boundaries and roles of different social groups. To be relevant, a SCOT framework must balance the needs of the various groups that are involved in design and evaluation and their various notions of the actual and desirable levels of influence that each group holds. During any evaluation process, evaluators should examine why certain groups are more or less influential and what consequences these influences have over the course of a project. Evaluators can help interpret the demands of different groups, help each group understand the perspective of other groups, depoliticize technology development, and help groups reach consensus or closure (Kilker & Gay, 1998).

Conclusion

An interpretivist approach, such as the SCOT framework that is advanced in this chapter, takes a contextually based perspective that values the multiple understandings, intentions, involvement, and perspectives of all project participants. This approach orients interpretivist inquiry within a meaningful framework that facilitates the evaluation processes, illuminates tacit assumptions and contextual issues, and enhances the trustworthiness and credibility of the findings by grounding them in users' understandings.

Design is situated in a network of influencing social systems, and building any technological system is a socially constructed and negotiable process. By using an interpretive flexibility framework, developers can understand stakeholders' various goals and apparent inconsistencies. When using the SCOT model, researchers are required to highlight differ-

ing perceptions of a technology, gather differing assessments of the technology's performance, determine the features that should be incorporated, and decide the way that the features should operate in any given context. The goals of the various groups involved in the production of a technology can be very different, and therefore their interpretations of the project tend to differ as well.

In conclusion, the design of any technical system requires careful consideration of the interactions among the various groups that are working to define and develop the system. To design an effective system that meets the needs of various users, consistent and simultaneous attention must be paid to a variety of social, organizational, administrative, and technical concerns (Kilker & Gay, 1998; Levy & Marshall, 1995). The SCOT framework offers an important approach to this potentially daunting challenge.

arqa 84

ARQUITECTURA E ARTE

Set|Out 2010 | €11,00

GERAÇÃO Z #

Plano B • José Pedro Sousa
Extrastudio • Atelier Data

Manuel Graça Dias
Michel Toussaint
Nuno Grande
Ricardo Carvalho
Rui Mendes
André Tavares
Pedro Duarte Bento
Pedro Baía

Catarina Pestana
Manuel Santos Maia
Pedro Barateiro

Jovens Arquitectos Portugueses Premiados Internacionalmente • Megastructures
Dossier: Once Upon a Place • Académicos: Projecto Pluridisciplinar 97 - FAUP

ISSN: 1647-077X

EDITORIAL

GERAÇÃO Z #2

Como pode a questão geracional apresentar-se como hipótese crítica?

Luís Santiago Baptista|lsbaptista@revarqa.com

1 Conforme prometido no final do ano passado, a arqa promove agora o segundo ciclo do programa curatorial geração z, apresentando mais 4 práticas emergentes portuguesas.[1] Depois de, no final de 2009, termos apresentado *geração z #1*, com MOOV, Arquitectos Anónimos, Kaputt! e ALZprojekt, apresentamos agora *geração z #2*, um novo ciclo de exposições e conferências a ter lugar na sede da Ordem dos Arquitectos, desta feita com Plano B, José Pedro Sousa/ReD, Extrastudio e Ateliermob. Sendo este um segundo ciclo, impõe-se fazer um primeiro balanço crítico, que extravase o "breve relato crítico" já publicado.[2] Se, por um lado, as exposições foram visitadas e bem recebidas pelo público e as conferências e respectivos debates foram bastante concorridos e participados, por outro, não faltou pluralidade e polémica nas páginas da revista-catálogo que então editámos. No entanto, as intuições que expusémos nesse editorial confirmaram-se, em grande medida, nas respostas às nossas entrevistas-inquérito e nas reacções que fomos tendo de todo o evento.[3] A questão geracional na arquitectura portuguesa continua remetida para o campo do indizível, assumida como existente na generalidade para logo de seguida ser remetida na especialidade para o domínio do irrelevante. Simplificando, parece que a questão geracional sempre existiu da mesma forma, numa mera repetição circular do mesmo desde a emergência das vanguardas históricas, que subentende uma periodicidade regular estabelecida, regida por um tempo homogéneo e cadenciado, no essencial avesso aos fenómenos de aceleração e pluralização histórica, ou mais prosaicamente, que é coisa de juventude, associada explicitamente a ingenuidade, inexperiência, senão mesmo oportunismo, ou que é alimento da lógica mediática disciplinar vigente, gerando sentimentos de indiferença e no limite desconfiança. Ao fim e ao cabo, poderíamos concluir que esta seria então uma falsa questão, um tema sem conteúdo, uma tese sem consistência. Mas acreditamos que não. Perante as dificuldades sentidas pelas gerações mais novas, alguns factos muito positivos dão-nos que pensar: os MOOV e o Atelier Data, sem praticamente obra construída, estão prestes a construir em Dallas um protótipo experimental de quarteirão sustentável; as práticas muito jovens Urbanouveau e Blvanc estão em processo de construção respectivamente de um plano de reabilitação habitacional na Índia e de um modelo de habitação sustentável em África; o atelier Rocha Tombal, tendo emigrado, constitui hoje uma prática desafiadora consistentemente estruturada no país de acolhimento, embora praticamente desconhecida no país de origem; os Ateliers de Santa Catarina, formando um conglomerado internacional de práticas emergentes, participam na construção colectiva de obras relevantes de Portugal à China; um blogue como o do ateliermob funciona como plataforma expansiva de informação disciplinar e divulgação projectual, adquirindo um impacto nacional e internacional; um arquitecto como Marcos Cruz é neste momento director da Bartlett, uma das escolas de arquitectura mais importantes do mundo. Os exemplos, apesar de tudo, poder-se-iam multiplicar. Não tanto como uma galeria de conquistas nacionais lá fora, mas como sintoma de uma mudança significativa nas práticas arquitectónicas emergentes e no seu modo de organização, funcionamento e comunicação.[4] Como se pode interpretar esta realidade disciplinar emergente? De que forma podemos enfrentar criticamente esta nova situação? Com que instrumentos e dispositivos o poderemos fazer? Foi a estas perguntas que procurámos afirmativamente com o programa *geração z*. Baseamo-nos num conjunto de parâmetros cronológicos e profissionais - arquitectos já nascidos depois do 25 de Abril e com atelier montado já neste milénio - que nos pareceram relevantes no conteúdo disciplinar nacional e internacional, parâmetros porém sempre de certa maneira artificiais. De resto, esta é apenas uma das perspectivas críticas possíveis. Esta cartografia geracional não invalida outras abordagens da arquitectura portuguesa consideradas igualmente relevantes, sejam elas inter-geracionais, multi-geracionais, ou porque não mesmo anti-geracionais. Todavia, esta abertura a outras linhas de investigação não nos afasta da convicção que este é o caminho mais fecundo. Falamos em convicção e não em certeza. É isto torna-se muito importante porque o projecto *geração z* não é um programa legitimado à partida, justificado com antecedência, confirmado a priori. É essencialmente uma hipótese em cima da mesa, ou melhor, um teste em plena execução. Enfim, um *work in progress*. Por isso, investimos essencialmente na análise crítica e adiámos estrategicamente as conclusões. Interessa-nos mais, por agora, seleccionar candidatos, compilar informação e promover o debate. Desde logo, queremos não só mostrar consistentemente a obra dos ateliers envolvidos e ouvir atentamente as suas ideias, mas igualmente convocar a sua criatividade na apresentação da sua produção arquitectónica, primeiro bidimensionalmente, no caderno *geração z* inserido na revista, de seguida tridimensionalmente, na instalação na galeria da Ordem dos Arquitectos. Depois, procurámos inquirir sobre a temática geracional não apenas aqueles que se cruzaram de diferentes modos com a questão das práticas emergentes, como um conjunto relevante de arquitectos, críticos e teóricos de arquitectura dos mais diversos quadrantes disciplinares. Não pretendemos congregar uma comunidade de afectos em volta da diferença geracional, tal como não desejamos instigar a polémica estéril. Queremos simplesmente perceber o que está a mudar para melhor actuarmos. E se a mudança nas condições profissionais e produtivas não é propriamente geracional, não deixa de ser nas gerações mais jovens que ela se manifesta de modo mais claro e intenso. Para o bem e para o mal. Neste sentido, deixamos o convite para que nos visitem na exposição e conferências *geração z #2* e que leiam o material apresentado neste número da arqa e no anterior sobre esta mesma temática. A partir daí tirem, mesmo que provisória e tentativamente, as vossas ilações e conclusões.

2 Como fazer uma cartografia das práticas arquitectónicas portuguesas emergentes? Esse mapeamento pode partir da análise das novas práticas arquitectónicas portuguesas como um reflexo crítico e criativo de um estado de coisas. Este manifesta-se essencialmente em quatro campos distintos mas complementares: o das mudanças nas condições disciplinares da arquitectura portuguesa, o da transformação das condições territoriais em Portugal, o da mutação das condições produtivas nacionais e o das alterações nas condições profissionais dos arquitectos portugueses. Em primeiro lugar, existem as mudanças nas condições disciplinares da arquitectura portuguesa. Se a arquitectura portuguesa se tem representado segundo uma concepção identitária essencialmente convergente e coerente, ao custo da neutralização das franjas da actividade disciplinar, é essa unidade ideológica que estará hoje manifestamente em questão. A meta-narrativa da arquitectura portuguesa, que lhe conferia um sentido histórico e um fundamento cultural agregador,

A questão geracional na arquitectura portuguesa continua remetida para o campo do indizível, assumida como existente na generalidade para logo de seguida ser reenviada na especialidade para o domínio do irrelevante. (...) Ao fim e ao cabo, poderíamos concluir que esta seria então uma falsa questão, um tema sem conteúdo, uma tese sem consistência. Mas acreditamos que não.

GERAÇÃO Z #1 - MOOV + Arquitectos Anónimos, Ordem dos Arquitectos, Lisboa, 2009 + AUZprojekt + Kaputt!, Ordem dos Arquitectos, Lisboa, 2009

fragmenta-se e implode em micro-narrativas diferenciadas, estruturalmente impuras e imprevisíveis. É neste sentido que as práticas emergentes afirmam a dissipação das identidades que sustentaram a especificidade disciplinar portuguesa, suplantada agora por uma multiplicidade fundadora. A emergência de uma pluralidade de novas propostas arquitectónicas, que dificilmente encaixam na ordem disciplinar dominante, é um efeito directo e explícito da realidade contemporânea. Não só a deslocação formativa e práticas de mobilidade estão hoje generalizadas entre estudantes e jovens arquitectos como a informação disciplinar adquiriu uma escala e disseminação globalizada por uma diversidade de meios físicos e virtuais. As novas práticas arquitectónicas começam a apresentar-se como o resultado dinâmico das múltiplas ligações e conexões simultaneamente locais e globais, materiais e imateriais, conceptuais e formais, que configuram uma rede mais livre e ampla de influências e contactos. São por isso mais individualizadas e específicas, demonstrando que é impossível senão mesmo irrelevante pensar a prática arquitectónica contemporânea fora desse universo de contaminação e hibridização. Esse horizonte pode ir das abordagens mais participadas às propostas mais irónicas, dos projectos mais pragmáticos às investigações mais experimentais, das concepções mais *high-tech* às apropriações mais *low-tech*.

Em segundo lugar, existe a transformação das condições territoriais em Portugal. Perante a devastação do território das últimas décadas, não sobra nenhuma intervenção disciplinar emancipadora e reabilitadora que dê sentido à paisagem portuguesa. A manifestação da identidade portuguesa já não está cingida à memória fragmentada que resta pelo território ou à pontual modernidade urbana bem circunscrita, mas emerge da nova realidade construída que, paradoxalmente, não deixa de ter traços originais especificamente portugueses. Estes podem ser encontrados nos centros históricos desertificados, nas extensas periferias habitacionais, no massivo contínuo costeiro e na urbanização informal do meio rural. As novas práticas arquitectónicas são aquelas que se têm de confrontar definitivamente com o facto da arquitectura portuguesa ter perdido o território, ou melhor, uma certa ideia idílica do território. E sem a estabilidade desse lugar sedimentado para acolher o projecto, outros campos têm quer ser explorados para manter uma réstia de poder significante e transformador da arquitectura. É por isso que as novas práticas já não fogem ao choque violento e intenso com a realidade, enfrentando-a positivamente, sem rejeitarem o existente e sem se autonomizarem. Nestes termos, adoptam as estratégias criativas mais expeditas, tendo em conta a resposta eficaz a uma situação específica. Estas podem adoptar perspectivas relacionais que podem ir do diálogo crítico do objecto com a envolvente até à reinvenção projectual contextualizada, passando pela activação temporária do espaço público de orientação mais crítica ou lúdica. Em terceiro lugar, existe a mutação das condições produtivas nacionais. Com a expansão da lógica de mercado nas últimas décadas, a arquitectura portuguesa vê enfraquecida irremediavelmente a sua moderna relação com o domínio público. A verdade é que no campo da arquitectura de autor cada vez menos as distinções se fazem por tipos de encomenda, pública *versus* privada, por espécies de cliente, institucional *versus* empresarial, ou por categorias tipológicas, cultural *versus* comercial. Por outro lado, a rarefacção da encomenda pública é directamente proporcional à crescente iniciativa privada, que salvo raras excepções vai construindo massivamente o território com recurso a modelos banalizados, rejeitados por um planeamento burocratizado. Se os principais arquitectos reconhecidos têm reorientado a sua actividade no sentido de explorar as novas solicitações do mercado, seja de obras públicas de referência com impacto institucional e cultural, seja das novas tipologias empresariais, comerciais e turísticas da promoção privada, a grande maioria dos jovens arquitectos fica cingida ao campo da construção indiferenciada ou eventualmente a pequenas obras singulares. Sintomaticamente, a geração mais nova de arquitectos portugueses é a primeira que não consegue estruturar um percurso profissional a partir da participação em concursos públicos, estando igualmente arredada das grandes operações do mercado imobiliário. Se, por um lado, alguns têm conseguido internacionalizar-se, participando em concursos e eventos culturais, por outro, algumas práticas têm desenvolvido novas actividades, estratégias e projectos em áreas mais marginais da disciplina. Emergem assim práticas alternativas, mais interventivas e reivindicativas, que apostam em abordagens mais críticas às condições existenciais contemporâneas, afastando-se do horizonte tradicional da encomenda. O resultado mais evidente é uma abertura do espectro de acção do arquitecto, compatibilizando o propositivo com o crítico, o projectual com o

GERAÇÃO Z #2 - Plano B, arq/a #57, 2008 • Plano B, Casa do Garrano, Ourém, 2008-09 • ReD, arq/a #55, 2008 • José Pedro Sousa, Fachada Habitada, Porto, 2009

performativo. Este campo integra a exploração da pequena encomenda, a participação em importantes concursos internacionais, o investimento criativo no processo produtivo, a participação em eventos urbanos efémeros transdisciplinares, o envolvimento arquitectónico em contextos de crise humanitária e mesmo a pura investigação digital. Em quarto lugar, existem as alterações nas condições profissionais dos arquitectos portugueses. Nos últimos anos, estes tiveram que interiorizar os processos de democratização da profissão, com o consequente aumento da competitividade entre si. O incremento exponencial do número de arquitectos e a desigualdade de acesso ao mercado de trabalho não deixaram de revelar o recente agudizar das tensões profissionais. Esta situação leva necessariamente a uma redefinição das estratégias profissionais dos jovens arquitectos portugueses. A situação profissional dos novos ateliers fomenta a crescente exploração de estruturas híbridas de trabalho, cada vez mais adaptáveis e moldáveis, e promove a criação de redes de trabalho interactivas e dinâmicas, que se afastam da ideia do arquitecto autor individual. Isto reflecte-se nas mudanças nos modos de estruturação dos ateliers, quase todos adoptando a forma de colectivo, e no desenvolvimento de colaborações, que atravessam múltiplos interesses e campos disciplinares, desde o design ao urbanismo, desde as ciências sociais e humanas à investigação tecnológica. Por outro lado, os jovens ateliers exploram as novas formas de comunicação e divulgação potenciadas pelas aberturas existentes no espaço mediático. Apropriam as novas plataformas informáticas, facilmente acessíveis e de alcance generalizado, onde desenvolvem práticas alternativas de divulgação do trabalho e de debate de ideias. As práticas emergentes redefinem as suas formas de organização, estratégias de comunicação e programas de intervenção, pondo em causa as fronteiras profissionais tradicionais. Em suma, a adaptação criativa ao contexto disciplinar, territorial, produtivo e profissional e a consequente abertura estratégica do campo da arquitectura portuguesa é algo que caracteriza especificamente a geração emergente. Não por acaso a grande mudança que se sente nesta geração mais nova é não só a irreversível pluralização das práticas, mas a significativa repolitização da actividade, com o extravasar do interesse para o campo social e ecológico, algo que não pode ser desligado de todo um contexto disciplinar internacional em mudança. Tendo em conta os poucos traços comuns referidos, a nova geração de arquitectos portugueses afirma-se no campo de uma multiplicidade estrutural, manifestada na actual proliferação e disseminação embrionária de práticas arquitectónicas diferenciadas. Pela primeira vez é impossível contê-las num âmbito comum, que não seja a experiência do agravamento das condições do exercício da profissão.

3 O ciclo *geração z #2* integra 4 práticas emergentes: Plano B, José Pedro Sousa/ReD, Extrastudio e Atelier Data. Das abordagens mais ecológicas às mais tecnológicas, das lógicas mais pragmáticas às mais especulativas, das perspectivas mais estéticas às mais programáticas, estes ateliers jovens apresentam propostas inovadoras coerentes mas estruturalmente diferenciadas. Em primeiro lugar, o Plano B apresenta-se por definição como alternativa aos modos disciplinares e profissionais dominantes: "Plano B significa uma alternativa ao plano inicial, ao previsto. Supõe-se que actue quando da ineficácia deste."[5] Aí reside a sua força e fraqueza. Força porque se assume como um espaço de liberdade aberto à experimentação. Fraqueza porque inevitavelmente se afasta da realidade produtiva. Poder-se-ia dizer que o Plano B procura incessantemente um equilíbrio dentro desta dualidade. Por outro lado, o posicionamento "crítico" e "experimental" deste colectivo procura distanciar-se dos lugares-comuns que envolvem os temas da sustentabilidade e da construção em terra. Se rejeitam a lógica ingénua da alta-tecnologia, com a sua confiança linear no progresso ilimitado, por outro, afastam-se da concepção nostálgica das propostas vernaculares, com o seu pessimismo intrínseco nas sociedades contemporâneas. Mas se se furtam às abordagens dominantes, não deixam de procurar novas sínteses entre materiais naturais e artificiais, entre tecnologias industriais e tradicionais, entre construções perenes e efémeras. Invertem as ideias vigentes ao "utilizar os materiais naturais estruturalmente, onde eles apresentam maior dificuldade em competir com os modernos materiais e utilizar materiais artificiais de uma forma visível, onde eles são mais chocantes para um público desejoso de soluções ecológicas."[6] Incorporando assumidamente um programa ideológico, o Plano B aproxima-se pragmaticamente do campo utópico, ao qual não será estranho o ímpeto de participação colectiva na construção dos seus

Em suma, a adaptação criativa ao contexto disciplinar, territorial, produtivo e profissional e a consequente abertura estratégica do campo da arquitectura portuguesa é algo que caracteriza especificamente a geração emergente. Não por acaso a grande mudança que se sente nesta geração mais nova é não só a irreversível pluralização das práticas, mas a significativa repolitização da actividade, com o extravasar do interesse para o campo social e ecológico.

GERAÇÃO Z #2 - Extrastudio, arqa #80-81, 2010 • Extrastudio, Café Sena das Minas, Sintra, 2009 • Atelier Data, arqa #61, 2008 • Atelier Data, Moradia Ribamar, 2008

pequenos manifestos arquitectónicos. Em segundo lugar, José Pedro Sousa, membro fundador do ReD, desenvolve uma actividade contaminante entre o experimental e o digital, apostando "na convergência entre actividades de investigação e de projecto, tanto no mundo académico como na prática profissional."[7] Conciliando campos normalmente separados, este arquitecto escapa da ideia restrita do uso computacional para a geração da forma, defendendo uma abordagem mais ampla que vai da concepção até à construção. Nas suas "geometrias interpretadas materialmente" interessam-lhe mais os "processos" inerentes aos modelos digitais do que os resultados formais. O seu trabalho investe criativamente "para além dos limites da estandardização e da geometria euclidiana", tanto nas morfologias complexas como na sua tradução nos processos de fabrico industriais ou artesanais. Como refere, "considero que um dos grandes desafios da actualidade consiste em conseguir dar respostas cada vez mais específicas e personalizadas à diversidade de constrangimentos e exigências que caracterizam os diversos problemas e contextos de projecto."[8] Se nos seus espaços expositivos se revela essa relação mais directa e expedita entre concepção e construção, tornam-se igualmente determinantes os trabalhos experimentais que tem realizado com empresas de materiais de construção. Em terceiro lugar, o Extrastudio explora um campo de trabalho invulgarmente alargado, desde a pequena encomenda privada até à escala do plano urbanístico, passando pela investigação de novos materiais e processos construtivos.[9] Perante as dificuldades crescentes de acesso à encomenda, este atelier lisboeta furta-se à definição de um programa arquitectónico: "Acreditamos que vivemos num tempo onde não nos é permitido estabelecer uma agenda específica. Como arquitectos, a nossa única estratégia é desenvolver uma lógica clara para cada projecto."[10] Com este mínimo denominador comum, o Extrastudio procura explorar o potencial de cada projecto, adoptando uma estratégia simultaneamente pragmática e experimental, entre o realista e o afirmativo. Revela uma confiança que cada projecto pode abrir possibilidades, que têm que ser detectadas. Depois, tudo se joga no equilíbrio instável e imprevisível da relação com os clientes, promotores, instituições, empresas, fornecedores, construtoras, etc. Neste sentido, a experimentação arquitectónica não tem que depender da quantidade dos meios disponíveis, mas de uma gestão atenta de possibilidades. Saber o que se quer e saber até onde se pode ir será assim a maior virtude do Extrastudio, da qual depende o sucesso das suas propostas. Em quarto lugar, o Atelier Data tem consciência da duplicidade da sua actividade, entre a encomenda privada, com as limitações da realidade produtiva nacional, e as propostas de concurso, de âmbito mais "propositivo" e "especulativo". No entanto, essa percepção das diferenças inerentes às respostas projectuais não vai contra a procura de um dispositivo unificador, que explore simultaneamente o potencial de cada uma das situações. Esse dispositivo agregador é o "diagrama": "Procuramos desenvolver estratégias que respondam de forma clara a um problema concreto, actuando dentro de uma lógica diagramática e elementar. Desta atitude sistemática surge a operatividade e a eficácia de todo o processo de investigação e de construção da ideia."[11] A abordagem diagramática concilia o trabalho analítico de "diagnóstico" com a redução conceptual ao "elementar", revelando uma abertura estrutural à evolução e uma disponibilidade específica à adaptação. A lógica diagramática explora assim mais os processos de desenvolvimento do que os resultados finais. E esta abordagem permite quer uma maior capacidade negocial com os promotores, quer uma grande elasticidade no desenvolvimento projectual das suas propostas. Como afirmam, "reconhecemos neste cenário de maior adversidade a virtude de provocar novas "inquietudes" que abrem e desdobram o nosso campo de actuação e despertam novas motivações."[12] ■

---

[1] Ver: http://geracaoz.wordpress.com/
[2] Ver: Luís Santiago Baptista, «GERAÇÃO Z #1: Breve relato crítico do evento na Ordem dos Arquitectos», in arqa #77, 2010.
[3] Ver: Luís Santiago Baptista, «GERAÇÃO Z #1: Porque é tão difícil debater diferenças geracionais na arquitectura portuguesa?», in arqa #75-76, 2010.
[4] Ver: Itinerâncias de Cristina Veríssimo sobre Jovens Arquitectos Portugueses Premiados Internacionalmente neste número da arqa.
[5] Plano B, «geração z: Plano B», in arqa #57, 2008, p. 99.
[6] Ver: entrevista Plano B neste número da arqa.
[7] ReD, «geração z: ReD», in arqa #55, 2008, p. 99.
[8] Ver: entrevista José Pedro Sousa neste número da arqa.
[9] Ver: Extrastudio, «geração z: Extrastudio», in arqa #80-81, 2010.
[10] Ver: entrevista Extrastudio neste número da arqa.
[11] Atelier Data, «geração z: Atelier Data», in arqa #61, 2008, p. 100.
[12] Ver: entrevista Atelier Data neste número da arqa.

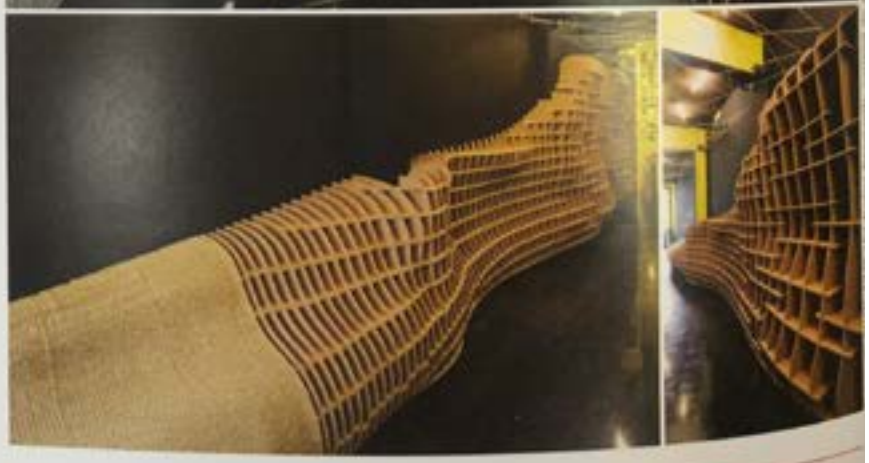
Reduzir, Reutilizar e Reciclar na Loja|Bar LOW

LOW é uma Loja|Bar que vende e divulga produtos de design português com materiais ecológicos e materiais reciclados, num apelo a Reduzir, Reutilizar e Reciclar. A LOW pretende implicar a indústria e os criativos para que trabalhem determinados materiais e produtos ecológicos e reciclados, organizando eventos para a apresentação do material e produtos que, com ele, foram desenhados e produzidos. Na zona de showroom são apresentadas peças de design do Remade in Portugal, que se associou à LOW, disponibilizando produtos, criados por arquitectos, designers e outros criativos, cuja composição integra, pelo menos, 50% de matéria proveniente de processos de reciclagem, de pré-consumo (reutilização de desperdícios do produto industrial, normalmente assumida pela indústria) e de pós-consumo (reutilização de embalagens, resíduos e desperdícios domésticos recolhidos em ecopontos).

O espaço foi concebido pelo arquitecto Pedro Campos Costa, que desenhou também o mobiliário e o expositor, realizados em cartão reciclado. O expositor é o elemento que marca o espaço, uma estrutura ondulante, concebida para ser montada sem colagens, que se forma longitudinalmente num banco corrido e dá origem, na extremidade oposta, à estrutura de expositor. O tecto falso é constituído por uma teia de corda de sisal e as cores dominantes são o preto e o amarelo.

Neste espaço, aberto desde Agosto, estão previstas acções de divulgação, debates e conferências sobre a sustentabilidade e materiais de construção. Situa-se na Rua da Barroca, 75, no Bairro Alto em Lisboa.

www.camposcosta.com • www.remadeinportugal.pt



Catálogo "As Idades da Construção"

"As Idades da Construção" é o catálogo recentemente editado pelo Instituto do Emprego e Formação Profissional (IEFP), no contexto da exposição

DESIGN
ensaio

Catarina Pestana

Um design social

Carla Carbone | carlacarbone@yahoo.com

O trabalho de um designer gráfico não se reduz somente ao desenho de uma letra, ao anúncio de um produto, ao desenvolvimento de uma embalagem.
A pouco e pouco, o designer sabe que a sua área de intervenção se espraia por outras dimensões que não são apenas as meras execuções das coisas. O designer sabe o seu papel social. Mesmo que o ignore, participa dele. Um cartaz anuncia, uma embalagem é vendida, em conjunto com um produto, pelo país fora. Ou até pelo mundo. Sabemos das teorias de informação, de Abraham Moles, e de como um objecto não só comunica as suas funções práticas e úteis - para amenizar as actividades do quotidiano - como transparece funções, por vezes mais subtis e, nem por isso menos importantes: as funções simbólicas, as funções sociais, as funções estéticas, estas últimas, raras vezes inocentes, que podem ditar costumes e impor *hábitus*.
Por *hábitus*, palavra tão séria partilhada por Bourdieu, sabemos ainda da existência do ser individual, em primeiro lugar resultado da sua construção como indivíduo, em família e, depois, resultado da sua existência como ser social, neste caso quando se encontra em interacção com os outros indivíduos. Por isso procura encaixar-se num grupo ou sociedade, de forma a evitar o sentimento (estado) de exclusão social. Somos o produto de nós mesmos e o produto da nossa relação com os outros. O designer sabe isso.
Cada troca simbólica, também outra expressão de Bourdieu, vincula um movimento de saberes e cultura ou, inversamente, o seu aviltamento ou alienação. Em cada grupo, ou sociedade, observamos as contaminações de outras culturas, a circulação de bens culturais e a sua apropriação.

Catarina Pestana

Não se pode falar de uma cultura, mas de uma diversidade de culturas. Que em maior ou menor escala coabitam, difundem, chocam ou transformam.
Outra expressão encontrada, para esta "contaminação", será a designação "violência simbólica", que não é forçosamente uma expressão pejorativa. Violência simbólica requer que, com um dado grupo cultural, social, económico, sejam partilhados novos hábitos e rotinas ou provocações, que o dinamizem e o façam sair da letargia em que se encontra. Sabemos também que sociedades fechadas são sociedades que não evoluem e que entram progressivamente em entropia. As escolas são exemplo disso. Os velhos métodos autoritários educativos já não se enquadram numa cultura em que dominam a internet, a televisão, os jogos de consola, o cinema. Todo um mundo virtual que se impõe e que, pelo colorido, abafa outras formas de expressão, mais silenciosas e menos inteligíveis. As imagens dominam. A facilidade estabelece-se. As mensagens devem ser eloquentes, eficazes, para serem ouvidas, e mais rapidamente. O designer por isso veste várias roupagens para se fazer valer da sua mensagem. Transmuta-se e transdisciplinariza-se. Mais ainda, o designer é agora o produto desse viver mediatizado. Trabalha com esses signos. Utiliza a mesma linguagem que os demais, para ser ouvido. Isto lembra o centro das preocupações do marketing e as questões da pós-modernidade.
No sentido de um designer completo, voltado para a vida e para a sociedade, consciente da sua participação nessa sociedade. Uma vez que não lhe pode fugir, ou sequer refutar-se a participar nela.
Desse modo, melhor do que ninguém para nos explicar esta experiência de uma "arte total", de uma arte pública, a própria designer Catarina Pestana, em "O papa veste Prada" ou a peça "light my fire": Se observamos "light my fire" (cariz sexual), ou "papa veste prada" (de cariz religioso), todos eles comunicam uma mensagem. Sim, são projectos críticos onde lhes foi adicionado um *twist* comunicacional, com um sentido de humor próprio. Porquê? Porque perante os problemas, ao invés de lhes fugir, há que falar neles. E rir deles!. Porque não só é uma forma de encarar a vida como é também uma forma de referir o que existe, o que nos envolve, a nossa cultura, a nossa sociedade... é uma forma de cidadania. O design permite isso e serve esse propósito".
A designer, nas suas experiências de intervenção pública, depara-se com o choque, e surpreende-se com o facto de, ainda agora, se manifestarem tantos tabus e puritanismos.
A designer explica: " Em comunicação, existem tabus, que funcionam na criação de choque. Será que o choque ainda funciona? Alguém ainda se choca? A verdade, o delicioso deste pensamento é observar que, de forma espaçada, quase experimental, tenho chegado à conclusão que, de variadíssimas maneiras, o puritanismo e o medo de falar em voz alta está patente em diversos órgãos. Sexo, religião e política são as três temáticas tabu patentes na nossa sociedade. Verifiquei isso com "light my fire". Na peça "light my fire", a designer colocou um vibrador num manequim feminino, dourado, acompanhado por uma t-shirt, com um

Rebranding TagusparK - início 2007

Fernando Pessoa & Heterónimos - Vista Alegre - 2009 - Ilustrações de Catarina Pestana

O Papa Veste Prada - 2010 - (Visitera Visita Bento XVI A Portugal)

slogan que dizia: "coca-cola light gosta de mim". Na realidade o slogan oficial da campanha era: "cola-cola light gosta de ti". A designer brincou com as palavras e com a mensagem do slogan e deslocou-o para um tabu ainda existente, o debate sobre o sexo: "cola-cola light gosta de ti", e a designer pergunta: Quem não ficaria excitado?

A designer recorda a experiência, em "O papa veste prada", das reacções do público, da polémica à volta das vestes do papa e de a mesma viver, há mais de dois anos, do trocadilho com o filme "O diabo veste Prada". Valeu a pena: as reacções das pessoas nas ruas, os risos, os carros a apitar, a participação dos transeuntes na paródia.

Para o fecho da trilogia da comunicação falta saber como a designer vai responder à próxima acção de cariz político: "Estando em 2010, no ano de Celebração do Centenário da República, o que estará reservado para o próximo dia 5 de Outubro?"

Na realidade, esta tónica na ironia e no humor sai reforçada. Catarina Pestana corresponde àquela geração de designers que não escapou, felizmente, ao que melhor caracterizou essa geração: uma certa crítica social, um pendor para o mordaz, a utilização da ironia como forma de transformação de algum decantismo vigente, em matéria de design, tão agarrado que esteve às amarras da indústria e ao pensamento seriado das produções. Num design virado para a indústria, não havia lugar para a ironia, para a opinião, para a extravagância, era tudo uma questão de responder a "briefings", a receitas e ao fantasma dos custos. De uma certa forma trata-se não só da libertação criativa, em que estão em jogo as emoções, a individualidade, a cultura do designer mas, igualmente, uma libertação social, à revelia de uma economia, uma representação social, uma indústria, uma política. A designer diz-nos: "Interessa-me intervir em diferentes media e suportes. A minha formação em design de comunicação acabou por fomentar a minha transversalidade na abordagem de projectos. Independentemente

Catarina Pestana procura em cada novo projecto não repitir as fórmulas encontradas em projectos anteriores. Na realidade interessa-lhe renovar os conceitos, a cada novo projecto, a cada nova intervenção e ideia, a fim de a mensagem resultar "fresca e notória aos olhos do utilizador".

...o projecto, interessa-me sobretudo a localização no conceito, na mensagem a transmitir. A escolha do meio é reflexo de necessidades. As especializações no design de comunicação são, sem dúvida, importantes na canalização visual para a transmissão de mensagens". Acrescenta: "Não sou purista nas abordagens que faço. O que pretendo comunicar é que acaba por delinear os passos subsequentes". Catarina Pestana procura também que o projecto seguinte não repita as fórmulas encontradas em projectos anteriores. Na realidade interessa-lhe renovar os conceitos a cada novo projecto, a cada nova intervenção e ideia, a fim de a mensagem resultar "fresca e notória aos olhos do utilizador".

A forma não parece por isso uma prioridade para a designer: "Essa consciência na actuação, muito antes de me preocupar com a forma, permite que variadas vezes me questione sobre o que virá primeiro: se a estratégia ou a criatividade. Estrategas de comunicação apontam necessidades, indicam passos. Os criativos, perante essas directrizes, adicionam a criatividade na execução desse protocolo". Por esse motivo a designer gosta de uma certa atitude salutar, e cada vez mais necessária nas sociedades de hoje, a atitude polemizadora. Gosta de questionar a estratégia do mesmo modo que gosta de acrescentar algo à própria estratégia.

Por vezes os projectos surgem sem briefing e sem sequer terem sido requisitados. Surgem da necessidade da designer em canalizar mensagens. Exprimi-las: "Poder-se-á pensar que fujo à metodologia projectual do design. Por outro lado, os passos que dou são, sem dúvida, 'designerianos', ou quiçá, 'daseinerianos', já que acresce a essa metodologia uma atitude, um modo de estar no mundo e na vida. Isso, mais do que uma metodologia de design ou artística, é uma metodologia com uma forte componente humana e emocional. Revejo-me neste 'core' de actuação porque transmito mensagens com conteúdo. Em ponto algum elas têm qualquer carga gratuita de qualquer espécie. Se não me apresentam um problema, limito-me a observar os problemas existentes, dar-lhes uma forma e apresentá-los. Não crio esses problemas, na realidade, eles já lá estão". ■

Catarina Pestana procura em cada novo projecto não repitir as fórmulas encontradas em projectos anteriores. Na realidade interessa-lhe renovar os conceitos, a cada novo projecto, a cada nova intervenção e ideia, a fim de a mensagem resultar "fresca e notória aos olhos do utilizador".

do projecto, interessa-me sobretudo a focalização no conceito, na mensagem a transmitir. A escolha do meio é reflexo de necessidades. As especializações no design de comunicação são, sem dúvida, importantes na canalização visual para a transmissão de mensagens". Acrescenta: "Não sou purista nas abordagens que faço. O que pretendo comunicar é que acaba por delinear os passos subsequentes".

Catarina Pestana procura também que o projecto seguinte não repita as fórmulas encontradas em projectos anteriores. Na realidade interessa-lhe renovar os conceitos a cada novo projecto, a cada nova intervenção e ideia, a fim de a mensagem resultar "fresca e notória aos olhos do utilizador".

A forma não parece por isso uma prioridade para a designer: "Essa consciência na actuação, muito antes de me preocupar com a forma, permite que variadas vezes me questione sobre o que virá primeiro: se a estratégia ou a criatividade. Estrategas de comunicação apontam necessidades, indicam passos. Os criativos, perante essas directrizes, adicionam a criatividade na execução desse protocolo". Por esse motivo a designer gosta de uma certa atitude salutar, e cada vez mais necessária nas sociedades de hoje, a atitude polemizadora. Gosta de questionar a estratégia do mesmo modo que gosta de acrescentar algo à própria estratégia.

Por vezes os projectos surgem sem briefing e sem sequer terem sido requisitados. Surgem da necessidade da designer em canalizar mensagens. Exprimi-las: "Poder-se-á pensar que fujo à metodologia projectual do design. Por outro lado, os passos que dou são, sem dúvida, 'designerianos', ou quiçá, 'daseinerianos', já que acresce a essa metodologia uma atitude, um modo de estar no mundo e na vida. Isso, mais do que uma metodologia de design ou artística, é uma metodologia com uma forte componente humana e emocional. Revejo-me neste 'core' de actuação porque transmito mensagens com conteúdo. Em ponto algum elas têm qualquer carga gratuita de qualquer espécie. Se não me apresentam um problema, limito-me a observar os problemas existentes, dar-lhes uma forma e apresentá-los. Não crio esses problemas, na realidade, eles já lá estão". ■

Pedro Brandão

Arquiteto, Professor IST, Autor “A Imagem da Cidade” e “O Sentido da Cidade”

arqa: Tendo em conta a investigação sobre os temas do espaço público, em que sentido lhe interessa especificamente o fenómeno das novas coletividades? Como se pode definir este emergente sentido de comunidade?

PB: (Querido Público...) Pergunta-se se estamos a assistir a novas formas de socialização urbana e se há novos espaços colectivos que lhe correspondam. Interessando-me as temáticas do espaço publico, interessa-me aquilo de que ele é feito, e o que ali acontece, ou seja, não só as matérias e formas do espaço, ou hardware, como também o software que o define como “publico”. Na origem, a palavra refere-se ao que é do povo (*populum*), seja espaço de estar “em público” como num *pub* (bar), seja o que podemos designar por comum, ou “em comum” (*commons*), aquilo que se refere a “todos” é objecto de comunicação, ou publicitação, ou tornado público (*published*). Por aqui se chega à noção de que se trata do espaço “de todos”, isto é, a entidade colectiva, que origina uma “vida pública”. Na cidade é de “urbanidade”, isto é, da qualidade de ser urbano, que estamos a falar. Mas público e multitude, serão o mesmo? “Querido publico” é uma colectânea que explica a crescente expectativa de participação do público na obra artística – a arte invadiu a “intimidade contemplativa” e a visibilidade, com inesgotáveis “formatos” urbanos, da apropriação de espaços-tipo: musicais, panorâmicos, da publicidade, grafiteiros, *happenings*, *flashmobs*, o simples homem-estátua entre muitos outros. Na diminuição da distância, entre vida e arte, operam-se mutações na produção do espaço. A um ponto em que o espaço publico se torna parte do “espectáculo”, como espaço de representação, de *flanneuries* ou convicções. E a estetização do jogo democrático parece agora abarcar o mundo, através da conversão dos cidadãos em público (espectador) e da vida num espectáculo, de que não fazemos parte senão na qualidade de “público”. Trata-se de um processo emancipatório, ou de um entretenimento, que outros decidem? Vem isto a propósito da necessidade de avaliar as novas “colectividades” e portanto conhecer de que se trata. Podemos dizer que “público” somos “nós”, fórmula que enuncia os limites entre domínio próprio e domínio comum e a inclusão na pluralidade; mas é o “todos”, que inclui como objecto e sujeito, os “outros”, a comunidade de pessoas, passadas, futuras, e desconhecidas. O “público” só é um ente, porque designa um abstracto colectivo – “o Outro”. O desafio do público como parte reactiva dum espectáculo não se situa na bi-direccionalidade do espaço cénico, antes se mantém em formatos espaciais diversos (os centros de lazer, de consumo e outros espaços do colectivo). Será talvez a própria “dramatização da vida”, e a consciência de que nela acontecem muitas coisas, que cultiva uma expectativa pelo espaço público no quotidiano: será um discurso estético a que o público adere, um substituto da perda de experiencias colectivas na vida diária, ou será uma alteralidade, que é reflexiva? A imagem refere-se ao espaço do Parque da Bela Vista, em Marvila (Chelas), de escassa utilização no quotidiano, e re-produzido para o festival “RockinRio”. Um pequeno inquérito realizado na freguesia se concluiu que se estão a consolidar-se novos elementos de identidade positiva dos moradores. Mas a partir do momento da abertura de novas vias (para a EXPO98) que deu a conhecer uma “Chelas sem estigma”...a Cidade do Rock, atrai uma vez por ano toda a Cidade ao Parque da BelaVista, que agora substitui a prévia primazia da identidade industrial (as fábricas, o clube de futebol Oriental...), mesmo se são outros que vão ao espectáculo, e nessa interacção se instaura a nova identidade, o espaço

Rock in Rio e Festa Insuflável, Parque da Belavista, Lisboa.

E a propósito da cidade e suas periferias alerta para as noções recorrentes de uma "doença do espaço", que permitiriam ao arquitecto sugerir uma competência mistificadora, como "médico do espaço". Como se a cidade moderna não resultasse da sociedade mas duma doença, a "periferia". A resistência à acção pública no plano do urbano parece resultar do abandono do primado político do que é público (...)

Pedro Brandão

é público, e é deles, e do seu bairro.

arqa: Perante a crise do modelo de desenvolvimento global, quais as possibilidades atuais da intervenção ativa, social e popular na cidade contemporânea? Que genealogia para esta nova estruturação do coletivo?

PB: (Bicicletas públicas, corpos em *flashmob*, ócios do povo) Talvez não tenha percebido ainda se se trata de uma sociologia dos lazeres, ou do consumo, ou do próprio consumo do espaço de lazer, como parte daquilo que uma cidade hoje "vende", tal como a sua história se vende ao Turismo. Ou haverá outros valores, na genealogia do assunto? Augé, no seu "*Elogie de la byciclete*" diz que "*le premier coup de pedal, c'est l'acquisition d'une nouvelle autonomie, c'est l'échapée belle, la liberté palpable, le mouvement a la pointe du pied, quando la machine réspond au desir du corps...En quelques segondes, l'horizon borné se libère, le paysage bouge. Je suis ailleurs*." É preciso dar crédito à bicicleta pela reinserção do ciclista numa individualidade e também pela reinvenção de ligações sociais amáveis, porventura efémeras, ou portadoras de uma certa alegria de usar o espaço socialmente (diz o autor que os recém-convertidos facilmente se dedicam a trocar informações mecânicas ou de orientação na cidade). Admitamos: talvez como a indústria automóvel, que se apropriou da cidade no negócio do século XX, a bicicleta possa montar o seu *cluster* num *boom* económico e cultural. Mas nada disso decorrerá, por uns pedaços de pavimento serem pintados de encarnado. Em rigor o lazer não é uma categoria de tempo e portanto também não é uma categoria de espaço. Porque o lazer se pode combinar com trabalho (as "melhores empresas do mundo" oferecem tempo e espaço para actividades de lazer). O comportamento, em cada categoria de actividade (incluindo o trabalho) pode incluir lazer. Isto evidencia-se na diversidade do lazer disponível e visível nas cidades de consumo abundante, em diferentes espaços. São "estilos de vida": nuns predominam práticas culturais, noutros as desportivas, a noite, a natureza... Se o lazer não é o oposto do trabalho, também não o é das obrigações familiares, associativas, politicas ou religiosas, que cabem noutra categoria de espaços e tempos públicos ou colectivos. Podemos dizer que o "tempo-livre" é orientado para a realização da pessoa como sujeito livre, na realização dos seus fins, segundo o seu próprio critério. E que o espaço urbano é apropriado naturalmente, no uso de qualquer espaço por qualquer actividade (ou convicção) individual ou colectiva. Parecem agora faltar na cidade, espaços de actividades produtivas. Mas se for possível ligar os espaços públicos (polivalentes), não a uma só actividade (de trabalho ou privilegiada e "livre"), mas à interacção de todas, então haverá ganho, em termos da liberdade e de "vida publica". Com efeito, se os passeios ribeirinhos e ciclovias, são as vias de êxito seguro no gosto do publico, a elas poderíamos somar, como espaços com retorno eleitoral, percursos para *skaters*, patinadores, *segways*, *hip-hop*, *parcour*... e outras mobilidades e amenidades "longe do transito", de "regresso ao centro", "reconquistados para o peão"... As retóricas projectadas no espaço público são afirmadas à medida da qualidade do

Passeio ribeirinho, Oeiras.

ar ou dos índices cardio-vasculares, com uma espécie de surfada, nas ondas do espaço e no tempo de lazer. Mas o paradigma que justifica esses novos "espaços públicos qualificados", não é o de um espaço público contínuo, ao serviço da comum deslocação quotidiana e das actividades que ela motiva, na cidade alargada: para essa, mantém-se tudo, como antes. As "sensações da descida", são os adereços da moda adequada, o som dos *phones* abafando o pavimento, o vento na pele... Já o espaço público, sendo a rede para servir todas as actividades, incluindo comer, dormir, trabalhar, sentar, conviver, conterá naturalmente referências a tudo o que se passa e passou na cidade, incluindo o governo do colectivo e a desobediência civil, ou as acções que nem sempre precisam de pedir licença para falar, na cidade.

arqa: Nas mudanças das sociedades contemporâneas, que papel será o do arquitecto na configuração do novo sentido das "colectividades"? Haverá um novo espaço colectivo?

PB: (A produção critica do espaço...) Talvez que seja a mudança, a fé mais duradoura da modernidade. Se é assim, a angústia que sentimos hoje, será tão só, a da incerteza quanto à mudança, ou o futuro que nos falta? O que nos mostra Seurat no seu *Le Dimanche a la Grand Jatte*, é o lazer descoberto na modernidade nascente, pela pequena burguesia de Paris, conquistando no subúrbio, uma nova qualidade: não apenas da proximidade da natureza e suas amenidades, mas também a do uso social do espaço e do tempo. E os meios para a

Dimanche sur la grand Jatte.

interacção social, no prazer de interagir, como corpo publicamente afirmado, culturalizado. Tão suspenso está no tempo, o retratado, que chega até nós intacto. Substituam-se os personagens e somos ainda nós, o futuro da imagem. A pergunta então é, pelo Arquitecto. E o futuro na ideia de Projecto. Se se valoriza hoje o espaço público, teremos de ter uma perspectiva de pensamento crítico: Qual é a avaliação do processo de produção do espaço público construído, que anuncia o futuro? Por aqui poderemos eventualmente chegar à ideia de uma Produção Crítica do Espaço. Lefébvre coloca o problema na responsabilidade: "*Suprême illusion: considerer les architectes, urbanistes ou planificateurs comme experts en espace, juges suprêmes de la spatialité…*". E a propósito da cidade e suas periferias alerta para as noções recorrentes de uma "doença do espaço", que permitiriam ao arquitecto sugerir uma competência mistificadora, como "médico do espaço". Como se a cidade moderna não resultasse da sociedade mas duma doença, a "periferia". A resistência à acção pública no plano do urbano parece resultar do abandono do primado político do que é público, que decorre da dominância ideológica dos valores da livre iniciativa e do indivíduo, com as suas garantias "naturais" (liberdade, propriedade…) que incentivam a "mercadorização" do espaço público, com a hipervalorizada especialização no processo de produção do espaço, de que decorrem duas consequências do "grande gesto": por um lado, a maximização do próprio espaço construído, como produto financeiro e, por outro, os espaços hipervalorizados, pela sua performance como produtos da imagem. Atingido o seu limite, o processo retoma conceitos similares nos produtos de "reabilitação-de-topo-de-gama-no-centro" abandonando os espaços desvalorizados, dos "comuns", na periferia. Como explicar a adesão dos actores institucionais a esta retórica projectual senão pela falta de uma afirmação do saber profissional, fora do reduto da acção, das representações do poder? Na competitividade urbana a "gesticulação" projectual que decorre deste sistema afirma-se com apoio em tipologias de espaço "público" gentrificado (*waterfronts*, museus e auditórios, hotéis de sete estrelas, adegas *gourmet*…) mas é inerte em relação à possibilidade de resposta, aos novos "sentidos de colectivo", no processo criativo, interdisciplinar e colaborativo. O espaço público é uma noção que revela da interacção social, que tem a sua riqueza na sua inerente interdisciplinaridade: o facto de ela operar para lá dos "formatos" uniformizados da produção do espaço. O espaço público só pode renascer, da polissemia, que pode gerar a riqueza do saber da interacção, necessária à produção do urbano: uma projecção da figuração desejável e possível do futuro, integrador de permanências; uma convicção na maleabilidade do real, para apoiar o melhoramento da vida urbana; uma construção do espaço (geográfico, social, cultural), com valor específico, de todos.■

Vista do Vondelpark, Amesterdão.

Parallel thoughts in different times

BRIGHT MINDS, BEAUTIFUL IDEAS

BRUNO MUNARI
CHARLES & RAY EAMES
MARTÍ GUIXÉ
JURGEN BEY

Edited by Ed Annink and Ineke Schwartz

Introduction
Bright Minds, Beautiful Ideas
Parallel thoughts in different times

Beyond problem solving

The profession of designer is a turbulent one. A designer likes to interact with people (colleagues, airplane captains, bartenders, friends, restaurant keepers, football players, actors, manufacturers, scientists, managers, artists and so on), which together generates many insights and ideas. He or she likes books and magazines and other visual and verbal information of all kinds and from all countries. A designer wants to know what is happening in the world. Who is doing what and above all: why? All his friends are like that. And all perceive the world in different ways, they see differently, interpret differently, explain differently, and decide differently. So, their output is different as well.

Some designers are even beyond problem solving and finding answers for questions asked. They come up with new questions, new viewpoints and new ways to look at things. They bring exciting interpretations about newly-developed materials or new production technologies and, even more, they come up with completely new ways of approaching global and local issues. They are able to develop something that makes an essential contribution to society, that resolves everyday problems or reflects or comments upon them: perhaps in the form of a product, but sometimes a system or guide to tackling familiar things differently.

In this regard, four people currently come to mind – two 'classic' and two 'contemporary' designers: the Italian Bruno Munari (1907-1998), the American couple Charles (1907-1978) & Ray (1912-1988) Eames, the Catalan Martí Guixé (1964) and the Dutchman Jurgen Bey (1965). What they all have in common is the ability to look further than the end of their nose – beyond the world of the drawing table, of commercial operations, marketing and calculations. Besides a shared design standpoint they share a vision of the world, of society and culture, science and economics. They are capable of thinking and working at a global level, not just a local one. They come up with streams of unexpected questions and statements. It is not the diverse branches of industry that make them work. It is their own curiosity that moves them. So doing they move us, their colleagues, their producers and consumers.

Shifts and changes

Such ways of thinking, seeing and doing are of course always important. Because society – and with this culture – is subjected to constant changes, norms and values are continually re-considered and adjusted calling for unconventional visions and approaches. Something that today is needed more than ever. An overcrowded market, shifting disciplines, mixing and merging labels, global economy down and local cultures up are the context of the contemporary designer, consumer and industry. As old ideas are confronted with new practices, even the cultural and economical molochs and stepping stones do not seem to be able to last. Companies are cutting back, firing their workforce, halting innovations and turning their backs on experiment. Over the last few decades, the design industry has produced an enormous amount of products in many materials, colours and qualities. More and more designers entered the design profession and more and more products were made by growing numbers of design enterprises. The mountain of products they made together seems to be a devaluation of design. There are innumerable imitations, epigones and repetitions that nobody seems to need anymore. Almost nothing stands out as a singular exploration, self-willed stance or extraordinary end result. The status of the designer has become nondescript. Designers are not referred to in terms of their originality but in terms of their name and status. Some people don't want to hear the word

'design' and an increasingly number of designers no longer wish to be associated with it.

High time to reconsider the role of the designer and the value and (possible) meanings and values of design. High time for the question of what we really want and need. And not only to serve 'good business' (whatever that may be) because the Western economy is in a slump (only China has undergone economic growth of roughly 6% over recent years) or because of the stifling competition in the market. Even the consumer has simply had enough of the overload. Slowly but surely, the situation is reversing: the initially super-successful mechanism of producing more of the same but-just-that-bit-different, has collapsed. Too much of anything creates inflation: value depreciates, and meaning is lost.

These are difficult points to answer for designers because we want to create. We like to see our ideas distributed globally. Everybody must have our coat hanger! Our car! Our vase! Our chair! But when so many designers more or less have the same handwriting, the same taste, the same talent to create a shape in such a way that it can be produced, and the design industry is confused – what then?

A subjective selection

When Guta Moura Guedes of Experimenta-Design 2003 invited me, as a member of staff, to devise a project on the theme 'Beyond Consumption' I had an answer at the ready: a project on the mentality and attitude of truly innovative designers. A project that would excite, challenge and inspire another kind of designer mentality. A project about curiosity, investigation, the powers of imagination in combination with the right intuition. A plea for more sensible thinking and less thoughtless production. A challenge to debate the concept 'beautiful', to expand it to include content, meaning and ethics. 'Bright Minds, Beautiful Ideas, parallel thoughts in different times' consists of a workshop, a book, an exhibition and a series of debates. The project centres on the body of thought and work of Bruno Munari, Ray & Charles Eames, Martí Guixé and Jurgen Bey.

Of course this is a personal and therefore highly subjective selection of designers. For which there is good reason. These four are all great examples of vital designers and a vital design mentality, in an artistic and inspiring way as well as in a 'hands on' way that uses the possibilities of science and industry. Designers that don't just talk about taking an inter-disciplinary approach, but who actually succeed in operating within various design disciplines and make work that extends over various social levels.

The work the Eameses has been praised, discussed and published countless times. What we value in the context of this project are not so much the 'leg splint' and the 'DCW chair' that is still a smart addition to any office, but their 'House of Cards' and other children's games; their films, their communication and their interest in science. Plus their ability to undertake things, triggered by their own curiosity, followed by seeking the right arguments to convince the industry to put their proposals into production, not only argued in economic terms, but in cultural and social terms too. With the Eameses, all three were always beautifully balanced. Even if this is not so apparent today, in their days their work was revolutionary although it now predominantly serves as representation.

Munari only incidentally succeeds in combining his passion for culture with commercial production. His mental world, his imaginative powers,

'Aura'

'Penellessa'

his writings and his machines, however, all hold their value. For example read his great writings in the book *'Bruno Munari, Air Made Visible.'* Munari's work is a substantial source of inspiration for many artists and designers.
Jurgen Bey's greatest quality is his naturally questioning behaviour. By continuously philosophising about what lies beneath familiar things – possibilities, answers, potential and coherence – he raises highly unconventional questions and answers. Sometimes they are usable in designing, sometimes bizarre, but can always be taken equally seriously. Bey is able to table genuinely new insights. His interest in environmental issues, human rules and behaviour do the rest.
Marti Guixé is another extremely unconventional thinker. In his self-created vacuum, he can do whatever he wants: magazines, exhibition makers and even the business community are eager to see how he gives shape to the concept 'being really contemporary'. More interested in food and systems than in products, his designs are often immaterial and his interventions minimal. They always embrace far more than the humorous or even corny comments on the world that they're often taken for.

Munari and Eames hit their peaks in the fifties and sixties. Guixé and Bey have only just started. They (still) don't always have an immediately implementable connection to the industry. But they too both have an enormous interest in culture – their insatiable interest in contemporary social developments have a deep social and ethical awareness and an unconventional approach that generates much food for thought. They have ideas with the same energy, decisiveness and humour as Munari and Eames in their day. They merely live in another time that plays by different rules.

CULTURE AND MANDORLA

When Munari created 'Penellessa' he was 53. He looked at the moon and wrote about people's stubborn inflexibility. Why do we see faces in everything and don't see bluebottles in the moon? Because we carry the image of human faces in our immediate consciousness, not images of bluebottles. Munari makes a portrait of a long-bristled brush, the kind you use to create fake wood grain.
By uniting/combining the words 'princess' and 'pencil' he simultaneously creates an appropriate new word that, just like the face, fits precisely into his imaginative world. One thing becomes another – the brush gains character, you see the innocence of the girl hanging there – it's a very moving thing.

Here, Munari is not acting the successful designer. He created an image that perfectly communicates his was of looking and thinking: open, curious, explorative, layered and full of humour. 'Penellessa' is not a product for direct economic use or for instant money flow. It served the purpose of joy, fantasy and imagination. Nor do Munari's so-called *useless machines* 'aid in the creation of capital', as the designer described it himself. 'Some people held that they were extremely useful, in fact, because they produce spiritual consumer goods: images, aesthetic sensibility, education of taste, kinetic information, and so on', he wrote. Marti Guixé has a word for that kind of value: 'Mandorla', or 'aura' in English. To feel good, inspired, touched, fulfilled, content, happy, energetic, are all wonderful offsprings of products, systems and ideas, the economic value of which is often underestimated. In fact the mentality of Marti Guixé touches that of Bruno Munari. They think parallel in different times, as do Ray & Charles Eames and Jurgen Bey. All of them have this great imagination, this ability to invent and to discover.

What is design? Questions & Answers
Madame Amic – Charles Eames 1969

The following questions were asked by Madame Amic and answered by Charles Eames. The questions and answers were the conceptual basis for the exhibition 'What is design?' in 1969 at the Musée des Arts Décoratifs.

Q1 *What is your definition of 'Design'?*
A *A plan for arranging elements in such a way as to best accomplish a particular purpose.*

Q2 *Is design an expression of art (an art form)?*
A The design is an expression of the purpose. It may (if it is good enough) later be judged as art.

Q3 *Is design a craft for industrial purposes?*
A No – but design may be a solution to some industrial problems.

Q4 *What are the boundaries of design?*
A What are the boundaries of problems?

Q5 *Is design a discipline that concerns itself with only one part of the environment?*
A No.

Q6 *Is it a method of general expression?*
A No – it is a method of action.

Q7 *Is design a creation of an individual?*
A No – because to be realistic one must always admit the influence of those who have gone before.

Q8 *... or creation of a group*
A Often.

Q9 *Is there design ethic?*
A There are always design constraints and these usually include an ethic.

Q10 **Does design imply the idea of products that are necessarily useful?**
A Yes – even though the use might be very subtle.

Q11 *Is it also to cooperate in the creation of works reserved solely for pleasure?*
A What would my own pleasure in non-reality?

Q12 *Ought train to derive from the analysis of function?*
A The great risk here is that the analysis may not be complete.

Q13 *Can the computer substitute for the designer?*
A Probably, in some special cases, but usually the computer is an aid to the designer.

Q14 *Does design imply industrial manufacture?*
A Some designs do and some do not, depending on the nature of the design and the requirements.

Q15 *Is design an element of industrial policy?*
A Certainly; as is any other aspect of quality, obvious or subtle, of the product. It seems that anything can be an element in policy.

Q16 *Ought design to care about lowering costs?*
A A product often becomes more useful if the costs are lowered without harming quality.

Q17 *Does the creation of design admit constraint?*
A Design depends largely on constraints.

Q18 *What constraints?*
A The sum of all constraints. Here is one of the few effective keys to the design problem – the ability of the designer to recognize as many of the constraints as possible – his willingness and enthusiasm for working within these constraints – the constraint of price, of size, of strength, balance, of surface, of time, etc. each problem has it own peculiar list.

Q19 *Does design obey laws?*
A Aren't constraints enough?

Q20 Are there tendencies and schools in design?
A Yes, but this is more a human frailty than an ideal.

Q21 Ought the final product to bear the trademark of the designer? of the research office?
A In some cases, one may seem appropriate. In some cases, the other, and certainly in some cases, both.

Q22 What is the relation of design to the world of fashion (current trends)?
A The objects of fashion have usually been designed with the particular constraint of fashion in mind.

Q23 Is design ephemeral?
A Some needs are ephemeral. Most designs are ephemeral.

Q24 Ought it to tend towards the ephemeral or towards permanence?
A Those needs and designs that have a more universal quality will tend toward permanence.

Q25 To whom does design address itself: to the greatest number (the masses)? to the specialists or the enlightened amateur? to a privileged social class?
A To the need.

Q26 Can public action aid the advancement of design?
A The proper public action can advance most anything.

Q27 After having answered all these questions, do you feel you have been able to practice the profession of 'design' under satisfactory conditions, or even optimum conditions?
A Yes.

Q28 Have you been forced to accept compromises?
A I have never been forced to accept compromises but I have willingly accepted constraints.

Q29 What do you feel is the primary condition for the practice of design and it's propagation?
A Recognition of need.

Q30 What is the future of design?
A [no answer]

Charles & Ray Eames

Eames and Eames

Ray (1912-1988) and Charles (1907-1978) Eames designed many of the design icons of the last century. Even people who do not know their name, know their work, or might even sit on one of their world famous chairs in their home or office. As designers the couple are legendary. Every designer wants to be at least a little like the Eameses. Design luminaries like Terence Conran, Jasper Morrison and Aldo van Eyck rate their work among the finest and most important product design of the twentieth century and stress the major impact it has had on their lives.

At the same time it is this immense regard for their furniture designs that is partly to blame for the bad name which the concept of design and the profession of designer has at this time. The fact is the work of the Eameses personifies the representative side of design – the status it bestows on multinationals, lawyers and anyone else who can afford the highly priced soft pad and lounge chairs to decorate their boardrooms and offices like trophies of good taste. A wry paradox is the acceptance of work by designers who dedicated themselves to having modern, mass-produced products recognised and actually promoted affordable modern furniture for everyone. During his own lifetime, Charles Eames was already aware of this dangerous sting in his own design tail. On one of his early trips to Europe in the early fifties, during a visit to a department store that had his furniture in its collection, he came to the appalling conclusion that his chairs were being sold at ten times the price they were in America. Much later, when it was already evident that his designs were also sold as status symbols, to the question of whether design was for the masses, the wealthy or specialists, he gave the meaningful reply: 'design is addressed to the need'.

The designer's role

Charles and Ray Eames were clear about their intentions when designing products – they ought to improve the world. In itself in the 1930s – the formative years of Charles Eames and Ray Kaiser – this was not anything unusual, at least not in the world of the European avant-garde. But it certainly was for a young American architect like Charles Eames, who at first was still barely aware of such a tradition.

Eames was a talented architect for whom during the 1930s nothing stood in the way of further building on a career as a successful designer of comfortable, modern Georgian villas for well-paying clients in the Midwest. A meeting with the pre-eminent immigrant architect Eliel Saarinen and his son Eero was the first to change all that. The Cranbrook Academy, where Saarinen taught and Eames studied, was one of the few places in America where a similar European avant-garde belief had been able to gain a foothold. Here, along with Saarinen, the idealistic European tradition, largely absent elsewhere in the country, had established itself. After his meeting with Saarinen, Eames questioned – probably for the first time – his role as a designer. Did he want more than unique designs for houses and churches? Was he happy with the conventional relationship between architect and client, and if not, what should it then be like? At first he was at an utter loss with such questions and uncertainty, even though he was impressed with Saarinen's work and the stories of his son, who almost immediately became a lifelong friend.

The breakthrough came shortly afterwards in 1940 when he met the artist Ray Kaiser. Kaiser had studied painting in New York – like Cranbrook one of the few places where modern European artistic ideas could be found. It was she, with her defiant views on modern European painting, that inspired Eames to find and take up an independent position within his field. Raising the issue of the everyday job of designer, which until then Eames had practised with satisfaction and without any doubts whatsoever, was at the time an unexpected and by no means obvious step. While modern art may have been continually preoccupied with its rights to exist, a similar standpoint for architecture and design, especially in America, was far less self-evident. America was certainly familiar with avant-garde artists – in the 1930s they often

made the newspapers and magazines namely as 'curiosities', but similar examples in the design world hardly existed as yet. At the same time, the fertile world of exhibitions, debate, publications and clients based around architecture and design was completely absent there.

The road to paradise

Together Charles and Ray, with great dedication, searched and found a role for design in the avant-garde movement. But what had they thought they would find? After the Depression, which took its greatest toll on America in 1929, the country quickly struggled to its feet and by the mid-thirties America was the pre-eminent land of consumerism. During the Depression in America, designers precisely for economic reasons, had set to work and in the 1930s window-dressers, set designers and teachers of drawing retrained as designers for industry. Professional design was used as commercial persuader – American designers came up with new unique selling points often for old existing products. Charles had experienced the birth of this new profession from close by in fact. However, he decided not to be associated with this well-paid line of business. Once with Ray, he saw ever more clearly the huge disadvantages of burgeoning consumerism in the thick mail order catalogues and the endless assortment of goods in the major department stores. It was not so much the scale of the number of products, but the sheer overwhelming choice on offer that swamped American society. The Eameses did not have an immediate alternative at the ready, but continued to have a deeply felt awareness that American consumers were waiting to be 'liberated' from the products and attendant ideas from grandmother's time. Note, however, that for the Eameses, in sharp contrast to the European avant-garde, modern design was not in the first instance a solution for hunger, unhygienic conditions and a lack of housing. For both Charles and Ray it was the fact that as modern designers they wanted to deliver American buyers from products with imposed considerations of status. Both had a clear-cut image of the disadvantages of American culture – to which serious shortcomings like hunger and deprivation obviously belonged – but which in their eyes were chiefly personified in the artificial gloss many designers and manufacturers applied to their products. This spurious gloss manifested itself in an exaggerated predilection for luxury, especially imitation, which gave working class people the sense that they possessed something from the upper classes: a sofa in the form of a Buick, a car with the look of an aircraft or a mock Versailles cupboard. According to the Eameses such products held back the development of the real mental freedom of the consumers. Their objective was, in the most modern sense of the term, the 'democratisation' of the object.
With this type of 'democratised' design, the couple had in mind the social and cultural liberation of the Americans in highly concrete terms, even though that goal was not devoid of self-interest. Ray Eames articulated this very clearly when she recalled memories of early discussions with her late husband. At the time he was designing his first items of furniture with his friend Eero Saarinen, who had set him on the path of a modern, almost classless furniture style, which in his case meant an undecorated design bereft of historical references. Through Ray, Charles realised that every new design for the same kind of product required the same kind of effort each time. A chair was followed by a second and a third, with the enormous danger that the wish to design and unnecessary originality during the design process would gain the upper hand. The Eameses decided that a once-only, all-out effort necessary to make the perfect chair should suffice, and at the same time produce a result that would benefit as many users as possible.

In practice

These were fine words and interesting ideas. Charles and Ray Eames were to learn the answers to their crucial questions on accessibility and acceptance of their designs in practise. The year 1940 provided a good opportunity. The curator, Eliot Noyes, from New York's Museum of Modern Art wrote out a competition entitled 'Organic

Furniture' to find designs for affordable furniture. Like the Saarinens, Noyes was extremely well informed about all the latest developments in the world of avant-garde design. After experimenting with tubular steel, many designers, especially those from Scandinavia, were attempting to design a more congenial version of mass produced wooden chairs and other furniture designs. At that point, the work of the Finnish designer Alvar Aalto was among the leading mature experiments in the field, and Noyes invited him to sit on the jury panel. Under Aalto's direction, two submissions from Eames and Saarinen were awarded first prize. The prize-winning plywood chairs had a distinctive fluent design and bore all the promise of mass production. And although they looked somewhat clumsy, they were instantly spotted throughout America.

While it had been Noyes's express intention to reach a wider public with affordable, mass-produced furniture, this ideal still seemed a long way off. During the exhibition, Noyes, at the time ashamed and annoyed by his director, wrote: 'the excitement of sitting in them is not going to be a middle class thrill at this point because prices are something terrific'. Despite the Eameses good intentions of 'enlightened' design gaining broad acceptance, their efforts were destined to fulfil an honorary role within high culture from the MoMA depot.

The couple saw the danger and did everything in their power to get industrial production of their furniture from the ground. Various circumstances came to their aid. In the first place Bloomingdale's department store was prepared – no doubt with broad approval from the designers – to sell their prize-winning designs at cost price, an unprecedented gesture in America's commercial world. The premise looked favourable – until America also became engaged in the Second World War. Within a few weeks following the attack on Pearl harbour (July 1941), the Eameses were not allowed to use rubber, metal and plywood for their experimental furniture production. The ambitious couple were forced to suspend their quest for socially motivated design.

BLOOMINGDALE'S PRICE LIST FOR FURNITURE AND FURNISHINGS OF

ORGANIC DESIGN

Immediately following the outbreak of war, the cultural world was also called to make a contribution to the war effort. Along with other artists, Charles and Ray Eames were enlisted for a cultural war programme aimed at making maximum use of America's artistic talent. Many painters and sculptors were employed to make propaganda material, while Charles Eames himself was given a dream commission. His knowledge of plywood – still limited at the time – was used to make military material, especially for the airforce. Aircraft builders acquainted him with various production techniques and possibilities, which up until then he had only experimented with using cheap materials in the spare room of his Santa Monica apartment. In immense factories useful cockpit chairs, wings, fuselage and entire aircraft from wood were now made. During the war the possibilities to bend, mould and glue were combined with the need for a huge industrial production. Eames saw his chance, especially when he heard that certain products in the war functioned extremely badly. A friend drew his attention to metal stretchers and splints in use by the American marines. These items were heavy and thus so dangerous when in use that according to reports they had even cost lives. Eames saw the possibility to use his fascination for plywood and his limited experience of mass production gained with companies to make a really 'socially engaged' product – the plywood splint. Its strong, light construction and flexibility were ideal for mass-production. Never before had the experience of making a socially relevant object been so forceful. The awareness of the social necessity of design was never to leave the Eamses.

Design as art: an apparent contradiction

Within a few years Charles and Ray Eames had changed from artists to social engineers – designers who first thought about the place and function of products rather than the form and style of the products themselves. For Charles, the transition was a big step, but also for Ray, who had been raised with the concept of visionary artistry. Together with Charles, Ray was now the avant-garde of social design. Due to the Second World War, both artists and designers in the entire western world felt the need for a new legitimacy. Where the question of social relevance before the war had been chiefly a matter for a small avant-garde – sometimes insufferable to a wider public, it was now the concern of everyone. And only rarely could the question be answered with the cry l'art pour l'art (art for art's sake).

Now the roles appeared to be reversed. Instantly activities like weaving, pottery, glassblowing and silversmithing were seen as suspect and even unethical activties, which the old social relationships deemed dangerous occupations. Certainly in design circles, industrial design, with its highly utilitarian notion, served as the guiding principle by which many designers worked – and then no longer to produce luxury or imitation luxury goods, but to find practical and user-friendly solutions for everyday problems. The lonely artist was suspected of being an elitist and anti-socially engaged. It was no small wonder that Eames continually rebelled against his lifelong 'genius' label, bestowed on him by so many.

Seen in this light, it is remarkable that the Eameses remained openly – and with complete conviction – interested in the visual arts and in craftsmanship, tradition and nostalgia. In the formulating of the new requirements for the social designer, they considered the dogmatic rejection of the 'irrational' would also lead to attractive and valuable attributes of this being lost. Furthermore, they felt that all these – unofficially forbidden – interests had unique qualities that were extremely important for designers. Adopting this attitude – viewed as a contradictory one at the time – they warned against the false certainty of one-sidedness, in the same way they did in the way they worked at their office, in their life at home and particularly in their design work. Even before the time they exchanged visionary artistry for the position of social designer, they knew art could look far and touch deeply. The statement by art dealer Sidney James, who once wrote about the group to which Ray Eames belonged, exactly expresses what the couple thought: 'As if by magic whole new worlds of the spirit are lit up, worlds of poetic interfer-

ence, mythological worlds, worlds of haunting reminiscence, of unearthly fantasy and disquieting dreams'. The social design task of the Eamses was not only a simple calculation of material wishes and necessities. For them their fondness for playfulness, poetry and association were just as important as well as – not to forget – the almost absurd and even nostalgic aspects of design. Years later when Ray Eames gave an account of their office in a book, the first thing she showed was the machine that produced the first plywood chairs. Thus, according to her, the history of the office began with an experiment. From the beginning, Charles and Ray Eames combined that desirable avant-garde trademark with the innovation of the engineer and designer.

The Eames culture and progress

Charles and Ray Eames understood better than anyone that culture in the western world is a paradox in itself. Culture is by definition a combination of assumptions and unconscious ideas that change very slowly. But one of these fixed ideas in both Europe and certainly in America is a strong belief in progress, a predilection for experimenting and innovation. In their work the couple reconciled these fixed views with the puritanical idea of progress – humanity as a measure of things, as the centrepoint that controls the environment and is continually searching for improvement in art and science. They reconciled tradition with experimentation and innovation, usefulness with enjoyment, apparent superficiality with timelessness. One of their finest commercial briefs was to produce a design for the future in which the possibilities of aluminium were shown to their best advantage. The Eames office invented the Solar Do-Nothing machine, a solar-panelled operating mobile comprising light-hearted and playful components. It is a charmingly animated, futuristic machine, which was considered so beautiful that no-one actually asked what it did. The object was typical of Charles and Ray Eames. In one of Charles's early designs, the leg splint from 1941, he combined Surrealism with association and the ghastly need of a functioning product. In the Solar Do-Nothing machine the couple combined technical innovation with the most engaging form of uselessness. And to quote Charles Eames: 'Who is to say that pleasure is useless'.

Timo de Rijk

Charles Eames was born on June 17th 1907, St Louis, Missouri, U.S.A. Died August 21st 1978.

Ray Eames: Alexandra Kaiser was born 1912 California, U.S.A. Died August 21st 1988.

Design and the Social Sciences: Making Connections

Edited by Jorge Frascara

5 Social sciences and design innovation

Bernd Meurer

Introduction

Design must take three major factors into account: first, that the individual scope of action has been significantly enlarged and will grow in future; second, that knowledge plays an increasingly important role in the economy; and third, that the globalization in the economy goes along with the individualization of society. The fact that knowledge has become the most important productive force, and that capital today as human capital, that means as fantasy and eagerness to learn, is more important than material capital, shows how far the basis for "the individual as protagonist, as designer, as juggler and director or stager of his biography, his identity, his social networks, his relationships, his convictions" (Beck 1993) has matured. This also shows in the urban design of many middle-sized cities.

The return of the public to the city in interrelation with individualization does not necessarily mean de-socialization or social isolation. Individualization comprises "first the dissolution and second the replacement of industrial forms of living by other forms, where individuals have to produce, to stage, to stitch together their biographies themselves." The release of man from traditional ties makes it necessary to test or try new forms of social behavior. "Thinking of oneself and living for the other, although seemingly contradictory, turns out to be a meaningful inner correlation. The one who lives for himself, must live socially" (Beck 1997).

The private is not anymore a stronghold against the public. The place of living has become a stage for the public and the public has become a stage for the private. We do not know how individualization and socialization will unfold. We only know that it is important to design processes and artifacts that allow us to generate these correlations. The question is: how can the desire for self-determination be brought into accord with the desire for the split common ground, which is just as important? This confronts us at two levels that are interwoven: namely at the social level regarding living and at the material level regarding objects.

The Museum of Modern Art in New York has recently organized an exhibition about new forms of living; it was titled "The Un-Private House." Below, I refer to three examples from this exhibition.

The private and the public

If we talk about the end of unambiguity (Zygmund Baumann), about distraditionalization (Anthony Giddens), about the flexible man (Richard Sennet), about the relief of work by other activities (Jeremy Rifkin), about globalization that comes along with individualization (Ulrich Beck); and when we talk about how these social changes take place, in what relation to the transformation of products and processes, then most happen in the non-spectacular world of everyday life—a process of impenetrable ambivalence.

I will concentrate in this chapter on the transformation of the public and the private in architecture and design. At the end I will give three examples of design as related to such transformation—three examples of how far the radical shifts in the public and the private have already entered the design of housing. Of course, the examples appear still as exceptions. On the other hand, they are not truly exceptional anymore. The design debate is already penetrated by these changes, even if partially in the subconscious.

New and unusual forms of living develop in a way that is different from those examples of urban transformation that of their own, for instance because of technical innovation, create new forms of use and behavior. While living is changed by new technologies, it depends more than other fields on cultural traditions. It is influenced by habits that have developed over thousands of years and did not change substantially (such as eating, sleeping, etc.). On the one hand, living is shaped by conservative habits, to which man holds, especially in times of radical change and upheaval. On the other hand, in its most developed form, living is characterized—also visually—by the dissolution of the sociological base of the society and the outcome of new ones.

The world of objects constitutes itself in activity. We perceive objects by nothing other than use, in the most far-reaching sense. Use is activity. In creative use, say design, we are confronted with two different kinds of transformation. On the one hand, there is conscious design, that appears in innovations—for example in social intervention, in new buildings, in strategies for mobility, etc. On the other hand, there is subconscious change, imperceptible in everyday life where considered change is mingled with not particularly thought about activities. In a sense, the transformation of our artificial environment is a systemic chaos, where all activities are related and in continuous flow—overlapped by planned strategies and innovations.

Materially, the artificial environment appears as something different. It appears as a gigantic accumulation of artifacts, as an arsenal of buildings, streets, spaces and all the other material products, which are part of life and of the economy.

In the traditional understanding of architecture and design, the transformation of life is seen above all as material change. The change of the material world comes to the fore. Seen in this one-dimensional way, the development of civilization is reduced to the material. Our world is object-fixated. And this object fixated understanding of architecture and design is also about allowing space for social and technical processes. But consciousness of human and social activity is thereby narrowed to the category of the mere usability of artifacts.

This division between object as a static thing and process as a dynamic action has its roots in pre-industrial design methods. In the pre-industrial design history objects don't have a self-dynamic momentum of their own—with the possible exception of, say, wind and water mills. This static understanding of artifacts still continues to have a strong effect on design—especially in architecture, where the work of an architect is thought more as an unchangeable object than as a transforming process, even if space defines itself in terms of time.

In the course of mechanization and industrialization, the concept of dynamic action processes slowly found its way into design, but mainly in a purely technical way. Mechanical engineering, transportation and communication are examples of areas where this first developed. However, generally the task of design is still not dedicated to processes but rather to the object. The immaterial—the processual—of it is merely considered as a service function. With the microprocessualization of everyday life, the knowledge orientation of the economy and the growing ecological awareness, the processual is pushed to the fore. This appears at the base of social behavior. The passive and static industrial biography dissolves, and the active do-it-yourself biography grows. With this development the dynamic action processes place an ever-increasing importance on social, economic and design innovation.

In research and development of mobility, for instance, thinking in terms of object-process-systems has already become an everyday method. After all, mobility research and development as a whole includes a lot of processes and products. There are product innovations (like the development of new vehicles and accompanying objects), infrastructural measures (in the field of highways, tracks and communication lines), the development of processes (like intensifying product-use by, say, car-renting and car-pooling), the development of new organizational structures (between transport services, political authorities and the users) and the development of new services. The decisive difference with ordinary product (and process) development is that various tasks are no longer handled separately from each other but rather in an interrelated object-process-system fashion. But

still most of the design results are thought of as unchangeable things that don't move or transform. The results reflect more the fundamentalist culture of certainty than the art of doubt.

The invention of comprehensive object-process-systems has become a key for the social and economic modernization of our life-world. Anyone who has a nose for this networking innovation will not only be successful in economic, social and ecological innovation but will also—putting it in broker oriented terms—earn high profits in the stock market.

The transformation of the working world changes the social and spatial organization of work and with this the social and spatial organization of our environment. The development of design and architecture must take three major factors into account: first, that the individual scope of action has been significantly enlarged and will grow in the future; second, that knowledge plays an increasingly important role in the economy; and third, that the globalization of the economy goes along with the individualization of society.

The fact that knowledge has become the most important productive force, and that capital today as human capital (Gorz 1998)—that is, as fantasy and eagerness to learn—is more important than material capital, shows how far the basis for "the individual as protagonist, as designer, as juggler and director or stager of his biography, his identity, his social networks, his relationships, his convictions" (Beck 1993: 151) has matured. All this has far-reaching consequences for the comprehension of living and working, and of the public and the private. In the course of the individualization of work and working processes also the working environments individualize—both despite of and because of their networking. Additionally the social splitting of job, housework, family work and social work, gives way increasingly to a plural occupation of the individual. If one looks at the problem of housing, the Dutch architects group MVRDV argues: "The demand for greater variety and even more extreme forms of dwelling is gaining momentum. The ideal home no longer exists: there are thousands of ideal homes" (MVRDV 1997: 4). The changes in practice and concept of living, working, the public and the private, require the dissolution and alteration of the (industrial) typology of space, of buildings and of city-zones and the other things of life.

The modern, knowledge-oriented economy is based on the development of lively, cosmopolitan and urban milieus to gain higher synergy effects. This economy-oriented interest corresponds with the social oriented idea of a complex urban structure where the most different fields of activities are tied in an attractive way.

Also in the choice of living surroundings grows a renewed desire for urbanity, which in the past had been driven out of people's mind by the noise and emission problems. In the more recent past downtown housing has become more and more attractive. That is—apart from the search for new types of living—urbanity in a new comprehensive sense is growing

because the product, namely the inner city, has changed. Downtown areas in Western Europe—and in a different way also in America – have gained an ambivalent social attraction with a growing number of sidewalk cafes, restaurants, attractive spaces, modern cultural set-ups and changing closing times.

. Unlike a few years ago, public space is no longer a commodity the loss of which would be lamentable. Understood as a dense meeting space full of action, it slowly becomes a renewed subject of planning. Interestingly enough, the renaissance of the public space happens at a time when social communication—if we see it purely technically—no longer needs to rely on public urban space. Today, one can communicate with people and communication machines all the way around the globe without ever leaving one's home. Nevertheless the need for real communication in real public spaces is growing in addition to virtual communication and spaces. Even increasing portability of communication means (like cell-phone, notebook, etc.) does not damage this renaissance. The contrary happens: as of recently, telecommunication is no longer limited to stationary communication equipment tied to the private world of working and living. In the public space the individual is today confronted by the behavior of others not only in a spatial context but also through telecommunication elements.

At the same time the microprocessualization of everyday life has shifted the division between the public and the private. For years past, public space became global and penetrated private space. With television, public space became omnipresent. Private space in the shape of the private car has occupied street space and driven out public activities such as children's play and leisure. The public street space mutated to a gigantic accumulation of four-seated private spaces on wheels. Today, pedestrian areas are slowly growing from small islands to larger car-free city areas. The spheres of the private and the public are penetrating each other. This shows in the development of many mid-size European cities, such as Freiburg, Strasbourg, Tübingen, Bologna, and Montpellier, to mention just a few. For instance, the redevelopment of Montpellier to a so called "technopolis" included the transformation of the whole downtown, namely the entire old part, to a pedestrian area with thousands of open-air restaurant tables, beautiful shops and a lively city center. This process is in itself ambivalent. It includes social hardships. The city also changes towards a place solely for consumerism and services whereby the traditional population may be driven out.

But the return of the public to the city takes place in interrelation with the individualization of the society. The consequence of individualization is not necessarily de-socialization or social isolation. Individualization implies "first the dissolution and second the replacement of industrial forms of living by other forms, where individuals have to produce, to stage, to stitch together their biographies themselves" (Beck 1993: 150). Individualization involves self-authorization and self-responsibility. The growing

social demand for self-determination and self-consciousness comes out of an increased freedom that questions the traditional forms of living and demands to try new principles of common ground. More than ever the individual is forced to make his own right choice on social behavior. Naturally this also increases the risk of error. In the end modernization is a revisable, and not an un-revisable process. The dialectics of modernization and counter-modernization have to be permanently dealt with.

The release of man from traditional ties makes it necessary to test or try new forms of social behavior. A new culture of common ground is growing; for example, when citizens take over tasks of the state like nursing care and senior citizens care and—on a different scale—the work on the "local agendas." In the world of economics such a change is also noticeable. Some businesses understand that they are more than money partners for their employees. While the social benefit state becomes less affordable, a growing public spirit emerges. Little plants, certainly; but they grow even in the private economy. We experience at the same time both degeneration and a regeneration of a responsibility in ethics. The sociologist Ulrich Beck noted that "thinking of oneself and living for the other, although seemingly contradictory, turns out to be a meaningful inner correlation. The one who lives for himself, must live socially" (Beck 1997: 19). The newly developed spaces for social interaction in the cities are not only areas of consumption but also test grounds for these social experiments.

The private is no longer a stronghold against the public. The place of living has become a stage for the public and the public has become a stage for the private. We don't know how and in what form individualization and socialization will unfold. We only know that it is important to develop processes and artifacts that allow us to generate this correlation. Ulrich Beck asks: "How can the desire for self-determination be brought into accord with the desire for the split common ground, which is just as important? How can one be at once individualistic and absorbed with the group" (Beck 1996: 12). This question confronts us at two levels that are interwoven: namely at the social level in respect of living and at the material-processual level in respect of objects. But the industrial past thoroughly shaped the terms of our work, life, consumption and leisure style, partly by the hardening of obsolete thought patterns. The difficulty is to replace the old industry-oriented functions with the development of new knowledge-oriented forms.

Last summer (1999) the Museum of Modern Art in New York opened an exhibition on new forms of housing with the intention to indicate how the social changes result in new forms of living. The exhibition was also to be seen until April this year at the Museum für Angewandte Kunst in Vienna. The subject was provocatively titled The Un-Private House. In this title the un-private does not stand for the public. It rather means the broadening of the private into the public, the change of the private that

gives space to a new type of the public in the private. The public enters the private and the private enters the public. A changing sphere where the private dominates the public and the public dominates the private. Many of the examples shown still glue to the living form of the detached house. The rethinking of the detached house has not yet quite developed. Unquestionably the wasteful land usage for one-family housing in suburbia is still much more dominant than the yearning for urban living forms. Similar to the hang-ups of business in the mono-functional business area, it is a question of understanding as well as promotion on the part of municipal authorities, for change to come about. It is a question of what kinds of synergy-producing product-process-systems are more useful and attractive.

The one- or two-family house is expanding with its consequence of landscape destruction. By official predictions the world will in 50 years be a total mass of houses. What today seems to be self-evident, the spatial splitting of the city in living, working and leisure, started only 150 years ago. Prior to that, work and living was combined. With the industrialization of work, the work emigrated from the place of living as labor into the workshops, into the factory, into the office. The place of living was transformed into a place that is solely for living, devoid of any work aspects. In connection with this began the bourgeois retreat into the private. But this form of living which emerged only about 150 to 200 years ago is hardly to be considered as historically the last and final.

Many of the examples this exhibition shows already test the un-private, but still related to the antiquated structure of the detached house. They show the penetration and the overlap of functions that dissolve the traditional floor plan. I want to refer to three examples. First, a house on a spacious lot similar to a park; second, a house in a block on a very small lot, that has—in itself encapsulated—four and a half floors; and third, a house where the lot is almost completely taken up by the house in a high-density area.

The example from the Dutch architect Ben van Berkel works according to the principle of the Möbius loop. The house is conceived for a couple with children (Figures 5.1–5.3). The two adult inhabitants work at home and want to also have the opportunity to withdraw from each other. The designer tries to make living, working and sleeping meet in a new way. An endless loop or band forms two intertwined sequences of spaces. Semi-public spaces, two different work spaces, family spaces, and private spaces, are in an open relation. The circulation areas not only serve as a function but also acquire a temporal dimension, reflecting integration as well as separation of living, working and sleeping. Instead of creating traditional spaces and forms—following a static idea of functionality—the house articulates the changing relations of the inhabitants. The public and the private are in a continuos flow.

The spatial characteristics of the Möbius loop are visible in the plan and the section of the house. The loop-like breakaway from average geometry

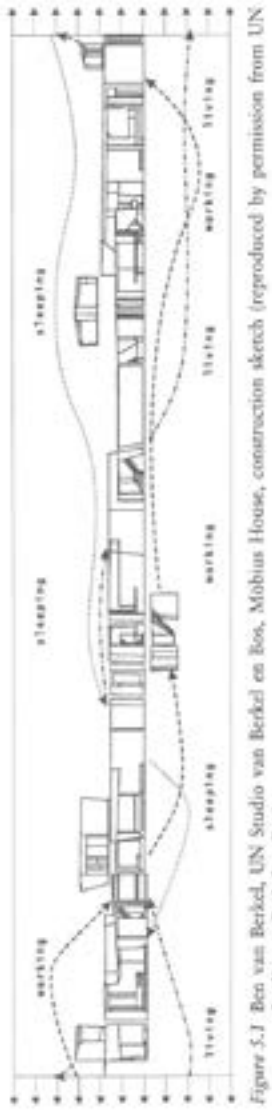


Figure 5.1 Ben van Berkel, UN Studio van Berkel en Bos, Möbius House, construction sketch (reproduced by permission from UN Studio van Berkel en Bos).

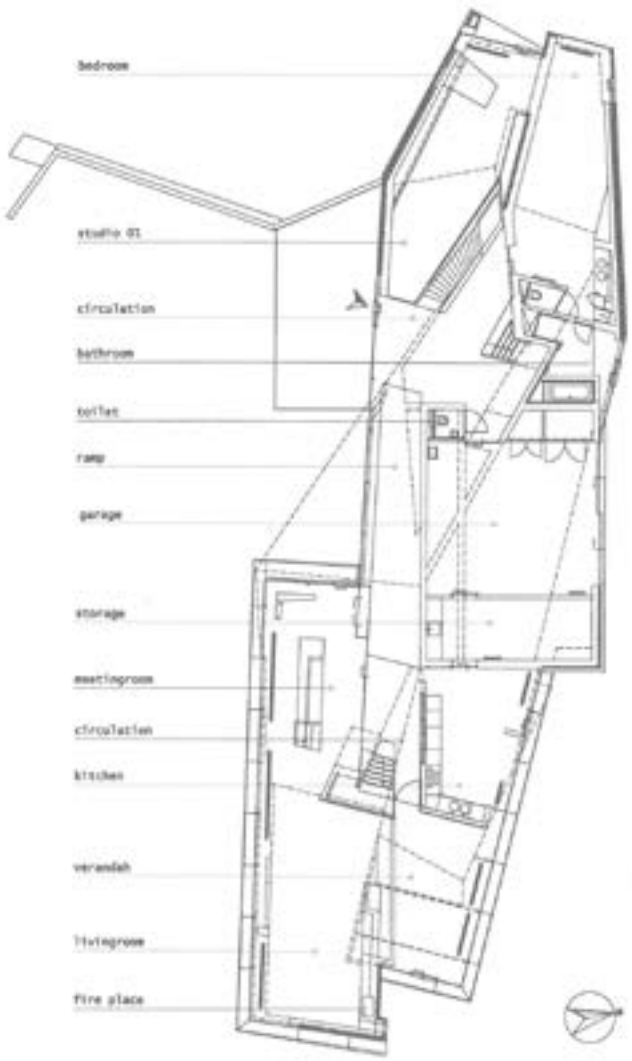


Figure 5.2 Ben van Berkel, UN Studio van Berkel en Bos, Möbius House, section (reproduced by permission from UN Studio van Berkel en Bos).

Figure 5.1 Ben van Berkel, UN Studio van Berkel en Bos, Möbius House, photo Christian Richters (reproduced by permission from UN Studio van Berkel en Bos and Christian Richters).

brings about space to respond in a new manner to the 24-hour rhythm of living, working and sleeping. The occupants can go for an endless Möbius-trip in this house. The twisted band turns the inside to the outside and vice versa. The intertwined spaces and structures seem to fold back the design over onto itself. The house articulates the complex relationship between the occupants themselves, in their relation to the house and to the impressive nature of the site.

The house is conceived as a detached house. In this respect it represents an antiquated form, despite its novel features. The detached house has become a nature-destructive mode of living. On the other hand, in this example, the house conserves a suburban enclave outside the city. A new form of space arrangement collides with the land-eating use of the city. As a detached house it is far from creating an alternative to the wasteful use of nature in housing. In the contradiction of both aspects, namely the modernization of the space arrangement by using the Möbius band in a new way, and the preservation of the antiquated model of the detached house, appears the inconclusive dialectics of modernization and counter-modernization. The modern societies are confronted by the principles and the limits of their own models.

Design has to show effect. And this effect must be strong enough to be felt. Seen in this light the house of van Berkel opens itself to the ambiguity and the ambivalence of its design. Here design has some points of contact

with the skepticism of modern sociology. Not the dissolution or neutralization of conflicts should be the aim, rather their civilization.

As a second example I want to refer to a house by the Dutch group of architects MVRDV (Figures 5.4 and 5.5). This example deals with high density house-building in a block. The architects tried to work on the design problem of planning a house for living on a small lot and the sociological problem of the individualization of society. "The society moves closer together," writes MVRDV, "the private mercilessly is combined with the public, the marital row is fought out in public and the intimate conversation takes place on the street by cell phone. Only the neighbors you don't know, since soundproofing became much better" (MVRDV 1998: 43). The old borders between the public and the private have become open. New ways of living together and living apart seem to be suggested in these new forms. We have to invent other distinctive features. Individualization is an intermediate stage in this process. From the historical base of the passive industrial society emerges the reflexive, the active knowledge-oriented society.

For the designers, the sociological aspect does not explain the architectural quality, it serves as a means of understanding the spatial structure of the house—particularly as in this example—where it was achieved by using traditional methods in a new manner. The lot is very narrow, with adjoining multi-storey houses on both sides. The design intends the greatest possible spaciousness and versatility within the limited total space. The house is only 4.2 meters wide and 16 meters long. Within the height of 9.5 meters normally only three floors are possible. This design achieves four floors while the space over the floor in much of the building is two or three storeys high. To compensate for the reduced dimensions, the house is conceived as one long space that develops over four and a half floors, offering closed privacy as well as open un-privacy. There are solids and voids encapsulated in one another. The un-private alternates with the private. The bedroom – the room with the highest degree of privacy—is located between the working level on the fourth floor and the spatially connected living space on the second floor. This again is spatially connected with the dining area, at one and a half storeys lower. The stairs are conceived in a self-contained staircase which develops in an irregular manner and creates an artistic form in the living area.

Open sections of two and three storeys alternate with sections of narrow ceiling height. The dining, living and studio spaces seem to be fluid. They appear as broken or blind continuations of themselves. They develop from the two-and-a-half-storey veranda over the balcony for the living area one storey higher up to the terrace above the bedroom. All this is done in a bewildering or surprising manner so one never sees the whole extension of voids and solids. The ambivalence of this effect takes place apart from the pure geometric clarity of space-structures. A series of non-enclosed rooms has been created with varying height and privacy, each space combined in an individual relationship with the exterior.

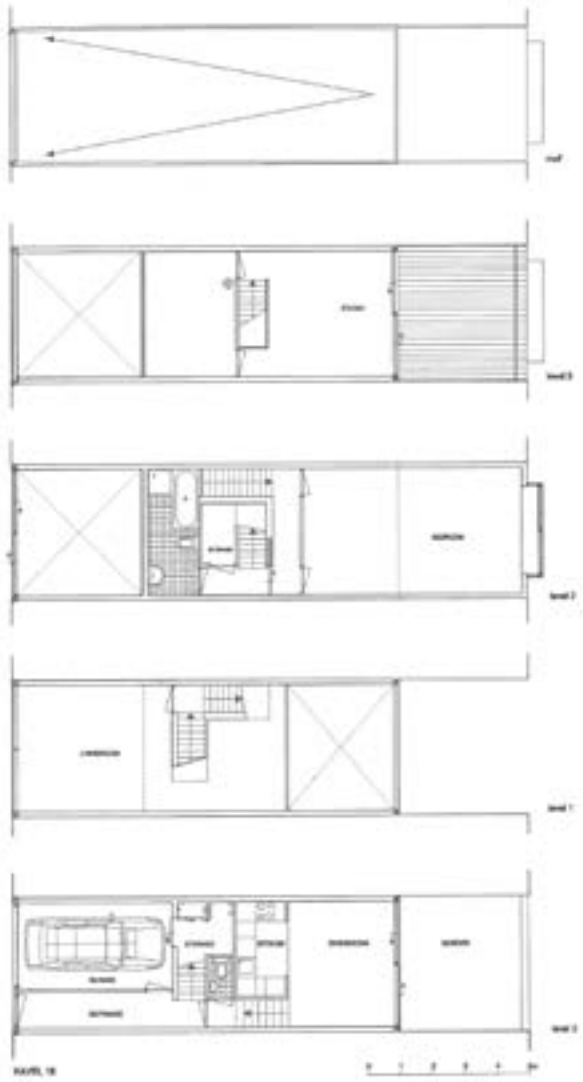


Figure 5.4 MVRDV, Borneo House Number 18, floor plan (reproduced by permission from MVRDV Architects).

Figure 5.5 MVRDV, Borneo House Number 18, photo Nicholas Kane (reproduced by permission from MVRDV Architects and Nicholas Kane).

Figure 5.6 Shigeru Ban, Shigeru Ban Architects, Curtain Wall House, photo Hiroyuki Hirai (reproduced by permission from Shigeru Ban Architects and Hiroyuki Hirai).

As a third example I choose the curtain house of the Japanese architect Shigeru Ban (Figures 5.6–5.8). In plan it seems rather traditional. But the emphasis of the innovation in changing the function of the façade radically transforms the use of the house. Positioned in a dense residential neighborhood in Tokyo it is designed as a three-storey house. The entrance and the working and parking areas are on the ground floor. Living is on the second floor and sleeping on the third.

Figure 5.7 Shigeru Ban, Shigeru Ban Architects, Curtain Wall House, photo Hiroyuki Hirai (reproduced by permission from Shigeru Ban Architects and Hiroyuki Hirai).

It involves the transformation of traditional life-habits. Half of the façade consists of a two-storey outdoor curtain that is combined with sliding glass partitions that form a terrace about 2 meters reset from the curtain. Without a doubt this house generates space for the most open and at the same time the most secluded life forms. Over and above the aesthetic and material qualities of a modern house the space becomes public stage,

Figure 5.8 Shigeru Ban, Shigeru Ban Architects, Curtain Wall House, photo Hiroyuki Hirai (reproduced by permission from Shigeru Ban Architects and Hiroyuki Hirai).

private refuge or something in-between at the option of the occupants. They can change the character of the house by making one of four main choices: first, a totally open option, where the private is in the public; second, one where the inner is semi-closed from the outer by transparent sliding partitions; third, one where the visual contact with the public is interrupted but the acoustical is not—by closing the two-storey-high curtain; and fourth, one where the partitions are closed in addition to the curtain so that a hermetic, divided enclosure is created.

Closing only the curtain combines the living with the sleeping area by creating a continuous inner space between the two. Also one has the impression of living in a maisonette. The house has the possibility of making bedrooms, kitchen and living room into public rooms, where they have no division from the public other than by (stage) elevation. To make the rooms private you close the transparent partitions. They also isolate against cold, heat and noise. If you close the curtain you are protected visually. The degree of the private character of the interior spaces and their public exposure—or the participation in the public—are not unlike those in a traditional Japanese house. The functions of the traditional partitions are transformed by the two-storey outdoor curtain. When the curtain is closed the two storeys form one room. From inside, the space over the terrace seems to be one high closed space, so it intensifies the spatial connection between the bedrooms on the third floor and the living area on the second. At night the closed curtain has a gloomy effect. The inhabitants become fuzzy silhouettes. In this house the private dissolves, changes, transfers and is entered by the public. The frontiers between the private and the public are shifted, are replaced, overlay one another and allow ambivalence. By these qualities the building is transformed into a reflexive house even though it was realized by traditional building methods.

This was a little excursion into the developed practice of living. The three examples show how former certainties have been replaced by what Ulrich Beck and Anthony Giddens have described as self-produced uncertainty, and how doubts—or shall we say freedoms—may become form.

References

Beck, U. (1993) *Die Erfindung des Politischen* (Frankfurt: Suhrkamp).
Beck, U. (1996) *Edition Zweite Moderne* (Frankfurt: Suhrkamp).
Beck, U. (1997) *Kinder der Freiheit* (Frankfurt: Suhrkamp).
Gorz, A. (1998) *Arbeit Zwischen Elend und Utopie* (Frankfurt: Suhrkamp).
MVRDV (1997) "Berlin Voids." *El Croquis* 86, MVRDV 1991–1997.
MVRDV (1998) "7 Notities, Bart Lootsma, Ausblick auf eine reflexive Architektur," *Arch+*, 143.

6 Design language

Confluence of behavioral, social, and cultural factors

Dietmar R. Winkler

The Constructivist imaging vocabulary, the still accepted mainstream language for image and object-making, is a truly elitist and aristocratic visual language, with a clear hierarchical structure, made opaque by removing it from the common human experience and environment. Like all artificial languages, it has to be learned. It is jargon or expert lingo. It is not expansive. One can confine its vocabulary to a single page. It is not easily accessible to and apprehensible by the outsider. This language situates itself around a power history and the politics of the imaging worlds which exist from the times of the ancients, to the Vatican, through the epochs of nobles and the aristocracy, to today's trendsetting educated rich, stimulated by ambitious academicians, without giving up any hint of its cultural coercion.

This vocabulary includes concepts like "harmony," "balance," "quality," "truth," and "aesthetics," loaded with value ramifications. In real life there are many legitimate aesthetics, and harmonies as well as disharmonies that sometimes resolve themselves into new harmonies and aesthetics. What is disharmonious for one cluster of politics is constructive energy for the next. The Constructivist movement imbued form, physical form, with personality and character, thereby letting it emulate the human. The language is nevertheless abstract and removed from the direct human experience. In reality, the only reason we can sympathize with aggressive or passive forms is because we have experienced the pictorial abstraction through direct human physical experience in everyday life, on the bus, the subway, in a child's shoving match, or in its abstraction in the bullying of a political leader or union or corporate boss. The rewriting of the form language and its definitions through human behavioral filters would make the critique of design and art totally understandable to all participants, experts, and novices alike.

In contrast to the opaqueness of the Constructivist lingo, the Japanese language of forms is constructing a taxonomy that is direct, easily understood and easily interpreted. For example, the objects or images that respond to the concepts of "forms of stacking" or "forms of separation" do exactly that. Neither novice nor expert are confused.

Most texts written and prepared for the design profession are oblivious to the impact on the culture and sociology when a mark is made or an image or object is produced and released by the maker into a social system. That each random introduction of an object or image has the ability to enhance, but also to impede or even destroy the culture, has not yet become the central discourse of design. When it comes to communication, usually simplistic diagrams, adapted from signal and information sciences, stand in for the complexity of human communication. There is no content or context provided in describing the process of encoding, selecting the signal, transmitting, receiving, decoding the message and avoiding noise. For example, even though thermal dynamics instructs on concepts and logic of entropy and provides an analogy which makes it translatable to advertising in terms of message success through continuous hypnotic repetition, paralleling thermal dynamics' dynamism, the instructions are about the process only, not about either contents or contexts. The closest discussion dealing with social and cultural communication that one can find is in the marketing literature. This is where a concern for gender, age, ethnicity, lifestyle, even religion is entering the discussion. But marketing has its own isolated demons, namely its predatory agenda. It addresses itself to a very small portion of the rich spectrum of communication. It is usually not interested in supporting or building culture, but much more in culture manipulation.

In the overabundance of "how to do it" design books, there has been a dearth of texts that deal with the sociology of communication and language. That is why for nearly thirty-five years Edward T. Hall's writings have provided the sociological platform upon which my courses in typography and design were grafted. Hall's books are simple; actually, they are deceptively simple. They are easy reads, almost throw-aways, until one unfolds the concepts hidden in them and sees the bullion cube turn into an amazingly rich and rewarding feast. There has been nothing more exciting to students than to realize their own response to the culture that surrounds them.

The other multidisciplinary resource has been the papers presented through the *Visible Language* journal, first under the editorial leadership of Merald Wrolstad and later by Sharon Poggenpohl. From the moment of its conception in the 1960s, this journal brought together the sociological, psychological and philosophical filters through which visual language can be explored and communication design must be addressed. *Visible Language* provides one aspect: it is concerned with research and ideas that help define the unique role and properties of written language. The basic premise of the journal is that writing and reading form an autonomous system of language expression which must be defined and developed on its own terms. *Visible Language* also takes up the challenge to understand and explore the conventions for the new media, beyond the book and into more fluid and seamless systems of presentation.

Now, when global commerce and global communication challenge all cultures, the Eurocentric and design-egocentric legacies need to be regarded with great caution, particularly in view of major demographic cultural shifts, where, for example in the US, the Spanish-speaking population is increasing in an intellectual environment dominated by an Anglo-Franco-German not to forget Italian history or, on a global level, where Asian and African populations are finding their response to the history of European cultural invasions and intrusions.

Even if I stay just in the confines of my own heritage, I see questions arising that are of amazing complexity and ramification. For me the most perplexing questions are: Does the world of a German look the same as the world of a person born and raised in the US? Does living in Germany, where a citizen is guilty until proven innocent, produce different sets of behavior than in the American culture where a citizen's innocence is assured until found guilty? Does not even a quick unscientific look bear out the German behavior of the overly strong concern for the surrounding gestalt ("There they are! They observe me. They judge me.") in contrast to the American's identity ("Here I am! I do not care what you think."), using Bauhaus terms, lying in the figure and not the ground?

Another mystery is establishing the true capabilities of the visual. What is the edge between what visual language, tactile, verbal, or adumbrative language-use can achieve? Nelson Goodman, philosopher, makes clear how the visual language differs from the written or oral form. He queries: Can a picture quote a picture (Magritte, Duchamp), a symphony quote another (Stravinski, Ives) or can gestures quote other gestures (Chaplin, Graham)? Can a seascape quote the picture of a ship? To some degree some of the world's artists have answered his questions but the preponderance is still that imaging cannot achieve what visualizers promise.

We know that the advertising language is militaristic. It is about campaigns, squeezing out, wedging in, forcing out. It is about starving out the competition. It has little to do with the art director's award at the end. The art director just forms an allegiance with the copywriter and the marketer to evolve a cultural weapon to annihilate the competition.

There are many examples where visual and verbal messages are built on cultural clues and social biases but because of the tradition of separation of tasks, of writers writing and designers making images or objects, the fact of everything relating to "language," that is neither just verbal nor just visual but all inclusive, has fallen between the cracks. In agreement and grateful to Franz Boas and his contributions to determining communication the core of culture and essence of life, nevertheless I am proposing to substitute "language" for "communication" and thereby change the discussion from process to content.

The need to do so is becoming more acute, because in addition to all ancient modes of communication and traditional media, machine simulation of human behavior has been added. This requires understanding of

enormous proportions. Robotics form the success of understanding the muscular and skeletal human function. Speech simulation is about the recreation of physical aspects of speech. However, the use of combinations of text, image, icon, objects, in either representation, simulation, and abstraction, to symbolize or technically explain, becomes exceedingly compounded by the fact that they are transmitted across cultures on a global scale and in rapid fashion. If one adds to this fact the sense-deprived electronic environment which takes up an enormous amount of recreational time for many, the removal of tactile and olfactory experiences, at least for this moment, and the substitution of abstract and synthetic sensory experiences create an enormous intrusion into the human culture. After centuries of slow and organic evolution we must now cope with these interruptions, even though emotionally underprepared, but commercially stimulated and stressed to the extreme. This statement should not suggest fear of emerging technologies but fear of a profession which has not prepared itself properly, and through understanding of culture, to manage and guide technology, technology which is not just the physical machinery but process, contents, and context. Designers need to be educated beyond the technical to foreshadow the impact of their work on cultural communication.

It should be obvious that the following statement is superfluous. But is it? *Homo sapiens* does not experience the world through just seeing, hearing or speaking. The body with its total sensing apparatus assesses the environmental conditions on a cathectic basis (that is, intuitive, emotional, uninformed judgement), feel good or feel bad, adumbration, making benefit or loss assessments, adjusting and readjusting. It is in the unique cyclical process in which an irritation in the gestalt of the environment stimulates the flight or fight response that is sometimes overridden by knowledge that is learned but not necessarily experienced. What is clear is that for the sake of survival what one sense cannot apprehend another must, even if the brain has to abstract the experience and translate it through another sense's memories.

Homo sapiens muses over what is experienced, sorting things into order so that the experience about the observed phenomenon can be legitimized. Entering first into an internal, personal discourse with the new phenomenon, then letting it grow in concentric circles, until the dialogue is externalized to include others. The observer of the phenomenon must dress up the perception of the emerging gestalt in a metaphor that advances its idea or concept. This metaphor must bridge what can be clearly understood and has been tested and found to be true in the past, across the void, to a recognition or revelation in which the new concept finds its footing. The metaphor cannot be complete as it would shut down the interpretation too early. It must allow for metaphoric expansion in the discourse to advance the emerging concept into something comprehensible. Through naming of the phenomenon and adding metaphoric descriptions the new

concept enters the socialization process. When the responses from experts or public reach a certain level of critical mass, having survived challenge and scrutiny, the concept, discovery or invention is integrated into the language reservoir. In return, language is forced to adjust its taxonomies, reorganize its power structures of church and law, and evolve appropriate modes of expression. The new, emerged world-view supercedes the old. The cycle is completed just to be immediately challenged by the next dawning and interloping observation and discovery.

Discoveries in science and in the arts travel the same paths. In the same ways in which slang and underground modes of expression enter Webster's dictionary, sub-cultural icons and languages like Cubism or Constructivism become part of the total language reservoir. When totally socialized there is no longer any major resistance to the idea. The idea has joined tradition. That is why the science of relativity is built on both the evolution of human rights and the ability to think freely, supported by the philosophies of Martin Luther (1483–1546), Bacon (1561–1626), Descartes (1596–1650), Locke (1632–1704), Spinoza (1632–77), Hume (1711–76), Kant (1724–1804), Hegel (1770–1831), and Kierkegaard (1813–55) on one side, and on the other by the legacy of scientists, mathematicians, and strategists like Newton (1642–1727) and Leibniz (1646–1716). Even though we recognize in Galileo's legacy the need of fighting ignorant power with scientific reason.

Homo sapiens enters each situation to find it not organized until a context for the observation is superimposed. Even if observations were made under the same environmental conditions it would become very clear that organizational structures, their hierarchical arrangements and emphases, as well as interpretation and meaning, shift in relationship to the filter that is chosen. Since *Homo sapiens* has the capability to shift in rapid mind-speed from one framework of observation to the next, from the pragmatic to the symbolic, from the technical to the emotional, each context provides only one layer of the total experience.

Linguists have taught that the linear grammatical structure helps clarify the intentions of the sentence. But that clear order does not help to describe and internalize the clues of the observations of the world. If one were to traverse a forest in a new encounter, with the sense apparatus and all its receptors at the highest level of alert, one would not understand the ramifications just through the visual information streaming seamlessly into one's memory but by each sensory signal that can be taken in. Sound, olfactory signals, thermal clues are processed and filed. The adumbrative ability shields us against any possible hostility and danger. That means that former experiences become the metaphoric filter for the assessment of conditions. In terms of traversing the forest, first comes what first is encountered, the order of importance or value is found later in relationship to the tensions felt at the moment of recall. Quickly discerned gestalt, determined not aggressive, is processed quickly and pushed into the

unconscious to make room for those things that need greater and more immediate consideration. Anything ambiguous, when the gestalt is not clear, and where flight and aggressive responses need to be weighed with much more and exhausting care get greater attention. Therefore, distinctions between the clustering and densities of tree species or the recognition that certain species are missing come later at the point of synthesis and retrospection. It is in retrospect that the experience is made sensible. The experience is a reservoir. It holds all ingredients for subsequent narratives. If the task of observation is about expediency, to get through the groves fast, then the narrative isolates all the issues around that filter. If the subject is about meditation, the narrative carefully selects those aspects. And if the narrative is about demons, then they will be easily conjured from the absence of certain things and conditions. Language stores each of the experience's semantic, syntactic, and pragmatic dimensions. In the design for visual communication in the various contemporary sense-limited media, the understanding of the importance of the total sensory human being, including the senses that are difficult to represent visually, is paramount.

In the repetition of life, the encounters with the same object assume various new roles in each differing context. We retain the memory of each, especially the unique moments of discovery. This moment's world, of course, is different from the next, because of the independence and accumulative effect of all experience.

The majority of traditional linguists refer to language as only that which is spoken (oral), written (verbal), or heard (aural). They also include the process of forming thought, processing, and sense-making. But most of them deal with the process. It is in the content and in the context in which a subject is communicated where the rubber meets the road. The success of the language transmission lies in the compelling cultural metaphoes.

The design complexity is increasing further. Even aurality within the new and emerging technologies has a new role to play. Voice, sound, and music over stationary or dynamic image and text, is asking designers to understand language that until now has been treated through typography as silent mouthing of verbal contents. From my vantage, this is why the contemporary discussion of language should begin to include everything, from mental imaging to social and cultural ceremony and custom, symbolic use of objects and images, territoriality of concepts of rhetoric, visual aesthetics, and expressions in form of law, religion, and commerce. For example, Roland Barthes' exploration of the fashion system makes a strong argument for the language of objects. He sees all ingredients united in a sub-system of language, engaged in a visual, verbal, tactile dialogue that moves into aesthetics, value discrimination, development of social status and location in a social hierarchy, and the cultural aspects of ritual, performance, and ceremony.

Languages cannot be differentiated by establishing the incongruities between speech mannerisms or the disparate rules for each speech com-

munity. The true difference is built into the worldview of each speech community, which is content in context. It is about cultural and social perception, the measurement of values, traditions, customs and rites, the quality citizens expect and the social contract through which they anticipate rewards. Even though all subsystems support the major communicative role of the overall language umbrella, there are efficiencies in certain modes which cannot be achieved through others.

For instance, Nelson Goodman points to the difficulties in the language of art in which uniform communication and fidelity cannot be achieved, because of the extreme ambiguities and inconsistencies in usage and translation of symbols. Each object is known under a great multiplicity of labels and there are great variations in the application of these labels. Things become compounded when the same symbol is assigned different meanings in different circumstances and contexts or is complicated by the instability and ambiguity in the translation of metaphors.

Even if one looks at the language of aesthetics, one becomes quickly aware that the subject matter is a holistic study that includes the filters of the physical, philosophical, psychological, and sociological languages of art, honed by the value structure and power-history of a certain society and culture.

Umberto Eco examines the language of sports which is represented through the labels and metaphors for man, society, heroic ideals, animalism, sexuality, but also through ideas of pleasure, utility, and waste. The latter he presents as a contradiction in which caloric and intellectual waste is profoundly healthy and beneficial. In sports the physical and psychological sides of *Homo sapiens* meet up with each other. This is where recreational waste frees the individual from indispensable work or slavery. He reveals the contradictions of healthiness that can be interpreted as sick or relationships between player and voyeur, in which the observer competes seriously and intellectually in the contest through sense memory, while the players may be only marginally involved, physically or emotionally, to the consternation of the audience. He points to paralanguage and its auxiliary communication devices as far more interesting than the pejorative professional jargon in which they are framed by linguists. Paralanguage transmits simultaneously a same message by different means, allowing a certain level of clarity to emerge in the overlap and intersection of variations of tone, character of voice, and body language, each providing clues and meaning to the contextual quality of the communication such as, for instance, the speaker's age, sex, social and cultural sophistication, and the speaker's ability to add meaning through pitch, tone, accent, inflection, and tempo.

In the body language of sports, *Homo sapiens* recognizes the evolutionary journey from primate to modern man. This component of language is internalized and immediate. The clues of flight or fight alertness or being in a state of inner equilibrium are read and processed quickly. This is where the non-verbal communication mode, made up of gestures, expressions, and

postures, is effective as a bridge between the organically perceived and the abstracted graphic and photographic images, that make the stone "stonier," that heighten the memory experience, that become the catalysts for the resubmission of memory from the unconscious to the forefront of consciousness as a new experience of something old, forgotten, and ignored.

Vygotsky speaks about the unity between perception, speech, and action, and the internalization of the visual field which constitutes the central subject matter for any analysis of behavior. Since perception includes all human sensory gathering-tools of stimuli, it becomes an interesting debate on where the physical brain begins and where it ends. In my book the nerves are the brain. In the same way the question of language becomes complicated. Does language only exist in the verbal and visual, or does it include the total system of sense-making and expression, message reception and processing within specific ecological, environmental, political, and social contexts?

What about the visual dialects designers own, equal to the regional varieties of a language distinguished by pronunciation, grammar, or vocabulary? There is the language of cars, the landscape, the factory. Just like Plattdeutsch—a speech related language dialect of German, or Cockney, a dialect of English, the wealth of visual expression in photographic, illustrative, and graphic varieties of language that with other varieties like cartooning, caricature, and concrete imaging, typography, cartography, topology, constitute the visual language realm of language—no single variety is standard or has the same purpose. It is the rich occupational language of art and design, and all other manners of expression which finally form culture.

There are many examples that support the notion of visual and verbal languages paralleling each other, supporting, underscoring each other. A visual language equivalent can be found for nearly each rhetorical rule. An example of interaction can be found in the design pidgin language developed for computer and human interfaces. The designer invents a simplified trade language for the sake of user-friendliness, using part of the language system of computing, data generation and data manipulation, and the language system of visual literacy and human conduct, and for expediency's sake adopts the shortest and most efficient way of each discipline to communicate. It is not difficult to find other visual equivalents for each of the language terms, glossary or axioms. Therefore, it is possible to say that architects are working with the visual interface of verbal language, in which for example the concept of "diglossia," a language phenomenon in which different dialects are spoken in different social situations, is applied. Architects understand and therefore counteract the phenomenon, otherwise banks and churches would look like Jack-in-the-Box or Kentucky Fried Chicken fast food take-outs.

This holistic view no longer allows naive discussions of dominance or inferiority of one part of the language system over another, even though

one may be used more frequently than another or for different purposes or under different circumstances. The contemporary view requires that we understand the rich complexity of language as a reflection of the human spirit, existence, and evolution, not separable from culture but as culture itself. This requires all searchers to respond with humility, in awe, and with pride, because *Homo sapiens* has evolved from physical territoriality and its conflicts to social and cultural understanding. So has the design field. The next stage is tolerance, because all human endeavors are humanistic, all cultures healthy and valuable, and all subcultures ready to move up the ladder to legitimacy.

Acknowledgements

My own contribution to today's discussion is to honor those colleagues of mine that during my teaching career have helped build the social and cultural scaffolding for the infrastructure of my course agenda.

There are a number of distinct academic colleagues at the University of Massachusetts, like Jim Hijia, Professor of History, who uses cartography to define the negligence of cultural historians in looking at the technical expression of history of Native Americans; Donna Huse, Professor of Sociology, who incorporates cultural reporting into her contribution to design classes, pointing to the conflict and clash of oral and written cultures in this century, or Judith Sims-Knight, Professor of Psychology, one of the hardiest design critics, who queries deeply the slogans of the design mega-institution, including traditional quotations like "good design communicates" or "an image is worth a thousand words." She is much more careful about these design truths. First she points to circumstances in which the axioms are definitely true but to others where visualization is just not adequate, neither dependable nor efficient. She expects designers to test their assumptions and to amass knowledge before they call themselves professionals. Then there is Richard Upchurch, Professor of Computer Engineering, who although an expert in software development, interested in human factors, questioned the cultural barriers to cyber-collaboration. He is also very concerned with what happens to the message after it has been released. What is its achievement? What is the cultural result?

The persons who really fortified my belief in social and cultural understanding are, of course, Len Singer, a very sensitive, perceptive, and extremely generous Professor of Design, committed to the cultural and social issues drowned out by present-day jargon of "human factors," and Sharon Poggenpohl, editor of *Visible Language*, who in her early academic career presented a very detailed thesis on the process of value transaction between object-maker, object, value determination, and user. She spawned my interest in the dynamics of the gift-giving culture from the Potlatch ceremony and the Hallmark greeting card to colonialism, Mother Theresa

and the welfare state, the system of social and cultural relationships and obligations.

Many of these colleagues came out of their isolation and the success and safety within the walls of their own disciplines to compare notes, possibly only in the spirit of synergy, in which each discipline contributes to a shared resource of knowledge because not any single group or individual can address the rich and all encompassing field of language alone. Without these silent contributors to my philosophical platform the contents and context for my teaching would have been less strong and definitely vocational or barely professional.

8 Emotion and urban experience

Implications for design

Ausra Burns

Introduction

We relate to our environments emotionally. Though design theory sometimes fails to appreciate the complexity and the variance of human experience, for anyone concerned with design, cultivating the ability to recognize, listen and respond to what people undergo and feel is vital. I intend to draw attention to the discursive topic of the urban dimension of emotion. While I focus on experience of the city, I believe that the implications of my arguments are relevant to design on many levels, as it relates to explorations of diversity of human experience in general.

Emotional experience in the urban context has been discussed in various schools of thought and within the disciplinary circles of sociology, psychology, anthropology and geography. Certain prominent themes and representations of emotional reactions to city life enrich the interdisciplinary dialogue and broaden our understanding of issues and modes of conceptualizing the contemporary urban condition.

My intention is to bring into design discussions centered on people's experience of, and reactions to, built environments, certain aspects of disciplinary knowledge arising from the social sciences and humanities. I will communicate some of the conceptual discourse surrounding my theme toward revealing dialogical, and more holistic, context sensitive ways of designing for the city—ways that use effectively knowledge generated in other fields of research, and accordingly create paradigms for design action.

There are many ways to approach and discuss the diversity of the city. Along with the transformations of modern history, and the growth of Western metropolitan culture, visions of the city have come to be divided into spheres of disciplinary competence. The complex phenomenon of the city is often defined by architects as a depository of building styles and influences, by economists as a site for regularization of retailing practices, and by planners as a transportation node and mosaic of municipal bylaws. On the other hand, a single hegemonic conceptual framework will not be able to account for and recognize all the diversity and conflicting notions

of urban culture, its forms and social processes. Consequently, it can be argued that no one possesses all of the knowledge and wisdom required to understand and act responsibly in this world. "We need diversity and alternative perspectives to keep alive the ongoing inquiry into ordering, disordering, and reordering that is the central enterprise of human culture" (Buchanan 1998: 15).

The changes experienced in contemporary Western cities over the past several decades—gentrification, suburban sprawl, physical and social fragmentation of the city, its growing cultural and physical diversity—have been identified as dominant developmental trends. Searching for a narrative about the city and its economy "that includes rather than evicts" marginal economies and their representations in the city's physical form, political economist Saskia Sassen establishes an intellectual interdisciplinary dialogue on the subject of race, gender and representation in the city (Sassen 1996: 184). In so doing, she provides us with an example of theorizing in the critical space in between disciplines, where new knowledge and directions for constructive action can be fostered. The need to embrace new models of reflection on urban processes has in fact been voiced by many social theorists and practitioners.

"Emotions" are the complex conjunction of physiological arousal, perceptual mechanisms, and interpretive processes; they are thus situated at the threshold where the noncultural is encoded in culture, where body, cognition and culture converge and merge (Illouz 1997: 3).

Why do I want to induce discussion on such a relativistic and seemingly unscientific subject related to urban experiences and emotions? My answer is that I think the potential benefits of this strategy outweigh the risks in terms of creating a better understanding of the phenomenon in question and developing design strategies that work in specific socio-physical conditions. Through discussion of how we or others feel about city living—in various situations and differing circumstances—we can increase our ability to relate our aesthetic responses to perceiving the environment to the practical actions we take within it. In terms of study of the subject and of theorizing, such an exchange may present us with the opportunity to critically analyze the standpoint of the researcher as a detached observer. In forums of discussion on how individuals or certain urban subcultures perceive their lives in the city, the researcher may become a more involved participant whose own stake in the issues at hand is raised and uncovered. Inevitably, when designers become more involved in the issues that concern people affected by design changes, they open themselves up to professional scrutiny and the challenges of self-definition. In order to follow and refine such a direction in professional and intellectual practice, one must identify the ontological, epistemological and methodological aspects embedded in one's theoretical orientation. Questions that could be asked in this context include: Whose interests are represented in the project? How are the results of the research or the physical changes to an environment going to impact

on various parties that share the common urban realm? Questions could also extend beyond the immediate concerns of the designer. For example: What will be the impact on future transformations of decisions made today?

In the context of the city, the experiential realm is largely comprised of the places and objects of everyday life. Streets and backyards, parks and monuments become situated not only in the realms of architecture or urban planning, but also in the realm of the human environment, where a distinct object, feature or image is dissolved "into a world of perceptual experience" and can no longer be regarded as an "external location but as continuous with human life" (Berleant 1991: 77). In this way, broader cultural aspects of the formation of emotional responses are grasped through research that goes beyond the study of the physical qualities of urban form: its colors, smells, forms and textures. People's emotional relationships with the environment are framed by attributes that may be evident from an external assessment of a situation—for example, skin color, class, gender and social status—and by those attributes that are not evident—those formed by individuals' personal histories and life events.

This position may represent an alternative to the traditional modes of framing experience in the designed urban environment. The tradition has been to view urban form as the static, axially oriented visual space of Western Classicism. Throughout Western social thought emotions are seen to be the very antithesis of the detached scientific mind and its quest for "objectivity." The roots of this separation and the custom of repudiating the importance and integrity of emotional experience lie deep in the Western intellectual tradition that separates body from mind, nature from culture, reason from emotion, and public from private. Moreover, these dichotomies are not value-free. The hierarchy intends to establish the supremacy of reason. Progress and precision are held above emotional, private, subjective experience. This experience is located in the realm of urban spaces and associated with femininity and irrationality.

Urban experience, its conceptualizations and representations

More reflective, culturally rich and dynamic articulations of our emotional relationship to the urban environment have been emerging from various disciplines of the social sciences and humanities for a number of years. An interest in the complexity of the social world and the positionality of knowledge and experience has evolved through the work of contemporary philosophers, geographers, anthropologists, psychologists and sociologists as part of a direction in social theory. Its aim is to develop an alternative to the positivistic and progressive view of the world as moving forward, in a linear trajectory toward . . . well, no one knows where anymore. Complementary calls have been made for radical transformations in the way we understand design as a professional activity. These calls come from those

who believe that the models and modes of action exploited earlier in this century are no longer adequate. Designers and other professionals dealing with the production and modification of urban spaces, processes and imagery are looking for new ways to approach culture as defined by conflicting values (Buchanan 1998: 19). To comprehend the "dynamics of individual and social behavior well enough to work efficiently and effectively in interdisciplinary teams" requires that design practitioners and theorists seek some common understanding of the social and cultural issues at stake and deepen their awareness of contemporary intellectual discourses and research methods that can contribute to bringing design, the humanities and social sciences together (Frascara 2000:120).

The humanist traditions in philosophy and the social sciences have introduced the notion of emotional and experiential complexity in the perception of one's surrounding world, and have challenged the more traditional model based on contemplative knowledge accumulation through passive spectatorship, objectivity and rationality. Symbolic interactionists suggest that individuals are not just aware of their place in the world, they are also involved in group interactions, each of which is located within a particular social setting worthy of careful consideration (Mead 1934). Many significant works produced within this theoretical orientation recognize the value of situated and reflective knowledge. Describing ways in which the space of inner-city Philadelphia was given meaning and made legible by street gangs through territorial boundary markers, David Ley shows how the realities of everyday life are negotiated by people in concrete contexts (Ley 1981). From this study of city gangs and their territorial behavior, Ley infers that the space, and the emotional responses to it, are socially constructed. The sociological study of the partitioning of the city into numerous territorial worlds has been a major aspect of the Chicago School tradition. In the works of members of this school, the impact of the overall diversity of the city on urban dwellers is much reduced. The main arguments comprising the standpoint of the school rest on the assumption that the city is a mosaic of different social worlds which overlap and interact. People, therefore, create their own social and territorial niches in the city, and in this way are able to develop a sense of identity and comfort in the modern metropolis (Langer 1984).

Attempts have also been made to articulate the conception of experience through close association of the space and the perceiving body. From this perspective, the environment that is perceived does not exist solely outside of the perceiver. It extends the "inner landscape of human beings into the world in ways that are comprehensible, experiential, and inhabitable" (Dewey 1958; Merleau-Ponty 1962; Bloomer and Moore 1977: 105). The "active model" oriented on action, function and response to one's surroundings has been developed by the American pragmatic tradition and in European existential-phenomenological philosophy (Berleant 1991: 87). Humanist geographers sought, through the philosophies of existentialism

and phenomenology, to recover the essence of the experience of place. They propelled the shift toward recognizing the materiality of everyday life and the power relations that influence the emotional reaction to place. Nevertheless, as critics note, the humanists still have not come to terms with the depths of subjectivity and intersubjectivity (Pile 1996: 62). Another serious criticism comes from feminist geographers who remark on the lack of adequate theorizing on the broader social power relations structuring our experiences of place. One of the underlying reasons for this deficiency is that humanists assume masculinity as the implicit norm through a certain form of rationality that still considers objectivity as the touchstone of true knowledge. In a 1984 meeting of feminist geographers, it was argued that "humanists tend to show a general concern for the way in which ordinary people are subject to various forms of authority, rather than analyzing the specific forms of exploitation and oppression that occur" (Rose 1993: 44).

Turning to linguistic philosophy, we learn that the emotional realm is woven into the structure of communicative action, and therefore open to contestation and argument. Intersubjective structuring, or communication between individuals of their subjective sensations through verbal and body language, becomes possible because emotion is publicly observable. It takes the form of actions made in response to certain circumstances. In other words, emotions can be conceived as meaningful responses to life situations (Crozier 1994: 19).

Some radical philosophers such as Marxists argue that people travel through a time-space life path while internalizing and interiorizing social relations. Human agency must be framed not only within the determinations (or power relations) of social structure, but within the material properties of time–space relations, and within the processes inherent in "personality." Personality in this case signifies identity that is expressed through subjective reactions conditioned by the life history of each individual (Thrift 1996).

In the work of behavioral geographers, mental processes and cognitive representation are of central importance. A more thorough understanding of human cognition was critical to establishing links between the mind and behavior. Mere descriptions of overt patterns of behavior were replaced by a search for, and explanation of, the reasons why people behaved in certain ways. But, as recent critics note, behavioral geographers failed to "recognize the mutual interaction between mind and environment" because they still operated in the realm of dichotomies such as those between the external and internal worlds, between the public world and the private world, between the subjective (perceptual) and the objective (phenomenal) world, and between Mind and Nature (Pile 1996: 43).

Exploring different spaces of the contemporary city, feminists often reject the pursuit of generalizations and "complete" visions. Their work is more tentative. It is grounded in the details of the everyday, and enables

interpretation of social life and spaces in the city as heterogeneous (Rose 1993: 133). The strategies through which feminist geographers pursue their goals include undoing, subverting and transcending the power-infused dualisms between dynamic and progressive time and static space; between the public and the private realm; between rational knowledge of, and the emotional responses to, the environment; and hierarchical dichotomies built on notions of masculinity and femininity. The "disorder" of urban life does not disturb women. The "socialization of women renders them less dependent on duality and opposition" (Wilson 1991:282). To many women, urban spaces simultaneously represent delight, a site of connection, and a place of danger and oppression—spaces that are lived, experienced and felt.

Another important contribution to more reflexive and reflective theorizing about emotional responses to the city comes from geographers using psychoanalysis to reconceptualize the dialectics between the subject, society and space. Each individual may be seen as "tied by the bonds of love and hate, in many directions, to numerous groups; each forms their sense of self in relation to different models of behavior; each has a share of many group identities" (Pile 1996: 118). These diverse relations are spatial, but originality and richness of experience, and the strength of ties between the individual and the environment, come from within, from the agent.

All of the nineteenth-century founders of sociology touched on the topic of emotion. Among them was Max Weber, who wrote about the anxious spirit of capitalism that evolves in the modern metropolis, and the role of rationality and charisma in the formation of this new way of living and being a member of a capitalist society. Karl Marx developed a view of alienation as an inevitable consequence of class conflict that brought to Western urban centers resentment and anger toward capitalist exploitation. Georg Simmel believed that the emotional state of the modern individual being was profoundly shaped by a continuous bombardment of the stimuli of urban life (Simmel 1955). Among the most evident reactions he points to is the "reserve" attitude one develops in order to survive in the saturated life of the city. This reserve attitude remains central in contemporary discussions regarding the reactions of the postmodern individual to the commodification of culture and her or his involvement in the collective consumption of fetishized commodities.

The attempt to establish scientific legitimacy in the discipline of sociology turned many researchers in urban studies toward explorations of social action, rather than of peoples' perceptions or other "soft" images of the city (Langer 1984: 198). Despite this trend, Robert Park, a key member of the Chicago School, wrote: "The city is . . . a state of mind, a body of customs and traditions, and of the organized attitudes and sentiments that inhere in these customs and are transmitted with this tradition. The city is not, in other words, merely a physical mechanism and an artificial construction. It is involved in the vital processes of the people who compose it" (Park *et al.* 1996: 1).

From the perspective of the environmental psychologists, our rapid and largely unconscious decision-making process is influenced by the potential for functioning in the locale. Such pointers for potential functioning are perceived abilities: the ability to enter the setting, to acquire the necessary information about the environment or setting, and to maintain one's orientation (Kaplan 1989: 174–5). Acknowledgement of the complexity of human emotions and their variance depending on the particularities of individual circumstances and cultural settings has brought psychologists' discussions closer to an understanding that "it is a person's experience of the world rather than the world's objective properties that counts" (Crozier 1994: 75). Neisser's seminal book *Cognition and Reality* marked a transition for psychologists (Neisser 1976). This more reflective and holistic conceptualization of psychological responses to one's environment caused psychologists to respond to, and gain interest in, research on cognition and the mental processes that underlie behavior. It has seemed to psychologists that "physiological processes, including variations in arousal levels, are not in themselves sufficient to discriminate between emotions, but that cognitions, beliefs or attributions are also necessary" (Crozier 1994: 19). Anthropology, on the other hand, embraced emotion in terms of how its conception and expression were subject to cultural production. The question facing anthropologists today is how best to integrate the subjectivity of those they observe into their analysis: in other words, how to redefine the conditions of representativeness to take into account the renewed status of the individual in our societies (Augé 1995). "The notion of material culture, developed by anthropology, initially due to the need to reconstruct social life through an analysis of extant objects, provides a conceptual frame for the understanding of how cultural models are promoted by material objects" (Frascara 2000: 124).

Urban experience: themes and representations

As my topic revolves around people's emotional experiences of the city, I would like to present a range of emotional responses and sensations that theoreticians from diverse fields of knowledge have identified, and later discuss how a broader knowledge of these themes and ideas can help designers in their professional work. While not representing a complete or exhaustive review of the subject, such discussion might lead designers to revisit or re-evaluate our paradigms of action and theorizing.

One of the city's strongest aesthetic appeals is to the person as pedestrian, and "this appeal rests very much on its attraction to the moving body, its ability to entice one to follow along a street in relaxed and irregular rhythms" (Berleant 1991: 101). Information derived from anthropology and psychology can support the argument that people enjoy "crooked streets" and the richness of urban experience, but they are most afraid of being lost. The intensity of this fear of being lost, disoriented or

confused by the monotony of the city suggests that designers (and urban planners and architects) should strive to produce "imageable" urban space by sufficient knowledge and through conscious manipulation (Lynch 1981).

One of the most powerful and brilliant descriptions of the emotional experience of individuals roaming the nineteenth-century Western metropolis was presented by the social theorist and philosopher Walter Benjamin. Employing techniques of surrealism as well as avant-garde montage and cinema, Benjamin created the portrait of an urban drifter, the *flâneur*, whose daily experiences were embedded in the "novel kind of beauty in the streets," through mundane activities of shopping, strolling and socializing (Wilson 1991: 280). The Paris *flâneur* was lured by the magnetism of the city streets, by the sensual power of crowds, by the erotic pleasures of window-shopping and offerings of sexual pleasures outside of the family circle. One of the important aspects of urban culture that Benjamin was able to relate through his narrative, and that still remains important in the contemporary city, was that experience was atrophying—that there was a rise of spectacle and spectatorship, and that interpersonal relationships were being replaced with the packaged messages of a commodified culture of spectacle and merchandising. Simmel argues that the individual is constantly presented with myriad possibilities in the dense and varied realm of the city. The person is continually confronted with strangers, and this makes it impossible to establish any deep personal relationships. The only reasonable reaction to this situation is the adoption of a posture of "reserve" and impersonality. The Chicago School sociologists stressed another aspect of urban experience. People's ties, relationships and attachment to their particular territorial niches in the metropolis were significant because it is in these niches that they "come to have some control," where they "are able to develop the sense of identity and comfortableness that one large downtown world makes impossible" (Langer 1984: 108).

If we adopt a perspective that recognizes the city as a site of power struggles, and therefore a site of diverse and situated experiences, we can see why it may matter "who is walking the streets and who is doing the looking, and why, it also matters which streets are being walked, and how the spatial regime of the visual is constituted" (Pile 1996: 231). From the viewpoint of feminist geographers, the gaze of the urban drifter, as presented in literature concerned with issues of urban experience, is often accepted as universal, and is in fact a masculinist gaze embodying a relationship of an active onlooker and a passive object (Rose 1993: 104). From this perspective, Benjamin's *flâneur* appears to be in such a position of power. He is captivated by the movement and excitement of the urban modern, but out of fear holds to a safe proximity or distance. What stands beyond this distance is an "uncharted territory: women, masses, the city: a territory which was simultaneously psychic, bodily, spatial and social; simultaneously real, imagined and symbolic" (Pile 1996: 209).

Let us turn for a moment and look at the city through the eyes of those who are being watched. Women often feel vulnerable in public because they are seen as properly belonging to the domestic sphere (Valentine 1992). "Being in space is not easy. Indeed, at its worst this feeling results in a desire to make ourselves absent from space; it can mean that 'we acquiesce in being made invisible, in our occupying no space. We participate in our own erasure'" (Johnston quoted in Rose 1993: 143). Rose recalls her personal emotions about being in everyday spaces of the city: "I have a strong sense of space as oppressive, for example, from being scared walking at night in the city in which I live" (Rose 1993: 143). On the other hand, the city's crowds and spaces make it easier for many men and women to become anonymous, to escape to a certain degree from the control of traditional hierarchies.

Power relations and their symbols are embodied not only in the actions and relationships of city dwellers, but in the spatial forms of the city, within the anchoring points of its architecture. The power of authority is displayed in the centrally located skyscrapers of contemporary cities, often housing the dominant economic, political and state power of the city. One of the important issues here is that this spatial organization seems to give an impression of intelligibility and transparency. Modern architecture's abstract transparency alludes to the utopian vision of a "radiant, egalitarian, dynamically open society" while embodying the "reality of panoptic, hierarchical bureaucracy" (Ockman 1996: 205). What is lost or, more accurately, pushed away or erased, is the representation and acknowledgement of the subordinate, marginalized, less powerful cultures inhabiting the urban realm.

Where then, is this marginality of the city embodied? How can we "excavate" this experience of the "other"? "Otherness" is embodied in the places of everyday: the homes, parks and shantytowns of our cities. There is no homogeneous "other" behind this theoretical cliché of "otherness." There are actual, flesh-and-blood others (McLeod 1996: 21). Some of them the sick, disabled and elderly, find a certain degree of comfort, security, autonomy and even freedom in sites of everyday life such as the home, the public park, and the department store. While the home, under certain circumstances, to some people, can be a source and site of oppression and violence (women, children in abusive families); to others, and in other circumstances, it can be a place that fulfills deep yearnings for empowerment and control over one's life and place of community contact (Hermanuz 1996: 235).

Many of us have experienced the devastating feelings of estrangement from one's surroundings engendered in such places as shopping malls, large hotels and transit points—places controlled by computer networks and personal credit-card identification. These places of supermodernity erase senses of real communication and memory. The individual becomes a passenger, customer or driver who is "possessed" by the "passive joys of

identity-loss, and the more active pleasure of role-playing" (Augé 1995: 103). But despite our worries about the changes that digital technology has brought to our cities, we have to face the fact that boundaries are becoming blurred between the social and the technological, between the natural and the artificial. The important question that is asked by many is: "What are the implications for human emotional experience of these new forms of technology and the various 'hyperrealities' they spawn?" (Williams 1998: 120). It can be argued that new forms of emotional intimacy, sharing and meaning are beginning to open up as a consequence of these technological developments. "The computer network provides opportunities to get together with considerable personal intimacy and proximity without the physical limitations of geography, time zones or conspicuous social status" (Williams 1998: 124). Though the "intrusion of commerce and sophisticated technology into every crevice of daily life can hardly be considered cause for comfort, it is also the case that the built representations of postmodern society are no longer charged so heavily with dichotomous gender stereotypes" (Ockman 1996: 208).

One of the themes that recurs in discussions about feelings and perceptions of the built environment is that of diversity and fluidity, of emotion's dependency on context. Physical and virtual places appear to coexist and blend in the contemporary metropolis. This demands from designers, architects and planners significant revision of design strategies and methods of work. Such changes involve recognizing the presence of marginality in social life and formal representation of the city, and working toward recovering the "informal life" in the city's dominant representations. We need a radically new approach to cities if we are to see realized the city's potential to offer freedom and autonomy to all individuals and groups (Pile 1996: 283). In many cases, the recovery of marginality offers passages into mysterious human nature, and at the same time provides confused "form givers" with some constructive understanding of what kind of city it is that people need these days, of how that city is supposed to serve their needs and reflect their emotional yearnings in a just and responsible way (Cline 1997: 14). Mere formal subversion of "otherness" in buildings as objects of art, and placing dominant value primarily on the physical features of the designs, is not sufficient or effective toward making contemporary cities better places to live. To adopt the position of an informed designer one must pursue a deeper understanding and appreciation of the cultural issues and practices that converge in the body of the contemporary city. One of our valuable resources of creativity and skill is our ability to listen and learn from those for whom we design (Frascara 2000). In the urban context, we should not forget that public space is the representation of a "public, as a living, acting, and self-determining community" (Torre 1996: 249).

As we develop a more profound sense of how different people live in the same city, we might not be surprised to find that "the public realm that can

be some people's heaven can be other people's hell" (Cline 1997: 53). I would argue that professionals should become more prepared to accept and learn from the unexpected twists and turns of real life city events. Many spontaneous and informal practices are deeply significant to the engaged individuals and groups, and can be very revealing to such professionals as designers. An example of such a practice is that of Latin American dwellers of the Bronx constructing, in the "vacant" land between apartment buildings, little houses that remind them of their home country. These *casitas* are filled on summer nights with the bustle of people enjoying comradery and the night (Cline 1997: 21). This example also reminds us of the fact that a sense of security and enjoyment of public spaces such as a park or a street depends on matters that extend beyond demands for sufficient lighting or smooth paving. Many ideas that transform our lives and are of greatest significance derive from non-architectural sources. Don't we often find ourselves perceiving the city, our daily journeys, and our inner thoughts and routines as one inseparable physical-emotional-mental landscape? Aren't our impressions of city sites and experiences of sightseeing subordinated to our daily worries and thoughts as we walk or drive along familiar streets?

While this does not mean that many traditional disciplinary skills and artistic imagination are obsolete to the designer of urban spaces, images or products, it does suggest that the issues relevant to a designer's professional competence require serious scrutiny and expansion. One of the critical aspects of this revised picture would involve the transcendence of static and oppressive dichotomies between male and female, between reason and emotion, and between the rational and the subjective. It would mean that space and time should be redefined, and seen as interrelated. "We need to conceptualize space as constructed out of interrelations, as the simultaneous coexistence of social interrelation and interactions at all spatial scales, from the most local level to the most global" (Massey 1994: 264).

Along with accepting the fluidity and diversity of concepts we operate with in our daily practice, it is necessary to adopt a flexibility in our methods of work and research. As architect Denise Scott Brown remarks, it is a sense of professional responsibility that moves her to accept the diversity and temporality of social agendas and meanings attached to designed spaces and buildings in the city. Instead of following the rigid directives of dominant ideologies, Scott Brown, in her daily work, chooses the more difficult route of negotiating mutually accepted agreements between parties involved. She admits, however, that "ideologies come and go and functional needs change with time, yet our buildings may remain" (Scott Brown 1996: 215). As difficult as it is to concede, we might never be able to determine the ultimate method or the perfect methodological package that would free us from continuous self-questioning, end our creative search, or address all the transformations in our working context. Cities, places, societies, and the emotional responses of people will change.

"Each situation demands specific responses, and all that methods can do is help us approach each new situation with a more sensitive and efficient eye" (Frascara 2000: 120).

Urban experience and the design practice

As I have been exploring here the role of emotion in urban life, I hope that the reader has been encouraged to adopt a critical position with regard to the information and the complementary or competing ideas presented. As I asserted earlier, there is no one and correct answer to all our problems of urban living, and therefore, there is not one set of criteria according to which the design process, under the current conditions, is supposed to develop.

Nevertheless, I argue that through informed selection and thoughtful consideration of some leading ideas offered by philosophers, geographers, sociologists and anthropologists, designers may be encouraged to reconsider the paradigms they traditionally identify with. Beyond adopting greater moral responsibility for their actions, a more profound awareness of contemporary social conditions, and enhancing their knowledge of methods, designers can embrace the diversity of human experience, fundamentally shifting their standpoint within the profession. The key to making this transition, I believe, is to adopt theoretical and action paradigms that enable designers to influence social change through interpretation and negotiation. This stands in marked contrast to a design practice based on authorship and the imposition of opinions and expertise.

The diversity of these concerns does not signify to me a loss of direction in design, nor a retreat to formal experimentations. As a designer working on urban design issues, the complexity I discover in conceptualizations and perceptions of the city serves to encourage me to continuously revise and adapt my working methods to the contextual criteria of each design situation, and to assess the forces shaping people's attitudes and actions. In this context then, I contend that knowledge gained through work on design projects does not accumulate in an absolute sense; rather, it transforms us and leads us to more informed insights. Since this approach is linked to postmodern paradigms, it also can be defined as inherent in the wisdom of everyday living. Isn't this the way we, as human beings, gain life experience and life skills: moving from one experience to the next, from one life lesson to another? What accumulates, of course, is not a catalogue of events defined by frequency or location of occurrence, but images, sensations and perceptions of the critical links and relationships. This accumulation becomes a wide web of practical knowledge which cannot easily be labeled as true or false. Knowledge can only be revealed through an understanding of the cultural discourses within which it is embedded. In such an approach, whether the research and design transformations are concerned with peer relationships, work strategies, perceptions of images,

or patterns of use in built environments, detached reflection based on a purely theoretical way of thinking is transformed into discussions and negotiations between the researcher and the user-participant.

Note

1 A similar version of this paper has been published as "Emotion and urban experience: implications for design," in *Design Issues*, MIT, 16(3), Autumn 2000, 67–79.

References

Augé, M. (1995) *Non-Places: Introduction to an Anthropology of Supermodernity* (London: Verso).

Berleant, A. (1991) *Art and Engagement* (Philadelphia: Temple University Press).

Bloomer, K. C. and Moore, C. W. (1977) *Memory and Architecture* (New Haven: Yale University Press).

Buchanan, R. (1998) "Branzi's dilemma: design in contemporary culture." *Design Issues*, 14(1) (Winter), 3–18.

Cline, A. (1997) *A Hut of One's Own: Life Outside the Circle of Architecture* (Cambridge, Mass.: MIT Press).

Crozier, R. (1994) *Manufactured Pleasures: Psychological Responses to Design* (Manchester: Manchester University Press).

Dewey, J. (1958) *Art as Experience* (New York: Capricorn Books).

Frascara, J. (2000) "Information design and cultural difference." *Information Design Journal*, Milton Keynes, 9 (2–3), 119–27.

Hermanuz, C. (1996) "Housing for a postmodern world." In Agrest, D., Conway, P. and Kanes Weisman, L. (eds) *The Sex of Architecture* (New York: Abrams).

Illouz, E. (1997) *Consuming the Romantic Utopia: Love and the Cultural Contradictions of Capitalism* (Berkeley, Calif.: University of California Press).

Kaplan, R. (1989) "The analysis of perception via preference: a strategy for studying how the environment is experienced." In *Landscape Planning*, 12(1), 174–5.

Langer, P. (1984) "Sociology—four images of organized diversity: bazaar, jungle, organism, and machine." In Rodwin, L. and Hollister, R. M. (eds) *Cities of the Mind: Images and Themes of the City in the Social Sciences* (New York: Plenum Press), 97–118.

Ley, D. (1981) "Behavioral geography and the philosophies of meaning. Behavioral problems." In Cox, G.R. and Golledge, R.G. (eds) *Geography Revisited* (London: Methuen), 209–30.

Lynch, K. (1981) *Good City Form* (Cambridge, Mass.: MIT Press).

Massey, D. (1994) *Space, Place and Gender* (Cambridge: Polity Press).

McLeod, M. (1996) "'Other' spaces and 'others.'" In Agrest, D., Conway, P. and Kanes Weisman, L. (eds) *The Sex of Architecture* (New York: Abrams).

Mead, G. H. (1934) *Mind, Self, and Society: From the Standpoint of a Social Behaviorist* (Chicago: University of Chicago Press).

Merleau-Ponty, M. (1962) *Phenomenology of Perception* (London: Routledge & Kegan Paul).

Neisser, Ulrich (1976) *Cognition and Reality: Principles and Implications of Cognitive Psychology* (San Francisco: Freeman).

Ockman, J. (1996) "Mirror images: technology, consumption, and the representation of gender in American architecture since World War II." In Agrest, D., Conway, P. and Kanes Weisman, L. (eds) *The Sex of Architecture* (New York: Abrams).

Park, R. E., Burgess, E. W. and McKenzie, R. D. (1996) *The City* (Chicago: University of Chicago Press).

Pile, S. (1996) *The Body and the City: Psychoanalysis, Space and Subjectivity* (London: Routledge).

Rose, G. (1993) *Feminism and Geography: The Limits of Geographical Knowledge* (Minneapolis: University of Minnesota Press).

Sassen, S. (1996) "Analytic borderlands: race, gender and representation in the new city." In King, A. D. (ed.) *Representing the City: Ethnicity, Capital and Culture in the 21st-Century Metropolis* (London: Macmillan Press), 183–202.

Scott Brown, D. (1996) "Through the looking glass." In Agrest, D., Conway, P. and Kanes Weisman, L. (eds) *The Sex of Architecture* (New York: Abrams).

Simmel, G. (1955) *Conflict and the Web of Group Affiliations* (New York: Free Press).

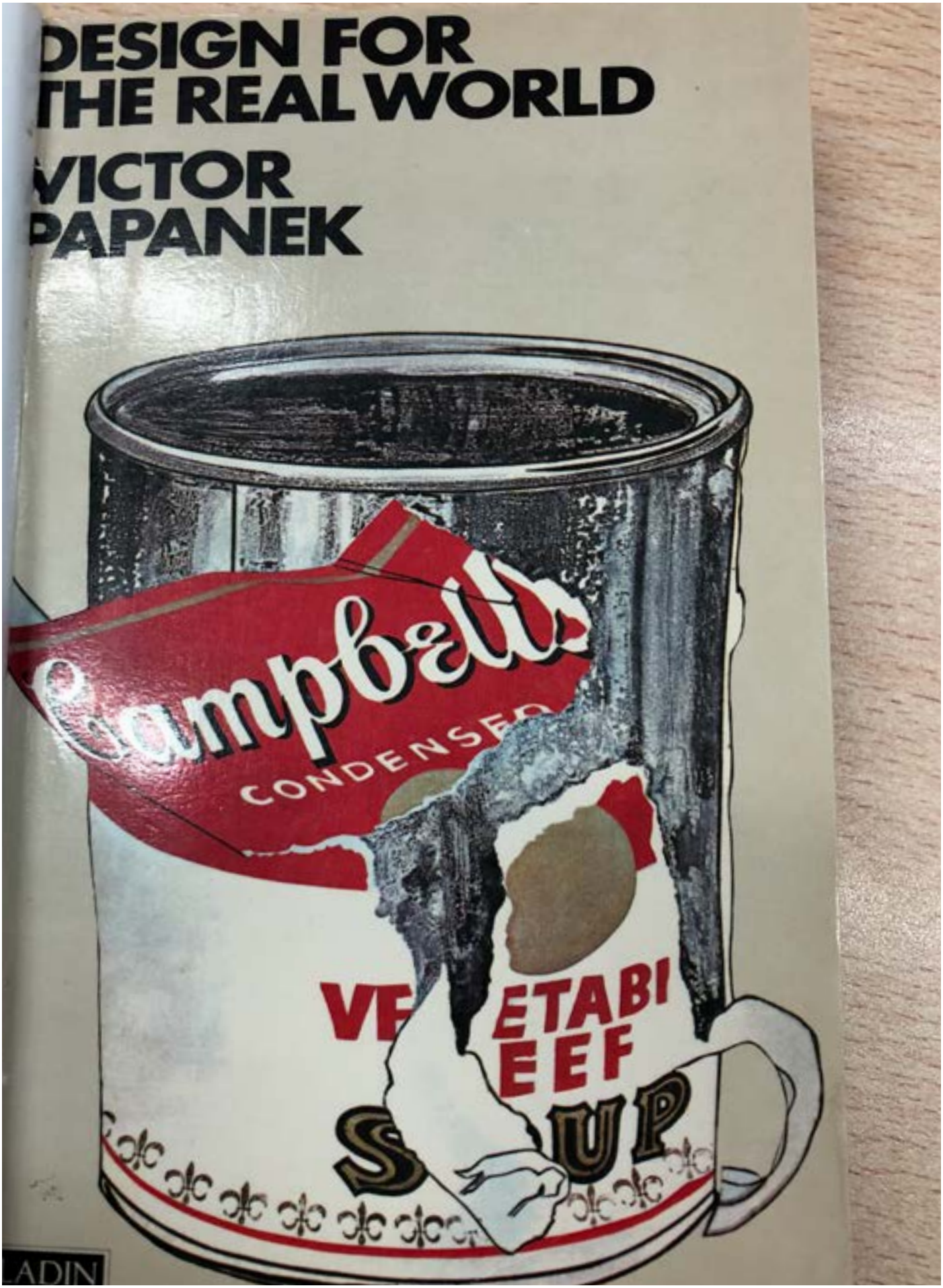
Thrift, Nigel (1996) "On the determination of social action in space and time." *Environment and Planning D: Society and Space*, 1(1), 241–50.

Torre, S. (1996) "Claiming the public space: the mothers of Plaza de Mayo." In: Agrest, D., Conway, P. and Kanes Weisman, L. (eds) *The Sex of Architecture* (New York: Abrams)

Valentine, G. (1992) "Images of danger: women's sources of information about the spatial distribution of male violence." *Area*, 24, 22–9.

Williams, S. J. (1998) "Emotions, cyberspace and the "virtual" body: a critical appraisal." In Bendelow, G. and Williams, S. J. (eds) *Emotions in Social Life: Critical Themes and Contemporary Issues* (London: Virago).

Wilson, E. (1991) *The Sphinx in the City: Urban Life, the Control of Disorder, and Women* (London: Virago).



Livro completo

Design Like You Give a Damn

Architectural Responses to Humanitarian Crises_Edited by Architecture for Humanity

Barefoot College

Location_Tilonia, Rajasthan, India
Date_1986–89
Client_Residents of Tilonia, India
Sponsoring organization_Social Work and Research Center
Project organizer_Bunker Roy
Design team_Main campus by Bhanwar Jat, Neehar Raina, and Barefoot Architects; geodesic domes by Rafeek Mohammed and Barefoot Architects
Construction_Bhanwar Jat with rural masons and day laborers
Major funding_Social Work and Research Center; Government of India; United Nations Development Program; German Argo Action; HIVOS-Humanist Institute for Development Cooperation; Plan International
Cost_$21,430
Area_Building: 30,140 sq. ft./2,800 sq. m; site: 377,000 sq. ft./35,000 sq. m

Inspired by Gandhi and moved to respond to India's famine of 1967, Bunker Roy moved from his family's affluent suburb to Tilonia, a rural community in the state of Rajasthan.

His aim was to help rural villagers improve their lives. The organization he founded in 1972, the Social Work and Research Center, would eventually come to be known as the Barefoot College.

Work on the Barefoot College began in 1986. Remarkably, the college was designed and built by the very same rural villagers, many of them semiliterate, that it was intended to train. As the group later explained, "We believe, like Gandhi, that there is a difference between literacy and education." This philosophy guided every aspect of the campus's construction and, eventually, all the activities that would take place there. After a preliminary scheme was drafted by Neehar Raina, a young architect, a farmer named Bhanwar Jat and 12 other so-called Barefoot Architects developed and constructed the buildings.

The process became very fluid; the group refined and redrew the plans on the spot to accommodate traditional building techniques and specific site issues. "The project was a joint effort. Everyone who was going to live there was consulted. Everyone's views had to be respected," Jat explained. Several women from the village assisted the team, taking active roles in the decision-making process and joining in construction.

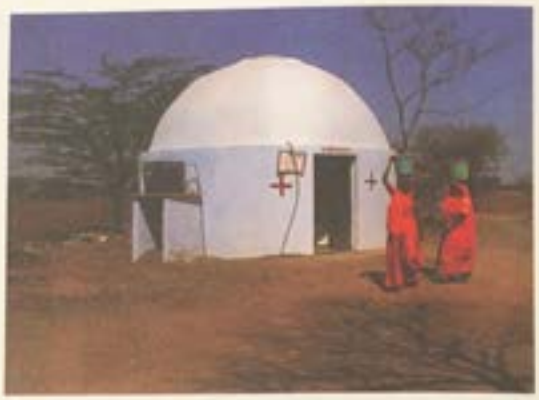
The buildings are arranged around traditional, highly decorative courtyards. Local materials were used throughout the construction process. Load-bearing walls were constructed from stone with lime mortar; the flat roof was constructed from stone slabs. Collected rainwater gathers in a tank beneath a courtyard, a space that doubles as a stage and gathering place for residents. Scattered throughout the campus are solar panels—built by the Barefoot Solar Engineers—that generate power for the college. These engineers maintain the panels at a fraction of the cost of Western units.

The Barefoot Architects also gave Buckminster Fuller's geodesic dome a sustainable makeover. Deforestation is a major threat in the area, as traditional housing has made wood a scarce resource. Rafeek Mohammed and seven other Barefoot Architects fabricated domes from discarded agricultural implements, including bullock carts and pump sections. They covered them with thatch, giving a traditional look to a new idea. Geodesic dome structures are currently used for a pathology lab, a dispensary, a post office, and an Internet café.

Communities from all over India have sent representatives to the college to study to become "barefoot" paraprofessionals, as Bunker calls them. Through night classes and other programs, the center demystifies education for the rural poor through technology training. Over the past 30 years the school has trained more than 750 health workers, teachers, and engineers. Many return to their villages to use their knowledge of water engineering, solar power, income generation, medicine, and other topics to improve their own communities.

above
The college sits like an oasis in the arid Rajasthan plains.

opposite
Local women use traditional technologies to waterproof the roof of a college building.



above left
Discarded agricultural implements are repurposed to create the structural members of a geodesic dome.

above right
A completed dome serves as a pathology lab.

right
Solar panels, built by the Barefoot Solar Engineers, generate enough power to run the college.

above
A stage in the central courtyard serves as the college's main gathering space. Rainwater is collected through the grates and stored in a holding tank beneath the stage.

left
The designers drew on traditional construction techniques in building the college.

All photographs The Barefoot Photographers/Aga Khan Foundation

Favela-Bairro Projects

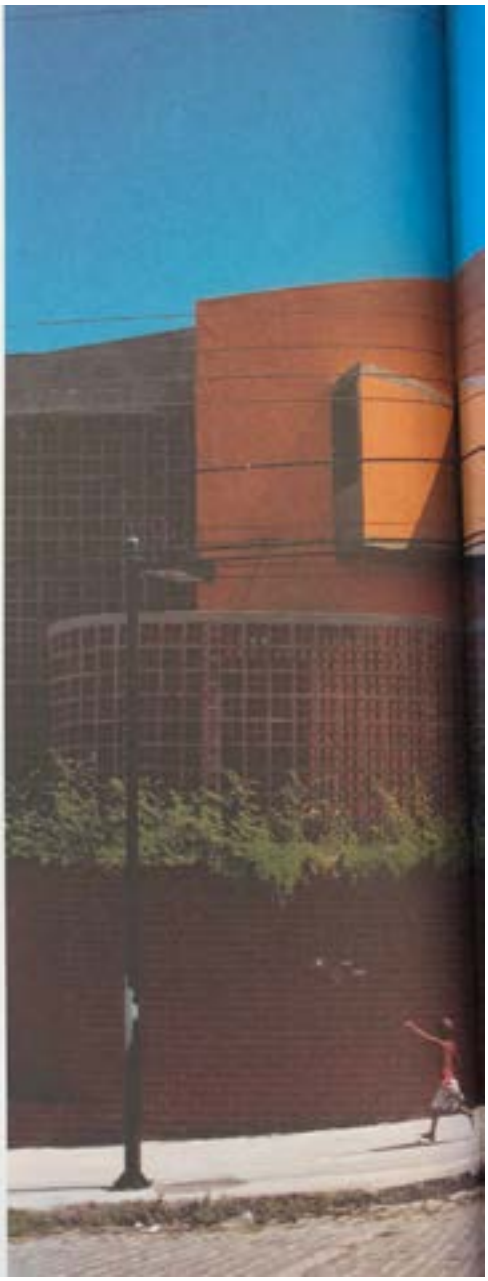
Location_Rio de Janeiro, Brazil
Date_1994–present
Client_168 favela communities
Design firm_Jorge Mario Jáuregui Architects
Design teams_Various
Major funding_Inter-American Development Bank
Total budget_$1 billion

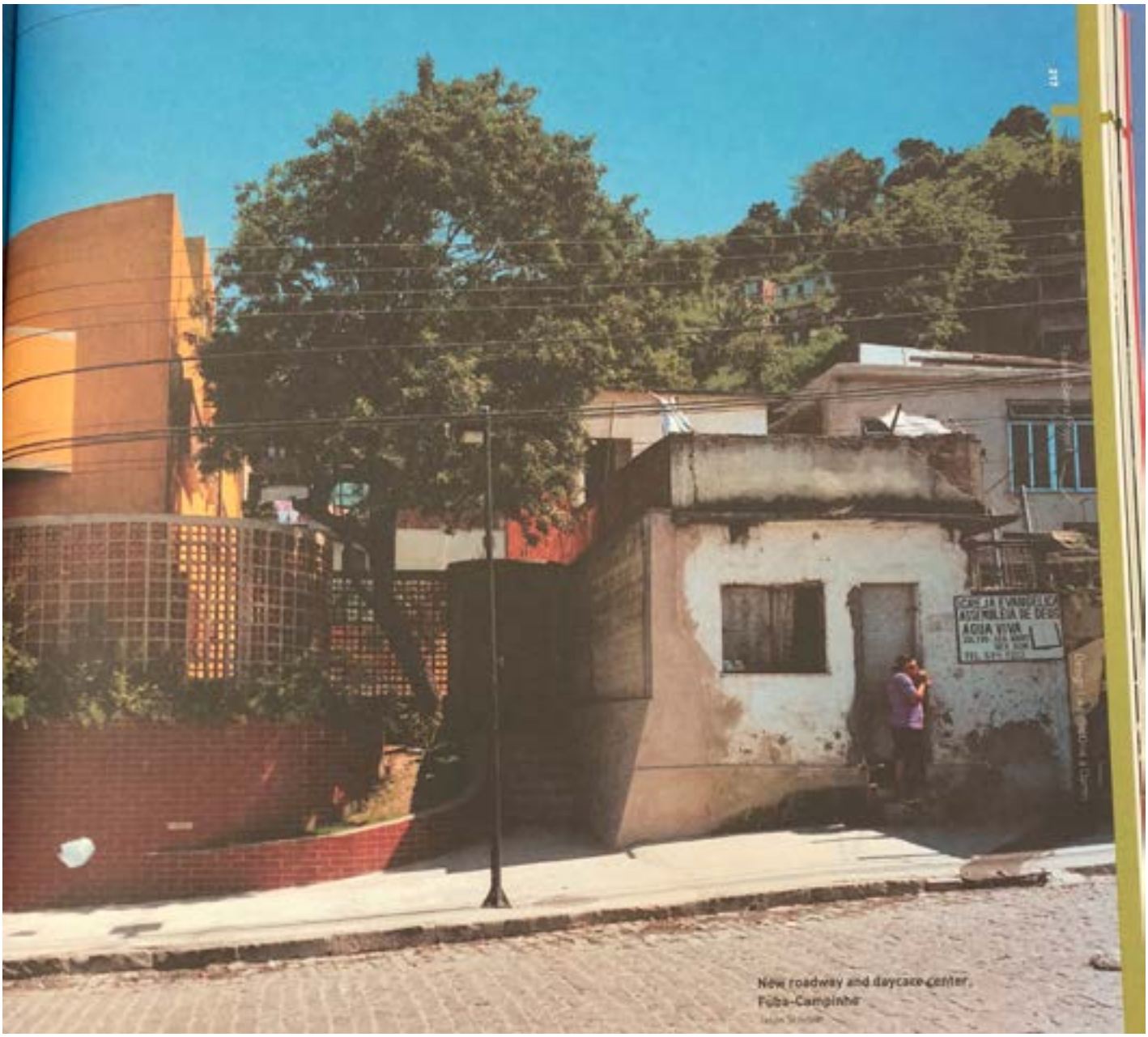
The favelas of Rio de Janeiro are unplanned, illegal shantytowns housing one-third of the city's population.

Though favelas are typically seen on the fringes of a city, Rio's unique topography of mountains and sea forced squatters to build within city limits. For over 100 years, simple makeshift houses climbed on top of one another up Rio's steep surrounding hillsides.

Though the government long ignored the favelas, efforts were finally made in the mid-twentieth century to eradicate them and move occupants to public housing. These efforts met with strong opposition from residents, and the favelas survived, growing at a faster rate than the city itself. By the early 1990s the favelas had become dangerous clusters of substandard housing, lacking basic sanitation and reliable electricity, terrorized by drug lords, and disenfranchised from the greater community.

In the mid-'90s the city changed tack, launching the Favela-Bairro program, which engaged the community in a participatory design process with architects and other





New roadway and daycare center, Fúba-Camginho

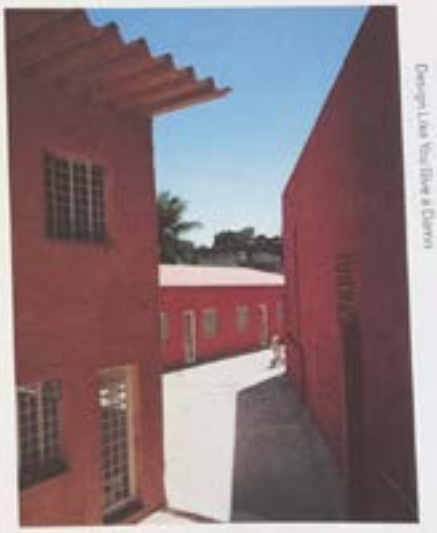
technical experts. Its goal was to upgrade existing favelas and integrate them with the larger city. The result was a wide range of proposals including the award-winning projects shown here by Jorge Mario Jáuregui Architects.

Since the program's inception this firm has built projects in more than 10 favelas, including Fernao Cardim, Fuba-Campinho, Salgueiro, and Vidigal. Grafted into the heart of the favelas, the new structures, with their Carnival coloring and functional modernist design, signal the arrival of basic services and the favelas' assimilation into the formal city.

Where tangles of wiring once snaked their way up the hillsides to informal shantytowns, new power lines have been buried and brightly colored stair rails mark the boundaries of newly formalized neighborhoods. In Fuba-Campinho, a gateway made from brick and steel I-beams brings order to the once-chaotic jumble of pathways and demarcates a new public square. In Vidigal, a semiabandoned sports center once overrun by drug dealers has been transformed into the official venue for Rio's soccer championships. In other neighborhoods, daycare centers, communal laundries, and salsa halls stand shoulder to shoulder with makeshift housing and storefronts, as if to invite and encourage the community to embark on its own journey of self-improvement.

In many areas streets are being built for the first time, allowing police and sanitation departments critical access to once-inaccessible parts of the city. Where streets cannot be built, connecting pathways are being improved to overcome the constant erosion of the hilly topography. In some cases housing must be removed to accommodate the new infrastructure. Affected residents are offered compensation to relocate or a spot in new housing units. Most choose the latter.

Since 1994 the Favela-Bairro Project has reached about 500,000 people in 168 of Rio's marginal settlements, and the government plans to continue and extend the program. Each project is designed independently of the others, maintaining the unique characteristics of neighborhoods ranging in size from 850 to 12,000 families. To encourage dialogue the project requires architects and planners, including many students, to be present in the communities on a daily basis—an experience most say they find liberating.



above
Soccer field and clubhouse, Fuba-Campinho
Tadeku Mori

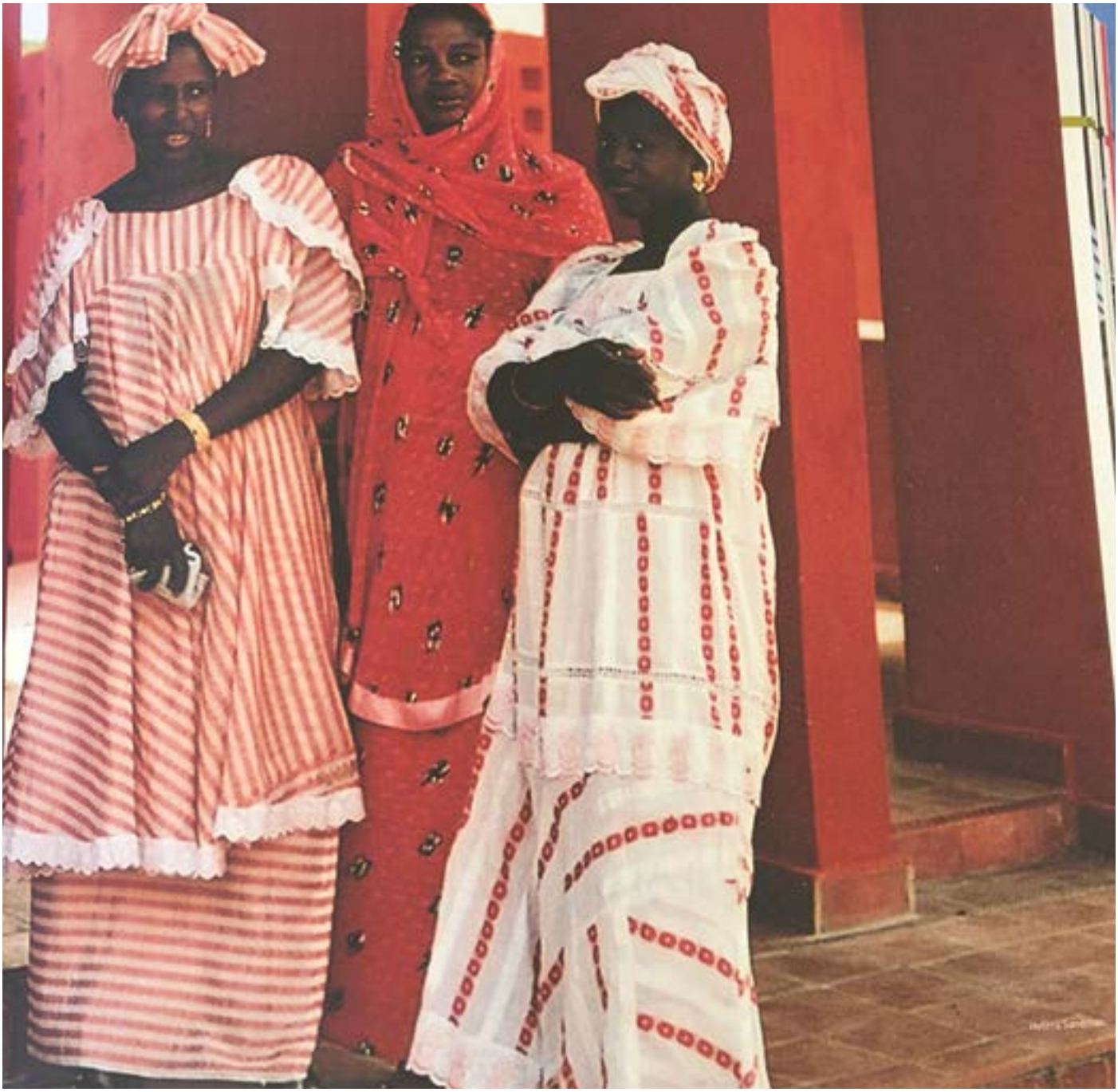
right
Public square entrance, Fuba-Campinho

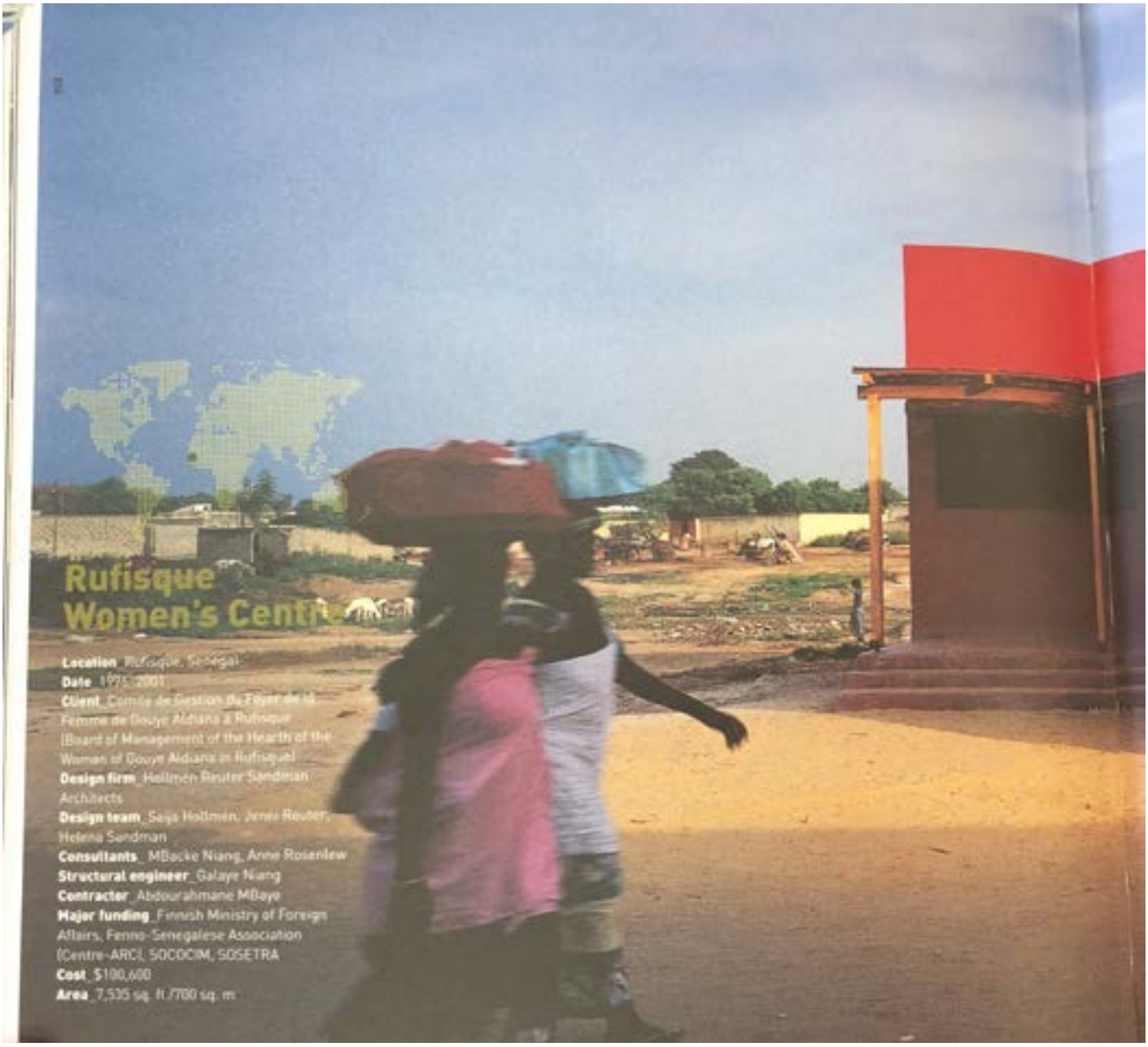
far right
Community buildings, Fuba-Campinho

opposite left
Daycare center, Rio das Pedras

opposite right
Communal laundry, Vidigal
All other photographs Jason Schmidt


women
WORK
2/3 of the world's working hours,
PRODUCE
1/2 of the world's food, and yet
EARN
10% of the world's income and
OWN LESS THAN
1% of the world's property
Walter Kalin et al., eds., The Face of Human Rights, Baden: Lars Müller, 2004
2/3 of the 110 million children not in school are girls
Walter Kalin et al., eds., The Face of Human Rights, Baden: Lars Müller, 2004
Women constitute 70% of the estimated 1,300,000,000 people living in absolute poverty
Walter Kalin et al., eds., The Face of Human Rights, Baden: Lars Müller, 2004
BETWEEN 40-60% of sexual assaults are committed against girls younger than 16.
"Prevention and response to sexual and gender-based violence in refugee situations", UNHCR





Rufisque Women's Centre

Location_Rufisque, Senegal
Date_1995–2001
Client_Comité de Gestion du Foyer de la Femme de Gouye Aldiana à Rufisque (Board of Management of the Hearth of the Woman of Gouye Aldiana in Rufisque)
Design firm_Hellmén Reuter Sandman Architects
Design team_Seija Hellmén, Jenni Reuter, Helena Sandman
Consultants_MBacke Niang, Anne Rosenlew
Structural engineer_Galaye Niang
Contractor_Abdourahmane MBaye
Major funding_Finnish Ministry of Foreign Affairs, Fenno-Senegalese Association (Centre-ARCI, SOCOCIM, SOSETRA
Cost_$100,600
Area_7,535 sq. ft./700 sq. m

In 1906 Finland blazed the trail for women's suffrage across Europe when it granted women the right to hold public office.

Finland is also home to a rich history of social democracy. This socially conscious agenda, translated to the soils of Senegal, informs the design of the Rufisque Women's Centre.

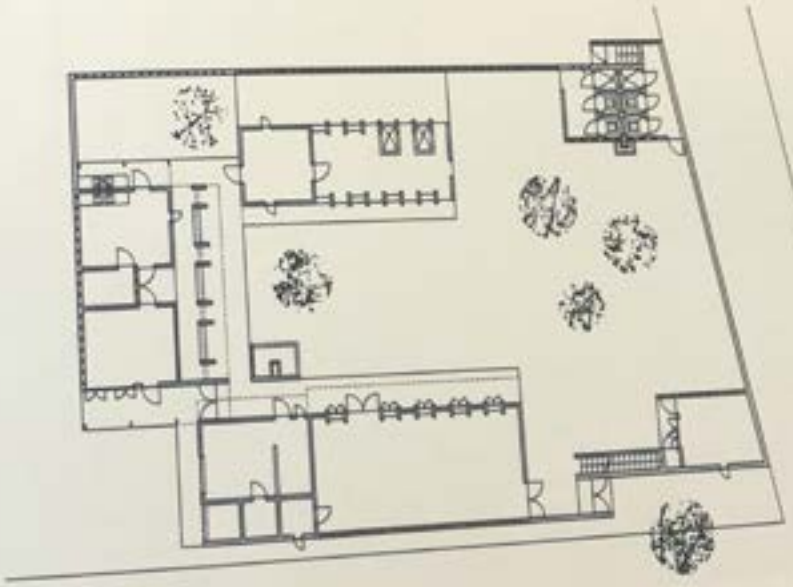
Designed by three Finish architects, Saija Hollmén, Jenni Reuter, and Helena Sandman, the project stemmed from the work of Centre-ARC, whose focus is Senegalese-Nordic cultural exchange. The center's director, Anne Rosenlew, a Finnish sociologist, spent nearly twenty years observing the political and social infrastructure of Senegal. By tracing the population explosion there, she noticed a rise in both urban sprawl and locally active women's groups. Senegal's high unemployment rate meant that women, who traded fish, vegetables, incense, fabrics, brooms, and other basic goods in the country's crowded markets, were often the sole breadwinners in their families. These women's groups, which emerged spontaneously by the hundreds within traditional social structures in all parts of the country, enabled women to form microlending societies. Segregated within their culture from the male sphere of commerce, the women created an emotional and fiscal support network, which provided opportunities for economic growth and stability and, in some cases, a means of survival for them and their children.

But while some of the women's groups were sanctioned by the government through a program called Groupement de Promotion Féminine, they lacked adequate facilities, funding, and centralized coordination. Meetings would often be held in the courtyards outside private homes. "Always after having a meeting, we had to repair the fence because we just didn't have space enough in the courtyard," commented one member. The Rufisque Women's Centre arose from this need for a central gathering space big enough to accommodate group meetings and other activities.

The center, built on land donated by the city of Rufisque, is composed of three buildings situated around a central courtyard in the underdeveloped district of Gouye Aldiana. Architects used scale models to facilitate an exchange of ideas with the women, who were involved in the design process from the beginning. With its space ordered around a courtyard, the center echoes the traditional Senegalese gathering space and serves as a metaphor for democracy.

Reuse and recycling, along with an emphasis on locally available materials, guided the design team's choices. For example, the biggest cement factory in West Africa is just up the road from the center, so the buildings were constructed of cement. The team used recycled metal for the doors, windows, and reinforcing bars; old car-wheel rims became vents; and recycled bottles—"glass bricks"—were used as fenestration. Every effort was made to avoid utilizing wood, one of the region's scarcest natural resources. The walls facing the courtyard contain open colonnades, which also function to ventilate the buildings. Rich red walls separate it visually and functionally from neighboring businesses.

Today as many as 30 women's groups use the center, including the 110-member Bokk Jomm association, which participated in its design. The center also serves as a hub for women from groups throughout Senegal who come here to learn trades and exchange ideas. For the women of Rufisque the center's courtyard has become a symbol of unity, a modern-day version of the communal hearth, where they can share their concerns and aspirations.

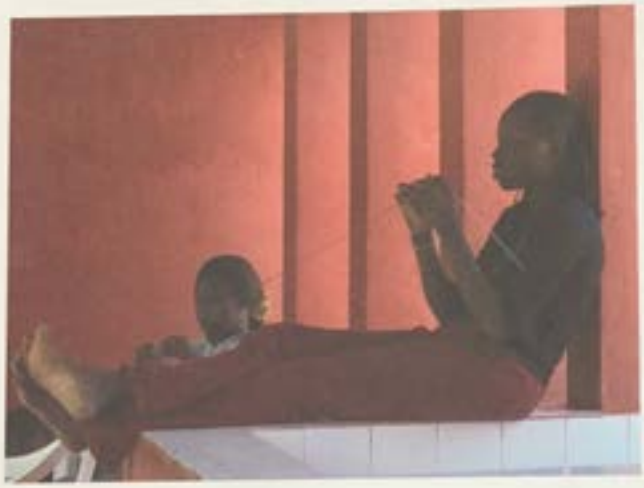


above
Courtyards are important in Rufisque domestic architecture, so the design team organized the center around a series of courtyards.
Atha Tanner

right
Plan of the center

"What I find to be the best thing about the group [is the ability] to meet every day and talk, [to discover] that which concerns another person also concerns me."

Bokk Jomm member



above
The interior and exterior spaces are designed to flow together.

right
A view from one of the center's workshops into a courtyard. The ceiling is insulated with straw, a technique borrowed from Finland that keeps the space cool.

Opposite top, Juha Soren; all other images Helena Sandman

PlayPump

Location_South Africa
Date_1996
Design team_Trevor Field, Ronnie Stuiver
Engineer_Paul Ristic
Manufacturer_Roundabout Outdoor
Major funding_International Finance Corporation (World Bank), UNICEF, Kaiser Foundation, South African Department of Water Affairs and Forestry, various advertisers
Cost_$8,500 (including maintenance)

When the children ride the merry-go-round, water is pumped into the nearby water tower. Public health and HIV/AIDS awareness posters always occupy two of the water tower's four billboards.

All photographs Roundabout Outdoor

Ceramic Water Filter

Location_Bisbee, Arizona, USA; Managua, Nicaragua
Date_1981
Organization_Potters for Peace
Design center_Central American Institute of Industrial Technology
Designer_Dr. Fernando Mazariegos
Additional consultant_Ron Rivera
Cost_$10–15
Website_www.potpaz.org

The Ceramic Water Filter provides households with safe drinking water and promotes community-based cottage industry. As water passes through the filter, most bacteria are too large to follow through its tiny clay pores. Any bacteria and fungi that do make it through the clay are eliminated by the ionic colloid state of the filter's silver coating. Each filter can purify nearly one to 1.8 quarts (1.75 L) of safe drinking water an hour, easily filling up a five-gallon (20-L) dispenser, enough to meet a household's daily drinking-water needs.

In October 1998 Hurricane Mitch tore through Central America. One of the most destructive hurricanes ever recorded, it left millions of people without access to safe water. In response Potters for Peace launched an effort to mass produce and distribute the filter in areas affected by the hurricane.

Since then Potters for Peace has continued to learn with local partners and groups throughout Central America as well as in twelve other countries throughout the world to establish production facilities and provide training in the filter's manufacture. Using local clay, sawdust, and 10 cents worth of colloidal silver per filter, one press mold can produce 50 filters per day.

Peter Charlwood/Potters for Peace

Long-Lasting Antimalaria Bed Nets

Location_Arusha, Tanzania
Date_2002–present
Design firm_Sumitomo Chemical Corp.
Manufacturer_A to Z Textile Mills
Project partner_Acumen Fund
Major funding_Acumen Fund, A to Z Textile Mills, Exxon Mobil, Sumitomo Chemical Corp., UNICEF, World Health Organization
Cost per unit_$7–8

above right
Installing antimalaria netting at roof vents

below right
Netting enveloped around a bed

All photographs Sudan Hospitals

Standing water is a breeding ground for mosquitoes and is the main contributor to the spread of malaria. There are 300 million new infections of acute malaria worldwide every year; 90 percent occur in Africa—primarily among children under five.

Treated nets kill mosquitoes on contact, but the cost of re-treating conventional bed nets can be a heavy burden on many families. In 1978 the Sumitomo Chemical Corp. of Japan developed a highly effective insecticide-treated antimalaria bed net that lasted three to five years instead of the usual six months.

In 2001 the World Health Organization initiated a project to manufacture beds using the chemical. But making this lifesaving yet expensive new technology available to as many people as possible posed a challenge. This is where the Acumen Fund, a philanthropic foundation based on a venture-capital model, stepped in.

First the Acumen Fund facilitated the transfer of the technology license and manufacturing contract to Africa's largest bed-net producer, Tanzania's A to Z Textile Mills. With investment from Acumen, A to Z purchased equipment to produce about 380,000 bed nets per year. Then, through a public-private partnership between A to Z, the World Health Organization, UNICEF, Exxon Mobil, and Sumitomo, the fund helped create a distribution channel for selling the bed nets at gas stations, clinics, and charitable organizations. The result: an improved product made accessible and affordable to those who need it most.

UnBathroom

Location_Pasadena, California, USA
Date_2003
Design center_Art Center College of Design
Designer_William Hsu
Cost per unit_$2 (prototype)

In a disaster situation, a critical part of preventing an outbreak of disease is the hygienic disposal of human waste. The UnBathroom biodegradable cardboard toilet offers a recyclable, sanitary solution. Allowing one liner bag and cardboard seat per use, it packs flat for shipping, assembles easily, and can support up to 200 pounds (91 kg). The waxed cardboard structure is intended to be burned after all the liners are used.

above
The UnBathroom ready for use

below
Removing the liner bag from the UnBathroom
Both photographs Steven Heller

Ecological Dry Toilet

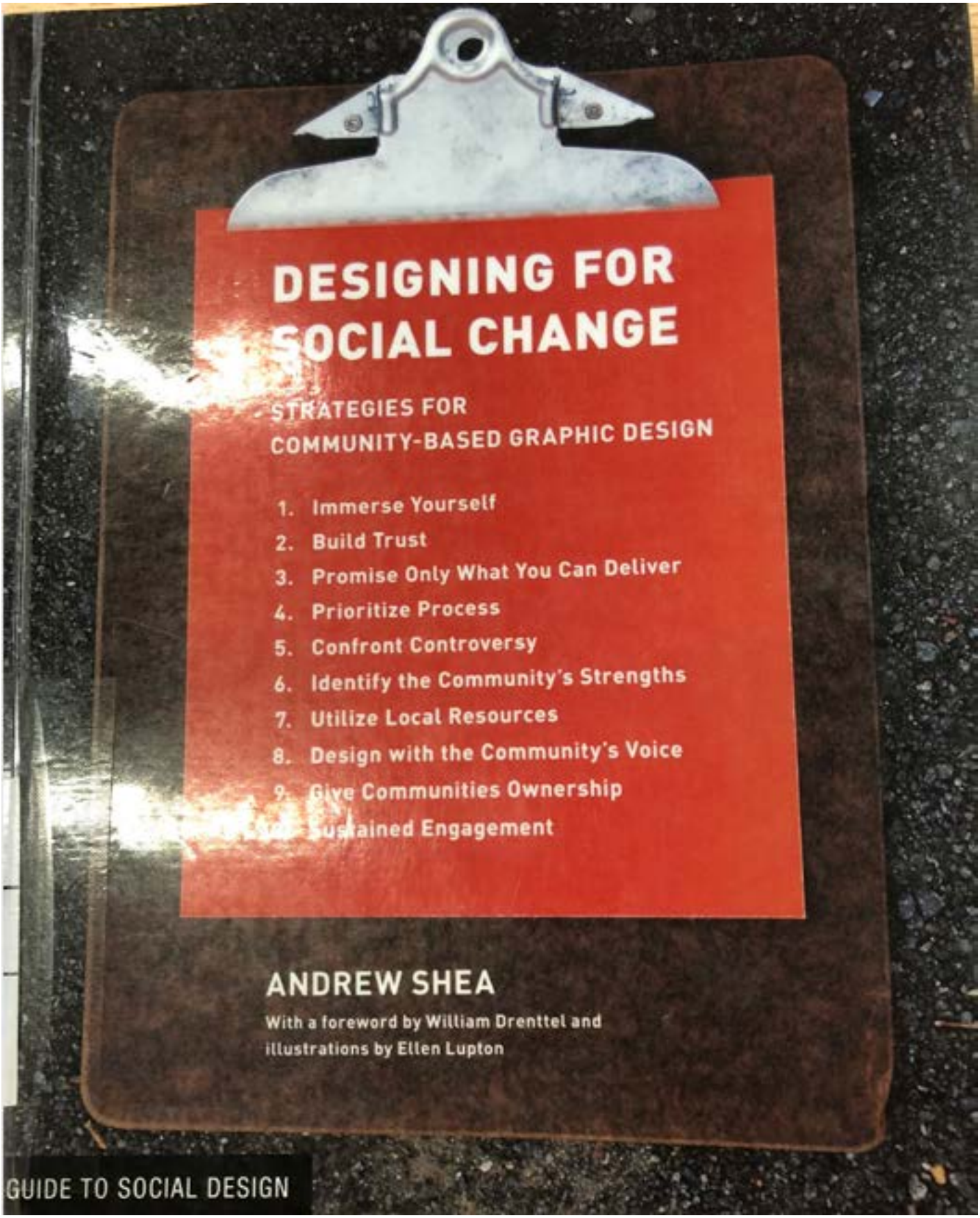
Location_Cuernavaca, Mexico
Date_1980
Organization_Centro de Innovación en Tecnología Alternativa
Designer_César Añorve
Additional consultants_Gustavo Esteva, Iván Illich, Jean Robert
Manufacturer_Tecnologías y Sistemas Ecológicos (TESEC)
Cost_$27–54 (stand-alone toilet), $150–550 (complete system)

Nearly half the water used in a typical Mexican home goes straight down the toilet. The Ecological Dry Toilet both conserves increasingly scarce water and creates fertilizer. The design mounts a conventional toilet seat over two chambers—one active, where waste is collected, the other passive, where waste composts while the other chamber is in use. The toilet diverts urine to a tank where it settles before being used as fertilizer. Solid waste passes to the active chamber, which is "flushed" with ash or lime rather than water to speed composting and neutralize odors. When the active chamber is full, it is sealed off and the waste is left to compost for 18 months or more. Meanwhile, composted waste is emptied from the second chamber, which then becomes active again. Because the waste streams must be separated, the group also created a dry urinal for men and recommends that homeowners install both.

While the toilet can be utilized with traditional plumbing, it is especially useful in areas that lack full sanitation services. TESEC, a small local business development firm, helps communities build new industry by setting up low-tech facilities to cast the toilet bowls from fiberglass or cement.

above left
Section diagram showing how gray water is diverted

above
The toilet with its diverting panel in place, and with the panel lifted
All images CITA AC


DESIGNING FOR SOCIAL CHANGE
STRATEGIES FOR COMMUNITY-BASED GRAPHIC DESIGN
1. Immerse Yourself
2. Build Trust
3. Promise Only What You Can Deliver
4. Prioritize Process
5. Confront Controversy
6. Identify the Community's Strengths
7. Utilize Local Resources
8. Design with the Community's Voice
9. Give Communities Ownership
ainable Engagement
ANDREW SHEA
With a foreword by William Drenttel and
illustrations by Ellen Lupton
GUIDE TO SOCIAL DESIGN

Design with the Community's Voice

The style of a community may be significantly different from your personal design aesthetic. While the community may need your fresh perspective in order to break from the past, your design also needs to connect to the style of your target audience in some way.

Sample the colors, typefaces, and other style elements you come across in the community. Feature quotes, video, or audio recordings from your conversations with community members. Consider the local languages, cultural norms, and literacy levels, and continue to home in on the final design by soliciting feedback from community members throughout the design process.

If the community is diverse, you may need to create a more general entry point into the design solution. As Cavaye puts it in his essay on governance and community engagement, "Community engagement may often involve tailormade 'solutions' in different communities."[1] Welcome the opportunity of designing for a specific audience. As Canniffe pointed out in a 2008 interview, "The design solution or the design's visual language is secondary—it's informed by the community. There's this great sense of release that comes with that approach: It's not important what it looks like as much as how it changes behavior, or how it can give a voice to a community. Who really cares what it looks like, as long as the community engages with it and feels a sense of ownership—that's what's important."[2]

In this sense, community engagement requires "cultural appropriateness."[3] Let your final design mirror the voice and style of the community rather than your own to ensure that it speaks to community members and portrays the community to the world in a convincing and authentic way.

Finding the right voice for their specific audiences was a central consideration for the designers of the following two projects, Vendor Power! and The 1% User Manual.

VOICE

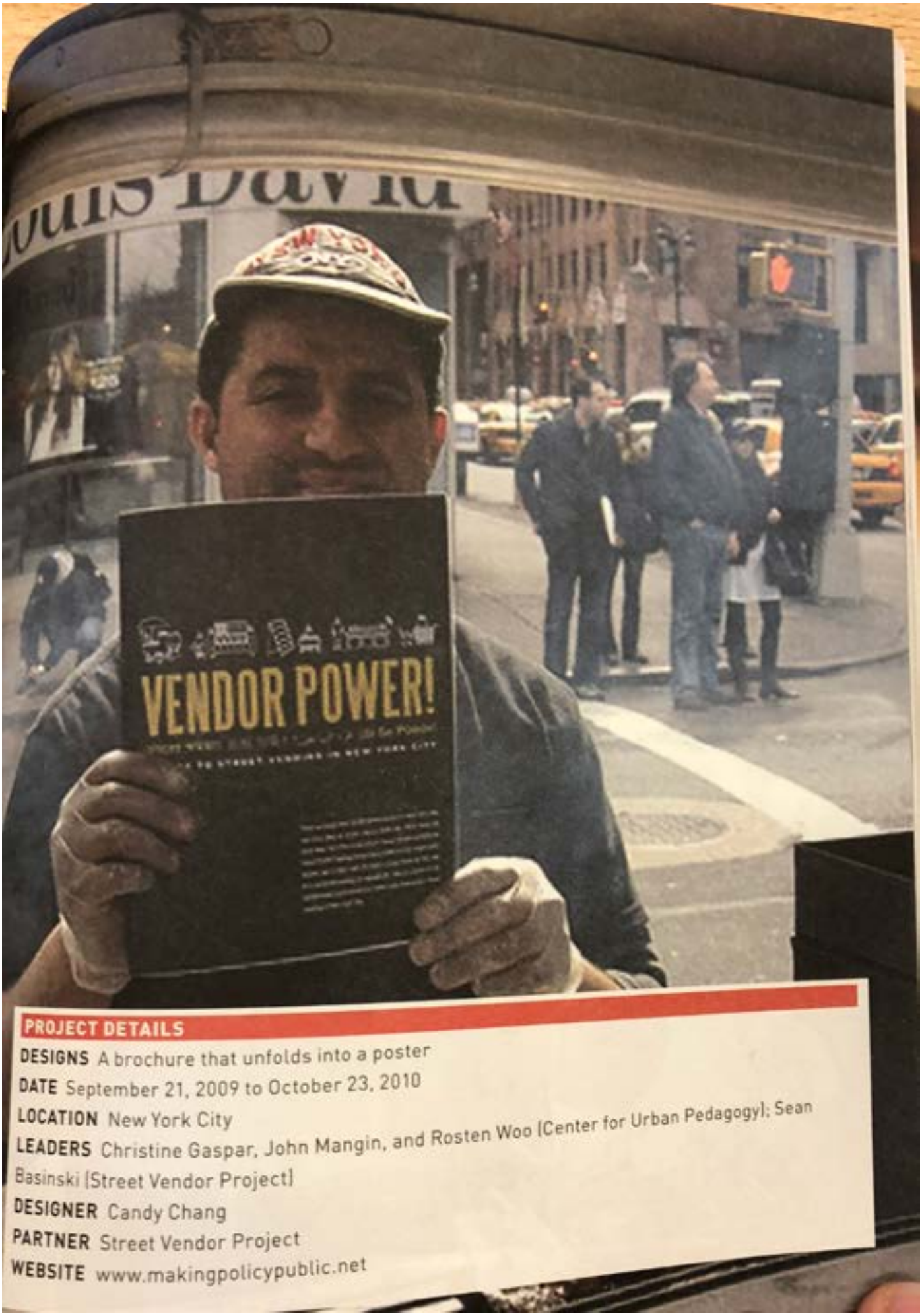
EDUCATION

Vendor Power!

Empowering New York City's street vendors with a brochure that translates and simplifies complex laws for many language groups

As our population grows, so does the complexity of our cities, which host millions of people and miles of infrastructure. A staggering amount of regulation exists to manage city life. Much of this policy is designed and enacted with the best intentions: to create a safer city, to make services more accessible, and to help people in need. However, the language of the law is full of jargon. Loopholes can negate a policy meant to protect; a policy can be unenforced or enforced too harshly; or its implementation can be discriminatory. In 2004 then–New York City consumer affairs commissioner Gretchen Dykstra compared the complicated set of policies regulating street vendors to an onion: "It has many layers and, after a while, one can't help but cry."[1] When people do not understand public policy, the result can be the opposite of its intent, and the underlying social needs are obscured.

The Center for Urban Pedagogy (CUP) has been working to clarify urban problems since 1997. The Brooklyn-based nonprofit organization "brings together art and design professionals with community-based advocates and researchers to make the city, its policies, processes, and infrastructure more legible so that



PROJECT DETAILS

DESIGNS A brochure that unfolds into a poster

DATE September 21, 2009 to October 23, 2010

LOCATION New York City

LEADERS Christine Gaspar, John Mangin, and Rosten Woo (Center for Urban Pedagogy); Sean Basinski (Street Vendor Project)

DESIGNER Candy Chang

PARTNER Street Vendor Project

WEBSITE www.makingpolicypublic.net

historically underrepresented groups can better participate in shaping the places where they live." It fosters collaborations that create new opportunities for designers to engage important social issues. One such series of collaborations, Making Policy Public, started in 2008 and grew out of a realization that a lot of community groups struggle to convey complex policy messages to their constituents, on whose lives the information can have a major impact.

To start these projects CUP sends out an open call to advocacy groups encouraging them to propose a convoluted public policy that needs clarification. In the past, these policies have included globalized shipping, social security, predatory equity, and the juvenile justice system, among others. A panel of four judges with a background in art, design, and advocacy chooses four of the entries. The winning policy briefs are then posted on CUP's website, and designers and artists are invited to apply to design a publication on one of them.

In 2004 then–New York city consumer affairs commissioner Gretchen Dykstra compared the complicated set of policies regulating street vendors to an onion: "It has many layers and, after a while, one can't help but cry."

During the design process the designers and leaders of the advocacy group work together. CUP encourages everyone in the team to keep talking to each other throughout the six-month-long project. The advocacy group also elicits feedback from its constituency at various stages to ensure that the publication will reach those who it is designed to help. "We ask the designers to really engage the content, and the advocacy groups to really engage in the design conversation," CUP's Christine Gaspar explains.

One of the center's Making Policy Public projects is Vendor Power!, which explains New York City's complex vending regulations, educating street vendors about their rights and existing rules. The topic was proposed by the Street Vendor Project, a legal advocacy group for New York City street vendors that was started in 2001 by Sean Basinski, a lawyer and former street vendor. The organization's more than seven hundred members work together to raise public awareness about vendor issues, file lawsuits to support vendor rights, and help vendors grow their businesses by linking them with organizations providing loans and training for small businesses. Basinski was teamed up with Candy Chang, a graphic designer, and two CUP staff members, John Mangin and Rosten Woo, CUP's director at the time.

During one of the team's first meetings, Basinski showed the group a box of pink violation tickets that local vendors receive for carts that are located too close to curbs, crosswalks, and building doors; for not wearing their vending license; and for setting up on restricted streets.[2] Vendors are harshly penalized under New York City's so-called quality of life crackdowns with one thousand dollar fines. "All these regulations are buried in documents full of intimidating jargon and heinous text formatting that would make even the most patient person cry," writes Chang in an article on the Architectural League's website Urban Omnibus.[3] Over 80 percent of

DESIGN CHALLENGE

Simplifying New York City's complex vending policies for street vendors.

ENGAGEMENT STRATEGY

Partnering with the Street Vendor Project to elicit feedback from the community and to gain a thorough understanding of street vendors' needs.

DESIGN STRATEGY

Using simple graphics and illustrations that communicate across language groups and ethnicities. Translating the text into several languages so that the majority of street vendors can read it.

"Jerry Seinfeld was once a vendor, and Bloomingdale's, D'Agostino, and Macy's all started as pushcarts."
Candy Chang

vendors in Lower Manhattan are immigrants, for whom English is a second language, making these rules especially cryptic. Vending is an ideal first job for immigrants, since it comes with low start-up costs, independence, and flexibility. However, city officials frequently create new obstacles for vendors to navigate, and current caps on the number of vendors mean that getting a vending license can take several decades.

After the team established the general scope of the content, Chang created several mockups of the layout. All of the Making Policy Public publications unfold from 8.5-by-11-inch brochures into 22-by-34-inch posters. The team decided to place vendor-targeted information in the first folds, so vendors can easily access it on a day-to-day basis. "The fully opened poster was devoted to a few additional elements, including personal stories from local vendors, historical background (New York City vending started when four Jewish peddlers set up pushcarts along Hester Street), fun facts (Jerry Seinfeld was once a vendor, and Bloomingdale's, D'Agostino, and Macy's all started as pushcarts), and recommended regulation reforms (lift the license caps, increase street access, reduce the fines, and reform administration and enforcement)," explains Chang, who kept the design as pictorial as possible to communicate across languages and cultures, and included text translations in Bengali, Chinese, Arabic, and Spanish.[4]

After trying out various visual styles, the designer "eventually landed on a friendly Chris Ware–inspired style and had good times illustrating everything from hot dog stands to former mayor Ed Koch," as she recalls.[5] Feedback from vendors about the brochure's clarity, content, symbols, language, and text translations helped refine the design, which, despite being easy to understand and welcoming, has a sense of authority so that vendors can use it when dealing with police officers.

After the publication was printed, CUP organized a citywide distribution event with the help of twenty volunteers who handed out free copies of the brochure to vendors throughout the city. "Cheikh Fall, a vendor himself, helped the team map the city's vendor-dense areas and estimate numbers," John Mangin of CPU explains. "We put the posters in the hands of about one thousand vendors and received reactions ranging from enthusiastic to 'what-took-you-so-long?'"[6]

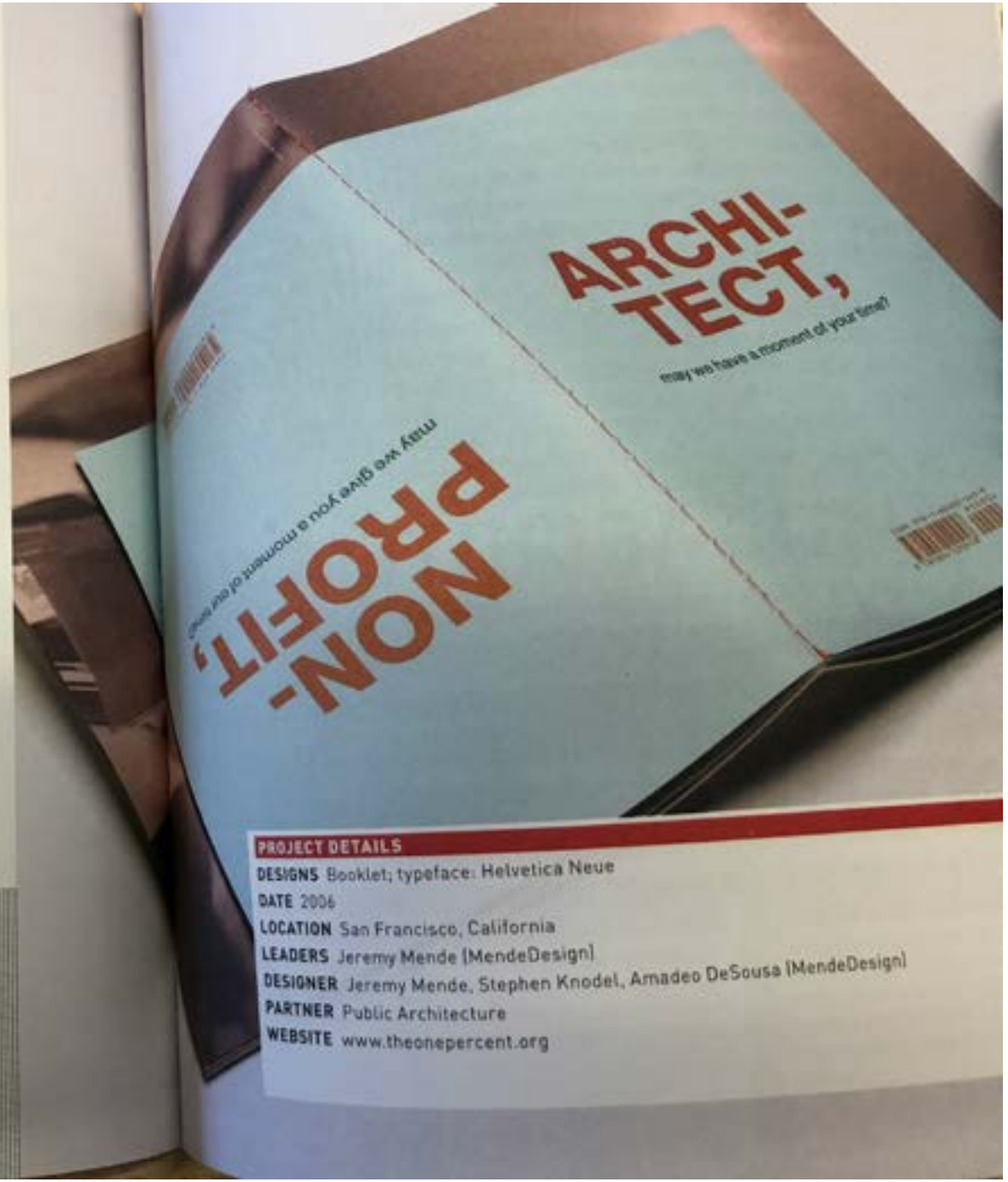
ARCHITECTURE

The 1% User Manual

Encouraging architects and nonprofit organizations to collaborate

There are over 1.6 million nonprofit organizations in the United States,[1] and many of them deliver critical social services to communities in need. Most of these organizations struggle through the cycles of grant writing and fundraising, and many do not think about building strategic collaborations with architects and designers to strengthen their organizations. Nonprofit organizations "tend to see design as cosmetic and/or a luxury," says Jeremy Mende of MendeDesign. "Likewise, architecture firms often take on pro bono work, but it is usually not part of a thoughtful corporate strategy."

MendeDesign's *The 1% User Manual*, winner of a Sappi Ideas That Matter grant in 2006, sought to change these perceptions. The 1%, created by Public Architecture, a nonprofit organization based in San Francisco that "puts the resources of architecture in the service of public interest," is a program that connects nonprofit organizations in need of design assistance with architects willing to pledge 1 percent of their billable hours to pro bono work.



PROJECT DETAILS

DESIGNS Booklet; typeface: Helvetica Neue
DATE 2006
LOCATION San Francisco, California
LEADERS Jeremy Mende (MendeDesign)
DESIGNER Jeremy Mende, Stephen Knodel, Amadeo DeSousa (MendeDesign)
PARTNER Public Architecture
WEBSITE www.theonepercent.org

MendeDesign's goal with the manual was to educate nonprofits about the positive impact that design can have on an organization's effectiveness and larger brand awareness, and to remind architects that their expertise can enhance the nonprofit sector while emphasizing the benefits of having a deliberate and codified approach to pro bono work within a design studio. Mende saw the project as a great opportunity to provide a service to every nonprofit organization in the country and to widely communicate how design—architectural, graphic, interior, and environmental—can be mobilized to make the entire sector stronger and more able to meet the demands of its respective missions. "Design can be used to effectively communicate the respective stories and relevance of nonprofits. Most of their funding and resource problems come from a lack of expertise in telling their stories, and further, knowing what consultants to seek out in order to do this in a compelling manner," Mende explains.

"It is our experience that a reader must do some of the work and be motivated to develop their own conclusions, for the work to be meaningful."
Jeremy Mende

Previous spread
Front cover of the manual

Opposite and below
MendeDesign also created a new visual identity for Public Architecture, along with a logo for The 1% program.

PUBLIC ARCHITECTURE

PUTS THE RESOURCES OF ARCHITECTURE IN THE SERVICE OF THE PUBLIC INTEREST. WE IDENTIFY AND SOLVE PRACTICAL PROBLEMS OF HUMAN INTERACTION IN THE BUILT ENVIRONMENT AND ACT AS A CATALYST FOR PUBLIC DISCOURSE THROUGH EDUCATION, ADVOCACY AND THE DESIGN OF PUBLIC SPACES AND AMENITIES.

1211 FOLSOM STREET, 4TH FLOOR, SAN FRANCISCO, CA 94103-3816
T415.861.8200 F415.431.9695 WWW.PUBLICARCHITECTURE.ORG

MendeDesign's process is "both strategic and intuitive.... We think and we make. Through experience we know that we make the most progress by making things, testing them, discussing them, and really trying to listen to the feedback—which is sometimes hard. Often we only realize where the heart of the project is after we've taken a couple of different approaches and then—through open critique—we gain a much clearer idea of what it is we are actually trying to do." The designers started the project by interviewing Public Architecture staff members, nonprofit administrators, and architects, gathering information and beginning to develop a message hierarchy and tone that would speak to both nonprofit administrators and architects. Mende and his partners steered clear from a formally expressive, mannered aesthetic, developing a minimal approach that used an aspirational tone within an oblique, open-ended narrative. As Mende puts it, "We want to reward our audience's efforts in interacting with our work, so we always want to include enough ambiguity for the final meaning to remain open to interpretation. It is our experience that a reader must do some of the work and be motivated to develop their own conclusions, for the work to be meaningful."

THE 1%

MendeDesign spent eight months conceptualizing, writing, and designing *The 1% User Manual*, which consists of two volumes bound together inversely. One book is written for architects, while the other targets nonprofit administrators. Rather than incorporating imagery from both sectors, MendeDesign staff focused on writing flexible copy about The 1%, designing the manual in a way that encourages both architects and nonprofit organizations to interact with it. The shared binding serves as a metaphor for the mutually beneficial relationship that the manual is working to forge between architects and nonprofit organizations. Each book

DESIGN CHALLENGE
Communicating Public Architecture's message in a booklet that speaks to both architects and nonprofit organizations.

ENGAGEMENT STRATEGY
Interviewing Public Architecture staff members, nonprofit administrators, and architects to target the design to its audience.

DESIGN STRATEGY
Developing an open-ended narrative, whose tone addresses both architects and nonprofits. Creating a booklet that encourages the reader to interact with it.

Since the publication of the manual, the number of architecture firms that have pledged to work with nonprofits has dramatically increased.

OUTCOMES

The booklet drives traffic to The 1% website. After its publication, Public Architecture's membership jumped from eighty to five hundred firms.

LESSONS LEARNED

MendeDesign learned that having complete control of the content also means a lot more content development than a small firm can easily handle.

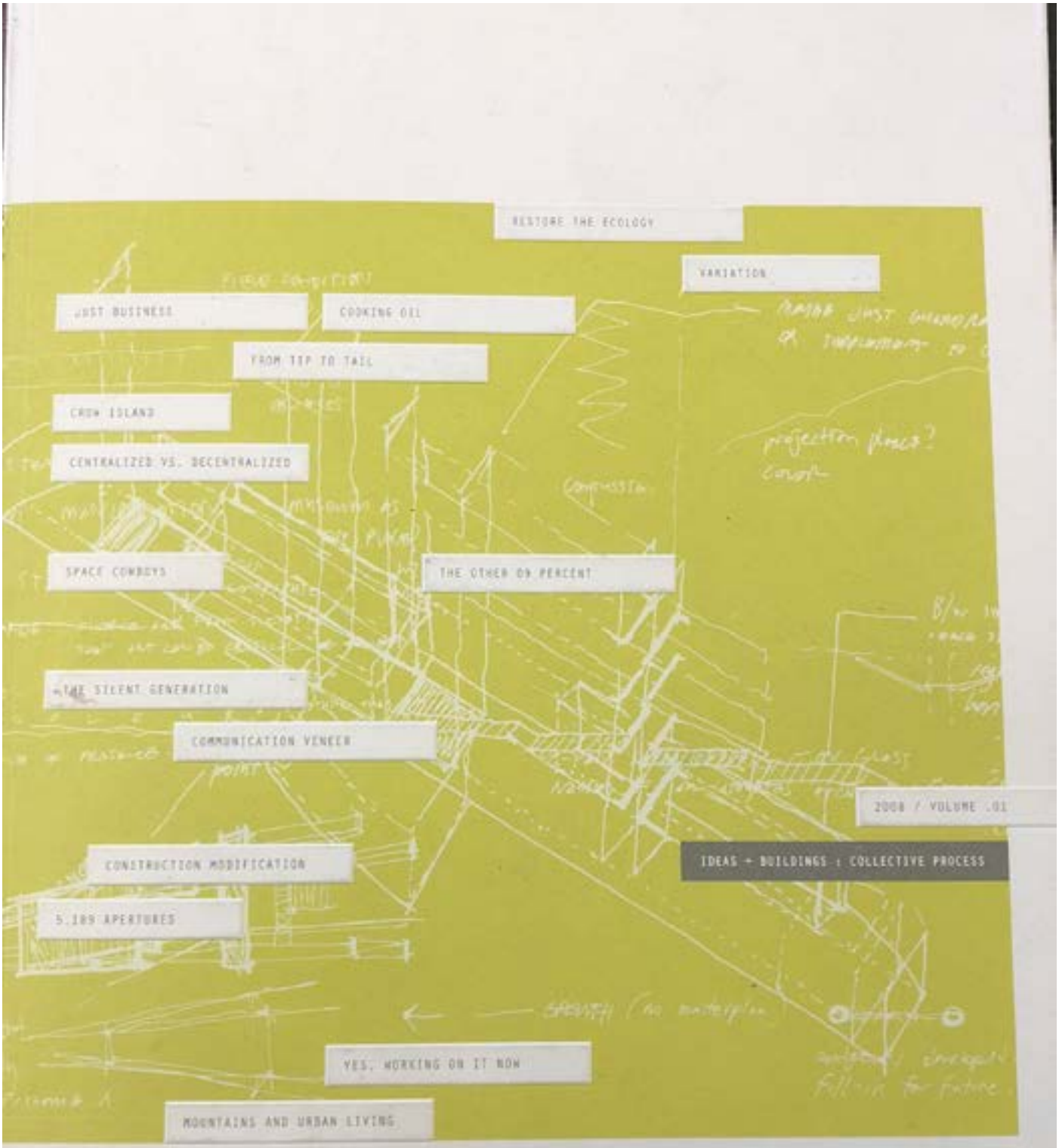
Opposite
Architects can benefit in many ways from working pro bono for a nonprofit organization, as the spread argues.

Above
The designers utilized statistics to compell architects to donate their time and services to nonprofit organizations.

Below
Center spread of the booklet, mirroring the front cover.

begins with a series of simple questions, making an emotional appeal to the respective audience group. This simple fill-in-the-blank format immediately captures the reader's attention with its interactive nature and proved to be one of the big successes of the piece. Each volume presents five specific benefits that pro bono relationships offer and outlines a best-practices model to ensure working relationships are productive and sustainable. Ultimately the booklet drives traffic to The 1% website, where architects can be paired with nonprofit groups in need of design assistance.

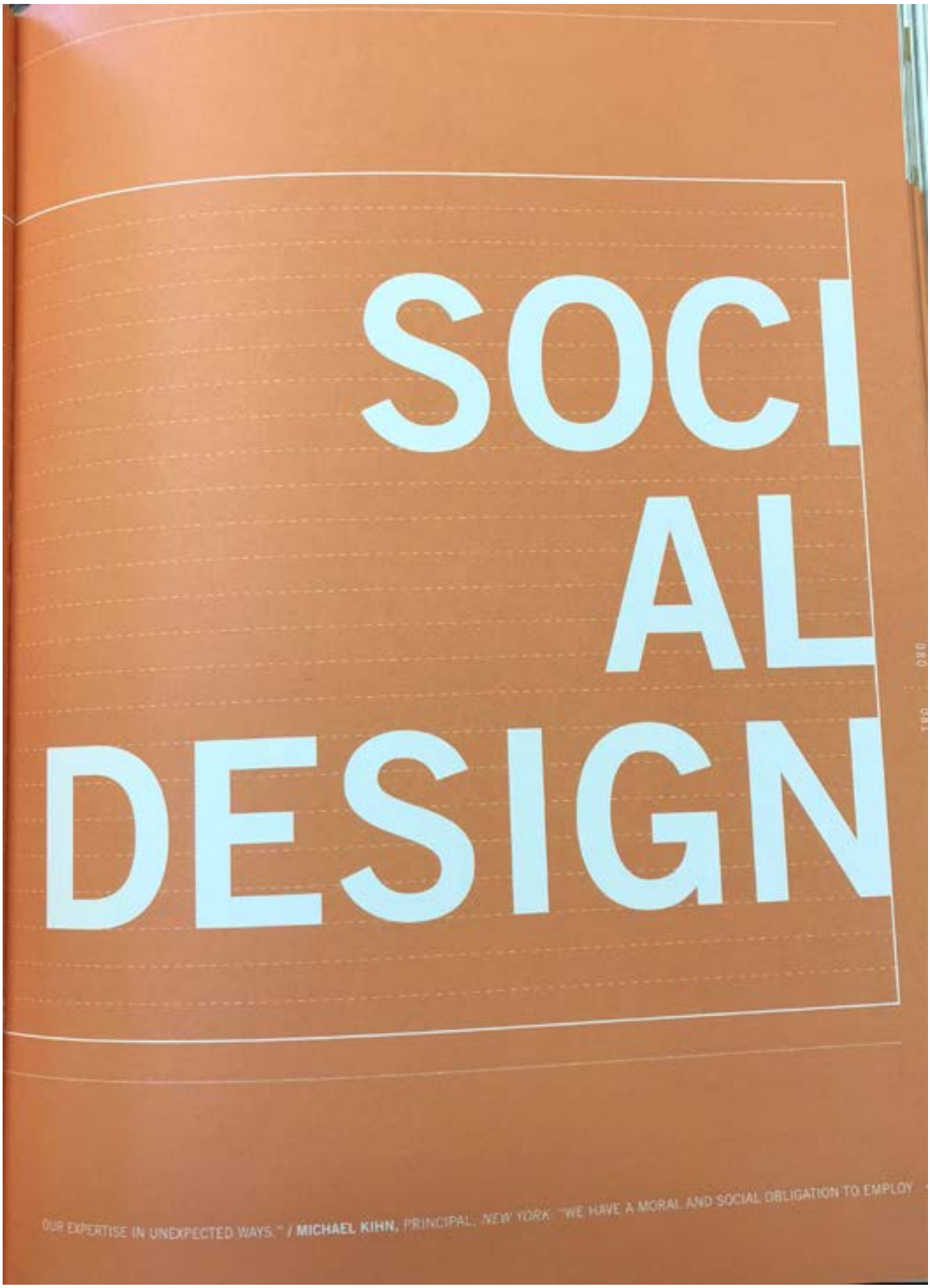
The project proved to be challenging. Along with winning the prestigious Sappi grant came complete control of the content, which in turn meant doing far more content development than the firm usually does. "The control allowed us to drive the design process but it was a huge amount of work for a small studio," says Mende. The results of *The 1% User Manual* are commendable. Since its launch, the number of architecture firms that have pledged to work with nonprofits has dramatically increased. Before the manual was published, Public Architecture had a membership of eighty firms. Six months after the brochure was distributed by Public Architecture, its membership had jumped to five hundred firms, and their numbers continue to grow.


RESTORE THE ECOLOGY
VARIATION
JUST BUSINESS
COOKING OIL
FROM TIP TO TAIL
CROW ISLAND
CENTRALIZED VS. DECENTRALIZED
SPACE COWBOYS
THE OTHER 99 PERCENT
THE SILENT GENERATION
COMMUNICATION VENEER
2008 / VOLUME .01
IDEAS + BUILDINGS + COLLECTIVE PROCESS
CONSTRUCTION MODIFICATION
5,189 APERTURES
YES, WORKING ON IT NOW
MOUNTAINS AND URBAN LIVING

SOCIAL RELEVANCE

How design engages with our modern world is the test before us. The relevance of our thoughts and designs as they exist in the social realm is the ultimate power of our work. In the most fundamental way, we believe that Perkins+Will, by virtue of our legacy, our reach, our talent, and our will to innovate, has the capacity to transform our society for the better.

I'd like to warmly thank Carl, Ron and Liz for their work on this book. Since this is our first edition, it is especially important because this team had to craft the container, and then edit the contents. They have done both exceedingly well.



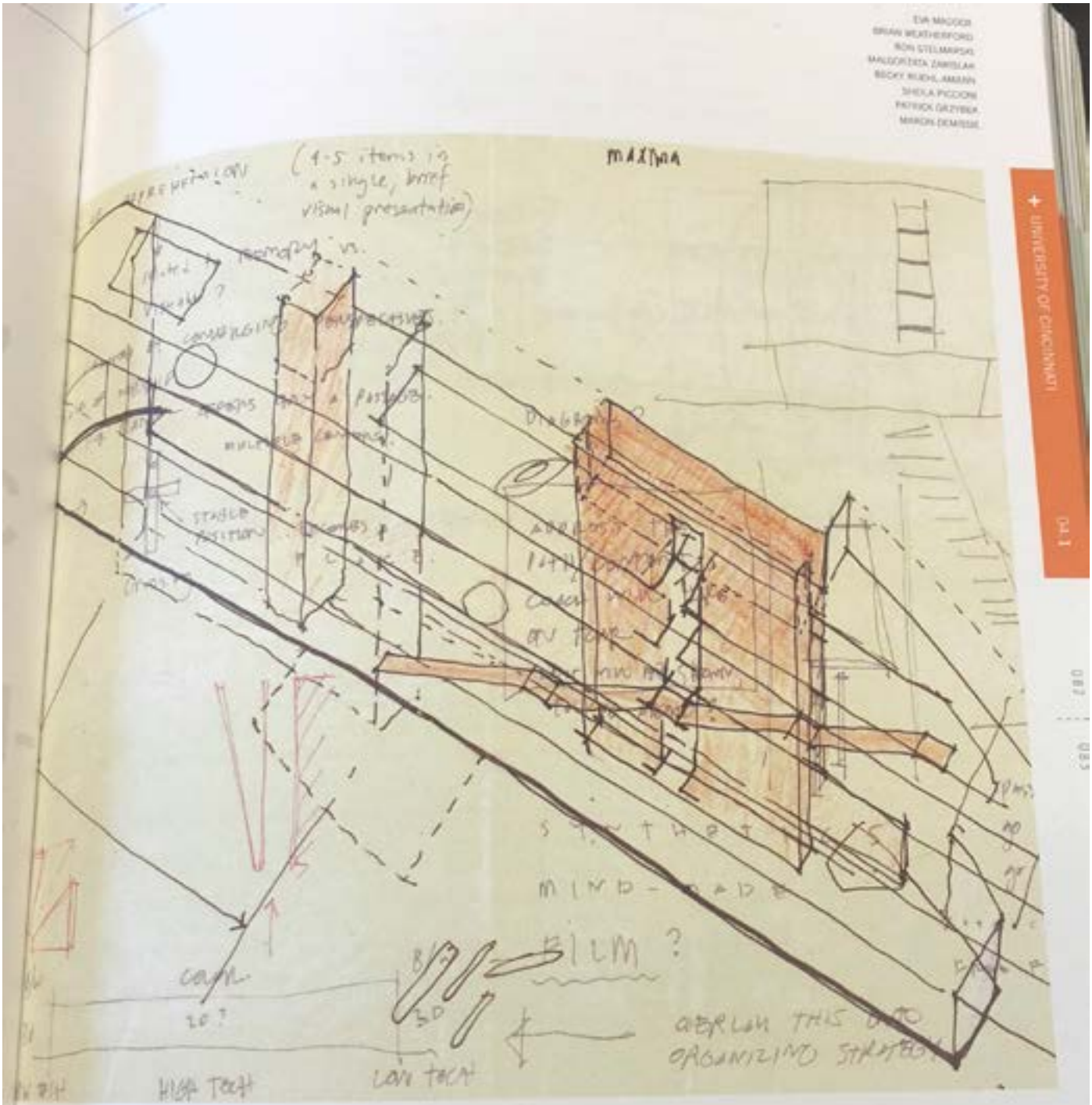
OUR EXPERTISE IN UNEXPECTED WAYS." / **MICHAEL KIHN,** PRINCIPAL, *NEW YORK*: "WE HAVE A MORAL AND SOCIAL OBLIGATION TO EMPLOY

04.1

A SPACE THAT SHIFTS SCALE, VARIES CONTENT, IS STATIC, DYNAMIC AND FOLLOWS A LANGUAGE OF SPATIAL ORIENTATION

BRANDED ENVIRONMENTS /

OUR IDEAS AND OUR PASSION FOR DESIGN TO ENRICH THE HUMAN EXPERIENCE, AND WE SHARE A COMMON PURPOSE: TO IMPROVE

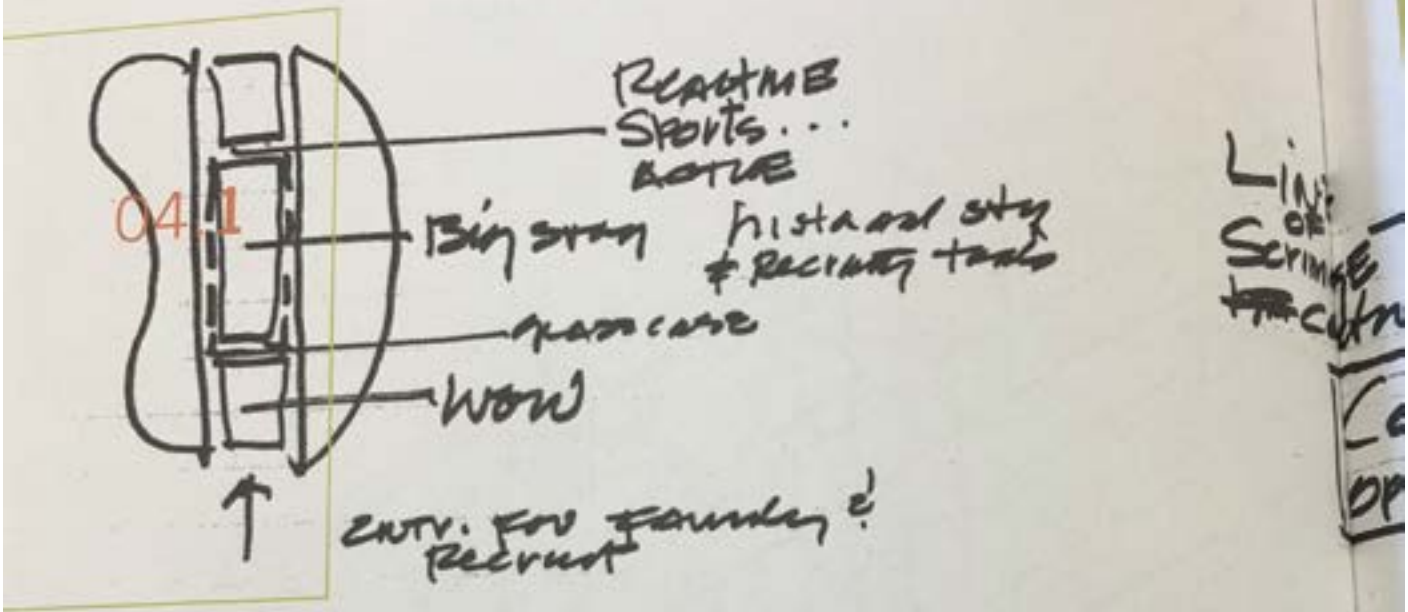


> THERE ARE 17 VARSITY SPORTS TEAMS AT THE UNIVERSITY OF CINCINNATI

QUALITY OF LIFE OF EVERYONE WITH WHOM WE COME IN CONTACT." / **JEAN MAH,** PRINCIPAL, *LOS ANGELES:* "AS ARCHITECTS OF THE PHYSICAL

PROJECT PREMISE /

The University of Cincinnati Athletics Museum brings together past accomplishments and projected future successes of the University in a truly contemporary spatial-experiential environment. Situated in the heart of a dense arrangement of academic buildings, the new athletics center is at the geographic center of a collection of athletic facilities to be branded as "Varsity Village."



The tension of the many shared contours of athletic facilities and academic buildings, coupled with the realization that both programs offered a history of substantial success and accomplishments, inspired the fundamental idea to bind the two stories and extend this productive tension through the atrium of the new athletic center. Situated on a major circulation route through the center of campus, this concourse was the ideal location to tell such an essential story. Conscious to avoid an ordinary presentation of historical events, the team focused their early efforts on defining an appropriate relationship between athletics and academics that would guide the story. The project evolved under the guidance of two fundamental design strategies, the "seam" and the "communication veneer," which, in combination, became an innovative design solution.

The Seam / The first strategy was a conceptual, programmatic speculation titled "The Seam." The design team suggested that the museum display not only the athletic tradition at the University of Cincinnati, but also the celebrated academic tradition, side by side. This strategy opened a significant number of possibilities for the project.

2007-08

AT THE END OF THIS SEASON, THE UC FOOTBALL TEAM ENDED UP IN THE TOP-25 RANKINGS FOR THE FIRST TIME IN SCHOOL HISTORY

RONMENT, WE CREATE SPACES THAT PROMOTE COMMUNITY, INSPIRATION AND BEAUTY. WE ARE ALSO STEWARDS AND ADVOCATES FOR

Communication Veneer / The second strategy focused on the physical design implementation, articulated as a response to the base-building architecture and its architect, Bernard Tschumi. Operating within a modest twenty-five foot width along a 300-foot long, five-story high atrium and limited by the architectural concept of end-to-end visual continuity, the museum was inserted as a "communication veneer." This solution afforded a core conceptual logic to the project that was able to exceed many of the restrictions while heightening experiential possibilities:

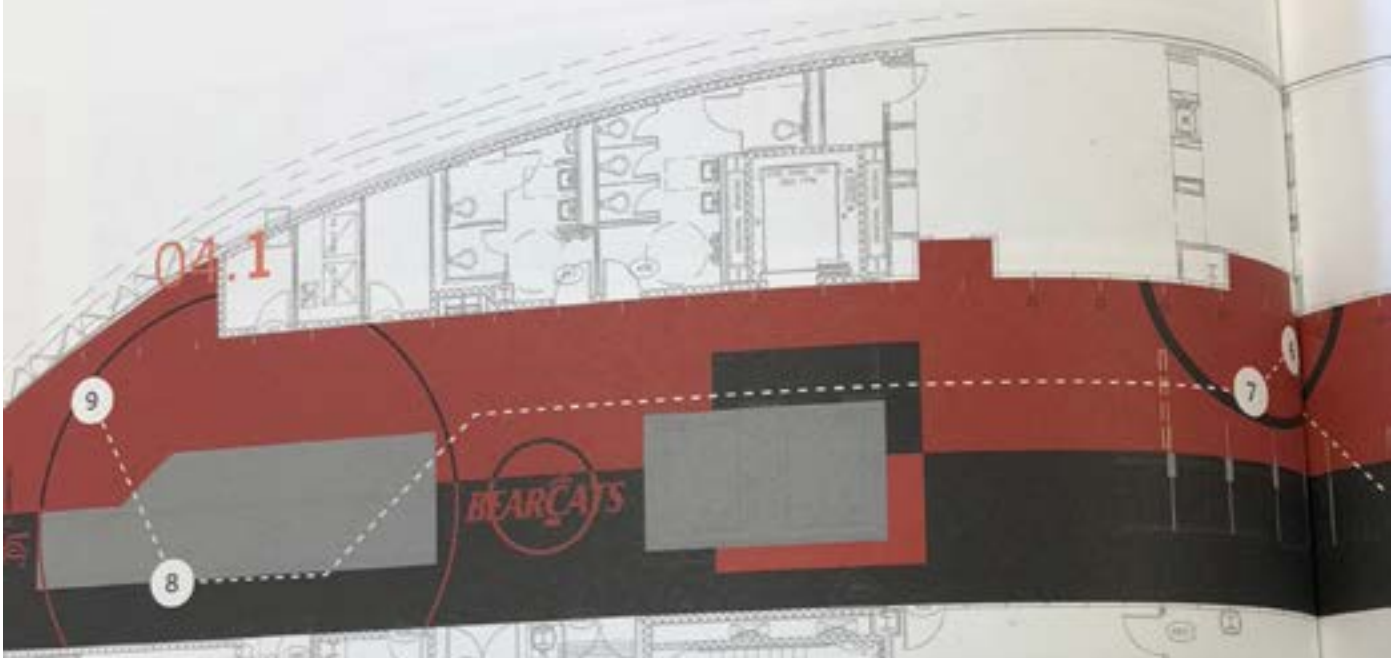
Architect Bernard Tschumi mandated unobstructed visual access through the building, north to south, along the primary 300-foot long public concourse. This constraint combined with the twenty-five foot width of the atrium (eighteen feet at the balconies), implied a very dimensionally restrictive design solution.

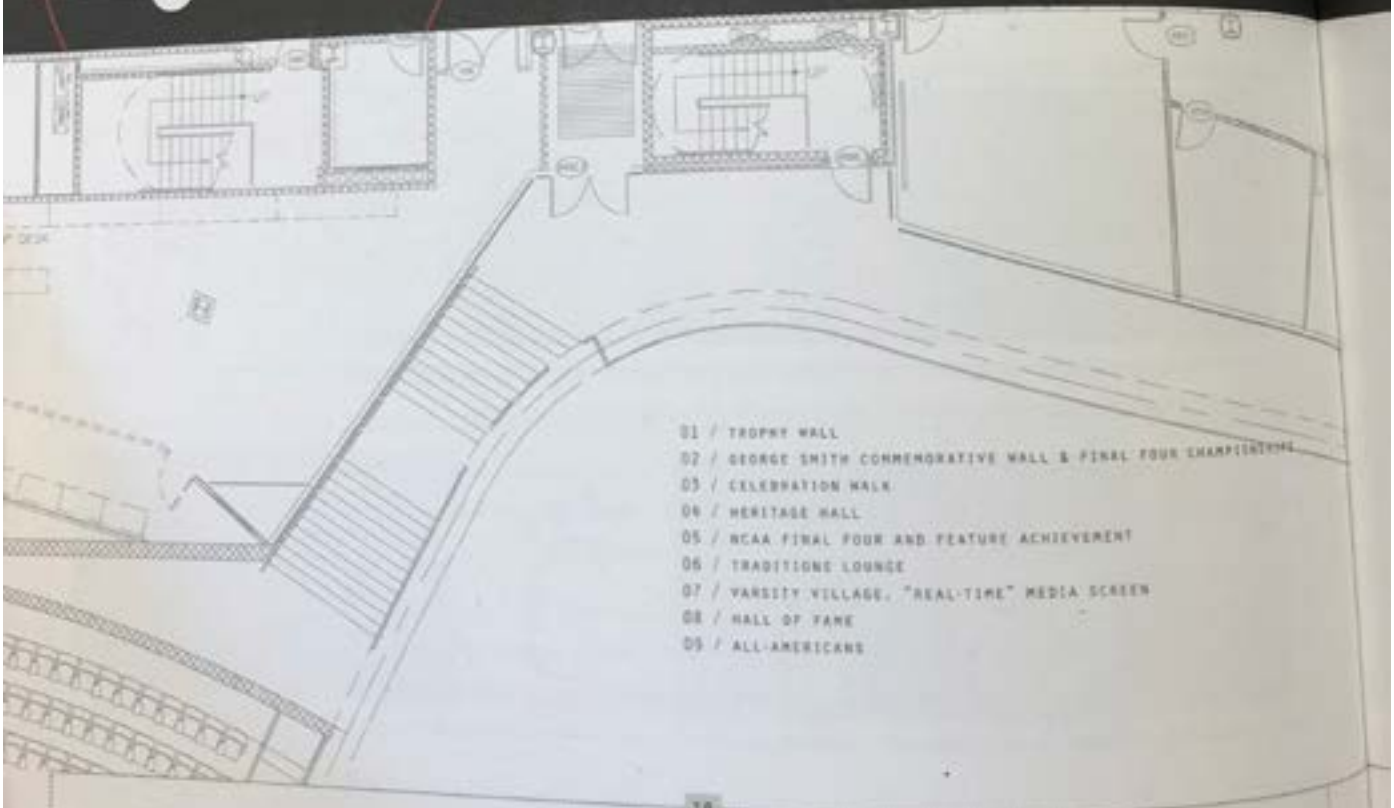
Thinness, or two-dimensional communications, followed the "veneer" design principle, building on the usual means of representation including flat graphics, photographs and video while finding ways to convert otherwise three-dimensional objects (i.e, trophies) into a predominantly two-dimensional expression.

The design needed to convey the thrill and pageantry of sport within an otherwise static space. The design team's position was that the individual should chart a personalized path within an environment that shifted scale, varied the content between historic and contemporary, static and dynamic and followed a language of spatial orientation that adapted to the position of the viewer.

THESE AREAS OF OVERLAP BECAME KEY POINTS OF INTENSITY THROUGHOUT THE BUILDING

04.1



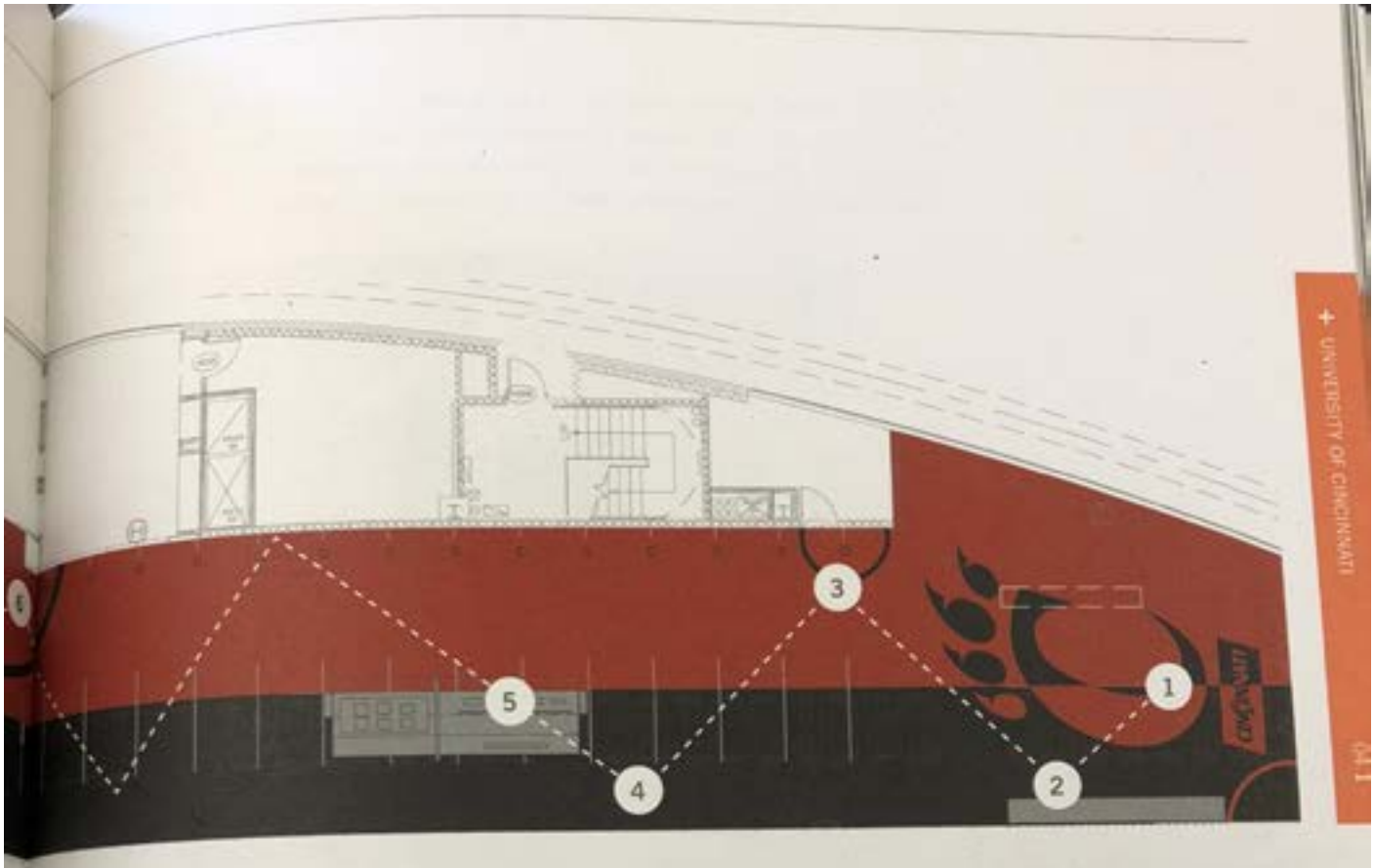


01 / TROPHY WALL
02 / GEORGE SMITH COMMEMORATIVE WALL & FINAL FOUR CHAMPIONSHIPS
03 / CELEBRATION WALK
04 / HERITAGE HALL
05 / NCAA FINAL FOUR AND FEATURE ACHIEVEMENT
06 / TRADITIONS LOUNGE
07 / VARSITY VILLAGE, "REAL-TIME" MEDIA SCREEN
08 / HALL OF FAME
09 / ALL-AMERICANS

19

NUMBER OF AUDIO VISUAL ELEMENTS INCORPORATED WITHIN THE PROJECT

WASHINGTON D.C.: "NO CAREER IS MORE REWARDING, MORE CHALLENGING, OR MORE HONORABLE THAN THAT OF THE ARCHITECT, THE



DESIGN PROCESS /

A vital part of the design process was to define the audience (user) paths. Audiences included: potential student-athletes (primary audience), their parents, current student-athletes, current students, alumni, donors and the local community (sports fans). The design team analyzed each group's approach to the building and mapped their respective paths through the building to find the areas of overlap. These areas of overlap became key points of intensity throughout the building.

The project design had to focus on several scales, layers of information and methods of delivery. The use of technology was critical to engage the 18-year-old primary audience group in a multi-sensory and memorable experience ("The Big WOW"). On a macroscale the museum design needed to address the entire atrium space. A 40-foot tall glass trophy case suspended in the atrium, opposing a 150-foot long graphic veneer on each side of the atrium, and ceiling graphics on vertically stacked angled balcony soffits address the macroscale. At the microscale the museum design needed to deliver detailed information to the individual viewer. Specific stories for each sport are portrayed through the wall graphics, individual-sized video monitors and dedicated motion-activated sound speakers. Smaller-scaled trophy cases for current or outstanding trophies further address the microscale.

2007-08

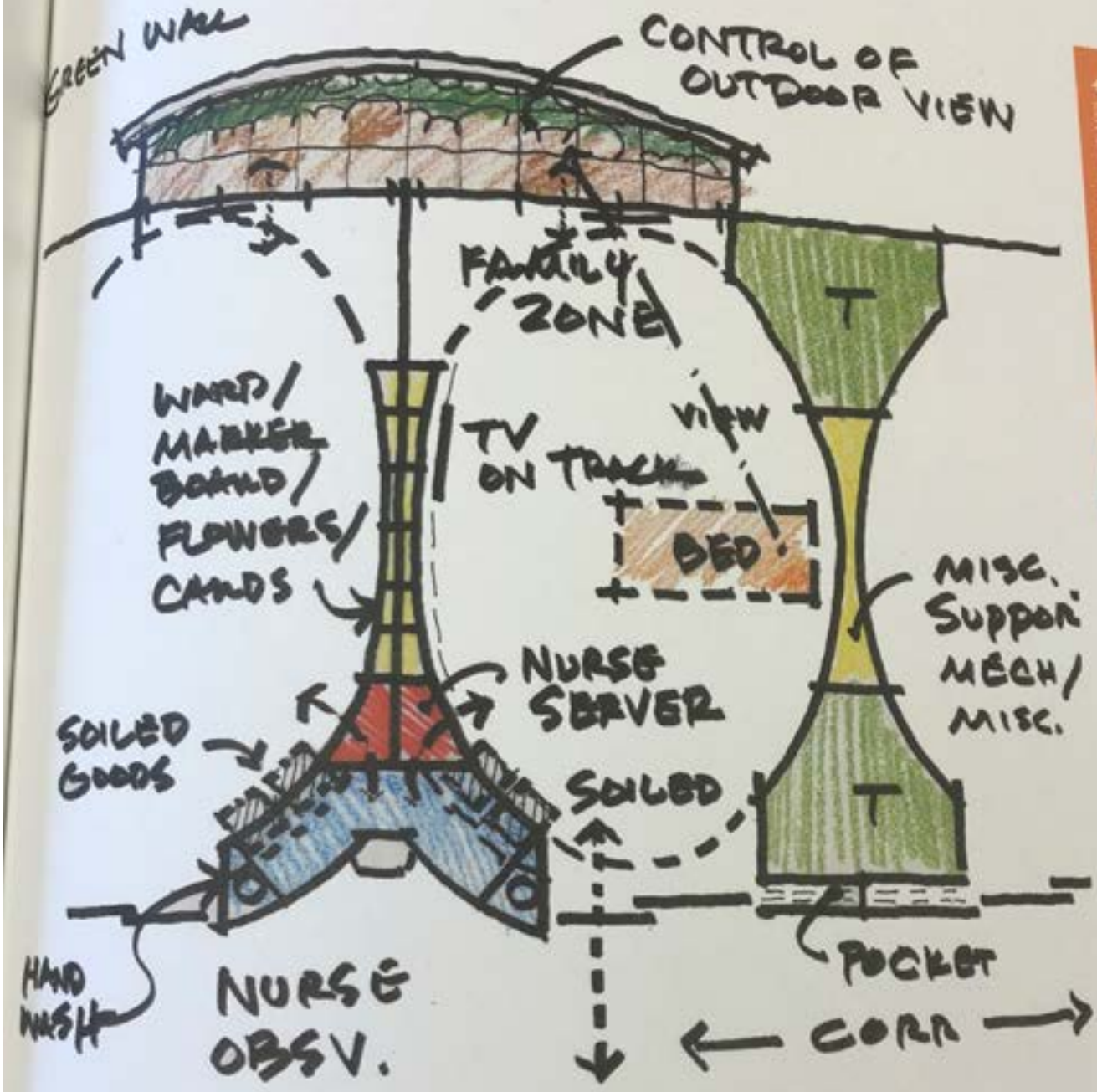
THIS WAS THE FIRST YEAR THE UC FOOTBALL TEAM HAD A 10-WIN SEASON SINCE 1951

04.2

INNOVATION COMES FROM THREE PLACES: THE EXPERT, THE FRONT-LINE STAFF, AND THE OUTSIDER

THE CHARRETTE PROCESS /

BE ADVOCATES FOR MORE HUMANE, SUSTAINABLE AND BEAUTIFUL DEVELOPMENT, WHETHER IT IS FOR URBAN PLANNING, INDIVIDUAL



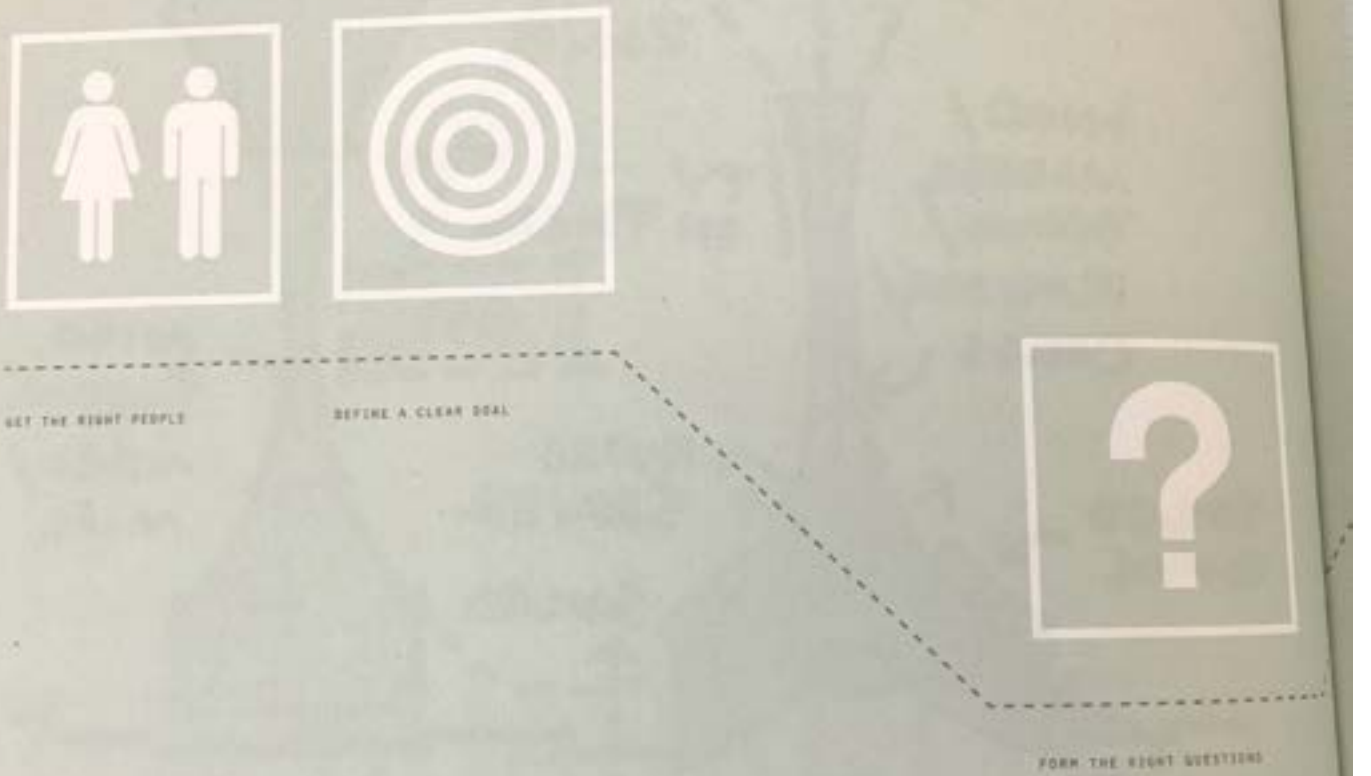
BUILDINGS, OR SPACES FOR LIVING AND WORKING. P+W'S 1% SOLUTION IS NOT JUST ABOUT DONATING PRO-BONO SERVICES TO NEEDY →

04.2

CENTER OF EXCELLENCE /

Perkins+Will has brought together healthcare leadership and staff on an annual basis for a number of years for the purpose of efficiently sharing and integrating best practices throughout the national healthcare practice. These meetings have traditionally focused on current work in each of the regional offices. By definition, the focus of the work had been somewhat retrospective, in that all work was related to a current or past client and shared work was already planned, designed and/or constructed.

For the Seventh Annual Healthcare Center of Excellence Conference in San Francisco, California, the healthcare leadership opted to take a more forward-thinking approach in an attempt to define and drive innovation. We organized a design charrette to focus on planning and designing the ideal acute care inpatient room, the ideal critical care room and the ideal acuity-adaptable room.



ORGANIZATIONS. IT CAN ALSO BE UNDERSTOOD IN THIS LARGER CONTEXT, THROUGH TIME SPENT WITH COMMUNITY ORGANIZATIONS, THE

ESTABLISH A TIME LIMIT

EVERYONE HAS AN EQUAL VOICE

Charrette is a familiar term to architects to describe a work session in which participants brainstorm solutions to a specific problem within a set period of time. Every architect learns this process in school. In fact, it's one of the advantages of our training. We are taught to think as individuals, with differing opinions highly valued – and to present unique solutions. In school it is more of a solitary process. In the professional arena it is a collaborative process.

For the Healthcare Center of Excellence Conference in San Francisco, we organized a charrette based upon collaboration. We took a large group of leaders in the healthcare practice, strong individuals who were valued for their unique points of view, and organized them into teams focused on inpatient room design. We included clients as guest speakers, participants and jurors for our solutions.

At a certain level, it was an enormous risk to include clients in what could have appeared to be a process that was too loose, unpredictable, and freeform. What we learned was that our clients were energized by the process. They were excited about working with us in a more informal way. They appreciated the importance of looking at specific design issues more broadly in the initial stages. And they appreciated looking at design and planning problems in a new way in the hope that it would offer innovative solutions rather than defaulting to well-known and "safe" solutions. The collaborative approach created by forming teams with members with differing opinions, strengths and skill-sets made for better overall solutions.

Keys to the Process / The secret to success is fostering a democratic team environment with respect for equal voices. To balance that democratic environment, there also has to be a team commitment to work to a solution. This commitment ensures that decisions are made and are made in a timely manner. And like all design challenges, the teams must triage the largest questions first, working toward the smaller details.

WE ARE TAUGHT TO THINK AS INDIVIDUALS, WITH DIFFERING OPINIONS HIGHLY VALUED

Preparatory work / Once the topic had been identified a number of things were done to prepare for the success of the charrette. We refined the topic to focus on the ideal acute care room, the ideal critical care room, and the ideal acuity-adaptable room. We defined each of these inpatient room types for the participants. Although we wanted to focus the charrette narrowly enough to get tangible solutions, we also believed it was important to understand the context of the inpatient unit in which these rooms would be embedded. Articles that provided baseline information about inpatient rooms were distributed weeks prior to the charrette. Key nursing activities for each room type and key design considerations were also distributed prior to the charrette.

Structure / We found that we had a mix of architects, interior designers, planners, graphic experts and others. Teams were formed prior to the charrette, deliberately distributing skill sets as equitably as possible among the six teams. In addition, we paid close attention to blending the different offices on each team. Two teams were assigned to the acute care problem, two to critical care and two to the acuity-adaptable room to ensure that we returned two solutions for each room type. A seventh team was formed to consider inpatient units and to identify opportunities and limitations salient to the many different inpatient unit models we have designed. Team leaders were assigned to each team with the responsibility of directing the discussion and work effort.

Focus questions / Fundamental focus questions were posed to the large group before breaking into teams:

01 / Does a single-handed room configuration also function effectively as a critical care room or as an acuity-adaptable room? 02 / Is there an ideal geometry for a critical care room, an acute care room? Does an acuity-adaptable room compromise the ideal geometry? 03 / What procedures are appropriate for a critical care setting? How do those procedures affect the room design? 04 / How can family members who will stay in the room be handled most effectively? 05 / Should any private rooms be built to semi-private standards for future flexibility? 06 / Are there advantages to one-toilet configuration over others (inboard, outboard, mid-board, or nested)? 07 / Is a single-handed room a preferred model over the mirror-image room model? 08 / Do nested rooms work as effectively as critical care rooms?

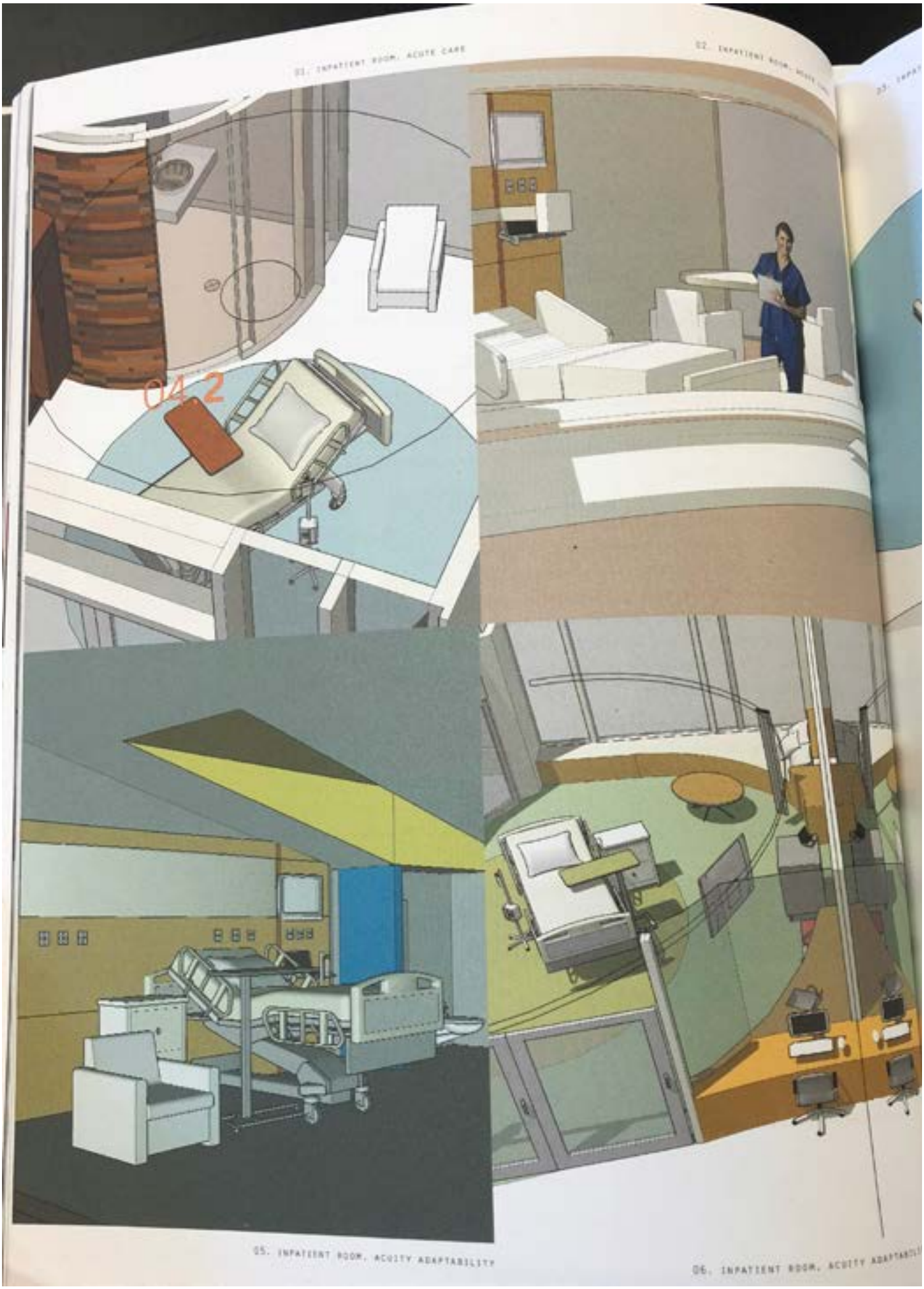
PROCESS /

The morning of the first day (4 hours) was spent hearing presentations from our guest speakers pertinent to our charrette topic. The afternoon of the first day (4 hours) was spent working with our teams. The facilitator and guest presenters acted as "floaters," moving among the teams, listening to the discussion, answering questions and redirecting the discussion if needed.

The morning of the second day (4 hours) was charrette time. The charrette was deliberately split over two days because the time between work sessions is essential for the percolation and synthesis of ideas. The afternoon of the second day was used to present charrette concepts and solutions to the panelists. The goal was to discuss the issues, identify priorities, identity key room decisions on day one. Day two was intended to be a revisiting of day-one decisions (after a good night's sleep), to briefly discuss any new ideas, then move quickly to producing and representing the ideas.

Benefits of this approach / The collaborative charrette is at its core a democratic process. Each team member has an equal voice. The team leader serves more as an conversational traffic cop. The shared values of wanting to do well, not wanting to look bad and the inherent competition between groups fosters an effective environment for decision-making. Just as some physicians claim that hierarchies can kill patients in the healthcare setting because decisions made by senior physicians are not tested or challenged in spite of symptomatic evidence, sometimes the best solutions can die that same death. The collaborative team is essential to the success of the charrette because in that environment ideas are born, challenged, tested and refined or discarded quickly and efficiently.

For the Healthcare Center of Excellence there was a second perhaps more important benefit. The team building across offices was invaluable. We learned that offices do not collaborate with other offices – people collaborate with people. This venue gave us the opportunity to get to know the other leaders in the healthcare practice on a personal and professional level very quickly. It essentially built the foundation for new collaboration opportunities in any region of the country. Effective collaboration requires knowing that someone in another office has a valuable skill. It requires knowing and trusting that person.


01. INPATIENT ROOM. ACUTE CARE
02. INPATIENT ROOM. ACUTE CARE
05. INPATIENT ROOM. ACUITY ADAPTABILITY
06. INPATIENT ROOM. ACUITY ADAPTABILITY

05. INPATIENT ROOM, CRITICAL CARE

06. INPATIENT ROOM, CRITICAL CARE

CONCLUSIONS /

Our charrette persuaded us that there is not one prototypical patient room that satisfies all patient requirements. We would be skeptical of anyone claiming in effect that "one size fits all." Operational issues are the overwhelming space drivers of our day. As healthcare architects, we seek to create space that supports a healing environment for the patient, supports the needs of the patient's family and supports clinical functions for staff and physicians.

A / We determined that single-handed rooms can serve effectively as acute care, step-down or critical care rooms, but may be best suited for acute care rooms. B / Larger rooms are better for future flexibility. Private patient rooms could be sized to flex to semi-private rooms (temporarily) in the future to accommodate sudden increases in patient volumes due to catastrophic events. C / The majority of solutions provided more family space than is traditionally planned. The consensus was that family will not only continue to room-in with patients and act as patient advocates, but may even have an expanded role in the future. D / Day-lighting should be brought into bathrooms via clerestory windows. E / Patient room design should be treated as a six-sided room with attention to floor and ceiling surfaces. F / Higher degrees of transparency in the corridor partition separating patients from staff may be appropriate for acute care rooms. G / Inpatient rooms should be planned as universal rooms – sized and configured to serve as acute care rooms or, with modifications, critical care rooms – over the life cycle of the building.

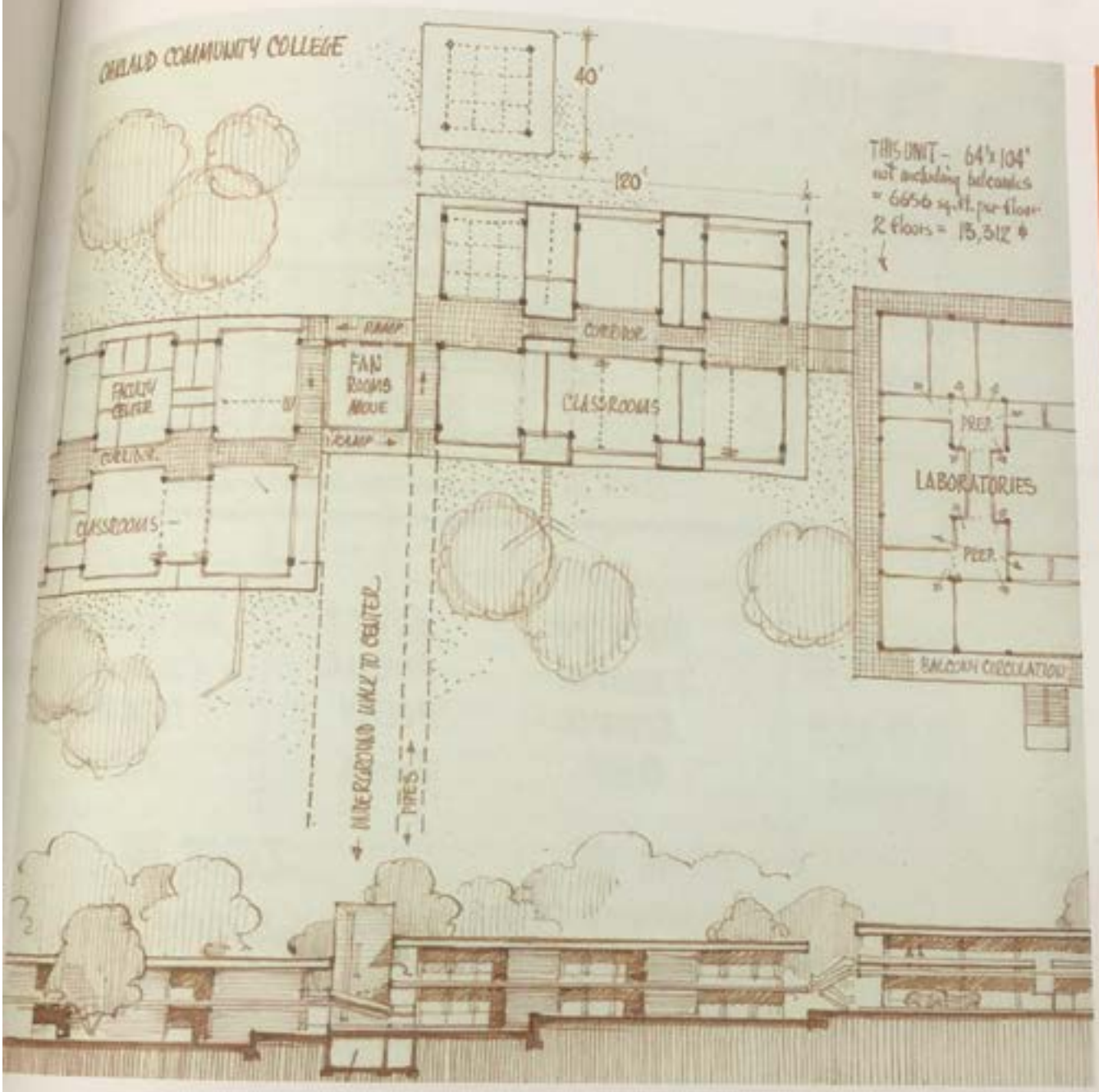
All those who participated felt enriched by the experience. It helped remind us how best to engage our clients – in an open, honest, interactive dialogue – while setting aside preconceptions. We need to continue to pursue opportunities to incorporate this collaborative charrette approach into our work process with our clients.

04.3

IDEAS OF PLANNING AND 3-DIMENSIONAL SPACE ARE UNIQUE SKILLS ARCHITECTS BRING TO THE BUILDING PROCESS

BRUBAKER'S DESIGN SKETCHES /

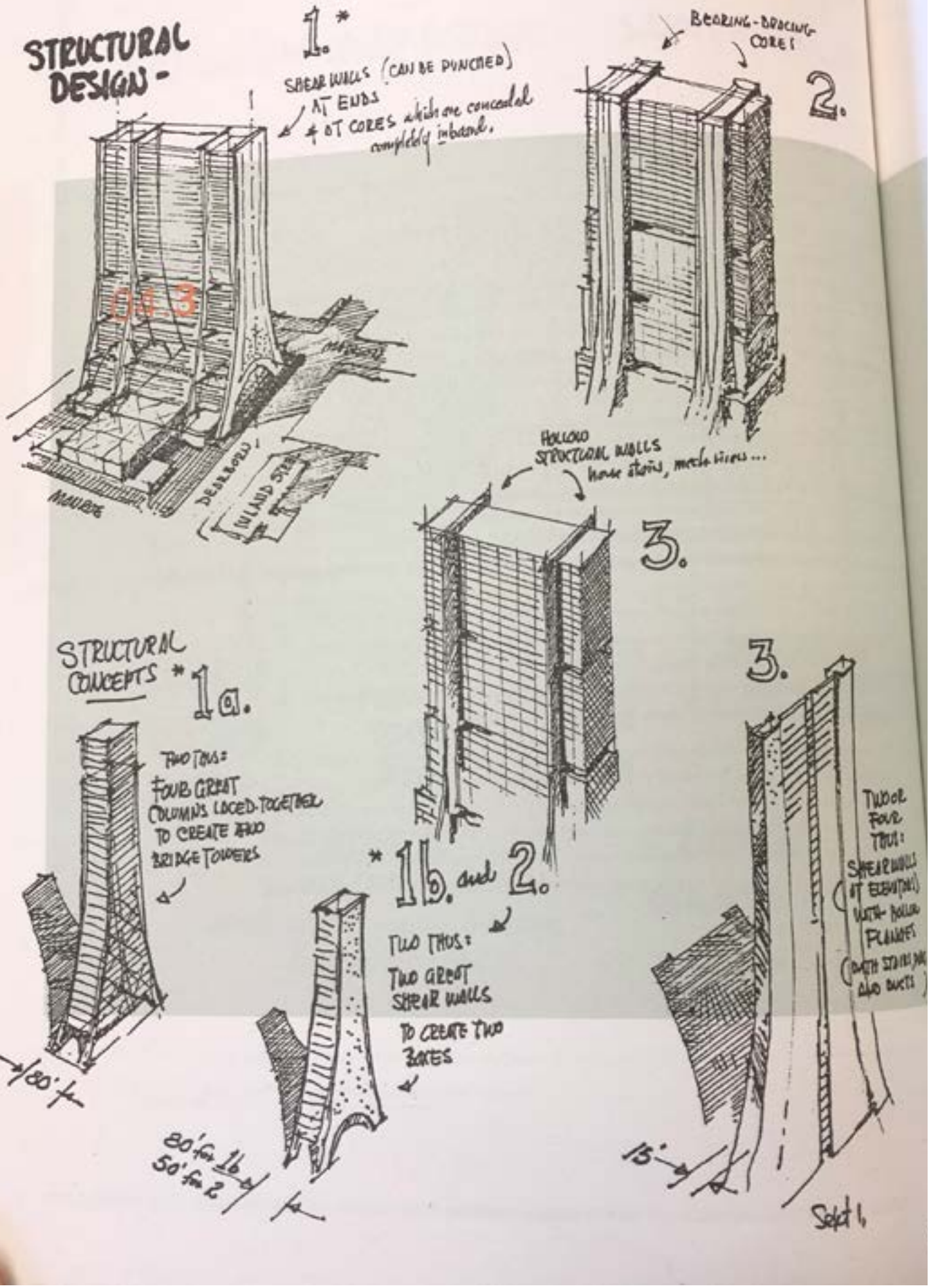
EVERY SENSE. RAISING FUNDS, VOLUNTEERING, DESIGNING INSPIRATIONAL PLACES, AND ENGAGING IN SOLUTIONS THAT ARE KIND TO THE

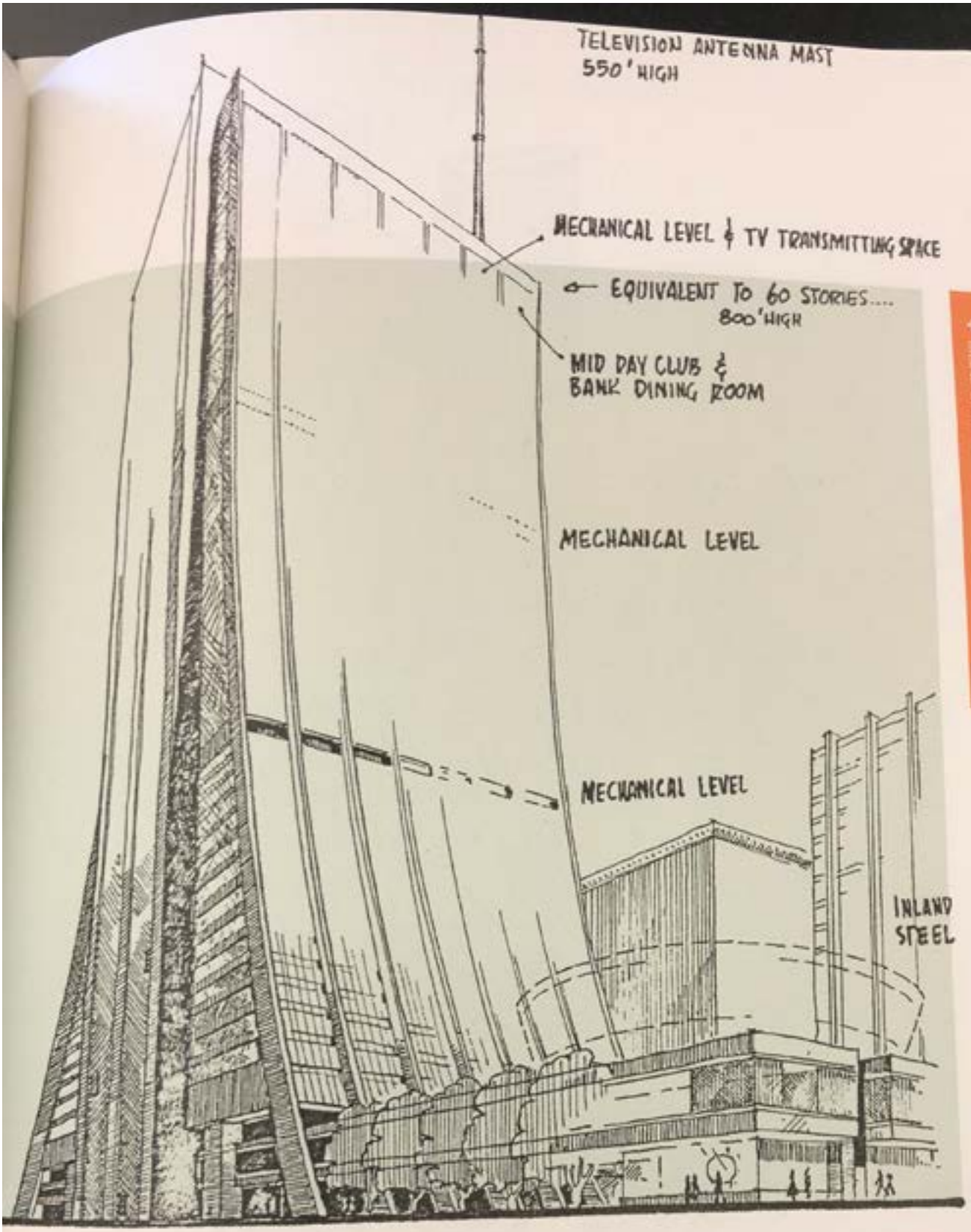


> BROBAKER STUDIED ARCHITECTURE AT THE UNIVERSITY OF TEXAS IN AUSTIN

RONMENT AND TO ALL LIVING THINGS. SOCIAL RESPONSIBILITY = HEALTH." / **RICH NITZSCHE**, CHIEF INFORMATION OFFICER, CHICAGO; →

STRUCTURAL DESIGN -





CARL & MONROE

THE FIRST NATIONAL BANK OF CHICAGO
FEB 22, 1965

OAKTON COMMUNITY COLLEGE Oct. 6, 1975

for energy design →

use ASHRAE 90-P standard plus CDB guidelines

Ashrae Standard 90-75 Section 10 calls for Alternative solutions!

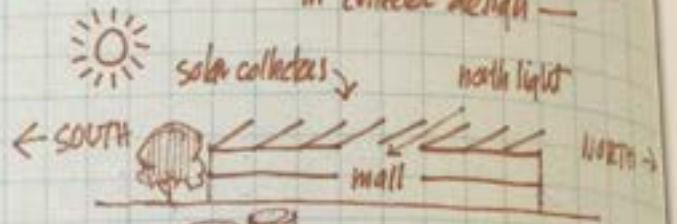
for RFP from ERDA "PON" - program opportunity notice for a solar + cohvectional system ..... does the Oakton design encourage rooftop solar collectors?

Yes, since roof area is 50% of gross area since orientation is ideal since roof design is basically flat (monitors can be incorporated in collector design —

heat is stored ... usually in a tank ...

tank size = 1 to 1½ gallons per sq. ft of building

(40,000 ft² library in Springfield had a 60,000 gal storage tank.)



The tank (or tanks) can be underground or above ground

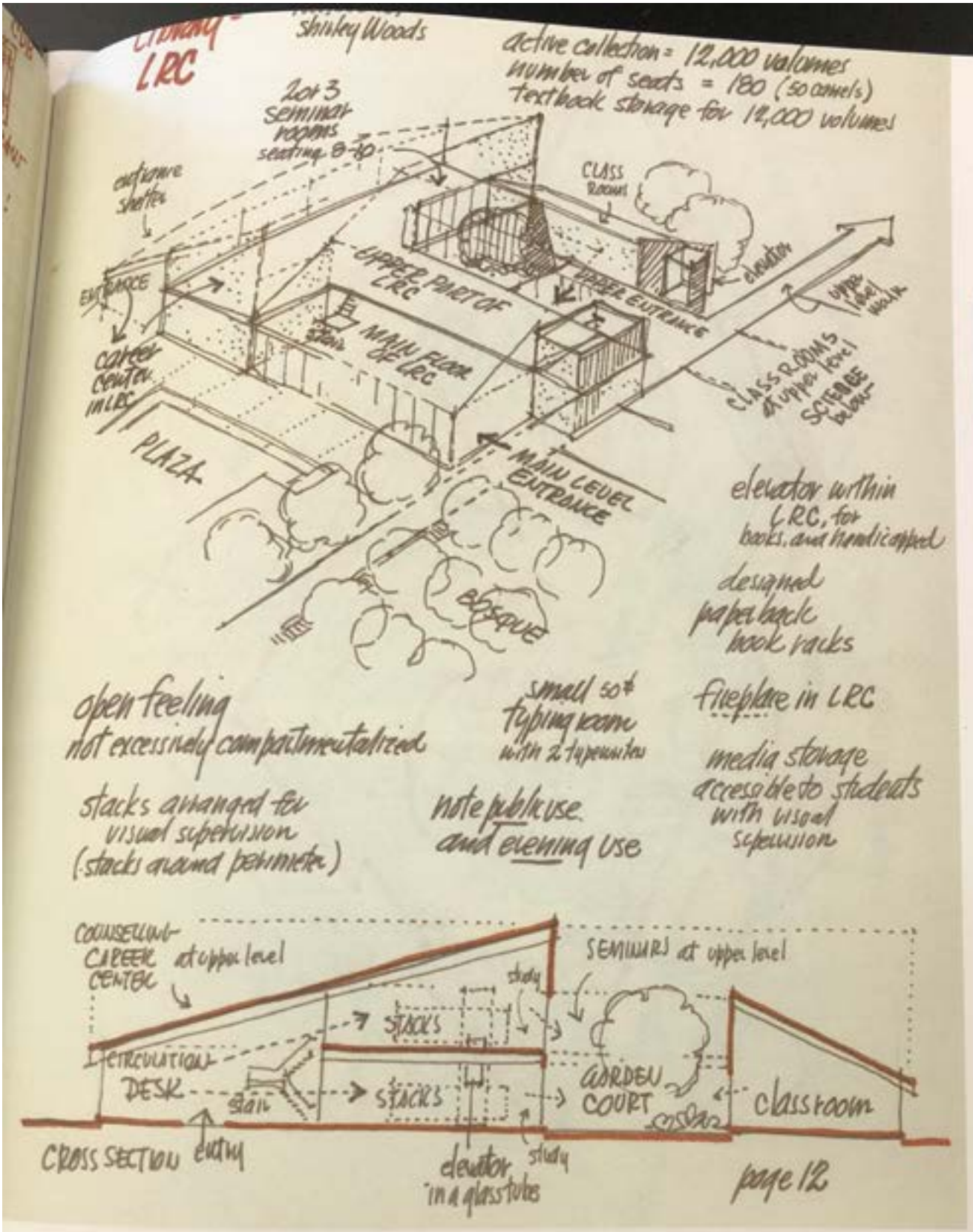
assume a 200,000 gallon tank (might even be 300,000 gallon)

Why not make something dramatic out of the required tanks?

note: Owens-Illinois "advanced solar collector" Aug 7 '75 EWR

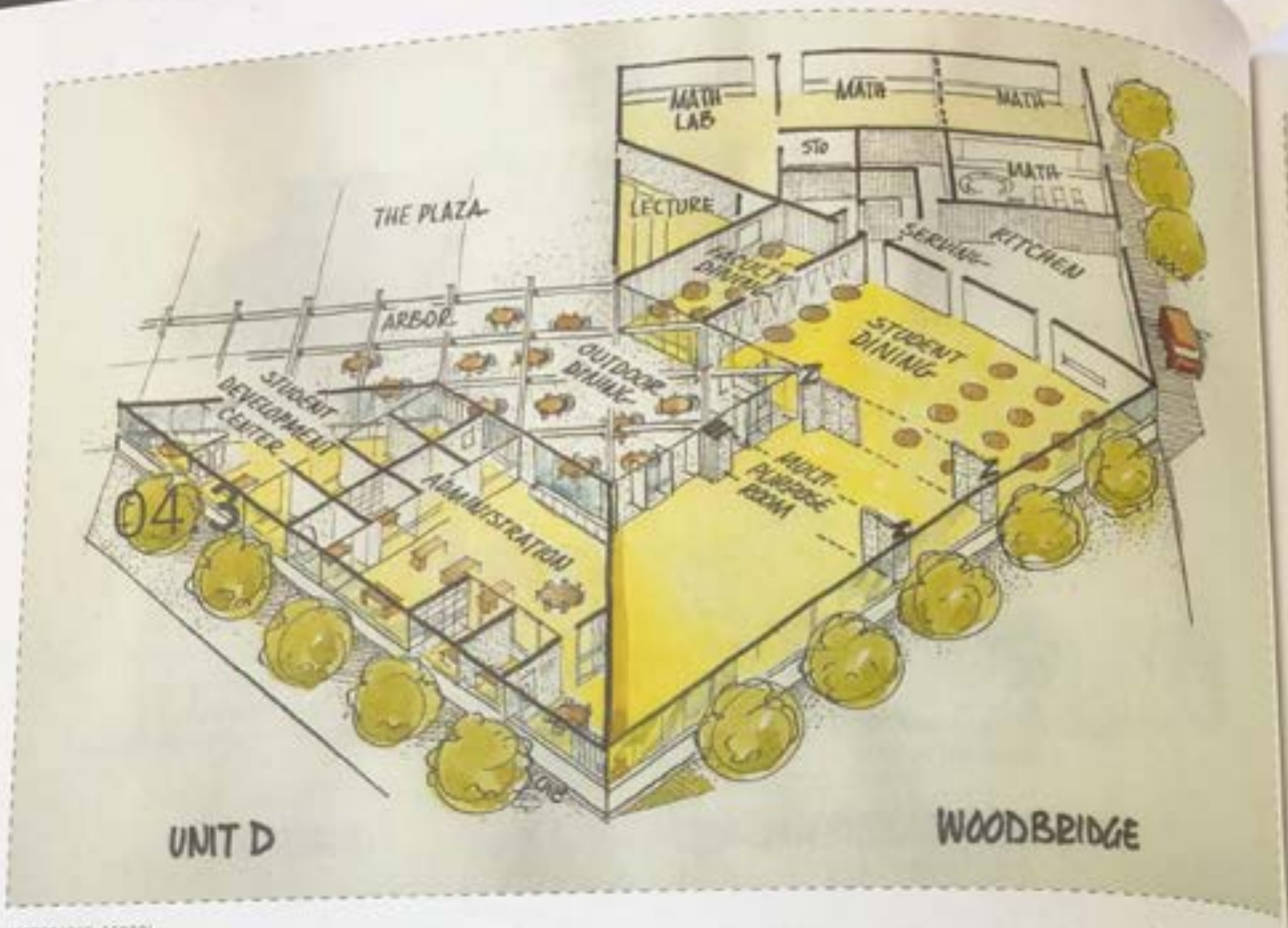
interesting alternate = "a plastic lake" ... float polyethylene on the surface of the lake — then the lake becomes the solar collector ... (since the "greenhouse effect" will be operating.

Note: a "pre-proposal conference" will be held in Washington, Thurs, Oct. 9 ... then a decision must be made on whether to submit a proposal.

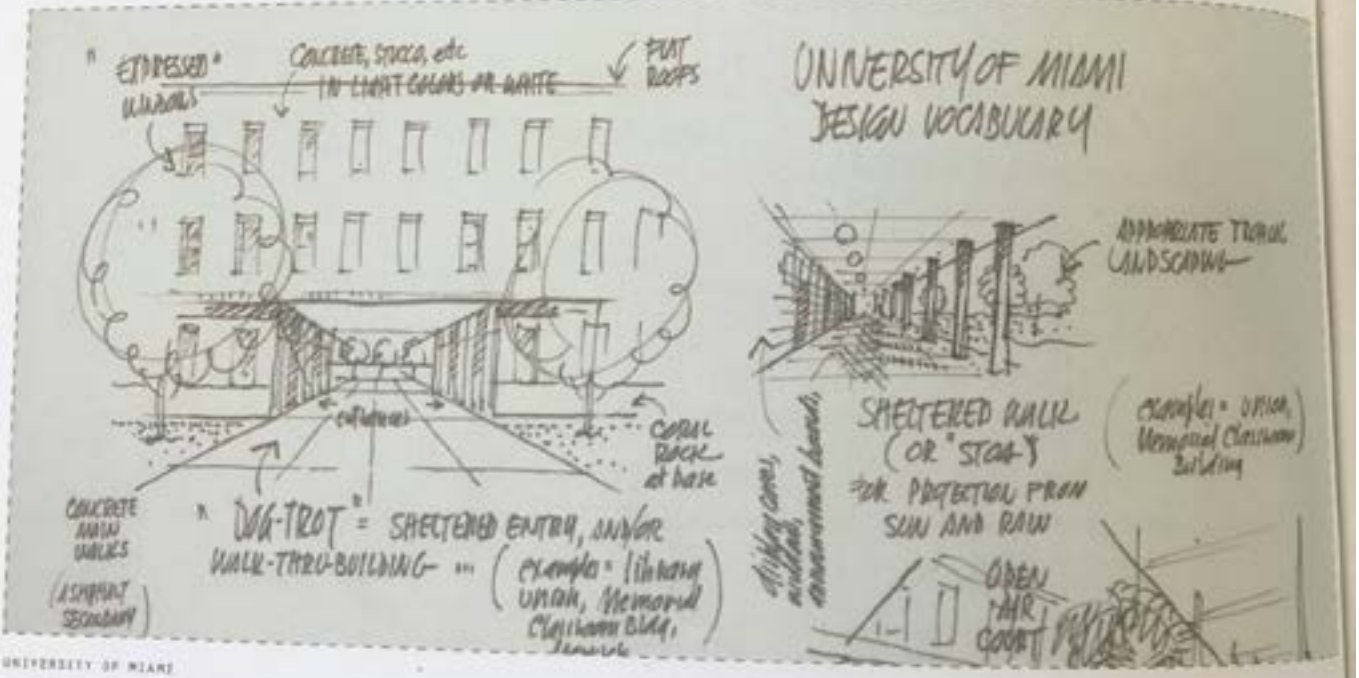


NUMBER OF YEARS BRUBAKER WORKED FOR PERKINS+WILL (JOINED IN 1950 AND BECAME PARTNER IN 1958)

FUNDAMENTAL [illegible] DESIGN STRATEGIES TO BROADER COMMUNITY GOALS, FOSTERING CONNECTIVITY THAT →

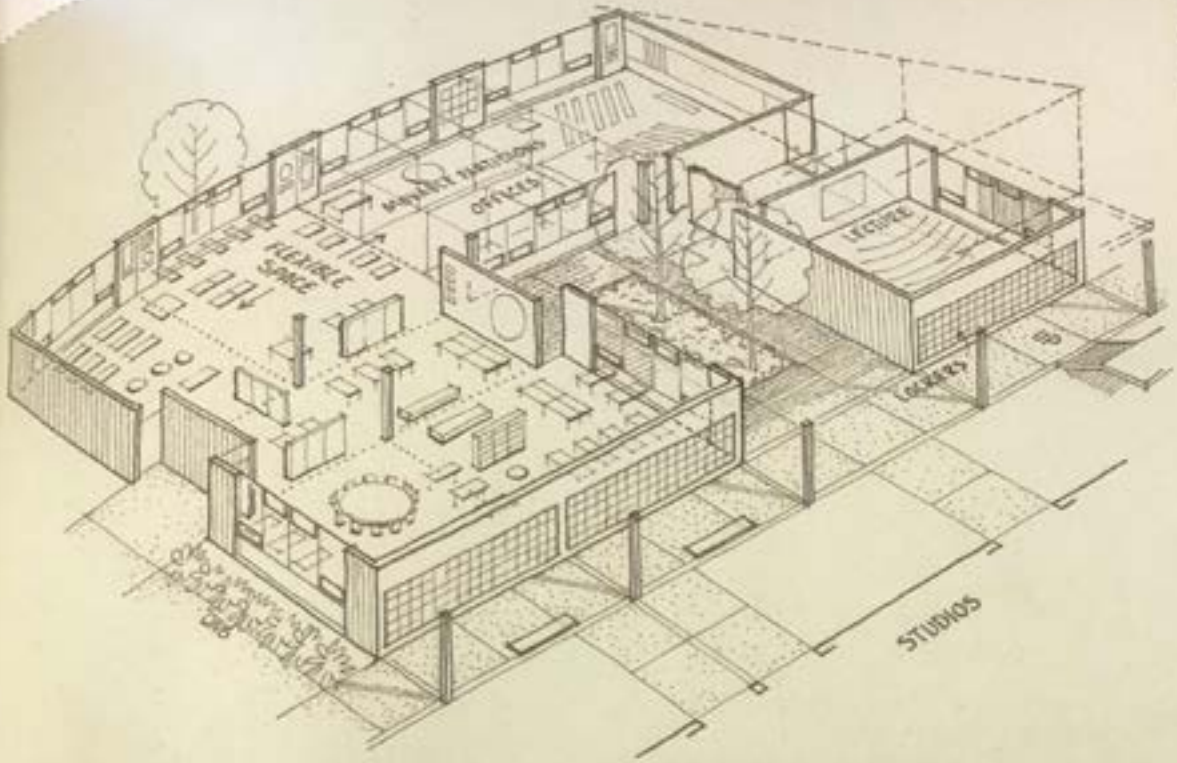


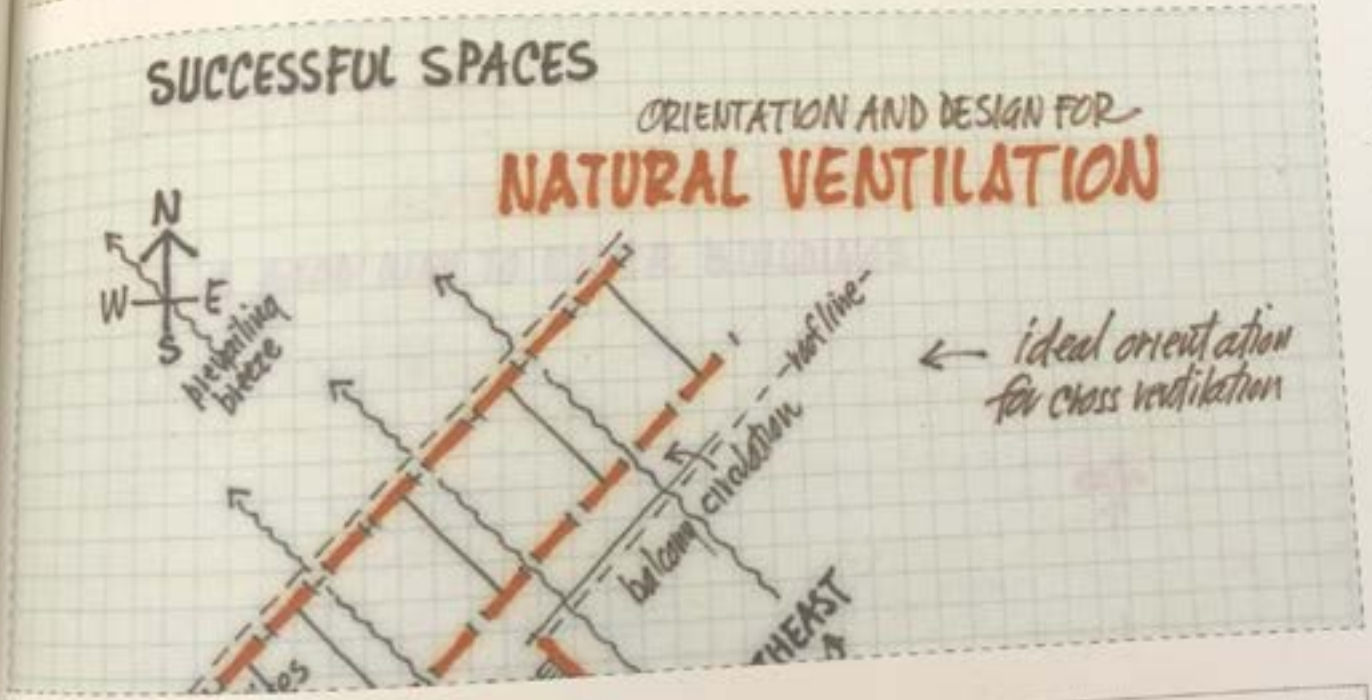
WOODBRIDGE SCHOOL



UNIVERSITY OF MIAMI

REINFORCES SOCIAL BONDS. AND MORE IMPORTANTLY THAT ACROSS DEMOGRAPHICS AND ECONOMIES, GOOD DESIGN IS FOUNDATIONAL





BRUBAKER (1926 – 2002) WAS BORN IN SOUTH BEND, INDIANA

LAPIZ 275

Revista Internacional de Arte

LAPIZ TREINTA AÑOS

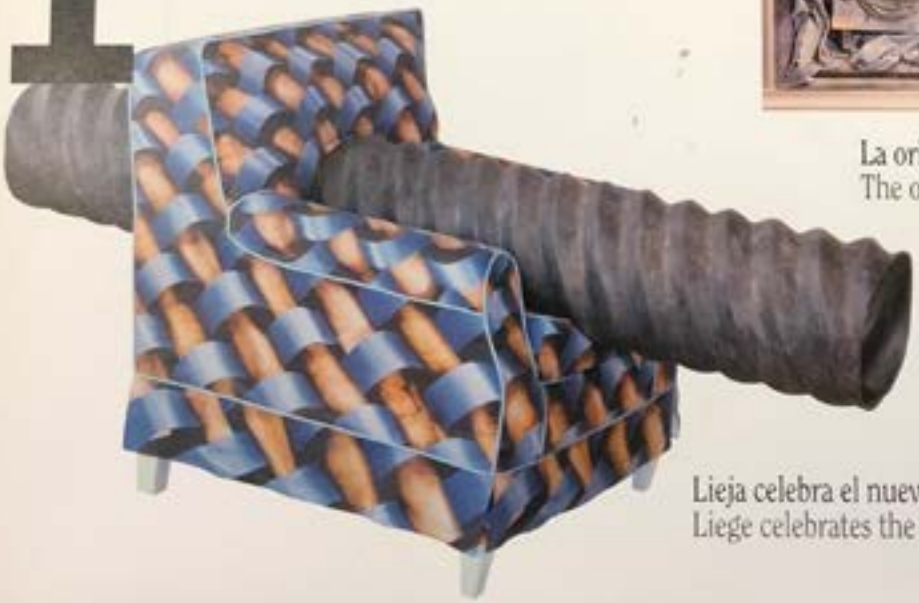
SPANISH / ENGLISH

Año XXXI
Núm. 275. España
Precio: 5,80 €

Un recorrido por la 30ª Bienal de São Paulo
A visit to the 30th Biennial of São Paulo

La originalidad de los hermanos Quay
The originality of the Quay brothers

Las formas orgánicas de la microarquitectura de los Bouroullec
Organic forms of microarchitecture by the Bouroullec brothers



Lieja celebra el nuevo diseño
Liege celebrates the new design

00275
8 413042 568308

Diseño social / Social design

Susana Molina

La ciudad belga de Lieja, al este de Bruselas, acoge durante el mes de octubre el evento Reciprocity Design Liège 2012, sexta edición de lo que hasta ahora se conocía como Bienal Internacional de Diseño de Lieja. Este cambio no solo obedece a que pasa a convertirse en trienal, sino también al aspecto en el que se centra esta edición y que determinará las temáticas que abordarán las próximas ediciones: el diseño social, aquel enfocado a dar soluciones a la colectividad, un diseño que va más allá de lo estético, lo artístico y lo aisladamente funcional. Esta redefinición de intereses apunta, así, al diseño como una especialidad dirigida a mejorar la sociedad y, en este sentido, como una labor en proceso que mantiene un diálogo con el entorno.

Reciprocity (Reciprocidad) se presenta como un encuentro multidisciplinar donde arquitectura, fotografía, moda y diseño se interconectan en una dinámica cultural y económica. Se presta atención a la sostenibilidad y los procesos de colaboración que hacen que estas distintas especialidades se enmarquen en un contexto colectivo no solo en su finalidad, sino también en su producción. De forma inevitable, se hace referencia también a la sombra de la crisis económica, que influye de forma directa, tanto a nivel público como privado, a la hora de invertir en diseño.

En esta edición, han participado diseñadores y escuelas de quince países. Las propuestas se distribuyen en más de veinte sedes expositivas, muchas de ellas edificios históricos. En el Saint-Luc Institute de la Escuela Superior de Artes Saint-Luc Liège, situada en un antiguo cuartel militar, puede visitarse *Craft & Industry. The Human Attitude to Produce*. Se unen aquí en un mismo espacio dos conceptos que parecen antagónicos: la artesanía y la industria. En el apartado principal de esta exposición se hace un recorrido a través de una serie de productos conocidos de la industria internacional, desde aquellos en los que prima la labor artesanal, como una caja, una manta o una cubertería, hasta, alejándose gradualmente de la intervención la mano humana, los objetos que proceden enteramente de la fabricación industrial, entre los que se incluye mobiliario, reproductores de música u ordenadores portátiles. El recorrido no pasa por alto la relación histórica del arte y el diseño en la fabricación de los objetos que rodean al ser humano.

En la orilla opuesta del río Mosa, que atraviesa la ciudad, se encuentra el Musée de la Vie wallonne, donde, en el Espa-

The Belgian city of Liege, to the east of Brussels, hosts during the month of October the Reciprocity Design Liege 2012 event, the sixth edition of what up to now is known as the International Design Biennial of Liege. This change is not only due to it becoming a triennial, but also to the aspect on which this edition is centred and that will determine the themes that will be approached during the coming editions: social design that centred on providing solutions to collectives, a design which goes beyond that aesthetics, the artistic and that functionally isolated. That way, this redefinition of interests leads the way to design as a speciality aimed at improving society and, in this sense, as a task in process that maintains a dialogue with the environment.

Reciprocity is presented as a multidisciplinary encounter where architecture, photography, fashion and design are interconnected in a cultural and economic dynamic. Attention is given to sustainability and the collaboration processes that make these distinct specialities are farmed in a collective context not only in its purpose, but also in its production. Inevitably, reference is also made to the shadow of the economic crisis that has a direct affect, both publicly and privately, at the time of investing in design.

Designers and schools from fifteen countries have participated in this edition. The proposals are distributed among more than twenty exhibition centres, many of them in historic buildings. *Craft & Industry. The Human Attitude to Produce* can be visited in the Saint-Luc Institute of the Higher School of Arts Saint-Luc Liege, situated in antique military quarters. Here two apparently antagonistic concepts; handcrafts and industry, are joined in one space. The main section of this exhibition includes a series of well-known products from international industry, from those in which handcrafts are important, like a box, a blanket or cutlery, to those, that gradually move away from human intervention, the objects that are completely produced by industrial manufacturing, like furniture, music reproducers or portable computers. The journey does not exclude the historical relationship of art and design in the manufacturing of things common to humankind.

Another of the main exhibits of the event is in the Vie Wallonia Museum located in the Saint-Antoine Space

Hella Jongerius, recipientes "3 Pots / 3 Centuries / 2 materials", porcelana, fragmentos de urnas de cerámica medievales y pintura.

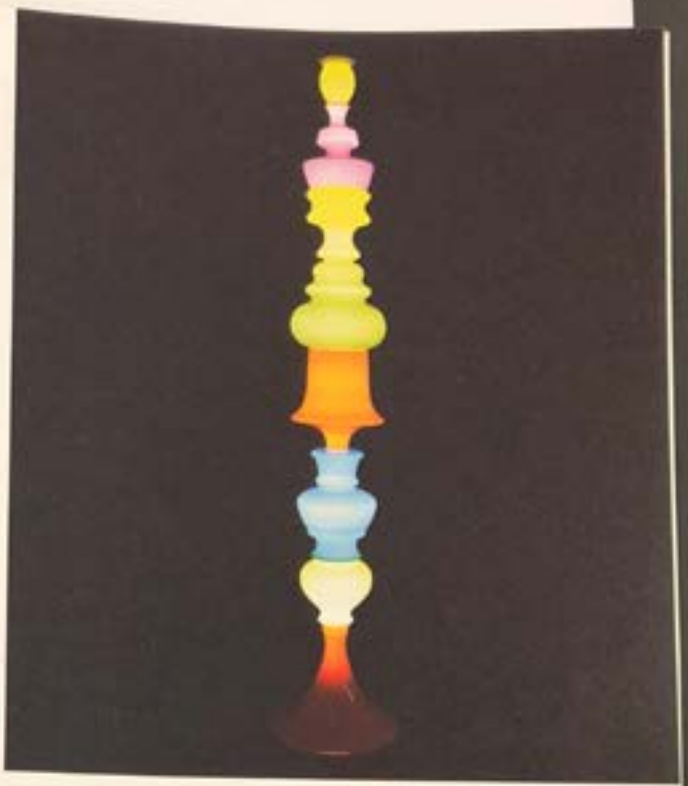
ce Saint-Antoine (antigua iglesia del siglo XIII), se exhibe otra de las muestras principales del evento: *Memorabilia. Designing Souvenirs*. Reúne ésta sesenta propuestas que reflejan en algún grado la procedencia o el marco social, étnico o histórico en el que se han formado sus creadores. En esas propuestas la cotidianidad de los objetos de uso contrasta con la innovación que se les incorpora gracias al diseño. Se trata de una convocatoria internacional que ha premiado el trabajo de diseñadores como Eugenia Morpurgo, por el proyecto "Repair It Yourself", que consiste en unos zapatos fácilmente reparables por el propio usuario; Jean-François d'Or, por su reinterpretación del espejo *psyché* en el proyecto titulado "Elisabeth"; y Michaël Bihain, por su taburete apilable *Diaphragm*. Pueden verse también vasos que al vaciarse muestran el mensaje "lávame", bisutería inspirada en los dibujos y texturas de ciertos tejidos, anillos-silbato y altavoces para móvil inspirados en gramófonos, entre otra variedad de ideas orientadas a rediseñar lo cotidiano. Como parte de la propuesta, en este museo se aborda, en el apartado titulado "Mapping the Design World", la proyección del diseño social a nivel mundial, a través de un amplio conjunto de proyectos en los que se manifiesta cómo ha intervenido el diseño en diversos puntos del planeta para atajar problemas de diferente índole, lo que abarca desde soluciones arquitectónicas en Chile o el reciclaje de botellas para dar luz en Filipinas hasta la construcción de puentes en Bali o unas intervenciones artísticas anónimas en Sofía. Se trata de una recopilación documental que ilustra las posibilidades de acción e innovación del diseño en la actualidad.

La Facultad de Arquitectura de la Universidad de Lieja acoge *Welcome to Saint-Gilles. Design and Local Communities*, muestra que, junto con la titulada *Kids Driven Design. Creative Learning & Co-design* que alberga el Musée du Grand Curtius, completa el núcleo expositivo de RECIPROCITY. *Welcome to Saint-Gilles* reúne, en forma de cuartillas, el resultado de numerosos proyectos reales desarrollados en colaboración entre estudiantes y habitantes del barrio de Saint-Gilles, a las afueras de Lieja, proyectos en los que se proponía la intervención del diseño para subsanar los problemas del vecindario: desde mejoras para la seguridad, el medio ambiente o las infraestructuras hasta propuestas para conectar a las personas entre sí o contar historias. Se muestran tarjetas en una de cuyas caras se plasma la idea,

(ancient 13th century church) on the opposite banks of the Meuse River that goes through the city: *Memorabilia. Designing Souvenirs*. This collection of sixty proposals reflects in some degree the procedence or the social, ethnic or historical framework in which their creators were educated. The everydayness of the objects contrasts with the innovation they incorporate thanks to the design of these proposals. This is an international call that has prized the work of designers like Eugenia Morpurgo for the "Repair It Yourself" project that consists in shoes that are easily repairable by the user; Jean-François d'Or for his reinterpretation of the *psyche* mirror in the project entitled "Elisabeth"; and Michaël Bihain, for his stackable stool *Diaphragm*. Also, other things like drinking glasses that when emptied show the message "clean me", costume jewellery inspired by the designs and textures of certain fabrics, whistle-rings and loudspeakers for mobile phones inspired on gramophones, among other varieties of ideas aimed at redesigning normal items are exhibited. A part of the proposal in this museum centres on the section entitled "Mapping the Design World", the worldwide projection of social design, through a large series of projects which manifest how design has been intervened in diverse points of the planet to attack different problems, including architectural solutions in Chile or the recycling of bottles to obtain light in Philippines to the construction of bridges in Bali or some anonymous artistic interventions in Sofia. This is a documentary recompilation that illustrates the possibilities of current design action and innovation.

The faculty of Architecture at the University of Liege hosts the *Welcome to Saint-Gilles. Design and Local Communities*, exhibition that, together with the one entitled *Kids Driven Design. Creative Learning & Co-design* hosted by the Musée du Grand Curtius, completes the RECIPROCITY exhibition core. *Welcome to Saint-Gilles* includes, on notebooks, the results of several real projects developed in collaboration between students and inhabitants of the Saint-Gilles neighbourhood in the outskirts of Liege that have proposed the intervention of design to resolve problems in the area: from the improvement of security, the environment or infrastructures to proposals for connecting people with each other or recounting stories. The exhibit includes cards

...dyson, ventilador de mesa "Air Multiplier", 2009. Abajo: Patrick Rizzo, lámpara "Light Harmonies", 2010-2012, resolina y luz fluorescente, 185 cm de altura.



Arriba: Enzo Mari, recipientes en mármol. Foto: Federico Villa. Abajo: Kasper Hornecher y Matylda Krzykowski, "Display Case", 2012, madera de roble, dimensiones variables.

Arribar Studio Job. "Containers x", 2010, recipientes realizados con cristal tallado de Val Saint Lambert, bronce y madera. Abajo: Etc & Is Studio. "Magaphone", 2011, madera y contrachapado con esmalte blanco, negro y oro de 24 k, 45 x 32 x 34. cm.

Eugenia Morpurgo, zapatillas "n.i.r. Reapair It Yourself", 2011, prototipo de goma y kits más kit de reparación.

mientras que en el reverso se relata el método elegido para llevarla a cabo. Son en realidad especie de instrucciones que el visitante puede llevarse consigo.

También para la muestra del Musée du Grand Curtius *Kids Driven Design* se ha contado con la participación directa de la sociedad. El proyecto parte de un taller de cinco días con niños de Lieja de entre nueve y diez años en el que se trabajó en torno a la búsqueda de soluciones respecto al problema de tener que portar agua. Los prototipos obtenidos aquí a partir de ideas individuales y colectivas han sido traducidos por Michaël Bihain en diseños viables, con formas curvilíneas que no sólo atienden al plano estético, sino también al funcional.

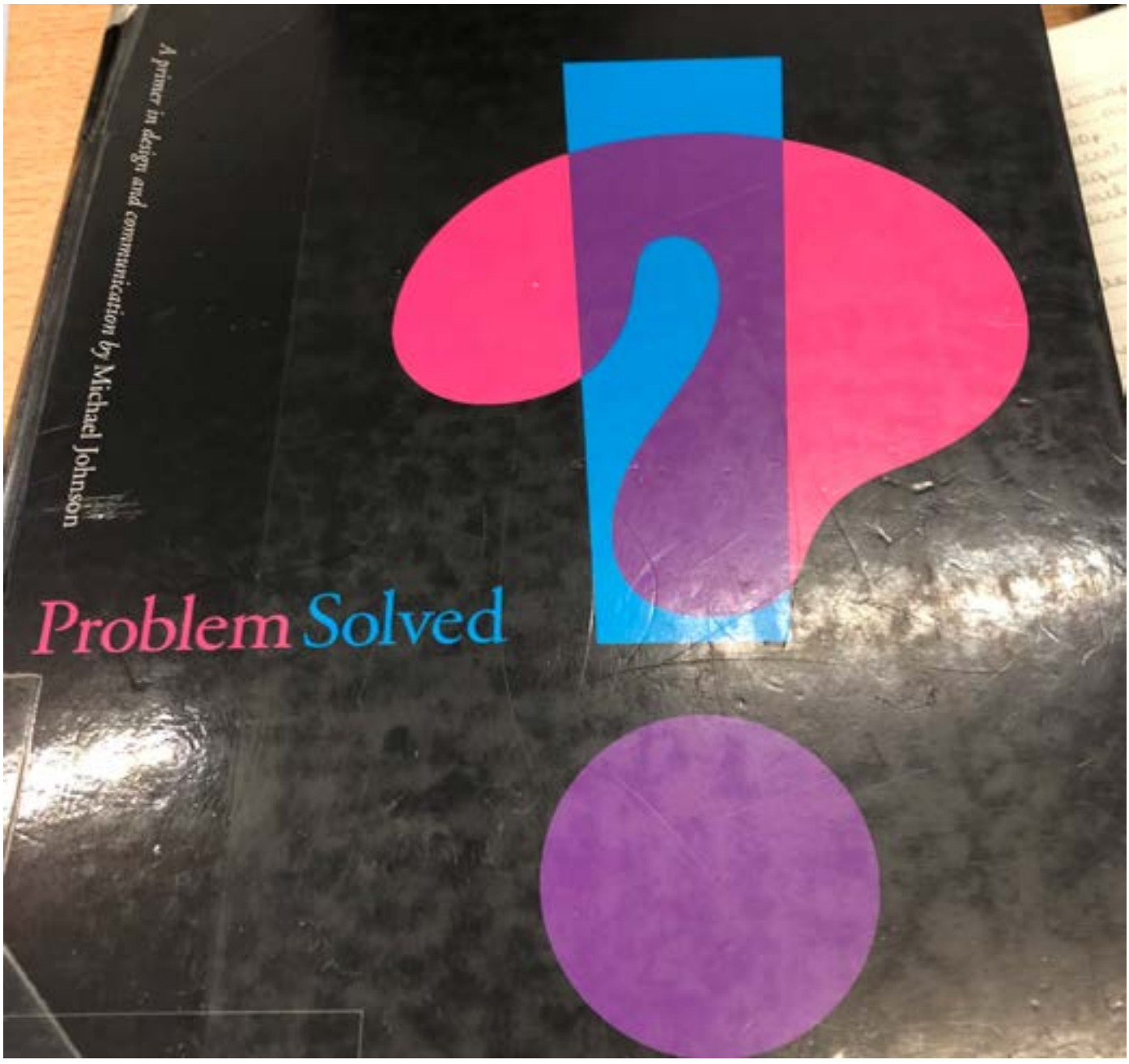
A pesar de tratarse de una cita internacional, también se ha dedicado en este evento un espacio específico a los diseñadores belgas. Bajo el título de *Belgian on Tour*, la selección se despliega en el antiguo mercado de carne, donde se exhiben diseños presentados durante 2012, destacando, por ejemplo, una lámpara solar transportable de Alain Gilles que traduce cabalmente el concepto de diseño social, la finalidad de utilizar el diseño para solucionar problemas y mejorar la vida. El evento se completa con varias otras propuestas, algunas de ellas también expuestas en las sedes principales de RECIPROCITY, y otras alojadas en distintos espacios y galerías de la ciudad. El conjunto de exposiciones deja claro el espíritu de esta convocatoria, en la que se pone el acento en la relación entre el diseño, el arte, la funcionalidad y la trascendencia social de los objetos creados por el ser humano para facilitar y ennoblecer su existencia. ■

where the idea is explained on one side, while on the reverse side the method chosen to carry it out is explained. Really they are like instructions that the visitor can take away.

Also the direct participation of society was used in the *Kids Driven Design* exhibition at the Musée du Grand Curtius. This project starts with a workshop that lasts five days with children from Liege aged between nine and ten, who search for solutions regarding the problem of having to transport water. The prototypes obtained here based on individual and collective ideas have been translated by Michaël Bihain into viable designs with curvilinear shapes that not only attend to aesthetics, but also functionality.

In spite of being an international encounter, there is also a space dedicated to Belgian designers at this event. Under the title of *Belgian on Tour*, the selection of designs presented during 2012 is exhibited in the ancient meat market, for example, a portable solar lamp by Alain Gilles that fully translates the concept of social design, the aim of using design to resolve problems and improve life. The event is completed with several other proposals, some of which also exhibited in the main RECIPROCITY centres, and others housed in different spaces and galleries around the city. All the exhibitions clearly define the spirit of this event, in which emphasis is given to the relationship between design, art, functionality and social transcendence of the objects created by mankind to facilitate and exalt our existence. ■

Translation: Nigel Greenwood


A primer in design and communication by Michael Johnson
Problem Solved

The ETHICAL *problem*

Can creatives produce potent work for a cause they don't believe in? Do you have to smoke to do great cigarette ads? When does a creative person's ethical responsibility kick in and the client's kick out? And why does political advertising often produce such great work – is it the ultimate product to sell, the ultimate demonstration of the communicator's skills?

Throughout the twentieth century, politics and communication have been inextricably linked. Wars have been fought and lost, backed up by propaganda campaigns. Student riots have been sparked off and recorded worldwide by the political or quasi-political image.

Designers and advertisers have always been involved in these developments. And sometimes creatives will have been asked to produce work which they could, or perhaps should, not have believed in. But can they simply plead poverty, close their eyes and get on with it? Surely there is a point at which personal beliefs must come into play and where 'commercial art' becomes un-commercial and even unethical.

The first well-known examples of propaganda date from the First World War, when, spurred on by various versions around the world, the famous Kitchener poster came about for the British war effort (to be copied and lampooned for the rest of the century). Poster artists on all sides were called in to ply their skills in the services of their countries. And the tradition continued into the 1920s as Russian Constructivism tested its theories on images of civil war.

But it is the rise of Nazi Germany that illustrates the problem at the core of this chapter. The poster designs of Ludwig Hohlwein rightly hold pride of place in the world's poster archives but they pose awkward problems – we stand back and admire their beauty in communicating the strength and power of the fledgling Third Reich, but we can't divorce them from the unhappy associations with the 'client'. When producing her ground-breaking propaganda films, Leni Reifenstahl introduced cropping and editing skills that were to have a lasting effect on world cinema, but her beautiful and powerful images were produced to promote a violent dictatorship.

Many see in Albert Speer's starkly powerful exhibition, banner and logo designs the beginnings of post-war corporate identity schemes (rigorously controlled repetitive elements with a restricted palette of colours and layouts). Did he close his eyes to the horrors around him? And how different is Speer's predicament to that of a contemporary designer producing posters for a regime that suddenly falls foul of the establishment?

Luckily, the same era provides us with some clues for a 'right' way to proceed, with the work of John Heartfield (formerly Helmut Herzfelde) who produced anti-Hitler posters in Germany itself before fleeing to Britain in fear of

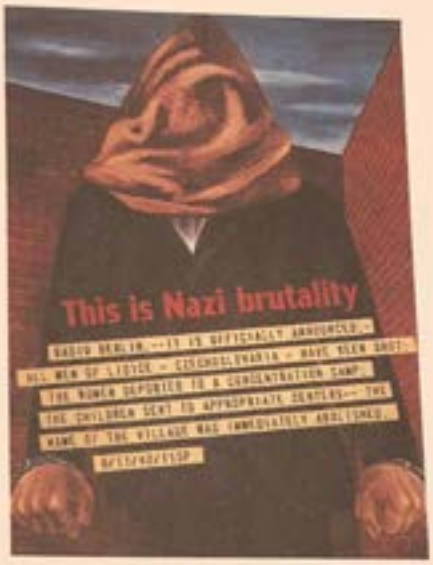
ABOVE
'Britons (Lord Kitchener) Wants YOU'
ALFRED LEETE UK 1914

LEFT
'Und du?' recruitment poster
LUDWIG HOHLWEIN
GERMANY 1940S

BELOW
Stills from *'Triumph des Willens'* and *'Olympia'*
LENI REIFENSTAHL
GERMANY 1935, 1936

his life. His image of Hitler's neck full of coins stands with Abram Games's 'Your Talk May Kill Your Comrades' and Ben Shan's concentration camp poster as one of the most compelling of the war.

But still, where does that place Holwhein? To use the defence heard many times at the Nuremburg war-crimes trial following the war, he 'was just following orders' and it wasn't his fault that his then masters were soon to be war-criminals.



Until the Nazis began to demonstrate their true colours, you could argue that he was simply extending the classic poster tradition for a client, which at that point had restored pride to a previously depressed nation.[1]

Whether we like the moral circumstances surrounding them or not, Hohlwein, Reifenstahl and Speer's work stands the test of time because in their purest form they were fine examples. We just happen to abhor what they actually stood for.

The language of the protest came back into its own during the 1960s, when a new generation railed against all manner of foes, from American presidents, to police aggression on the streets of Paris. Whether pasted up billboard-style as an anonymous protest against the state, or as a critical piece of bedroom furniture, the poster once again became essential propaganda. The change of heart over Vietnam by the American people is easily tracked in the posters of the time, which give voice to the ever-growing disquiet of a nation pitted against an unbeatable enemy in an unwanted war.

In the UK in the late 1970s, the Conservative opposition party ran a hugely significant poster campaign claiming that 'Labour isn't working', aimed at a nation then racked by industrial action and rising unemployment. Many well-read neutrals knew that actually the monetarist plans of the Conservative party

TOP LEFT
'Adolf, the Superman: Swallows gold and talks tin'
JOHN HEARTFIELD
GERMANY/UK 1932

TOP RIGHT
'This is Nazi brutality'
BEN SHAN USA 1943

ABOVE
'Your talk may kill your comrades'
ABRAM GAMES UK 1941

RIGHT
'SS'
ATELIER POPULAIRE
FRANCE 1968

would, in all likeliness, increase unemployment substantially (which is exactly what happened). But the fact that it was a brazen piece of work doesn't stop it from being one of the most famous posters of the century, whatever problems there were with the accuracy of its message.

When returned to government, this right-wing administration pursued, in their eighteen years of power, some of the most powerful political advertising ever seen, conveying the core messages (that the Labour opposition would tax you to hell or that the then new leader Tony Blair was the red devil in disguise) with single-minded efficiency (albeit ultimately unsuccessfully).

The left-wing Labour party was left to fight against the various government policies on a campaign-by-campaign basis. Only when replaced by a now more middle-of-the-road Labour party were the Conservatives thrown into disarray, and thus far unable to strike back coherently.

The most potent and historically interesting image of the British 2001 election only ran once, when an ex-intern at the Conservatives' old agency (Saatchi & Saatchi) posted a parody layout of their famous 'pregnant man' ad to the leader of the opposition. It used a picture of a pregnant Tony Blair accompanied by the line 'Four years of Labour and he still hasn't delivered'. The Conservatives' new agency, Yellow M, was then forced to run the ad, even though the original inspiration was by a rival agency.

The Labour party, re-elected in 2001, chose to pursue a tactical strategy – reputedly their new agency had developed up to 40 posters which could be 'wheeled out' for any eventuality. Unfortunately, this led to a slightly piecemeal campaign, with vastly

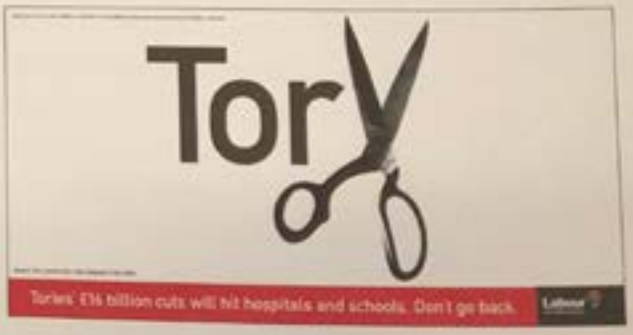
LEFT
'Labour still isn't working'
SAATCHI & SAATCHI UK 1979

BELOW LEFT
'Pregnant man' poster
SAATCHI & SAATCHI UK 1970

BELOW
'New Labour New Danger'
MRC SAATCHI UK 1997

BELOW RIGHT
'Four years of Labour and he still hasn't delivered'
YELLOW M UK 2001

BOTTOM RIGHT
'Tory Cuts'
TBWA\LONDON UK 2001



THIS PAGE
Anti-Berlusconi protest images
MARK BERNADENI BELGIUM 2000

varying styles of execution (veering from reportage, to pastiche film humour, to straightforward tax-cut shockers). But at least in the UK political parties can appoint agencies that agree with their policies, each then having a relatively free reign. In some countries government control of the media has become so strong that this level of freedom of speech is genuinely endangered.

In the 2000 Italian election, candidate Silvio Berlusconi flooded Italy with images of his grinning visage next to bland promises (such as 'a concrete promise: less tax for all', 'safer cities' etc). Unfortunately for the would-be premier, rumours that the picture was somewhat out-of-date (and hence slightly misleading about the precise extent of his follical challenge) led inexorably to a proliferation of easy jokes and graffitti ('a concrete promise: more hair for all') and then vast website resources devoted to spoof posters of Berlusconi as a Klingon, Che Guevara, the Pope and the most evil of them all, Darth Vader.

One wonders why the opposition parties did not simply attack the dubious record of the Berlusconi empire, but the truth is probably that against a mogul with such control over the vast majority of Italian media, the guerrilla activity (and low cost) of the internet suited them just fine. In the end, Berlusconi turned the campaigns to his advantage by offering a prize for the best one.[2]

LEFT
'Red tape' billboard
BOASE MASSIMI POLLITT
CRITAS PARTNERSHIP 1984

BELOW
Silk Cut poster
SAATCHI & SAATCHI UK 1987

BOTTOM RIGHT
Health Education poster
SAATCHI & SAATCHI UK 1970

BELOW LEFT
Lucky Strike packaging
LOEWY USA 1940s

What is clear from the previous cases is that successful political advertising is related to the persuasions of the agencies concerned. The Conservatives used the Saatchi brothers in their various agency guises because they were famously right-wing, while the socialist examples above were carried out by confirmed left-wing London agencies BMP DDB and TBWA. It's when we move away from politics and look at these agencies' other work that things get a bit more confusing.

For example, Saatchi & Saatchi have for years produced a campaign for Silk Cut cigarettes, which on the face of it has produced very fine examples of advertising. But how do the creatives feel advertising the biggest known cause of cancer?[1] Are they also just following orders? Strangely, when just a fledgling agency in the early 1970s, Saatchis made one of their first breakthroughs with work for the Health Education Council illuminating the dangers of smoking to the public.

Agencies and designers have long worked for ethically dubious clients, but history tends to view the work with strangely tobacco-tinted spectacles, especially the work that broke barriers before government's or surgeon's health warnings started appearing. Raymond Loewy's re-design of the Lucky Strike cigarette pack is often heralded as a design classic but few designers now would happily acknowledge or publicize their involvement in cigarette-pack design. The classic, ground-breaking advertising produced for Benson & Hedges in the 1970s by London agency Collett Dickenson Pearce (CDP) rightly occupies centre stage in terms of advertising history but these ads also encouraged a whole new generation that it was cool to smoke.

Presumably these agencies then saw no contradiction in their position. But placed in context with their many examples of social 'cause' advertising, this writer finds an ethical dilemma – agencies that can produce a charity ad one minute, then a cigarette ad, then an ad for a political party must have a 'moral compass' that is severely faulty. The Nuremberg defence doesn't apply for the anti-moralists, as we shall call them. They would respond that all they are doing is responding to whatever that particular client's problem is. That is their job, not to comment politically upon it. But that undermines the whole profession – if you are going to work for ultra-capitalist clients *and* do charity ads, it seems to this writer at least that the two simply don't mix; selfishness and selflessness make unsuitable bedfellows.

And with the next generation of communicators demanding higher levels of ethical responsibility from their employers, it's an issue which increasingly will appear on the agenda.

ABOVE
Benson & Hedges posters ads
COLLETT DICKENSON PEARCE
UK 1977–80

RIGHT
Anti-smoking poster
HALL ADVERTISING LTD UK 1978

Victor Papanek

The Green Imperative

Ecology and Ethics *in* Design and Architecture

CHAPTER 2

Designing for a Safer Future

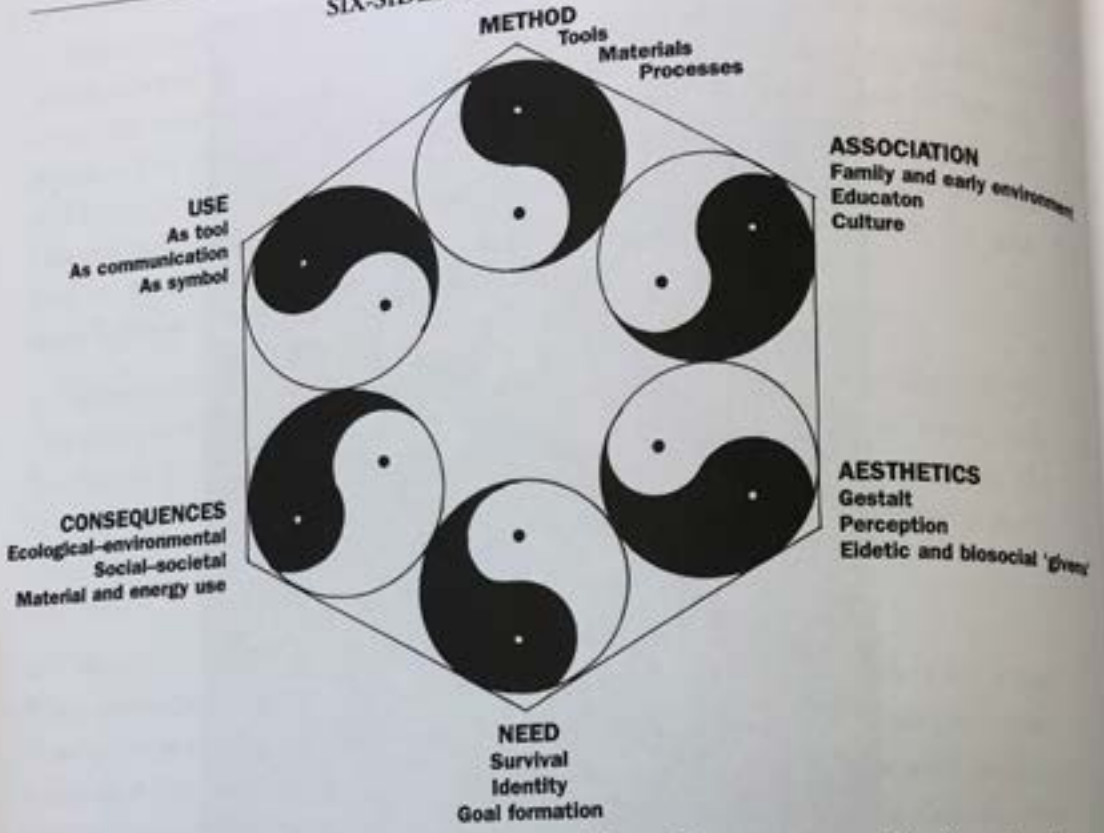
The epidemic psychosis of our time is the lie of believing we have no ethical obligation to our planetary home.
Theodore Roszak

ECOLOGY AND the environmental equilibrium are the basic underpinnings of all human life on earth; there can be neither life nor human culture without it. Design is concerned with the development of products, tools, machines, artefacts and other devices, and this activity has a profound and direct influence on ecology. The design response must be positive and *unifying*. Design must be the bridge between human needs, culture and ecology.

This can be clearly demonstrated. The creation and manufacture of *any* product – both during its period of active use and its existence afterwards – fall into at least six separate cycles, each of which has the potential for ecological harm.

When we speak of pollution as related to products, we usually think of end results: the exhaust fumes from automobiles, the smoke from factory chimneys, chemical fertilizers or truck tyres in a dump poisoning the ground-water. But pollution falls into several phases.

SIX-SIDED FUNCTION MATRIX



It is clear that we routinely over-package things. In some cases this is to lend a visual charisma to luxury goods such as perfumes that sell at enormously inflated prices. But the less luxurious package can be equally destructive of the environment. Fast-food suppliers have for decades used small coffins made of a plastic known as styrofoam in North America in which to serve their cheeseburgers and Big Macs. Some years ago, McDonald outlets in the American Midwest proudly proclaimed on an automatically changing neon sign: '*Seventy billion* sold so far' (italics supplied). More recently the McDonald corporation has been convinced of the ecological soundness of switching to paper containers.

Foam plastic is a very useful packing material, yet profoundly damaging to the environment. After it has been discarded, it is doubtful whether it is possible to re-use it, and it continues to be an environmental and toxic hazard in spite of the optimistic assurances of the manufacturers relayed to the public by their public relations people. The advantages of foam plastic are that it makes an extremely lightweight protection for precision parts, is easily formed around delicate optical instruments or electronic assemblies, and is quite inexpensive. But there are alternative and organic ways of packaging.

It is a valuable concept that there is really nothing new in the world that needs to be packed and shipped. The immediate objection will be that this is sheer nonsense. After all, there were no computers, CD players or camcorders in the distant

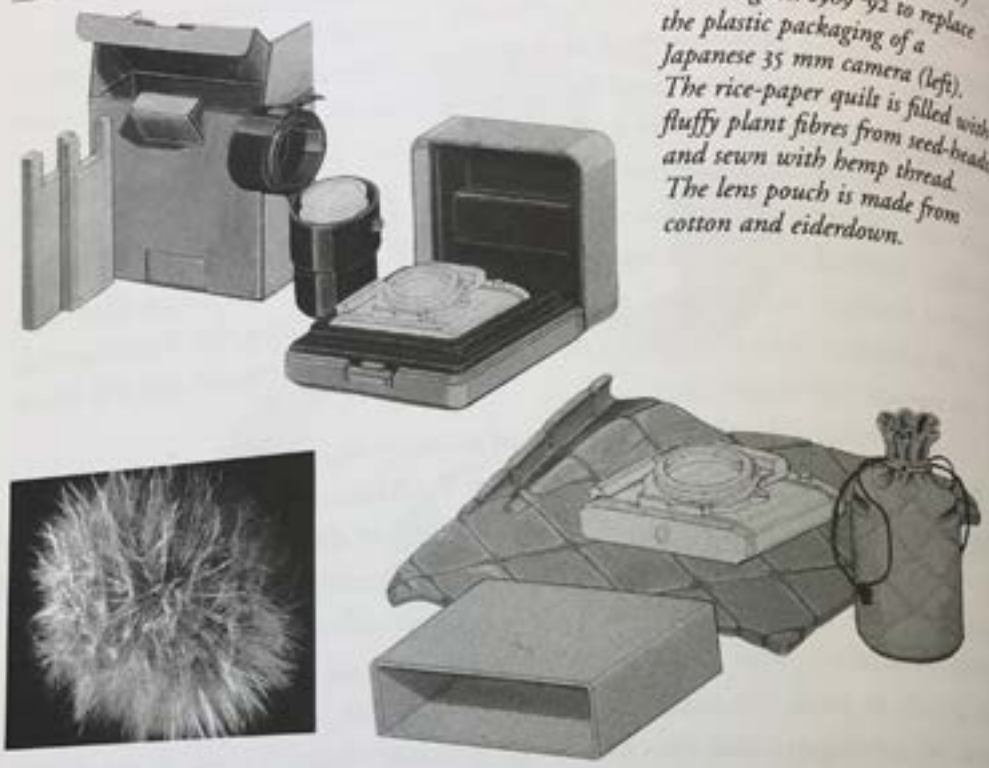
past. Yet Van Leuwenhoek had to ship his microscopes from the Netherlands to Padua in the 16th century, Galileo needed to send telescopes to the Danish astronomer Tycho Brahe on the island of Hven off southern Sweden, and forward 'philosophical instruments' and optics to various other parts of Europe. More recently, during the Civil War in the United States, delicate surgical instruments had to be shipped from northern factories to the front. The materials used to pack such early precision instruments were Spanish moss, other dried mosses, sand, sawdust, crushed and dried leaves or dried grasses, thin cotton bags filled with down or feathers, wood chips, and much else. The one thing that these materials have in common is that they can be recycled; they are all organic and will return to the natural environment.

My earliest introduction to this way of packing was my first job as a young boy in New York. I worked in the basement of the Museum of Modern Art packing small sculptures or ceramics to send to members of the museum who were renting art objects for a few months at a time. I remember that, in addition to shipping-boxes (which were made of wood or cardboard), we had two gigantic popcorn machines, and made popcorn – unsalted and without cheese, I may add – in which to pack the sculpture pieces; polystyrene 'worms' did not then exist. It was an intelligent and decent way of packing which in 1992, to my delight, began to be revived by some mail-order firms as an ecologically responsible way of dealing with fragile objects.

In 1989 I was hired by a Japanese corporation, specializing in computers, cameras, and other high-tech products, and spent three years conducting research and feasibility studies in the use of organic packaging materials. Research eventually concentrated on plants that, when maturing, surround their seeds with an enormous protective cradle of fluffy material. The specific seed we researched expands its bulk to more than forty times the original volume.

The package was for a professional precision 35mm camera and its lenses. Normally, expensive small cameras are cradled in a shaped foam-plastic cushion that has been covered with an equally plastic fake-velveteen fabric. This in turn is topped by another velvet-like foam-plastic lid on top, and both are bedded in a sarcophagus-like box, made of high-impact polystyrene. The box is held, or suspended, by two foam-plastic spacers within an outer (again plastic) case. Lenses are normally placed in plastic tubes that are upholstered with foam on the inside, and covered with a leather-like vinyl, called 'leatherette' (the very word makes one's flesh crawl), or a plastic called 'naughahide' on the exterior. A hideous example of over-packaging and transparent make-believe.

Eventually we created a small quilt, about 15 inches (37cm) square. The 'shell' of the quilt is made of rice-paper, filled with fluffy plant fibres and then sewn into quilt squares with a hemp-derived thread. The quilt is wrapped around the



The organic packaging (below) was designed 1989–92 to replace the plastic packaging of a Japanese 35 mm camera (left). The rice-paper quilt is filled with fluffy plant fibres from seed-heads and sewn with hemp thread. The lens pouch is made from cotton and eiderdown.

camera body and inserted into a cardboard sleeve. Quilted pouches, made of 'green' cotton and filled with eiderdown, protect the lenses. In Japan this method of softly cradling precision parts is already in experimental use, and will probably soon be used for export models. The great advantages of this package are obvious. Reliance on oil-based plastics and the hazards of their manufacture are entirely eliminated. The new package is wholly organic, and will return to the soil. To exaggerate somewhat, theoretically it may be possible in a year or two for someone to buy a camera or CD player and literally dump the wrapping in the back garden where the recyclable, organic components of the package – augmented by trace amounts of nitrate boosters – will actually help the garden grow.

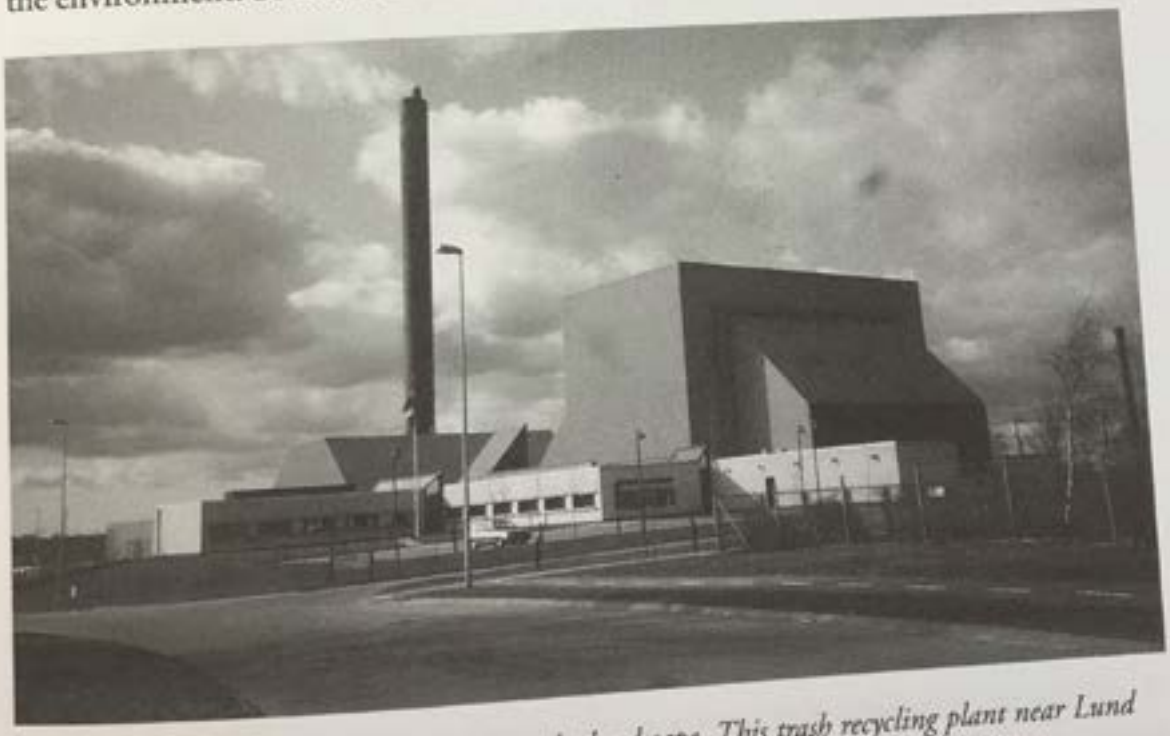
At the moment, packaging generally involves the use of plastics (discussed in detail later in this chapter), metal, wood, cardboard and paper. The use of paper has two major effects on the ecology. One of these is the cutting-down of trees and forests, the other the pollution that occurs in the paper production itself. Nine-tenths of paper products come from forests in northern temperate zones – Canada, the United States, and northern Europe. It is now widely known how to manage such forests commercially so that they can continue to function as renewable resources, but the timber industry generally refuses to engage in selective harvesting from multi-species mature forests, and continues to plant monocultural forests and to employ the clear-cutting of established woodlands.

Chlorines used in paper production as a bleach for wood fibres also pose an ecological hazard. Chlorine creates dioxins that are mutagenic, that is to say, they create genetic changes by bonding to the DNA structure of living cells. Furthermore the runoff of water tainted with dioxin and chlorine has endangered aquatic life (such as salmon in the Pacific north west of North America), as well as poisoning ground-water.

There are packaging items that are inherently impossible to recycle. Manufacturers can easily avoid using high-gloss papers, highly coated or plastic-coated papers, glues that are not water-soluble and plastic windows on envelopes. Instead designers could specify non-bleached papers or those whitened with new, bleach-free methods. More than three-quarters of all paper types can be recycled, but usually a percentage of new fibres are added. Recycling waste paper can be 50% more energy efficient than the use of virgin pulp. It is good practice to use paper with the highest percentage of recycled material. The Simpson Paper Company of San Francisco has emerged as one of the leaders in this field.

Lead, mercury, arsenic, chromium, cadmium, beryllium and vanadium are all carcinogenic and neurotoxic. They are frequently used in the composition of printing inks on packages, and pose a severe threat when they leach into the water supply from landfills. De-inking is difficult and costly. Vegetable-based inks, made from soya for instance, can be used effectively, and here again the Simpson Paper Company has led the way.

There are other materials that are dangerously poisonous to human beings and the environment. Some countries have already restricted polyvinyl chloride (PVC)



Recycling plants do not have to be a blot on the landscape. This trash recycling plant near Lund in Sweden is unobtrusive and uncluttered.

Three hazard symbols for harmful, flammable and toxic materials respectively, and (on the right) the Blue Angel symbol for safe materials, introduced in West Germany in 1977.

since, unless it is burnt in special handling ovens, it releases dioxins and hydrochloric acids into the air. It has also been established that the making of PVC is directly linked to kidney cancers in workers. There are many other substances, such as cadmium-based pigments, certain flame-retardants and chlorinated solvents, that are still unrestricted in the United States and the United Kingdom, yet pose major health threats. A series of labels and symbols have been developed and accepted internationally, and more specific national or regional markers also exist.

Terms for hazardous materials, products or processes

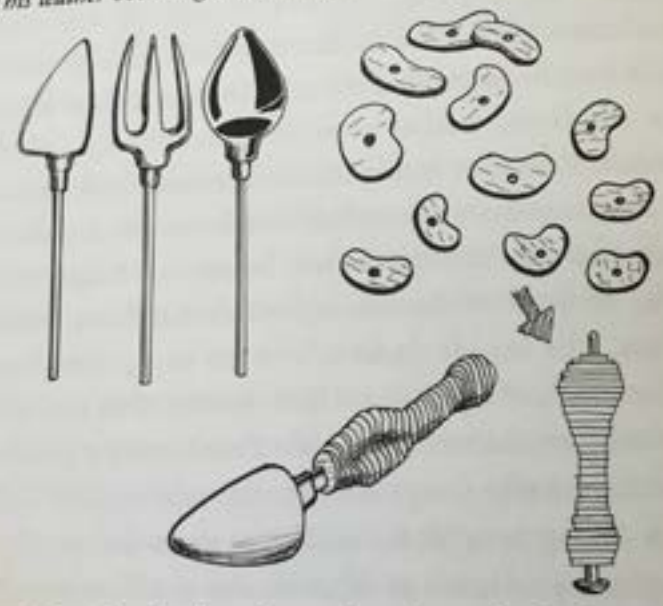
- **Carcinogenic:** can cause cancer either in manufacture or in use
- **Mutagenic:** can cause genetic mutations in human beings or other organisms
- **Neurotoxic:** can attack the nervous system of human beings or other animals
- **Biocidal:** destructive to the environment and ecology

In January 1993 a comprehensive set of laws was introduced in Germany to deal with the reduction of packaging waste. These include requirements that producers and suppliers take back all sales and transport packaging. Manufacturers are also obliged to remove wrapping when selling to the end-users, and to inform them where and how to return the rest of the package. Furthermore, the law states specifically that manufacturers must take back, sort and recycle the following:

> Electrical or electronic appliances in the sense of this ordinance are household goods, entertainment electronics appliances and appliances and installations for office, information and communications technology, banking machines, electrical tools, measuring, steering and lighting technology, toys, clocks which contain electrical or electronic component parts…component categories such as casing, screens, keyboards or plates.[2]

Furthermore, these laws decree that packages are merely for the protection of the contents and are not be used for advertising messages or point-of-sale graphics.

This leather bookweight is made from manufacturing off-cuts.



Design for cutlery handles to be cut from the smallest leather scraps.

finding solutions to their own problems, even – whether they want to or not – to become their own designers.

The old are just one of many groups either not sufficiently served by industry and its designers, or not served at all. Just designing for the needs of the ageing could keep most designers and architects busy for the next fifty years. This segment of the population is increasing more quickly than any other; most old people still have enough money to get by – in many cases even fairly large disposable funds – and are the best people to consult on ways of easing the difficulties of old age.

In a project, undertaken by one of my students, it was possible to recycle mattresses and plastic (the sort that dry-cleaners use to protect clothes) to make a highly portable bathing or sitting cushion that would ease the daily life of women in the last months of pregnancy. Small-scale, decentralized production, or working at home on a do-it-yourself level can combine with re-use to form a new process and a benign ecological intervention.

Babies and small children have specific needs for recreation, educational environments, exercise and general health. There are also a number of health hazards and disabling diseases where design intervention can help. These are but a few of the areas to which designers can and should address their talents. From such activities some very real spiritual values will accrue to the designer and the producers.

The requirements for decent design are far too complex for a designer to solve alone, (or even by several designers working as a team). It is essential to work with people from other fields. For many years, my own practice has been to set up a multidisciplinary team as soon as I have moved into a new locality or established my studio in a new country. The basic members of such a team will usually include an anthropologist, a psychologist or a member of one of the other social sciences, an environmental scientist with a strong bent towards biology and ecology, a doctor, an electronics and mechanical engineer, a lawyer and a graphic designer, as well as myself for product innovation and design. At other times specialists from different fields (architects, chemical engineers, child-care specialists, nurses, cultural geographers, historians, film-makers) may be needed temporarily to help with some special research. Obviously, I consider it absolutely essential that representatives of the users also participate in the team's work and discussions.

All this must sound formidable – in actual practice the team that works together intensively will number only four or five most of the time. With a group totalling around twenty-four who all share the dream of providing fewer but better goods for people in need this mode of operation enables us to approach our work with greater insight. The necessity of explaining what we are doing to members from many different disciplines means that we can look at possibilities through new eyes. An additional benefit has emerged. We are quicker to spot gaps – things that would answer to a specific need, yet don't exist at all. Our 'throat-cancer robot' may help to explain.

Oesophageal cancer requires the surgical removal of the larynx, and the patient then has to learn to use an external, artificial voice-box in order to talk. In the United States, this device is about the size of a packet of king-size cigarettes with a metal casing; sticking out of the top is a bent tube, which is inserted in the corner of the mouth; with months of patience and practice, the metallic-sounding speech (amplified by the external voice-box and lacking any underlying

A toy robot with electronic voice synthesizer to enable children to 'talk like a robot'.

The redesigned artificial voice-box which is based on the robot toy.

melodic structure) can be understood. This device costs nearly a month's wages for many people. The total cost of the components at retail prices is less than 1% of this!

This is where cross-disciplinary team-work comes into its own. Mr Paul Werner of Nebraska – a patient himself – discovered a Japanese toy on sale in the United States that works almost exactly like the clinical prosthetic selling for fifty times as much! The toy is a robot, six inches (15cm) tall, and made of bright red and blue plastic. It also has a tube, which is inserted in the mouth so that a child can – with a bit of practice – sound exactly like a robot. Werner showed it to speech pathologists at the University of Nebraska's Medical Centre, and the medical man on our team brought it to our attention. We decided to redesign the medical version, using the toy as a starting-point. It was a great temptation to distribute the toy itself, but the number of respectable people of a certain age who are willing to hold a brightly coloured robot to their throat is reassuringly small. The final device is black, and a simple neutral shape that fits well to the hand. It can be produced for the same price as the robot. As a further design improvement, we are presently exploring simple microchip technology to see if we can convert the rasping speech into a pleasant contralto or baritone.

Since the 1970s the wave of demythologizing various professions has grown around the world. In the field of self-administered diagnostic testing, the United States has made some interesting contributions. This is partly because of the steadily rising charges of the testing laboratories, partly the waiting-time for the results, especially when the test has to be sent away. There are also many more

The movable playground structure was designed so that the children, parents and teachers, working in co-operation, could easily assemble it.

tests and types of tests performed which increases the chances of wrong findings, accidentally switched samples and misdiagnosis. Consequently our belief in the whole testing-laboratory procedure has been shaken. Self-testing kits are available for blood pressure, pregnancy, diabetes, AIDS, and many other medical applications. We still prefer to pack our own parachute .

A design can serve several different groups and make direct participation by each separate constituency both possible and necessary. A post-graduate student from Britain investigated design applications in the social field, using the geometric solid tetrakaidecahedron. There were several objectives. The physical design goal was to build a exercise environment combining jungle and gym that would also be fun, a shelter from the rain, and would look different from routine schoolyard equipment. The social agenda was to develop a scheme that encouraged the schoolchildren, parents and teachers to co-operate in building the equipment. The creative teaching strategy was to give the children hands-on experience with photography (in the form of 35mm colour slides) and the making of audio tapes. They would also investigate the relationship between image and sound, edit their individual productions and share the results. Other factors influencing the brief were that the structure had to be vandal-proof, inexpensive and safe, movable, easy to put together and take down.

The result was an organic-looking cluster of four to eight tetrakaidecahedral nodes. The geometry of polyhedra is directly related to the growth and form

of crystals, and their shapes are consequently satisfying at deep levels of the collective unconscious.[6] The children and teachers working together would put together the flat squares and hexagons that formed the 'skin' of the environment. Parents and teachers together would then erect the actual play-structure from these parts. A bulky box contained a standard Kodak Carousel projector for 35mm colour slides, and a smaller unit held an audio-tape cassette player. The lens on the projector was modified into several facets so that it could project images into two or four different spaces simultaneously.

The schoolchildren's mission was to provide the 'software' for the entire system, that is, the slides and tapes. They received simple automatic 35mm 'do-everything' cameras and some plain tape-recorders. Instructions were minimal to encourage the children's immediate and intuitive response. They supplied the schools with almost endless streams of slides and tapes, documenting their friends at play, their homes, adventure walks, their pets, and much else.

It all came together better than expected. The sound-slide presentations by the children were moving and entertaining; they were also beginning to master cameras and recorders and to develop a selective eye. The play-shelter was so popular with the children that when the time came to photograph it we asked just a few to pose, otherwise the structure would have been completely hidden by more than a score of children swarming all over it.

DESIGNER AS ENTREPRENEUR

Many of the tools and devices illustrated in this and other chapters exist as prototypes only. High risk and low return discourage many firms from producing them. My proposed solution to this societal neglect of valuable ideas is a combination of small, highly decentralized factories (to give autonomy to owners and workers, as well as to conserve the energy wasted in long-range transport of goods). There is a need for both design enterpreneurship and governmental incentives that would protect such new enterprises.

I left university in 1957. In the field of product design alone almost everything has changed. There is one circumstance, however, that is even more relevant today. I remember my professor telling us repeatedly that no large company could ever afford to compete in the market [illegible] lished [illegible]

DESIGN ETHICS

The examples above may help to make the connection between the spiritual in design and the intent of the designer. But there still remains the question of design ethics.

Before we can honestly address this question, we must first eliminate the red herring of 'professional ethics' or 'professional codes of conduct'. These are generally rules that some trade group or professional organization has drawn up to further its own fortunes and eliminate competition between members. They also usually protect the group, or its members, from public scrutiny and criticism. To evaluate whether the ethical rules of a group are really more than a self-protection racket is fairly easy. All we have to do is ask some simple questions:

1. *Is the code of ethics simply self-serving?*
2. *Does the 'code of conduct' really protect the public?*
3. *Is this code truly regulative, that is, do the members comply with it, and can the public make its own judgments about the compliance of the members?*
4. *Are these rules clear and specific about the possible pitfalls inherent in the particular profession or work performed by its members?*
5. *Can non-members observe and judge compliance with the rules by members, and is it enforceable?*
6. *Is this code of ethics, as well as the group or association, so constructed as to anticipate future changes, and therefore willing to teach, learn and inform its membership as well as the public?*
7. *Can the professional leadership of such professional organizations be made aware that, due to the modern media, we are living in an increasingly transparent society, in which secret deals, whitewashing and stone walling will no longer work?*

With these 'cover your own backside, boys!' ethics out of the way, we can think about the interaction between design and moral values.

Properly speaking, ethics are the philosophical basis for making choices about morals and values. Moral decisions are made through recognizing that a dilemma exists and consciously weighing the alternatives. Values provide direction when decisions about alternative courses of action must be made. Values do not have to be based on truth. They frequently stem from beliefs or convictions that certain things are true – even if false. Many values in the United States, for instance, are based on the statement: 'All men are created equal.'

Most decisions in daily life have ethical implications or moral overtones. Issues in a post-industrial society are even more complex and baffling. This is especially true in product design since designers – like it or not – need to have one foot firmly planted in the future. The time-lapse between being assigned the brief to design, say, a refrigerator and its first appearance at a store can be as long as three years. This is not just an arbitrary example. A German firm began to design a new model, but was forced to rethink the entire appliance by the first discoveries of the effect of freon gases (CFCs and HFCs) on the ozone layer. The result was the first refrigerator that poses no threat to the atmosphere, but research, design and engineering time increased to nearly six years from brief to product. During this time, entirely new and unanticipated fiscal and aesthetic constraints had come into play.

To think dispassionately about what we design and why, as well as what the eventual consequences of our design intervention may be, is the basis of ethical thinking. It gets easier with practice.[10]

The most direct link between values, creativity, beauty, art and the transcendental is probably demonstrated by Abraham Maslow's seminal writings on the 'hierarchy of values'. The higher motives that Maslow recognizes have to do with self-transcendence and the eventual loss of self that can be experienced at the moment of high artistic creation, the process of invention or during the ecstasy of religious experience. He writes movingly about these 'metamotivational' needs that we are all capable of approaching and satisfying.[11]

When I first lived in Toronto in the 1950s, a client asked me to design a free-standing structure to house a florist's showroom. He said, 'I know you have studied with Frank Lloyd Wright; well, I want to have a showroom that looks as if Mr Wright had designed it!' The last thing I wanted to do was a Wright pastiche, yet I felt that I could not turn down my first and only job offer. I have regretted my lapse of ethical judgment ever since, especially as it later turned out that there were several scores of my client's showrooms clear across Canada. This early, negative experience first turned my attention to the ethical dimensions in design.

Nearly everyone seems to feel that a designer, faced by a job that is ethically unsound or offensive, has only two choices: reluctant acceptance after much soul-searching, or outright dismissal. When discussing this in a seminar, my post-graduate students urge me to react differently. 'Why,' they ask, 'don't you say, "I feel that this commission is morally wrong, here let me explain why." ' It is a sad fact that I have never yet had a client willing pay me one hundred and fifty dollars an hour whilst I attacked his proposal and lectured him about pop-psychology, ethics and personal value choices. Just unlucky, I guess. The fourth way of handling the situation is to tell him that I won't do the job (without going into details), then adding: 'But George will be glad to do it, and is an extremely competent designer. Let me give you his address.' This solves absolutely nothing. The job is still done (by someone else, it's true), your own office has lost income and helped the competition.

TRANSFORMING THE ASSIGNMENT

Over the years I have managed to develop a way out of the dilemma, and the case-history which follows may explain an actual working procedure, a system of dealing with ethically repugnant design assignments.

A large chocolate manufacturer asked me to design a new wrapper for their standard chocolate bar, which was sold predominantly from automatic vending-machines. The manufacturer wanted a more distinctive design for the wrapper, to rival that of his main competitor. I faced a real dilemma in social and ethical responsibility in design. On the one hand I was being hired by a company then more than a hundred years old and the main employer in the small city named after it. It was losing money to its competitor, and this endangered the fiscal and

CHAPTER 5

The Biotechnology of Communities

The young mistakenly think that imagination is a substitute for experience; their elders are equally wrong in believing that experience can substitute for intelligence.
Arthur Koestler

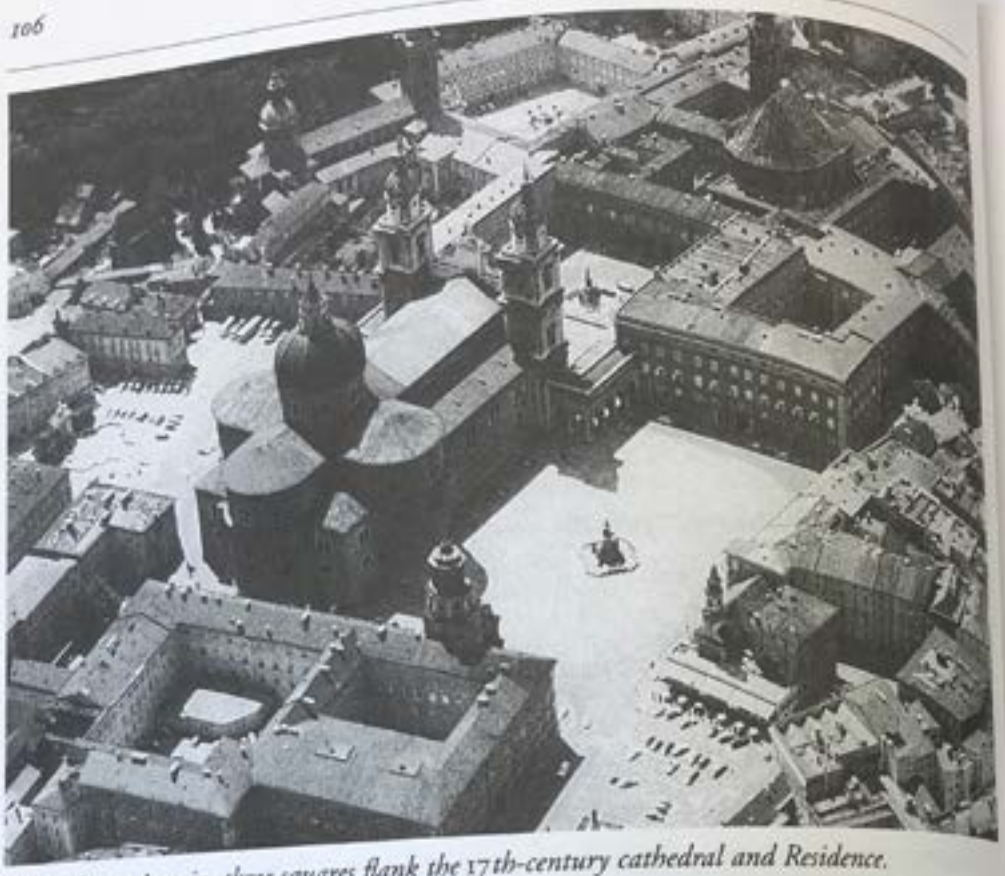
Knowing is not enough; we must apply. Willing is not enough; we must do.
Goethe

We all sense that something has gone terribly wrong with our communities. Hamlets and cities, slums and suburbs all lack a sense of cohesion. Not only is there no centre there – there is no there there. Cities, towns, villages and communities that were designed hundreds of years ago are obviously based upon some basic purpose of living that eludes the designers of our own time. Previous ages possessed one great advantage: a precise moral aim that gave meaning and direction to all planning and design. Classical antiquity sought a sense of harmony and balance, the medieval objective was mystic fulfilment, the Renaissance strove for an elegance of proportions and more recent times for enlightened humanism. Builders knew precisely what they wanted.

What then is the purpose of contemporary planners? Earlier builders knew what they were doing, because they followed the cultural imperatives of their society as their minds conceived them. Modern designers, whose purpose is the nourishing of public taste, have tried desperately hard – and with little success – to find out what that taste is. To help in this quandary, the designer uses research staffs and questionnaires, and what does he discover when at last his work is complete? That those for whom he has built move back to the old quarters of the city.

FINDING THE CENTRE ONCE MORE

Until very recently there has been no such thing as a changing purpose in planning settlements. That old towns are charming and new ones are not is due to the fact that city planners of former times – of ancient Greece, of medieval city states, of the heart of Amsterdam, London, Paris or Vienna – did not pursue *different* aims as their age changed, but instinctively always worked toward the one unchanging purpose that has always made people desire to live in urban centres in all human communities. Aristotle said that men form communities not for justice, peace, defence or traffic, but for the sake of the good life. This good life has always meant the satisfaction of man's four basic social desires: *conviviality, religion, artistic and intellectual growth, politics.*



In Salzburg, Austria, three squares flank the 17th-century cathedral and Residence.

The nucleus of cities, with all the variations in styles, therefore always included the same basic elements: inns and eating places, sports arenas and theatres to satisfy conviviality; churches or temples for the spiritual fulfilment; museums, zoos, libraries and schools for intellectual growth; city halls for politics. And, since the satisfaction of these four community-shaping desires required an economic base, these structures were naturally and organically grouped around the marketplace, creating and serving the fifth communal activity, trade and commerce.

If a new region is to be successfully developed, decentralized and open to many different possibilities, some interventions are simple. What is needed is the construction of focal points at traditional crossroads: a sidewalk café, a restaurant serving good food, a little concert hall or theatre, a charming church, a well-designed meeting hall.

Ancient planners put all their talent into the building of the communal nucleus – inns, churches, city halls. The rest of the settlement then followed by itself. Modern designers are forever concentrating on the rest of the city. But without an organic centre nothing can be held together. And we have difficulties now in conceptualizing a nucleus since we've let ourselves become convinced, falsely, that every age has a different purpose – by the time we discover our own it may have run through our hands like sand.

Model for a spiritual community founded by the teacher Aurobindo in Pondicherry, India.

PEOPLE NOT TRAFFIC

We live with traffic jams everywhere; the question is, what causes them? Narrow streets? Streets have been widened, and congestion has become worse. Too few traffic arteries? Traffic arteries have multiplied, and jams have become nearly continuous. Urban density? Cities have exploded outwards into suburbs and the surrounding countryside, reducing density, yet the gridlock has increased exponentially. Bad planning? International experts have made plans and when implemented, jams have grown. Too little thought? The reverse is true: *too much thought.* Modern planners are so concerned with traffic that they seem to think that the only function of the city is to serve as a race track for drivers between petrol pumps and hamburger stands. Los Angeles might have become an elegant city; it has instead become the first city to incorporate *rural* distances into its tormented, traffic-choked *urban sprawl.*

What most planners have overlooked in their rush to eliminate all obstacles to traffic, is that they are removing the community itself. The function of a community is to act as a goal not as a passage point, an end not a means, a stop not a flow, a place to arrive not for driving through. This is why nearly all good cities exist where traffic was bound to stop: at the base of mountains or at their top; on the bend of rivers, the shores of lakes or oceans; or – in the case of some of the

most spectacular among them such as Venice, Bangkok or Manhattan – in the midst of canals or lagoons or on the tips of thin islands where any movement beyond is restricted not just in one but in all directions.

To improve the quality of modern life designers must follow two guidelines. First they must reverse their current hierarchy of values, giving less not more thought to traffic planning, and concentrating instead on trade and community planning. Secondly, they must turn to a new set of experts. Since the foremost city planners are responsible for the most glaring obscenities – Brasilia, Canberra, Ottawa and the new towns of postwar England, to mention a few – our experts will be found in the genius of the past. We must look back with humility to study not what is the latest in Los Angeles or Milan but what is oldest in Boston or Siena.

THE AESTHETICS OF SITE

One true and tried method to protect a community from turning into a speed-way is the inclusion of squares or roundabouts into the road network to act as traffic obstacles, with sculpture, music pavilions, seating, water fountains and venerable trees. Yet the paradoxical nature of communities is such that once a town becomes commercially desirable and aesthetically attractive it attracts people from other communities like a magnet. This drift toward centralization must be fought, since, once this process starts, even the most beautiful community will attract so much commerce and traffic that it will head toward crowding and eventual decay.

Received wisdom explains the selection of a site though the interplay of four determinants: distance from markets, raw material sources, situation within a transportation net and available labour. The aesthetic factor – closeness to concerts, sports, theatres, conviviality appealing to the senses – is usually ignored. This fifth possible determinant of location, the aesthetic parameter, is not just equal in strength to any of the other four but can be stronger than all combined. This can be demonstrated positively whenever a new factory opens up in the countryside. The manager is usually the first to decide to subject himself to hour-long daily commuting rather than face the dullness of the countryside. The workers follow as soon as they can afford to do so. Some indeed even prefer unemployment and a richly textured existence among exciting architecture, theatres, galleries, inns and a vivid nightlife.

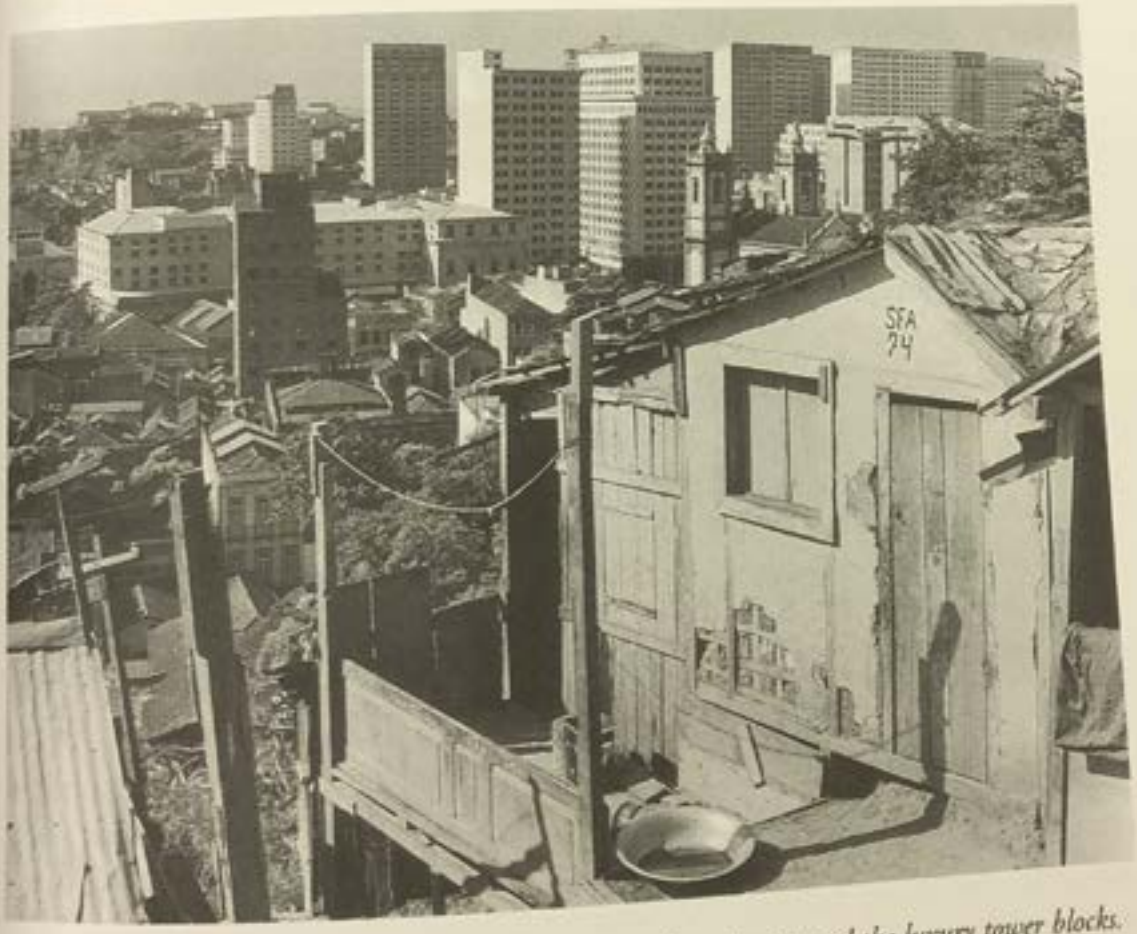
The aesthetics of site have been overlooked, since modern location theory originated at a time during the 19th century when virtually all cities, towns and villages possessed it to such an extent that the aesthetic assets of each were cancelled out by the beauty of the others. Even the most remote western villages in Colorado boasted an opera house a hundred years ago, as well as museums and decent inns. Austria-Hungary had so many glamorous small capital cities – most of them with

their own opera, palaces, theatres, courts and universities – that each had enough central force to hold beauty in balance across the land.

THE SENSE OF LOCATION

Just as birds choose the ideal location for their nests with their strongly developed siting instincts – and without the help of design consultants – so do certain human groups. Living and working in the *barrios* in Brazil, Colombia and Venezuela, I was struck by the paradox that the rich have luxury flats in high-rise towers at the base of a valley that is frequently choked by pollution, noise and traffic – whereas the poor live in slums on mountainsides overlooking the city, the ocean or the mountains. Even the large *barrio* just north of Guadalajara in Mexico is more pleasantly situated than the city. At Boroka in Papua New Guinea the slums are individual homes set on stilts in one of the most beautifully sheltered ocean bays just outside Port Moresby.

The high level of social happiness that exists in slums often surprises visitors. The slums are medically unhealthy and poverty is great, yet their inhabitants have solved many social and urban problems that bedevil designers elsewhere. There is no loneliness for the old, no lack of supervision for children. But, this high degree



The slums of Rio de Janeiro in Brazil are located high above the city and the luxury tower blocks.

of social happiness aside, what slum dwellers demonstrate from a design viewpoint is that they are one of the five lucky categories of people endowed with a wonderful sense of location. The others four are – according to Leopold Kohr[1] – the aristocrats, the innkeepers, the military and the church. And, as a direct result of their greater freedom to choose, where these favoured groups build or pitch their tents, there it is good to live. And where it is good to live it is also beautiful to live.

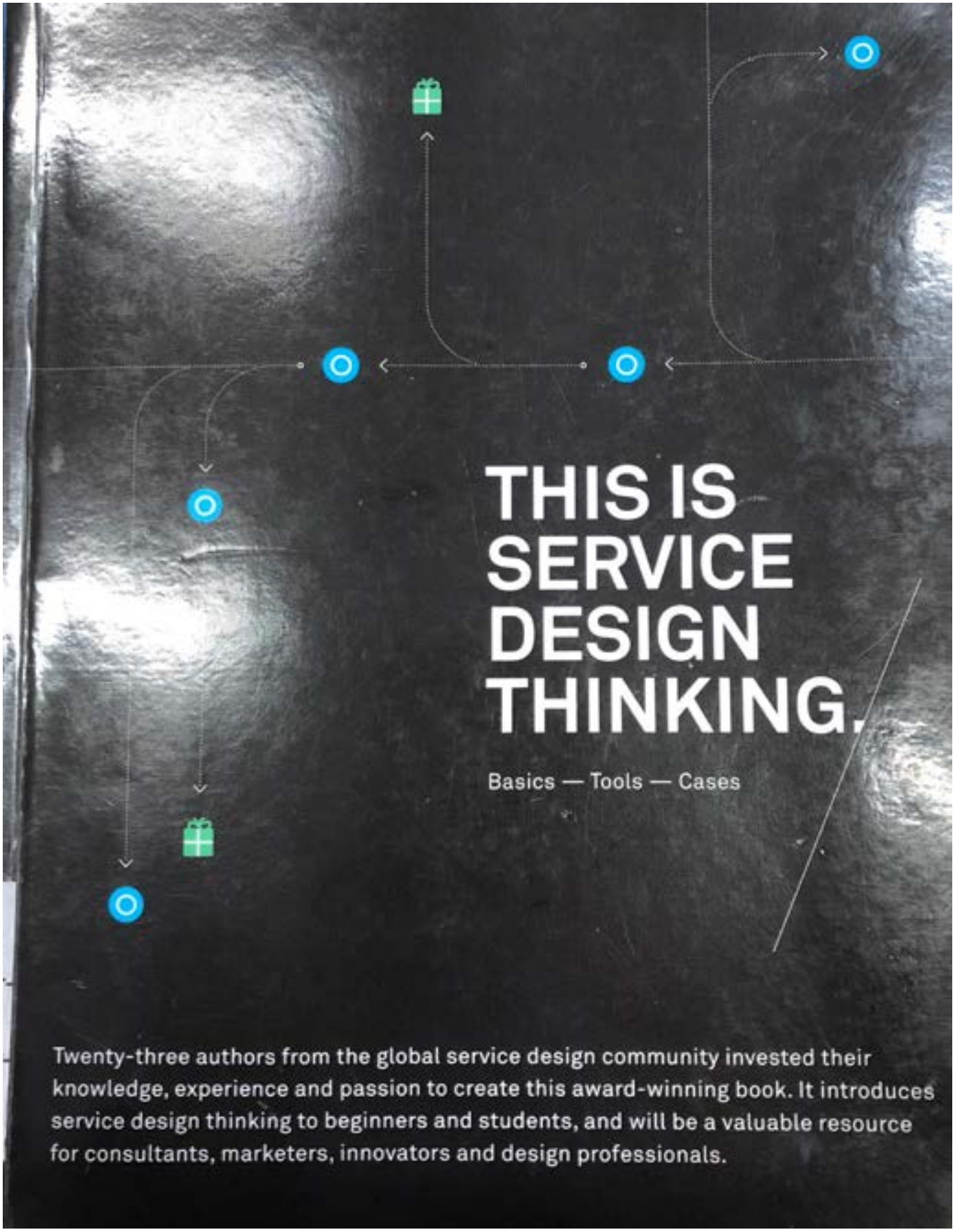
NATURE'S MAGIC NUMBERS

Embarking on a design for an entirely new settlement, we instinctively look for some guidelines. Nothing is as frustrating to a designer as to be given a complete *tabula rasa* without any constraints or limitations. If architects, designers and planners have neglected to use such guidelines in their work, it is because they are unaware that a body of knowledge is emerging that deals primarily with human scale, a recognition of certain magic numbers that are based on our physical, psychological and species abilities.

Our biogenetic heritage governs expectations of size, weight, distance, speed and time. 'Old' measurements like mile, pound, yard, foot, stone, reflect what we can lift or carry easily, and how we used our bodies as templates for measurement. As explained in Chapter 4, the *eidetic image* that we carry with us through life gives us another system for judging harmonious relationships and scale. 'Invented' measuring systems, like the metric system, are as meaningless to us as is the time displayed on a digital watch. Le Corbusier published two books of inaccurate mathematics, trying to fit the metric system to human perceptions, and failed. It is rather ironic that international usage of the metric system has forced us to think in these artificial terms, and to include metric measurements in this book.

Perception and *Gestalt* mechanisms provide more of our magic numbers: all that we have seen growing in nature around us since we were born reflects the Fibonacci series and thus deeply affects our concept of aesthetics. Eye-rotation and distance recognition yield us 'ideal' distances for houses from the street, house heights, and so forth. 'Experienced spaces', that is our familial and personal experiences, help us to find the ideal size for bedroom, kitchen or restaurant. This is modified by cultural constraints: rooms in traditional Japanese farmhouses tend to be smaller than, say, in England – yet the Japanese rooms are multi-functional. Single-function bathrooms in the USA are much bigger than in the Scandinavian countries, but much space is wasted.

Terrain, climate and travelling-time influence distance measurements; for instance, the distances between villages reflect how far a man could walk in a day carrying a load, how far a horse could be ridden or a cart driven; obviously in mountainous countries such as Switzerland, Papua New Guinea or Colombia towns are closer together. As far as the size of communities is concerned, here too



Twenty-three authors from the global service design community invested their knowledge, experience and passion to create this award-winning book. It introduces service design thinking to beginners and students, and will be a valuable resource for consultants, marketers, innovators and design professionals.

SOCIAL DESIGN: DELIVERING POSITIVE SOCIAL IMPACT

KATE ANDREWS

Intentionally or unintentionally, design and its processes have formed and styled the world we live in. Design surrounds everyday life to such an extent that designers and their processes have become largely invisible, vastly misunderstood and subsequently undervalued by society. Service design is playing an important role in shifting these perceptions, by breaking down preconceived notions of creativity, actively illustrating the significant and wider social application of design, and involving more people in the design process.

It is common for design graduates to stand at their degree exhibitions, with little more than a 1m square board on show to illustrate three years of thinking, development and visual and physical output. Such constraints perhaps breed a naive confidence that together with good grades, someone in the industry crowd might recognise the depth and direction of the work that the student displays.

From this perspective, there is much to query and explore in the broader role of design disciplines and how they are positioned alongside other disciplines. Designers possess more than simply an ability to style products; they are practitioners of an applied process of creative skills: identifying problems, researching, analysing, evaluating, synthesising and then conceptualising, testing and communicating solutions. Design, whatever the discipline, is not only about an end product, but rather a systematic process of identifying problems, then researching, creating, testing and implementing solutions.

One can look to the design profession for inspirations on style, but further investigation will show that design offers more than solely the creation and promotion of consumer goods. It is also possible to observe that designers have, through their broad and adaptable skill set, a service to offer to all areas of society. Such broader applications of design have variously been termed "innovation" and "design thinking", two terms that have seen David Kelley's IDEO and D-School gain kudos in the pages of Business Week. This broader application of design was consolidated

Service design is playing an important role in shifting former perceptions, by breaking down preconceived notions of creativity, actively illustrating the significant and wider social application of design, and involving more people in the design process.

in 2009 with the publication of *Change by Design* by IDEO CEO Tim Brown and *The Design of Business: Why Design Thinking is the Next Competitive Advantage* by Roger L. Martin. Design Thinking is now very definitely part of the social consciousness. But to what end?

Exploring the philosophical and historical position of "design thinking", Robert O'Toole explains:

"Design thinking is taking shape as an attitude, as a methodology, as a philosophy. And perhaps also as an approach to learning and designing learning. Certainly if its methods are able to deliver on the promises, unlocking potentials, setting creativity free, but in a collective and collaborative context, aiming for durable and sustainable ends, then it more than envisages an exciting and viable future. How can this be tested? Imagine, discover, think, prototype, test, iterate, implement."

Who are these Service Designers?

As demand for, comprehension of, and the value of design thinking have evolved, a mass of socially motivated designers have united further. Thinking very differently about design, they are using strategic processes to tackle critical issues such as sustainability, unemployment, mental health, homelessness and poverty.

Employing the design process to tackle a social issue or with an intent to improve human lives is known as social design. Although the term is used in an array of contexts and subsequently put to very different uses, social design exists as a way of thinking about what, why and how design (product and/or process) can or does address the ever-changing needs of a society.

Whilst designers have worked with a social conscience, and with a view to modifying societal perceptions for many years, the evolution of this practice has previously appeared embryonic and unsustainable. Methodologies of co-design, social innovation and service design have dramatically broadened the application of "design thinking", giving impetus and stability to a social design movement. One could argue that through these new methodologies, designers are better communicating the value of their creativity.

Social design exists as a way of thinking about what, why and how design (product and/or process) can or does address the ever-changing needs of a society.

In a 2010 feature, written for DesignObserver.com, designer Justin Kemerling explained the potential of interdisciplinary collaboration as a method for delivering positive social impact: *"There's a good chance [that] any given area has people who are good at graphic design, illustra-*

tion, web design, programming, writing, event planning, connection making, community organising, public speaking and joke telling and want to get their hands dirty. Put all those together and you've got something that's ready for positive impact."

Recognising the growth of a potential new design movement, many designers have begun forging multidisciplinary networks with the aims of social improvement through design. Identifying social projects that could benefit from design expertise, and sharing examples of successful practice online, designers have begun to identify how their transferable skills could be utilised, and how intangible ideas can be visualis/

Model Aidpod in a Coca-Cola crate

Who are these Service Designers?

d, communicated and implemented. One example of where a multidisciplinary design team successfully supported a socially focused project is with the story of ColaLife.

In December 2009, as the decade closed, design journalist Alice Rawsthorn confirmed how the "new wave of social designers" had successfully redefined design as more than a creation of "things", however, in her closing line she asked; "Was it enough? Sadly not. Let's hope design does better in the next decade." So, what's next? How do we "do" better? How do we upscale the success of the previous decade and ensure a sustainable social role for design?

The tools and methodologies being developed by service designers provide a unique opportunity for all designers, whatever their discipline, to consider, approach and tackle social issues. As the processes of design become more transparent and accessible to audiences, clients and end users, a better understanding of design's social value will emerge, helping to facilitate a broad and sustainable social application of design.

THIS IS CO-CREATIVE.
CASE STUDY: COLALIFE

In September 2008, ruralnet|uk Chief Executive Simon Berry presented an idea he had to ask Coca-Cola to utilise their global distribution channels to get medical equipment to dying children in Africa. Such a bold ambition demanded consideration of the project holistically, to identify the various systems Coca-Cola employed in its distribution networks and how it might be possible to utilise these for humanitarian purposes. This project would demand an innovative approach to work on new ways of addressing aims and objectives of all stakeholders involved with a view to ensuring maximum social benefit.

The project was heavily marketed through social media channels, something that helped bring together and facilitate the sharing of the different skills of designers interested in taking up this challenge. In effect, social media united participants in pursuit of this bold idea and helped turn it into something simple and accessible for a broad audience to understand, support and participate in. Simon was able to uncover people globally who had skills to aid the project's development. In under a month the Facebook group grew substantially and Simon gained international press coverage. Within six months the project was branded as ColaLife, had its own website, voluntarily designed, had its own animated advert, and an online and offline community of multidisciplinary designers and other supporters backing the campaign.

In 2010 and 2011, ColaLife made it into the idea index of Buckminster Fuller Challenge. Simon and his partner Jane won an UnLtd* Award in June 2010. In the same month they both gave up employment to focus full-time on ColaLife on a voluntary basis. As of today there are local partnerships in Zambia to implement a pilot of ColaLife in 2011. Partners include UNICEF and the local Coca-Cola bottler SABMiller.

This success sprung from a number of designers beginning to think holistically about a given problem and collaborating together effectively through social media and web technologies in pursuit of an innovative and practical solution to a pressing social problem.

Applied Service Design

SNOOK™
transforming people

MYPOLICE AND SNOOK

Mypolice

Mypolice is a limited company that provides qualitative information about user experiences to the police, encouraging a more empathic understanding of the problematic areas within their service delivery. Established in October 2009, it has roots that stretch back to May the same year when the idea was entered into Scotland's first Social Innovation Camp. Mypolice interacts with a wide range of organisations from the public, private and third sector that operate within the field of crime and justice.

Clients of Mypolice include the 53 police forces across the United Kingdom, special forces including the Scottish Crime and Drug Enforcement Agency, independent strategic bodies including the Association of Chief Police Officers, and various third-sector organisations that deal with victims of crime and other associated issues.

Snook

Based in Scotland, Snook works within the field of social innovation and the public sector. Founded by two service designers, the company uses design thinking and creative methods to develop solutions based on empathic user insights. Snook works with organisations to co-create these solutions, ensuring that senior-level policy makers, frontline staff and users are all involved in this process to drive visible changes and transform their thinking. Founded in 2009, Snook has worked with a wide range of different sectors including health, crime, social services and the arts to co-create solutions for our future world and ensure that people are always at the heart of service delivery.

The Police and the public

Aimed currently at the UK, the website is used by the public to give feedback on their experiences with police, comment on local policing and view other user stories and site statistics. The police use the product to respond to concerns and reach new audiences in terms of visibility.

Lack of confidence in the police

There has been a breakdown in communication and trust between the public and the police. In the past ten years, recorded crime rates have fallen considerably; however, according to British Crime Survey Statistics, the public have not felt the impact of this and believe crime is rising. (Kershaw et al., 2008)

Confidence in the police has fallen dramatically. With a broadcast mentality, deeply rooted in tradition, the police find it hard to engage with the public, especially since a large proportion of this audience spend their time online. Police organisations themselves have admitted setting the agenda in traditional forms of consultation and with a risk adverse culture, fear of social media and a lack of understanding the digital world, the police are finding it difficult to join "the conversation online".

"Writing to the police feels so unfamiliar and formal, wish I could just tweet via @mypolice" / "Probably the most impenetrable public service to give feedback to."

Further to this, many interviewees in the design research phase of the project described the current police feedback system as "dated", "closed", "biased", that it had made them feel "pressurised to say the 'right' thing" and "uncomfortable".

Citizens of the UK do not feel listened to by the police.

DISCOVERED USERS' PROBLEM

Creating an independent and neutral space where the police and public can come together. A platform that closes the feedback loop, fostering constructive and collaborative conversations between the public and the police.

SERVICE VISION

The police have in many cases lost the confidence of the British public.

COMPANY'S PROBLEM

SARAH DRUMMOND AND LAUREN CURRIE EXPLAIN

SNOOK'S PROCESS

"... it is often not known whether the deliverable of the design process will be a product, a service, an interface, or something else. The goal of this exploration is to define the fundamental problems and opportunities and to determine what is to be, or should not be, designed and manufactured." (Sanders & Simons, 2009)

In the case of Mypolice, Snook started with an idea and worked their way back. Based on a simple idea, the project team needed to explore the landscape and potential user base, to ask questions like who will use it, when, where, how and why? Moving from the creation stage to the exploration stage, the idea was reframed and a service was built around it to add value to the product. Additions to the Mypolice concept were drawn from first-hand research and based on insights gathered from interactions of the designers with the police and public. In essence, the company started with a light bulb moment and used a service design mindset and research techniques to grow and validate it.

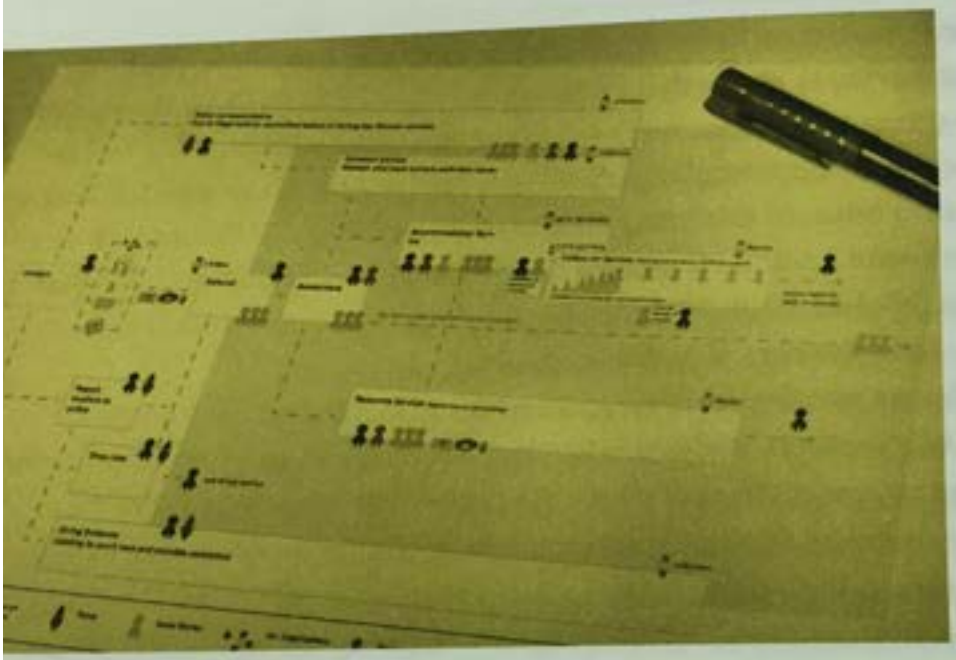
It was Scotland's first Social Innovation Camp opening a call for ideas, when suddenly a friend's experience of feeding back to the police and the fact she spent hours on the internet daily made sense. And so Mypolice was born. Two days of intense development ensued between coders, designers and business experts, with the result becoming the winning idea in the early summer of 2009.

The idea for Mypolice came from different events all happening in parallel. Public confidence in the police had plummeted to an all-time low after the events of the G20 protests when Ian Tomlinson, a newspaper seller, was knocked to the ground by a police officer and died later that day.

This was in addition to a first-hand observation that provided the original stimulus for entering the idea into Social Innovation Camp.

After witnessing a friend feeding back to the police and complaining about having to phone them when they were part of the large demographic who prefer to use computers as a communication method, it was clear there was an opportunity to develop something to fill this gap. Looking at statistics released this year, Nielsen claimed that 80% of online UK users spend around six hours a day on social networking sites and platforms (Nielsen 2010). The idea for Mypolice was a recognition of these facts and a synergy of multiple insights.

Having two days to develop something, in a closed environment, certainly presents challenges in terms of being able to adopt a user-centred design approach. Here is where the backwards work began. The first newspaper headline had been something of a dampener on the experience of winning. With the title "Shop a cop website", the Sunday Times visited the head of the Scottish Police Federation, and painted a blurry picture of the Mypolice concept (Macaskill, 2009). In an attempt to remedy this, the Mypolice team visited Calum Steele, the head of the Scottish Police Federation, and showed him screenshots that had been mocked up during Social Innovation Camp. Calum saw potential and added some helpful comments on what functions it would need to make it work for the police. This was still a case of working backwards from a solution, but represented the first example of where it would be possible to find useful user insights to help successfully reverse-engineer the user centred development of the Mypolice concept.



Stakeholder mapping through user journeys of a victim support service in Glasgow

Exploration: mapping the crime and justice landscape

The development of Mypolice was not simply about developing the product, but also about marketing it and selling it. What must be remembered is that, as much as Mypolice is a product, a website (http://mypolice.org), it is also a service that it provides to the police and the public.

The process began by mapping the crime and justice landscape. This was useful in determining who Mypolice's clients were, what their needs were and how Mypolice would fit into and alongside existing systems. This began by charting police forces, building up a more holistic view of the landscape to include third-sector organisations, local government and national government. Placing these organisations around the concept

of MyPolice made apparent the constraints of who would interact with the service and for whom the service would be useful. This mapping process also helped reveal some of the qualitative and quantitative data that would have to be integrated into the service to make it obvious to users the benefits and utility the service provides. Media organisations sat close to the centre of the circle whilst government sat on the outside. This helped to define what types of functions the service needed to offer to have the most impact in a short period of time and who to target when talking about the concept.

Visually mapping the organisations and how they fit together was beneficial to encourage reflection about what the goals for Mypolice are. Straightforwardly, they are about producing a conversation between the public and the police and introducing social media as a vehicle to do so, but in terms of the bigger picture, the mission is to improve the police's service delivery, put users at the heart of this and eventually inform policy in a more empathic way.

Creation: design as business

During the summer of 2009, Mypolice contacted a local online enthusiast who is part of the community council in Garnethill in Glasgow and worked with him to develop a use-case scenario for how Mypolice could work in a community by setting in a real location and tapping into this potential user's local knowledge to help refine the concept.

"As a discipline, service design should not be viewed in isolation, but as complement to service development, management, operations, and marketing" (Evenson & Dubberly, 2010).

At the time Mypolice was completing funding proposals to get some capital behind the idea and it was interesting to notice the parallels between the questions service designers ask when using certain tools and how funding proposals and early business plans are organised and worded. For example, using the standard categories behind a service blueprint, it was possible to categorise and organise the Mypolice concept into its constituent business components. The first question of a blueprint is how does a user become aware of the service? In a business plan, this is labelled as marketing and broken into two sections: corporate and public facing. More questions from a standard blueprint, like how will someone join the service, use it, grow with it and leave it, allowed the Mypolice team to create a plan of how to answer all these questions using the creative, and most importantly, low-cost techniques that service design offers.

Reflection: prototyping Mypolice

To answer the questions of who will use the MyPolice service and how they will use it, the team began in the local … community cafe with a "Mypolice installation", using a paper prototype method to record people's stories and "tag" them to understand the kinds of things people might want to say on the site.

This involved sitting down with members of the public and openly allowing them to tell of their experiences, then asking them certain questions about what parts of it they would share online and what they wouldn't. These notes were then attached to a wall or placed in a box, depending on whether they chose to be anonymous or not.

This session allowed questioning of people's internet habits and considering other options for accessing the site, including post and satellite TV options. Listening was crucial as asking direct questions about using the internet would have provided negative or quick answers. Users' stories and details about their lives allowed the gathering of insights about how people communicate with public services and the touchpoints they may prefer to use.

A common mistake, and possibly a reason why public sector websites cost the taxpayer large sums of money, is often that an idea conceived high up in the organisational hierarchy, is often untested and taken straight into implementation (BBC News, 2010). The benefit of prototyping with paper is that it costs nothing and it allows us to understand what will and what won't work at a very early stage. Service design and its process is a great money saver!

Exploration: understanding users

In the research stage, to further knowledge and understanding of users, time was spent in locals' homes, interviewing them and finding out how they felt about openly sharing their experiences with and comments on policing. Tours of locally run websites by active members of communities were useful for understanding when it was that people used these sites and, more importantly, gain understanding of why they did. Asking why and understanding the motivation for someone's actions is important to designers. Using the why question presents a designer with insights into people's lives and a deep level of understanding of the choices people make, allowing us to produce more relevant and valuable proposi-

tions as an outcome, in this case, why would someone become motivated to involve themselves in local community issues?

Building from this research and the people I had met, it was possible to construct personas, which enabled design in a people-centred way. Physically making the persona cards is useful as a constant reminder later in the design process, when engulfed in wireframes and technical details of the website, of what people want from it, and how they are likely to use it.

Exploration: marketing, growing awareness

Having answered the standard business questions through the method of a blueprint, the project team was able to figure out all the touchpoints of the service. A large part of this comes through our "marketing department" and involves consideration of how to make people aware of the service. In terms of mass marketing, radio and billboard advertising is a given, but there is a need to think deeper than this. Where are the interactions, with what types of users are you interacting?

As part of the landscape mapping, a big emphasis had been placed on third sector organisations, especially those who deal with victims of crime. During the research phase, time was spent with managers. The focus was mapping their service offerings, looking for interaction points with the police from an organisational and victim point of view and at what time someone would feel ready, emotionally, to submit a story to the Mypolice service or who else might do this.

It was also important to get inside the police networks. Due to some great people, Nick Keane for one from the National Policing Improvement

Agency, it was possible to keynote at conferences and be consulted on the use of social media in the police force.

Being immersed in police culture was interesting. Designers picked up huge amounts just through observation. Visiting police stations, being out on the beat with officers, attending conferences, meeting with both the heads and the frontline staff of the police proved significant for building up an understanding and empathy with the organisations to which Mypolice would relate.

Considering how to reach out to all these people was tough, but by using research (systems maps/personas/shadowing) it was possible to create a brand ethos that would work across all touchpoints. For the Mypolice service, everything needs to be designed, down to the last detail. The wording you choose in an email to thank someone for submitting a story, the card a policeman hands over when they've interacted with a member of the public, a radio advertisement's wording, a poster on a charity's wall, all this and more, needs to be designed. Importantly, the user's journey through the site and through the service and what they get out of it is crucial. To communicate this with police and the public, storyboards were generated to show how users might use the site and what happens after they "leave" it.


Reflection and implementation: planning the build

Once the team behind Mypolice had a clear understanding of what needed to be built and a bit of money behind the project, Mypolice recruited a developer and planning of the building and testing of the product began. In terms of software development, an agile methodology was adopted.

Developing the software iteratively through alpha, beta and gamma stages to establish what works and what doesn't. This gives space to uncover latent user needs and develop functions as the process progresses. Working in this way to develop software is similar to service design methods of rapid prototyping to assess and measure reaction to ideas and service concepts. Regular testing is part of the plan as well as having face-to-face user testing in our schedule and soft launches to see how users move around our website and what types of stories they submit.

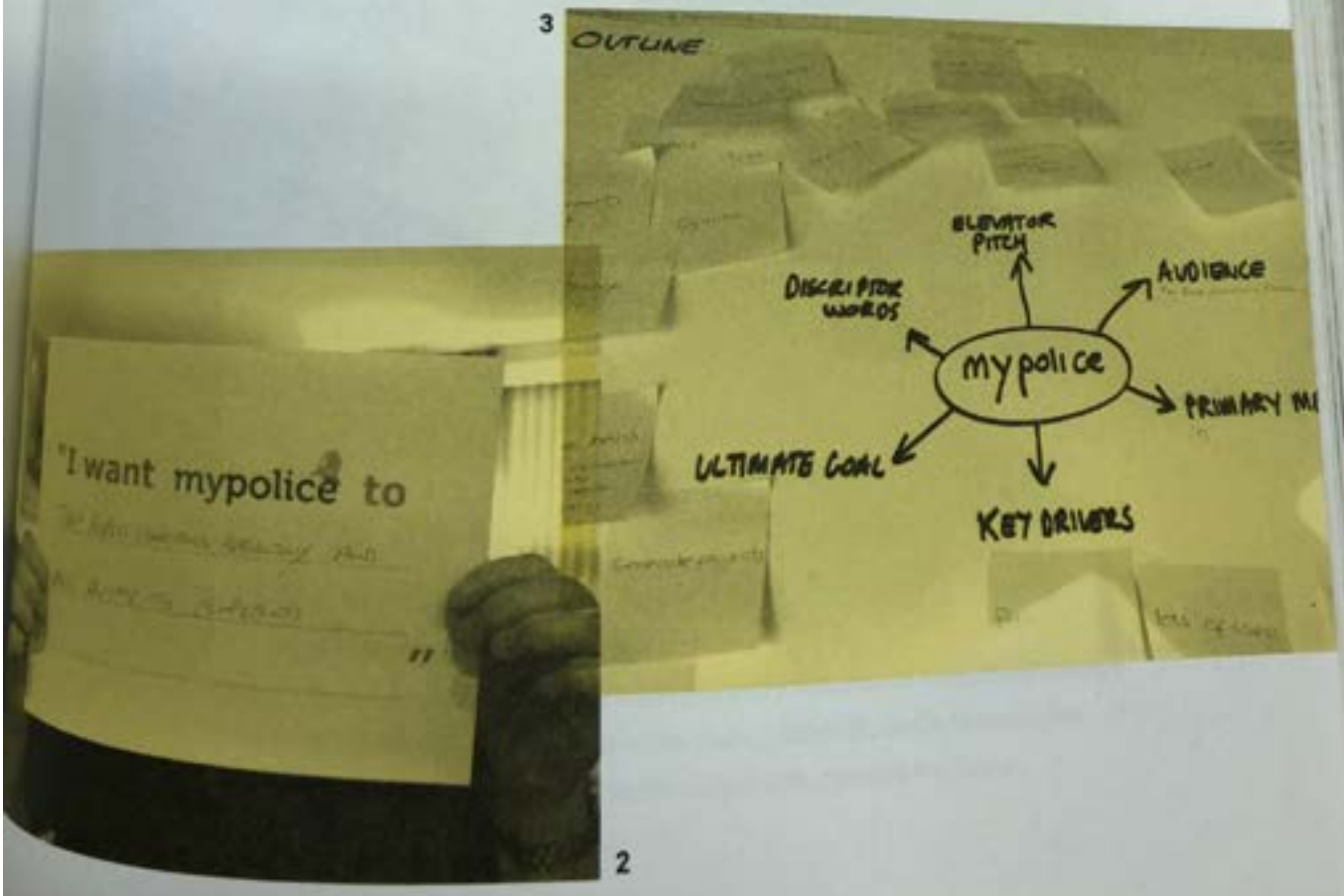
Developing this in stages and pitching this to the police is co-creating a solution that works for them. This entails designing it at a basic level and then going and piloting it with a local police force to see how Mypolice can fit with their system. The pilot is designed to allow tolerance for change in how the service operates and the service design team will be sitting there with police when the first story comes through. To a certain extent, the police's process of response needs to be designed but this is very much an open innovation process of discovery, reflection and response to ensure the development of a product and service that work for both the public and the police.

1 Ruth Kennedy live tweeting on Mypolice at Mypublicservice09
2 Contextual interview with a resident who runs an online portal for their block of flats
3 Branding Mypolice

1

Final statement

Mypolice is about taking what service designers do on a regular basis to a higher level. Specifically, listening, as part of the service design process, becoming a part of what the police do and, in so doing, helping them by positioning ourselves in the middle, between them and the user to quantify qualitative data to make it easier for police to understand. This will help the police empathically respond to user needs, target important areas for development, and close the feedback loop by responding and altering their service both with incremental and radical change where needed.

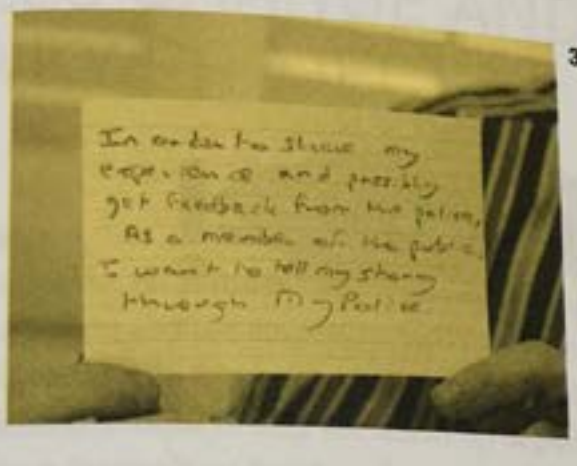


3

2

Applied Service Design

1



3

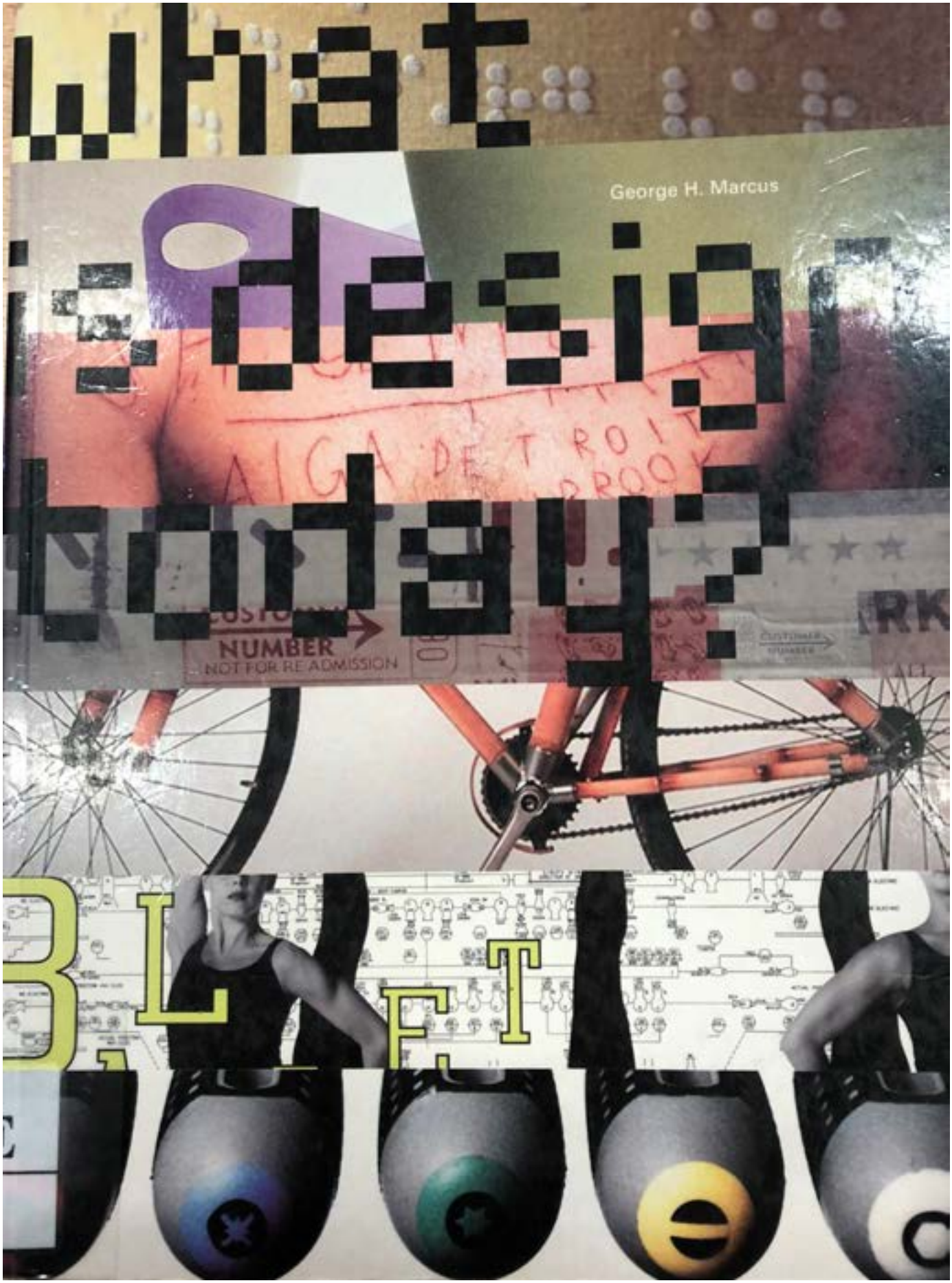
2

4

1 Planning the pilot along a timeline
2 Rapid prototyping the submit a story function at Mypublicservice09
3 Working with Unboxed consultancy to build Use Case scenarios
4 Lauren Currie talking to the public about police feedback

what is design today?

George H. Marcus



1
Since 1985, the annual volumes of the *International Design Yearbook*, compiled by Laurence King Publishing in London, have documented the yearly crop of consumer products, selected and introduced by noted designers and architects.

If you are reading this, you probably have some idea what design is–we all sort of do, we just can't quite put a finger on it. Dictionaries are no help. They define "design" as a sketch or a concept or a process but ignore the common usage that describes what these activities lead to. For those who understand the undefined meaning of this term, "design" signifies all of the objects that surround us–the clothes we wear, the products we use, the vehicles we ride in, the media that communicate with us graphically–which is what this book is about. The lack of a dictionary definition is perplexing since we are accustomed to seeing this term everywhere, on the cover of magazines, as the subject of exhibitions and books (figure 1), and as the focus of entire museum departments. The term "design" has been used in this way for more than a century, even before 1915, when Britain's Design and Industries Association was founded, or 1950, when the Museum of Modern Art in New York City and the Merchandise Mart in Chicago jointly initiated their influential Good Design exhibitions. As early as 1938, the British writer Anthony Bertram lamented the confusion over terminology in his book *Design,* based on a series of lectures on the BBC. "The very word 'design' is a mystery to the common man," he wrote, "almost a clique-word."[1] It still is.

While we all sort of know what design means, coming up with a definition that everyone agrees upon is not that easy, which is perhaps why the dictionaries have not tackled it. Is design an inclusive, value-free term applied across the board to describe all of the products of our day, or is it exclusive, with a particular bias about what an object should look like and what it should be? Must design be modern in its concept, or can it be postmodern–or, heaven

2
Florence Knoll's model living room designed for "An Exhibition for Modern Living" at the Detroit Institute of Arts in 1949 demonstrates the principles of the Good Design aesthetic: simplicity, utility, and economy; emphasis on natural materials; and disdain for applied ornament. (Photograph © 1949 The Detroit Institute of Arts)

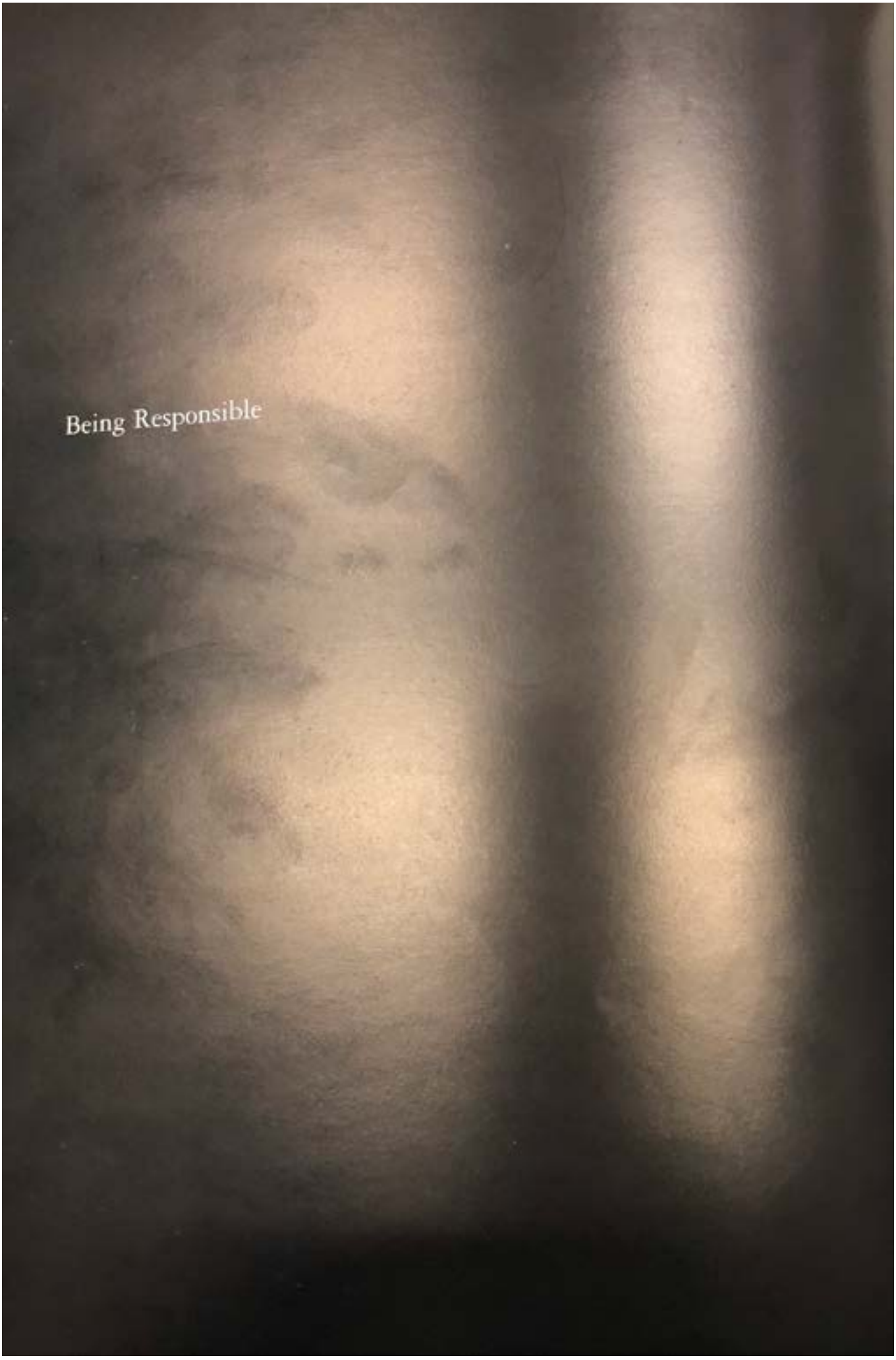
forbid, traditional? Does design have to be produced in a factory, or can a single, lovingly handcrafted object also be design? And must it be useful, or do ornamental objects belong to design as well? Finally, how do such issues as accessibility, ecology, and appropriate technology fit in? Where, in fact, does design begin and where does it end?

The reason we even ask these questions is that we are still wrestling with the legacy of Good Design, a mid-twentieth-century populist movement that attempted to bring products with an economical, no-nonsense, modernist aesthetic to ordinary households (figure 2). Good Design was based on ideas that had originated in mid-nineteenth-century England, when reformers advocated a simple, utilitarian approach to the creation of everyday products as an alternative to the mass of elaborately decorated manufactured goods that the Industrial Revolution had made possible. Instead of accepting the furnishings in a variety of historic and decorative styles that were typically used in their time, Bertram and other proselytizers of the Good Design aesthetic on both sides of the Atlantic sought to impose their own preference for modern forms characterized by austere simplicity, natural materials, and the absence of ornament.

In a book entitled *What Is Modern Design?* published in 1950, the Museum of Modern Art explained the principles of Good Design to postwar consumers. Although the title was posed as a question, the text by the museum's curator, Edgar Kaufmann, Jr., made it very clear that there could be no question about the answer, and he proceeded to list twelve precepts that explained it all:

1. Modern design should fulfill the practical needs of modern life.
2. Modern design should express the spirit of our times.
3. Modern design should benefit by contemporary advances in the fine arts and pure sciences.
4. Modern design should take advantage of new materials and techniques and develop familiar ones.
5. Modern design should develop the forms, textures, and colors that spring from the direct fulfillment of requirements in appropriate materials and techniques.
6. Modern design should express the purpose of an object, never making it seem to be what it is not.
7. Modern design should express the qualities and beauties of the materials used, never making the materials seem to be what they are not.
8. Modern design should express the methods used to make an object, not disguising mass production as handicraft or simulating a technique not used.
9. Modern design should blend the expression of utility, materials, and process into a visually satisfactory whole.
10. Modern design should be simple, its structure evident in its appearance, avoiding extraneous enrichment.
11. Modern design should master the machine for the service of man.
12. Modern design should serve as wide a public as possible, considering modest needs and limited costs no less challenging than the requirements of pomp and luxury.[2]

Good Design was far-reaching but short-lived in its validation of a modern style for the postwar generation as consumers from diverse economic and social levels embraced this new look for a limited time during the early 1950s. But its impact on the design community lasted much longer.


Being Responsible

72
Many more designs than we would expect are not fully tested in the field under the physical and social conditions in which they are to be used. This was the problem with the Florida butterfly ballot that was contested in the presidential election of 2000. This TV demonstration shows the confusion of arrows and listings that caused some voters to cast their ballots for the wrong candidate. (©AFP/CORBIS)

No one who reads newspapers or tunes into the media could be unaware of how design decisions can affect not only our individual lives but also the fabric of our nation. The debacle of the voting controversy in Florida during the presidential election of 2000, for example, when the form of the paper ballot left many voters unsure of which number to punch for their candidate (figure 72) and when flaws in the VotaMatic machine resulted in the incompletely punched paper chads,[35] pointed out what can happen if poor and untested design is presented to the public. At the same time that Americans were becoming aware of the political implications of poor design, newspapers were filled with articles about how safety could be affected by design, witnessing the recall of millions of Firestone tires that were said to have contributed to rollover deaths in the Ford Explorer. In its reporting, the *New York Times* was able to track down a series of "compromises" accepted during the development of this popular sport-utility vehicle that had put cost savings and the need to bring the Explorer to market quickly ahead of its stability and safety.[36] These, of course, are not the only instances in which problems in everyday objects and everyday experiences have been pinned on the acceptance of poor design–the notorious VCR, which ceaselessly flashes 12:00 because we can't figure out how to set it, is a common and frustrating example.

While we have been forced to become responsible in certain areas, for example, through product-safety legislation and with the introduction of seat belts, air bags, and other such features on automobiles, our health and our natural resources as well as our institutions and our overall safety are repeatedly at the mercy of a system that does not make responsibility in

design a national or international priority. Although the positive economic and social repercussions that can come from a national effort toward the improvement of basic design have been recognized, the United States has not embraced this on a government level as have other countries (especially Great Britain, which includes design studies as part of its national school curriculum) but relies on corporations, museums, and professional schools and societies to further efforts in this direction.

Although it would seem obvious that throughout each stage of design products would be studied both in the designer's studio and in real-world situations so that problems of functionality, usability, and safety could be worked out, this is often not the case, as the psychologist Donald A. Norman has shown in his eye-opening book *The Design of Everyday Things*. "What about my inability to use the simple things of everyday life?," he complains. "I can use complicated things. I am quite expert at computers, and electronics, and complex laboratory equipment. Why do I have trouble with doors, light switches, and water faucets? How come I can work a multimillion-dollar computer installation, but not my home refrigerator? While we all blame ourselves, the real culprit–faulty design–goes undetected. And millions of people feel themselves to be mechanically inept."[37] Norman lays some of the problems of the lack of usability of everyday objects on the arrogance of designers, who assume we are able or willing to follow detailed instructions about how to use them; and on manufacturers, who instead of simplifying products add more and more features to individualize them in the hopes of making them more marketable. He also shows that many common problems with products could be avoided if designers followed very simple principles,

such as providing visual clues as to how an object works, putting controls into the natural sequence in which they are to be used, and then giving feedback so that we know if our actions have been successful. Faced with poor design, we often are presented with new products created to remedy the problems of the earlier ones, such as lumbar supports for uncomfortable chairs or ergonomic accessories to ease the strains of working in unnatural positions that result in carpal tunnel syndrome.

If we extend our vision of responsibility beyond individual objects to their societal context, the primary concern in design today must be universal access, to bring the basics of industrial design–sanitation, electricity and communications, adequate tools–to developing nations. This is a moral and not a financial issue, and even in periods of international economic downturn, the disparity between haves and have nots leaves us no choice but to work toward alleviating the desperate conditions under which so much of the world's population lives. This is a goal that could be achieved with a relatively small outlay if the roadblocks of bureaucracy and politics could be overturned. The introduction of appropriate design and technology in concert with the needs and wishes of local populations can open up the process of providing both locally desirable and culturally specific utilitarian products to those who require them and access to the means to make products for themselves and for sale.

Craft economies in developing nations have been battered by the evolution of technologies and changes in consumer preferences (from pottery to plastics, for example). The choice for local craftspeople who remain outside of the

73
IKEA manufactures its products in large volume, which, along with knockdown packaging, results in affordable prices as demonstrated by its painted Edvard chair designed by Nike Karlsson (1998).

74
Blu Dot's web site clearly states its philosophy of selling "design you can actually afford."

global manufacturing system seems to fall into two categories, each of which impacts their economy in a different way. On the one hand, designers can devise new products for local manufacture that will meet the requirements of indigenous populations, and on the other, the government and other organizations can put industries in touch with tourist or ethnic-export markets, where traditional shapes, motifs, and decorative designs can be used in new ways to bring income to the locale. Local, national, and international initiatives–both commercial (figure 86) and nonprofit (such as that of Ten Thousand Villages, an organization that commissions products from village craftspeople for sale abroad)–have been credited with creating new markets, but the task of turning craftsmanship into new products and international sales calls for the mediation of cultural differences between makers and their distant customers. As much as industrial societies sentimentalize the hand craftsmanship that has been lost to them but is still in evidence elsewhere, it is unrealistic to think that large pockets of traditional craft activity will survive much longer. As the Indian designer and critic Martand Singh has pointedly shown, "We can look at an earthen pot and say, isn't this a great object, and we must sustain more and more of these great objects, because that is ethnic chic. And ethnic chic does arise out of our inability to create new horizons for craft. And our inability to accept the fact that the man who makes [the pot] wishes to become like you and wear a watch which is industrially produced and shoes which are industrially produced and live in a house with a fridge, have a fan or air conditioner or whatever, and none of this is related to traditional craft."[38] We must recognize that these same craft abilities have wider application to the field of skilled industrial production.

Even in industrialized countries, quality, well-designed products have not been consistently available to those who are less well off and who must rely on the cheap and often poorly thought-out merchandise sold by mass or cut-rate marketers. Although they do not aim specifically at the lowest population segments, some major retailers, such as Habitat in Great Britain and IKEA, offer well-designed and reasonably priced objects in an effort that recalls the democratic ideals, and sometimes the forms, of Good Design (figure 73). Blu Dot, an American firm, also creates flexible, knockdown furniture and accessories made for easy, economical distribution in a consistently more progressive style (figure 74).

Sustainability–the creation of environmentally sound products made from renewable resources–is the overarching concern for those who would be both forward-looking and responsible in the creation of design today. The emergence of a critical mass of activism in the United States for all aspects of the environment dates back to Earth Day 1970, when twenty million Americans marched throughout the nation to express their support for efforts to restore the well-being of the planet. Efforts to coordinate international environmental activity culminated at the 1972 Stockholm Conference on the Human Environment, which ceded control of that initiative to the United Nations. At first the proposed ecological solutions leaned heavily toward the cleanup of hazardous conditions and recycling; at the same time a retrogressive, anti-industrial stance emerged, manifested by a back-to-nature commune movement and such do-it-yourself publications as the *Whole Earth Catalog* (from 1968). Today the viewpoint is more proactive, focusing on the need to cut pollution, reduce the consumption of fossil fuels, and make

76
Toyota's Prius was the first hybrid family car to be sold in the United States (2001), responding to federal requirements for automobiles with lower emissions levels. As this advertisement shows, the Prius runs on dual energy sources, a gasoline engine and an electric motor, which alternate according to the particular driving circumstances. For normal driving, the gasoline engine is in use, but the electric motor takes over when the car slows down or idles, and the energy produced by deceleration is captured and converted to charge the battery. This results in fuel savings and lower pollution.

industry sustainable while recognizing that recycling efforts do not solve the underlying issues of the destruction of our resources. We must consider the impact of products in all stages of their life cycle, from materials and manufacturing to packaging and disposal, in order to assess their environmental impact. But we still have an uphill environmental battle before us, as was demonstrated by the uneasiness of the United States at the prospect of signing the Kyoto accord on global warming in 2001–and as Francesco Simeti reminds us ironically in his wallpaper showing muted scenes of toxic contamination removal amid decorative vignettes in an eighteenth-century format (figure 75).

In the 1970s, ecological design was often self-conscious, calling attention to itself–and to what was then its fringe, often deprecated as "hippie," advocates. After thirty years, ecological design has been mainstreamed, and responsible design generally eschews being obviously so as it reaches into all areas of the economy. Toyota's Prius, the first hybrid five-passenger car to be sold in the United States, combines an electric motor and gasoline engine to reduce energy use and harmful emissions but looks and performs very much like any other car on the road (figure 76). Yemm & Hart, an American company that recycles tires and plastics for construction materials, uses 100 percent postconsumer polyethylene from bottles for their Origins line (figure 77). They joyfully exploit it by artfully blending the flakes of shredded plastic and molding them into panels with multicolored, random patterns: "By making a recycled material look and feel desirable," and by adding several colors to plastics, which usually have a single color, "the material takes a step forward, changing the use of recycled materials from a cause to a common place."[39] But

77
Yemm & Hart recycles plastic bottles for its Origins surfacing products, which have colorful, decorative patterns that extend throughout the thickness of the material. In order to produce these materials, the bottles must be collected, sorted by color and shredded, and then blended into specific color mixtures.

some designers still want to broadcast their commitment to environmentally friendly design in order to capture a concerned audience or to encourage others to understand its benefits. The design firm Bär + Knell works with the German recycling institute to promote the use of recycled materials in manufacturing. Their mass-produced but one-of-a-kind furniture proudly announces its source in recycled plastic containers by incorporating the products' labels into their surface (figure 78). At the same time, they have introduced recycled bottles anonymously in a multicolored confetti pattern or in solid colors by rethinking the seats of a line of office chairs designed by Egon Eiermann in the 1950s and manufactured by the German company Wilde + Spieth.

Investigation into new materials and processes has uncovered sustainable sources that can replace conventional ones that have proved environmentally harmful. Biopolymers, such as those made from potato starch and cornstarch, have the same characteristics as certain plastics and can be molded and formed in the same ways, but they are fully biodegradable. Cargill Dow's NatureWorks plastics derived from corn and other plants are made into a variety of fibers, packaging, and other forms but will break down naturally when they are discarded, as will KidTech Tools' Magic Nuudles colorful building material created from cornstarch. Plants in their unprocessed forms are readily available sources for sustainable production. Bamboo, one of the planet's most vital plants, is virtually inexhaustible while gourds, bark, and wild (or other easily cultivated) plants are readily available for fiber use. Bamboo and rattan furniture have long been at the center of craft industry in Southeast Asia, and new uses for these plants are being introduced. Bamboo

composites have wide possibilities for flooring and are being introduced as well for surfboards and skateboards. Bamboo is again being considered for bicycles both decoratively and structurally (figure 79), as it had been in the late nineteenth century, replacing their metal frames on account of its great strength (greater than steel for tension). The architect Michael McDonough, cofounder of the Bamboo Research Initiative at the Rhode Island School of Design in Providence, brought high-tech considerations to design in bamboo with his laminated-bamboo chairs (figure 80). Wood, when farmed properly, is another renewable source for ecologically sound manufacture. The Finnish designer Ritva Puotila employs ecologically produced and organically dyed spun-paper yarns for her sustainable Woodnotes carpet collection.

The greatest focus has gone, however, to the utopian thinker William McDonough (no relation to Michael McDonough), who has become the poster child for responsible, environmentally sensitive, and sustainable design. An American architect of outstanding eco-friendly buildings for such firms as Nike and the Gap, McDonough has been celebrated both professionally and popularly; he was named 1999 Designer of the Year by *Interiors* magazine and was featured as one of the Heroes for the Planet in *Time* magazine the same year.[40] In 1995, in association with his partner Michael Braungart, a German chemist, he joined a group of well-known architects and designers in launching a new line of upholstery fabrics for DesignTex. But instead of accepting the company's seemingly ecologically sound suggestions to use natural cotton and fibers made from recycled plastic bottles for his designs (he questioned cotton because of the large amounts of herbicides used in its production and the recycled plastic because of the harm its unknown

components might bring to the human body), he insisted that the entire manufacturing process be reevaluated to make the production of his textiles environmentally safe and sustainable. This extended beyond the selection of a combination of organic animal (wool) and plant (ramie) fibers, which together would create a fabric that was cool in summer and warm in winter, to establishing strict ecological criteria for the choice of the dyes and other chemicals used in the manufacture, the monitoring of energy and water consumption and quality during the production process, and even consideration of the lubricants used on the machinery. The resulting fabrics (figures 81, 82) were executed according to what they have named–and trademarked–the McDonough Braungart Sustainable Design Protocol. As product conceptualists, they categorize products based on environmental values; after eliminating those that are harmful (and thus should not be made at all), they divide those they consider viable into two different spheres of sustainability in what they call "cradle-to-cradle" life cycles. Organic "Products of Consumption," everything from clothing to packaging, are meant to be biodegradable; after use they can be thrown on the compost heap and returned as nutrients to the soil. Technological "Products of Service," such as automobiles and television sets, follow their own closed cycle of use and reuse; when disposed of, many of their elements can be remanufactured into similar products rather than "downcycling" them into a sphere of lesser commercial value.[41]

Design for disassembly and remanufacture is a major initiative for sustainability that has been adopted as a national policy in some countries. In Germany, for example, products such as home appliances and electronics

textile collections for DesignTex follow the strict manufacturing procedures of his "cradle-to-cradle" life-cycle protocol of product sustainability but appear to the user like any other fabric.

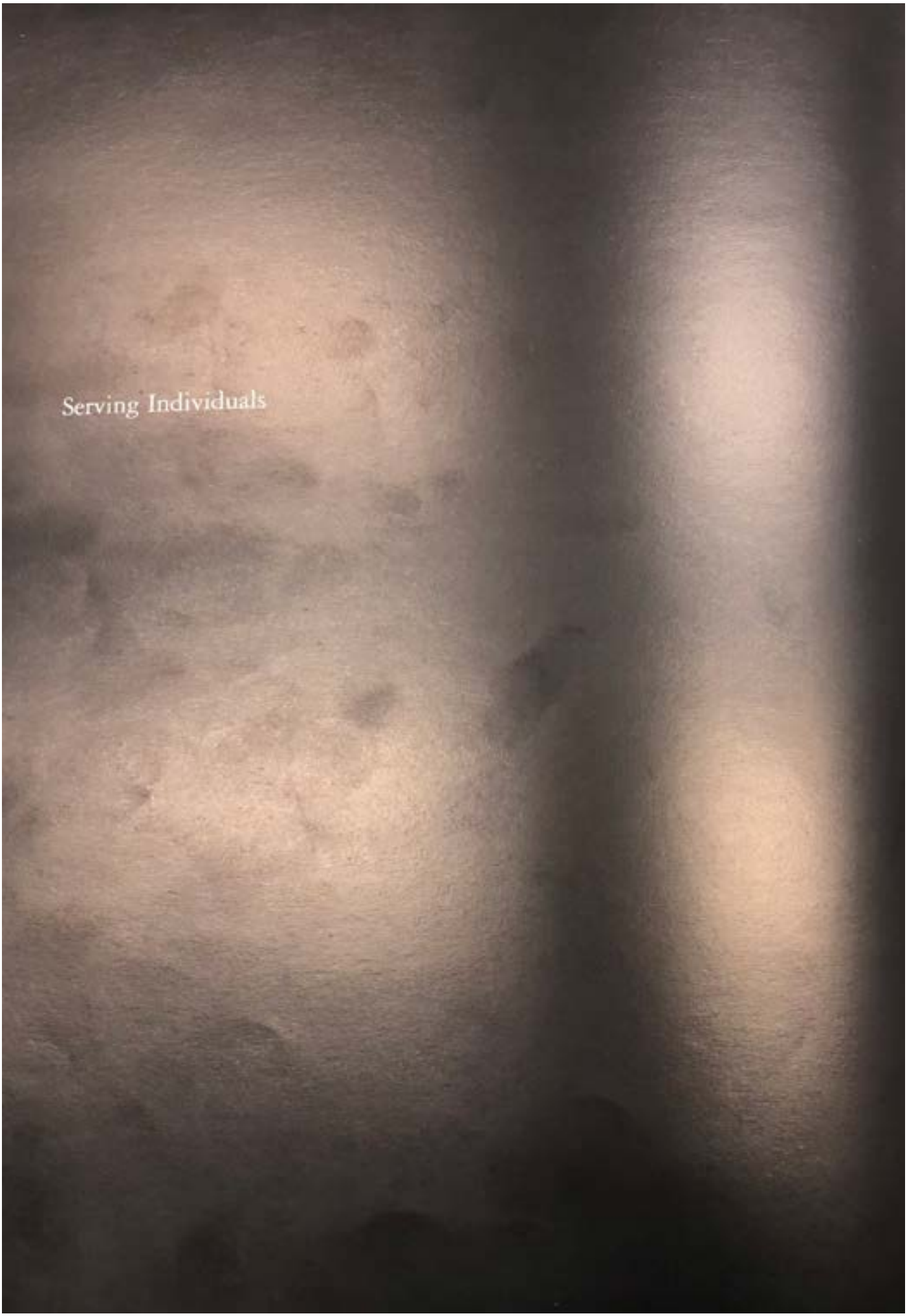
collection by William McDonough for DesignTex (2001), comes in fourteen colors, is fully biodegradable, and is made without harmful dyes or production processes.

must be designed in a manner that allows for easy disassembly when they are no longer needed; their individual components are either readied for reuse and remanufacture or their materials are easily separated for recycling, having been clearly identified during production. Packaging, too, must be minimal, devoid of advertising, and taken back by the manufacturer. This approach has been extended on an even larger scale to automobiles within the European Union with its end-of-life vehicle directive. By 2007 all European automobiles must be made so they can be returned to the manufacturer for convenient disposal processing; they will be taken apart when their useful lives are over and broken down into components that can be remanufactured, recycled, or disposed of properly (figure 83). Remanufacturing also is being taken up globally, as much to keep costs down as to be green and reduce landfills. Xerox designs its copiers so that the parts can be reused or remanufactured while Kodak collects "disposable" cameras and reuses elements from them in new ones. American automobile manufacturers also are investing in disassembly plants to recapture usable elements from earlier models.

Manufacturers often use leftovers and production waste, such as trimmings, to make additional products, as Rossignol does with snowboards and as many paper manufacturers do. Shredded plastic bottles, a major consumer disposable, have found a multiplicity of uses, including the making of insulating clothing fibers such as Polartec fleece. A simpler approach to recycling extends the useful life of materials and products with little physical change: Boris Bally reclaims large metal traffic signs and makes them into furniture and vessels in his "Urban Enamels" series (figure 84) and the Swiss company Freitag collects tarpaulins from European trucks and recycles them

87
Jurgen Bey's Gardening bench for Droog Design (1999) suggests one path toward noninterventive design. Made of hay, leaves, and resin, it follows its own life cycle and eventually reduces to compost.

into their Freeway shoulder bags (figure 85) and accessories, which have earned a cult following.[42] Craftspeople as far removed as Zimbabwe and Mexico collect tin cans to use as a raw material for making toys and basic products for the home (figure 86). Jurgen Bey in his Gardening bench for Droog Design suggests a way that we might make even simpler products with virtually no intervention in the life-cycle process. He has pressed hay and leaves with resin to form nondurable furniture, which is naturally recycled when exposure to the elements makes it no longer suitable for use (figure 87). Recycling and reuse are still the most practical areas for public intervention in green design because anything that can be recycled avoids, if only for the moment, adding to civilization's landfills.


Serving Individuals

88
Backpacks and suitcases with handles and wheels are examples of products that aim at the inclusivity of universal design, making the transporting of heavy loads easier for all.

The Class Act schoolbook backpack from the retailing cooperative REI (2001) comes with in-line skate wheels and a T-bar handle for easy rolling and with strong harnesses and straps for carrying on the back.

Nothing has had as much impact on the human side of design in the United States as the passage of the Americans with Disabilities Act of 1990 (ADA). More than just mandating barrier-free accessibility to public accommodations of every sort, the act established the principle of universal inclusivity. It legislated equal access to all facilities available to the public instead of creating a separate category of accommodation for those with physical and mental disabilities. The mandate to mainstream those who were blind or wheelchair users, for example, forced architects, designers, and social planners to reconsider the configuration of architectural spaces, particularly entries, corridors, and toilets; transportation facilities; and communications media. While the most immediate and most visible effect of the act was the creation of ramps on buildings throughout the country, the impact was all-encompassing.

Unwittingly, the ADA brought enormous benefits to the public at large. The simple changes that accrued and made everyone's life easier, such as larger, clearer signage that was much easier to read and the convenience of ramps or curb cuts for those with baby carriages or luggage on wheels–itself a product with universal applicability (figure 88)–pointed out the values that ADA reassessment of design could have for the entire population and pushed to the forefront the universal design, or design-for-all, movement. Following the spirit of the ADA, universal design is an approach that is inclusive, that aims to create facilities and products that everyone can and wants to use rather than those that are directed to particular segments of the population and that set them apart from the rest of society. It recognizes that all of us who today may be able eventually will need some of the accommodating features now found

in design for special needs, and thus making products universally accessible is both a logical and a sound social and economic goal. The range of universal design can extend even further when it brings products closer to the abilities of those with greater needs even if it does not reach them, since it then allows products to be adapted more economically and efficiently if required. But universal, and transgenerational, design as we know it today has limits; it is directed to the generic adult population, without gender or cultural distinctions, and excludes children, often purposely so for reasons of safety or because they may not be developmentally able to use certain types of products. Design for children is a separate area (figure 89; see figure 21) with its own universal design and accessibility standards.

Giving thought to including as much as possible of the technology and the elements that individuals who are left handed, aged, or impaired require at the beginning of the design process is the secret of universal design; choosing levers for door handles (figure 90) instead of the more difficult to maneuver round handles commonly used in American houses is a good example of a universal application about which most people would not think twice. Ameriphone's Dialogue ER telephone (figure 91) includes features that might well be desired by all users: big buttons for manual dialing, photo-display for speed dialing, and variable sound amplification. But these same features serve to enhance the abilities of those with special needs, impaired eyesight and memory, and hearing loss. In addition, the telephone has an emergency-response system of prerecorded dialing, which brings reassurance to seniors and those who live alone that they can press a button and automatically alert family or the authorities should an emergency occur.

92
Zelco's electronic Aqua Pilltimer lets us know with an alarm or a beep when it is time to take our medicine and makes it convenient by carrying a water supply and straw along with our pills. Its features are equally applicable to those who need special help in remembering to take their medications and those whose busy lives distract them from their schedules.

Likewise, Zelco's Aqua Pilltimer (figure 92), which holds water and pills and has a programmable timer that reminds us when it is time for our medicine, is a convenience for anyone who takes medicines regularly but also works to the benefit of those who may be forgetful in old age. OXO's Good Grips kitchen utensils and the large range of related products (figure 93) that followed upon the success of its first line designed by Smart Design and introduced in 1990 speak for the viability of universal design, and even the branding value of a design element added to accommodate disabilities. These utensils have a signature thick, black, nonslip handle with a flexible indent at top, which makes gripping easier for those with arthritis and other grasp impairments (for whose capabilities they were conceived), but work equally well for everyone. Many purchasers do not even consider the benefit of the grip when they buy these products but choose them for their weight, feel, and materials, their quality of manufacture, and their style without knowing anything about their origin in design for a special need.

Ergonomics and human factors, two allied fields that are integral to design today, work together to make products that serve specific needs for individuals of all capabilities. The science of ergonomics focuses on creating products in a way that will make them more effective, efficient, and easier to use and more comfortable for the user (figures 94, 95). One of the tools of ergonomics is human-factors engineering, which takes into account the physical and psychological needs of the user, relying on anthropometric data, the measurement of the human body and the way it functions, to improve the suitability of a design. Designers frequently consult anthropometric data published in journals and in the series of charts in the *Humanscale* statistical

96
There is no way to tell if these toothbrushes are created with true ergonomic research or use "ergonomic" elements simply for style.

97
Oral-B Laboratories' CrossAction toothbrush, designed by Lunar Design (1999), was the outcome of extensive documented research into the ergonomics of brushing and the bacteria-fighting action of head design so that the benefits of dental care could be maximized.

surveys[43] as a source for information on standard human measurements, which aids them in deciding on the shape and relationship of the elements of their products before they are tested, although these are general data based on averages. Human-factors engineering has most steadily been applied to design for the workplace to ease the strain of performing repeated tasks endlessly on the assembly line, sitting in one position for a long amount of time, or working at a keyboard. Office furniture especially has been a recent focus of this research. Herman Miller's Aeron chair designed by Dan Chadwick and Bill Stumpf in 1994 set the industry standard for ergonomically conceived office chairs, and many other manufacturers have followed their lead, bringing out second- and third-generation concepts of comfortable office seating.

The aura of ergonomics also has invaded many areas of design for personal, everyday use. There is no standard requirement for the use of the "ergonomics" label, and it has been applied as much to a look as to the result of actual human-factors research. Toothbrush design has been a particular focus of this; over the last decade, a great many toothbrushes with striking new designs have appeared on the market (figure 96), and there has been much confusion between those that reflect the thought and research required for the production of ergonomic toothbrushes, those that use the ergonomic look as a marketing ploy, and those created for style alone. In 1993, Philippe Starck set a design precedent with his much-celebrated toothbrush that borrowed its shape from the fluid, airy form of Brancusi's famous abstract sculpture of a bird in flight and came with its own display stand. Starck, taking his unique approach of situational thinking, understood the toothbrush as "a basic nonproduct. Everyone needs one, and they're all much the same. But," he

thought, "if, first thing in the morning, you had something bright and cheerful sitting on the shelf waiting for you, it would be like opening the bathroom window onto a summer landscape every day."[44] At the other end of the spectrum, Oral-B relied on extensive ergonomic and materials research for its CrossAction toothbrush (figure 97), introduced in 1999,[45] with thorough documentation that is publicly accessible. During the studies, it was discovered, for example, that we use five different ways of gripping the handle of our toothbrushes; these were then thoroughly considered when the soft, polyurethane-foam handle was designed.[46] But consumers have no way of knowing which companies actually test their designs, as Oral-B did, and which merely design products to have what has come to be considered an ergonomic look. In the same way, the pen and razor industries have adopted an ergonomic vocabulary often without acknowledgment of whether serious testing has taken place.

Many products and systems designed specifically for, and often in collaboration with, those with disabilities also have found universal applications, especially in the area of communications. Text-to-speech software, created originally for the blind, has become widely used among the general population for retrieving e-mail messages over the telephone while closed captions, which make television accessible to those with hearing loss, are introduced in public areas where sound transmission is not viable or not desirable. Computers can now be readily adapted for the blind, for the color-blind, and for those with impaired vision, and many of those special features have substantial wider applications, too. Both Windows and Mac software have numerous accessibility options built into their operating systems, including voice alerts to let us

know about technical malfunctions, easy-to-effect type zooms, and the ability to change both the contrast and the color of the screen. Those with physical impairments who type with one finger or a mouth wand can use the sticky-key features that allow command keys and letter keys to be typed sequentially instead of having to hold two or three down at the same time.

The aging population, who gradually need more and more adaptive devices, and the disabled are served by an increasing number of purpose-designed objects and interior accommodations (figure 98), which help them maintain independent and active lifestyles. Products as simple as plastic loops that attach to keys as an aid in opening locks and grips that convert doorknobs to levers, and as technologically sophisticated and complex as the Independence IBOT wheelchair, which Dean Kamen has been developing, exemplify their range. Kamen's amazing mobility-enhancing device will allow the chair to traverse rough terrain, mount a staircase, and raise itself on one set of wheels, making users feel as if they were standing up. But products designed for special needs can be not only physically enabling, they can be enriching and poetic, too. Blind, a yellow upholstery fabric from the Swedish group Saldo (figure 99), is printed with what to the sighted may look like randomly patterned white polka dots but is recognized by blind people who touch it as Braille. The raised text aims to convey the sensation and emotional component of the color yellow in the words of six different authors. This fabric attempts to bring accessibility to a new level of inclusion by imbuing the design with a special message, although the young designers who created it are aware that their pursuit is not without controversy. "How do you describe something that you perceive with one of your senses to a person who doesn't have that

particular sense?" Saldo asks. "Is it possible to give a blind person the 'sight' or 'feel' of a color even if that person has never seen yellow, orange, blue...? Can something beyond description be conveyed? Can you talk about silence or is that something that only fools do? How do you explain the color yellow to a person who is blind?"[47]

All of us, regardless of our physical needs, respond to products that satisfy our inner needs, that contribute to our comfort, spirit, and sense of well-being. We all feel better when a product meets our particular specifications, whether for fit, function, or style, and the large-scale availability of customization is now helping us achieve this. And we are enlarged emotionally when products evoke feelings within us and when we respond to the varied messages they convey.

Webgrafia

https://www.homy.pt/5-projetos-de-design-social/

http://www.cm-lisboa.pt/viver/intervencao-social/atlas-social-de-lisboa

https://www.almostlocals.com/a-avo-veio-trabalhar/

https://www.dn.pt/sociedade/interior/cozinha-comunitaria--premiada-esta-a-funcionar-como-armazem-5027416.html

https://constructive-optimism.com/IV-Design-Inception

http://lisboaenova.org/wp/eco-bairro-boavista-ambiente/

https://www.publico.pt/2015/11/22/culturaipsilon/noticia/joao-seixas-as-cidades-sao-grandes-espelhos-de-nos-proprios-1715219#gs.FujudGN2

http://www.cm-lisboa.pt/investir/noticias/detalhe-da-noticia/article/mouradia-casa-comunitaria-da-mouraria-aberta-ao-publico

https://naruacomhistorias.pt/o-projecto/

https://ami.org.pt/blog/projeto-comunidade-um-espaco-do-bairro-bairro/

https://www.publico.pt/2013/03/24/jornal/na-cozinha-popular-da-mouraria-todos-comem-e-todos-cozinham-26228558#gs.8YiizzuW

http://www.illegalbeauty.com/

http://socialdesign.ac.at/

https://designbyby.blogs.sapo.pt/8970.html