Flusser Studies 21 – June 2016

Introduction 2
Lucia Santaella, *Astúcias do Design* 5
Michael Hanke, *Vilém Flusser’s Philosophy of Design* 16
Andrew Hieronymi, *Autotelic Digital Play: Flusser and the Gesture of Smoking a Pipe* 44
Priscila Arantes / Sérgio Nesteriuk, *Programing the Visible: Dialogues between Vilém Flusser and Harun Farocki* 45
Lucas Bambozzi, *Do invisível ao redor: o que se vê e o que não é aparente* 56
Ana Pato, *O tradutor e a janela: Entre o método e a prática* 68
Rafael Cardoso, *Exhibiting the Archive* 78
Simone Osthoff, *International Symposium Transcoding Flusser* 83
Biographies 86
**Introduction**

*Flusser Studies* 21 focuses on design and emphasizes Vilém Flusser’s original contribution to a philosophy of design, which reverberates with his concepts of communication, media, gestures, translation, and technical images. Unfortunately, as Lucia Santaella pointed out in her essay, the originality of his approach has not yet been sufficiently studied, especially by those in the design field, a situation, which this issue hopes to improve upon. Flusser pointed to a design dimension that is rarely discussed: its power to trick, its meaning as fraud, and the inherent cunning in the art of projecting deception devices. For the philosopher, the design at the base of every culture “tricks nature by technical means, substituting the natural with the artificial (…) and astutely transforming simple mammals conditioned by nature into free artists.”

Lucia Santaella’s contribution, “Astúcias do Design” [Cunning Strategies of Design] therefore opens the discussion. Beginning with the etymology of the word design, she surveys a number of approaches to design, in order to discuss and emphasize Flusser’s original philosophical contribution.

Michael Hanke’s analysis, “Vilém Flusser’s Philosophy of Design: Sketching the Outlines and Mapping the Sources,” continues to engage Flusser’s design philosophy through the discussion of his central publications dedicated to the theme. Hanke’s comprehensive article establishes the origin and context for each essay included in Flusser’s central design books. He analyzes how Flusser developed and articulated a constellation of theorems over three decades by translating central concepts to address different audiences, conference themes, and publication opportunities. He further points out the connections between Flusser and other philosophers, especially Plato and Heidegger, but also Nietzsche and Wittgenstein, which are important references in Flusser’s writings.

Flusser’s approach to design is also deeply connected to his concept of gestures, as the visual essay of Andrew Hieronymi emphasizes. In “Autotelic Digital Play: Flusser and the Gesture of Smoking a Pipe,” Hieronymi examines gestures in video games and interactive art installations. His slide-show intertwines Flusser’s quotes from the “The Gesture of Smoking a Pipe” with images of various forms of interface created by his former students. The result,
both in form and content, adds a fresh and performative perspective to the discussion of gestures, writing, and play.

Priscila Arantes and Sérgio Nesteriuk, “Programing the Visible: Conversations Between Vilém Flusser and Harun Farocki,” expands upon Hieronymi’s examination of videogames, although with a more somber tone. It further connects design, art, and technology by discussing videogames as part of the image criticism developed in different ways by both Farocki and Flusser. In Farocki’s exhibition at the Paço das Artes in São Paulo (Jan.-Mar., 2016), among other works, he examined the fast changes over a few decades of videogame development, from two-dimensional graphics to three-dimensional renderings, designed to keep players engaged in a state of “flow”. The article discusses other media images through the conversation between Farocki and Flusser regarding the first page of the German sensationalist tabloid Bild Zeitun (this video was one of the works in Farocki’s exhibition). While deconstructing the tabloid’s graphic design, Flusser calls attention to how images and words are combined to reinforce a subliminal celebration of violence as something trivial. Central to both the filmmaker’s and the philosopher’s work is the possibility of creating a critical perspective of our media culture. For them, the question of freedom is paramount in a society increasingly programed and dominated by images.

Lucas Bambozzi’s essay “Espaço Informacional: o que se vê e o que não é aparente” [Informational Space: what we see and what is not apparent] focuses upon the material, yet invisible dimension of wireless technology. In the realm of mobile communication, invisible waves are ever more present in the urban fabric, and yet, they are not apparent to the naked eye. An artist based in São Paulo who works with mobile technology all over the world, Bambozzi employs the notion of site-specificity in art to discuss creative processes and artworks that make electromagnetic fields, Hertz waves, and Wi-Fi signals, visible. The article emphasizes the dramatic convergence and crossing of signs and systems of communication in heavily trafficked urban zones such as the center of the city of São Paulo.

Just as Hieronymi expands upon Flusser’s concept of gestures, Ana Pato explores the relationship between design and translation by making reference and building upon Rainer Guldin’s work on Flusser’s theory of translation. Pato’s essay, “O tradutor e a Janela: Entre o Método e a Prática [The Translator and The Window: Between Method and Praxis], employs translation as a method, and connects Flusser’s practice of translation with the archival explorations of the Brazilian artist Mabe Bethônico; more specifically, Bethônico’s
exploration of the archives of the Swiss geographer Edgar Aubert de la Rüe in Geneva. This article approaches history, and an archive of ethnographic studies, in terms of the fluidity between fictional and non-fictional narratives.

We conclude this issue with two reviews: the first, “Exhibiting the Archive,” by Rafael Cardoso, examines the exhibition Without Firm Ground—Flusser and the Arts; and the second, by Simone Osthoff, focuses on the symposium Transcoding Flusser: Synthetic Thinking, which took place this Spring in the Hague. The exhibition Without Firm Ground—Flusser and the Arts was first showcased in the Fall of 2015 at the ZKM in Karlsruhe. In December of 2015, the exhibition travelled to the Akademie der Künste, in Berlin, and in March of 2016, to the West Den Haag in a smaller format. In each of these venues, the exhibition was accompanied by an international symposium. The international symposium Transcoding Flusser: Synthetic Thinking (April 15-16, 2016) continued to advance Flusser’s legacy by examining not only Flusser’s speculations about the future of the digital revolution, but also the connections between concepts he developed early in his 1960s publications, and later in his media theory of the 1980s.

As the authors in this issue argue, Flusser’s original approach to design is an important part of his multidimensional work and it continues to provoke us to think differently about cultural history through the most basic elements of our lives. We hope to encourage new research and we look forward to continuing these discussions in future articles and events about Flusser and design.

Simone Osthoff and Priscila Arantes June 2016
Abstract

Today there is a plurality of design concepts and trends. After a brief presentation of such multifaceted perspectives, this article aims to discuss Vilém Flusser’s concept of design in order to emphasize its originality, which unfortunately has not been sufficiently brought into the light, especially by those who are both practically and/or theoretically involved with design. Moreover, it is a concept that, for its originality, adds complexity to that which is the backbone of design: the notion of project.

Keywords: design, history, postmodern, Flusser, project

A palavra “design” em português é um empréstimo do vocabulário inglês. Esse empréstimo se justifica porque a tradução literal “desenho” parece limitar a espessura e requinte de sentidos do termo tal como aparece no inglês, desde a sua origem no verbo latino designare. Isso convida a que comecemos este artigo com um pequeno exercício etimológico.

Segundo o Oxford Online Etymology Dictionary, o aparecimento do verbo, to design, em inglês se deu nos anos 1540, emprestado do latim designare que significa marcar (assinalar, demarcar, delimitar, destacar, desenhar), conceber (planejar, elaborar) escolher, apontar. Designare é uma palavra derivada: de (para fora) + signare que vem de signum (signo, marca). A esses sentidos, foi historicamente adicionado o verbo to designate (designar) de que decorreram muitas extensões metafóricas. No francês, a partir de 1580, o substantivo desseign, também derivado do latim designare, significa propósito, projeto. Já nos anos 1640, era empregado o substantivo designer, aquele que esquematiza, faz planos, desenha. A partir de 1660, referencia aquele que produz um design artístico ou um plano de construção. As extensões metafóricas do termo
A expansão histórica dos sentidos de design

A revolução industrial trouxe o fortalecimento do conceito e da prática do design. No início do séc. 17, os designers já vendiam seus projetos inovadores. Também existia a cópia de desenhos e projetos, num processo que tornou os plágios comuns. A difusão da comunicação escrita a partir de Gutenberg dependia, de um lado, da existência de profissionais responsáveis por desenhar o produto e, de outro, da sua produção e finalização em uma oficina para sua industrialização. O que se tem aí são as duas faces do design: o projeto e sua operacionalização.

Com o fim definitivo do estilo coercitivo, desde o século 18, a crescente industrialização demandava a criação de novos formatos e variações nas tendências da produção. Então, artistas com formação acadêmica em desenho, eram contratados
pelos fabricantes para criarem novas concepções formais que se adequassem ao gosto da burguesia consumidora e ansiosa por valores com os quais se identificassem. Do final do século 19 em diante, a arte começou a absorver e se misturar com a criação e a prática do design. Ao final do século 19 e início do 20, no Dada, nas vanguardas russas e em outros movimentos vanguardistas das artes visuais, a fronteira entre design e arte ficou porosa (Santaella, 2012, p. 163-164). É bastante notório o caso das vanguardas russas, cujos artistas, tais como Kasimir Malevich e El Lissitzky, por acreditarem na democratização das artes fora dos museus, começaram a colaborar com o desenho de cartazes para a publicidade das ideologias revolucionárias.

Ligados ao construtivismo russo, mas professando uma ideologia reformista, social-democrata, nos anos 1929, os movimentos construtivistas alemães (Bauhaus) e holandeses (De Stijl), deram continuidade aos ideais e métodos da arte como design. A partir de 1922, quando a direção da escola Bauhaus ficou a cargo do arquiteto Walter Gropius e do artista e designer construtivista Lazlo Moholy-Nagy, os trabalhos passaram a seguir a “regra”, enunciada pelo arquiteto Luis Sullivan no final do séc. XIX: “a forma segue a função”. Isso significa que o trabalho realizado deve ter, “em sua forma, elementos suficientes para cumprir a função para a qual foi projetado, ao mesmo tempo em que é apreciado visualmente” (Braga 2010, p. 20; ver também Silva e Pachoarelli, orgs., 2011). Os fundamentos básicos da Bauhaus, funcionalistas e racionalistas, ganharam notoriedade como princípios do design, especialmente porque os parâmetros, por eles instituídos na produção, auxiliavam na validação da profissão do designer. Isso, contudo, não deveria levar à equalização do design tout court com esses princípios, como pensam alguns. Ao contrário, no decorrer do século XX, o design passou a adquirir uma diversidade de facetas, algumas complementares, outras antagônicas ao funcionalismo. Tendências complementares, por exemplo, encontram-se nos anos 1950-60 na Hochschule für Gestaltung, de Ulm, conhecida como Escola Superior da Forma. Nela, os princípios racionalistas tiveram continuidade na valorização da boa forma, dos padrões visuais, da proporção, dos sistemas de coordenadas que, na sua
coesão, devem ser capazes de expressar coerentemente um conteúdo. A proposta dessa Escola era promover a superação da divisão entre belas artes e artes aplicadas. Contribuição similar se encontrava também no *Swiss/International Style of Design* que não se limitava ao design gráfico. O famoso arquiteto Le Corbusier, por exemplo, é tido como parte desse estilo que se espalhou por todo o mundo da arte e do design. Para seus adeptos, o design deve estar fundado em princípios racionais, alcançados por meio de um espírito científico. Para eles, designers estão mais perto dos comunicadores do que dos artistas, pois a beleza não se constitui em exclusivo princípio que guia o design. Buscavam a simplicidade nas estruturas modulares, na clareza e geometrização.

Nos anos 1970, os movimentos de contracultura, com seus protestos e aspirações de mudanças, bateram de frente no racionalismo anglo-saxão. O design aderiu, então, ao psicodelismo, à estética *hippie e punk* como evidência de participação política com a bandeira de subversão do *status quo*. Da segunda metade dos anos 1970 em diante, o pós-moderno foi tomando conta de todos os estilos nas artes, da arquitetura às artes plásticas, da música ao cinema, penetrando também no território do design. A diluição de quaisquer fronteiras tempo-espaciais, especialmente das dicotomias funcionalistas entre forma e função, trouxe a valorização da retórica visual, do ornamento, colagem, ilustração, da fotografia e da tecnologia (Harvey, 1993).

Atualmente, assiste-se a uma ampliação considerável do campo e das preocupações do design. Qual o papel do design na produção capitalista e nas extravagâncias do consumo? (Lipovetsky, 2007). Como os designers comunicam novos paradigmas culturais? Para responder a essa pergunta entram no debate, por exemplo, questões de sustentabilidade, enquanto o leque do design se abre para o design social, design e cidadania, design e política por meio do deslocamento da ênfase no consumo para a participação. O design de serviços, por seu lado, busca criar novos serviços ou melhorar os já existentes para torná-los mais úteis e desejáveis para os clientes, e mais eficientes para as organizações provedoras de serviço, utilizando uma visão holística, multidisciplinar e integrada (Stefan Moritz, 2005).
A tendência que entrou em voga é a do *design thinking* (Rowe, 1987). Os temas que circulam em torno dessa proposta são muitos, entre eles, o foco na colaboração e na experimentação, no aprender fazendo, na convicção de que velhas respostas não podem dar conta de novos problemas, na busca de bons problemas em lugar de boas soluções, mudança por meio do design, o papel da heurística na resolução de problemas, convergindo tudo isso para uma renovação da ideia de projeto que está no cerne do sentido de design.

Diante do rodopio de tendências do design na contemporaneidade não seria de espantar que uma pluralidade de conceitos de design hoje convive nem sempre pacificamente. Não está na intenção deste artigo explorar esse caleidoscópio, mas sim trazer à baila o conceito flusseriano de design, tendo como norte o fato de que se trata de um conceito original, pouco explorado por aqueles que lidam com o design. Ademais, trata-se de um conceito que, por sua originalidade, nos ajuda a adicionar complexidade àquela que se constitui na coluna dorsal do design, a noção de projeto.

**Design também é astúcia**

Pode-se afirmar que a noção de design está implicitamente presente em uma pluralidade dos escritos flusserianos. Esse é o caso, por exemplo, do texto sobre “O gesto de fazer” (Flusser, 1994, p. 49-67) que funciona como um embrião para os seus escritos sobre design. No fazer, as mãos têm encontro marcado com a materialidade bruta que o fazer visa transformar em objeto. O material bruto opõe resistência à pressão produtora, uma resistência que apresenta variações em grau e qualidade. Por isso, cada objeto possui “uma astúcia que lhe é própria e com a qual elude o esforço das mãos para impor-lhe à força um valor” (p. 59). Cada objeto exige uma estratégia e um método distintos: força para alguns, mimo para outros, assim como existe aquele objeto que é preciso burlar. É só na medida em que as mãos investigam seu objeto, em que exploram seu segredo, que são capazes de dar-lhe uma forma. Uma vez
investigado o objeto e descoberto seu segredo, então as mãos também descobrem seu próprio segredo, a saber, a sua habilidade, descoberta que resulta da luta das mãos diante da astúcia do objeto.

Mais importante nesse texto de Flusser, no que concerne ao design, especialmente para a noção de design como projeto, encontra-se naquilo que fica implícito acerca do poder das mãos sobre o pensamento, ou seja, o modo como, no gesto do fazer, as mãos realizam a pragmática do pensamento. Quando os objetos acabam por se transformar em extensões simplificadas e mais eficazes das mãos, estão dando corpo ao projeto que, alimentado no pensamento, encontra sua forma prática no mundo.

Outra fonte que subsidia a concepção flusseriana de design é aquela que se encontra na sua máxima do mundo codificado de que resulta, por inclusão, a codificação de toda experiência. Sem processos de codificação, o design não poderia se realizar, pois a criação de um artefato, quando dá forma à matéria, assim o faz pela mediação de conceitos e códigos específicos e apropriados. “Ao concretizar uma possibilidade de uso, o artefato se faz modelo e informação”. Cardoso (2007, p. 13) lembra aqui o exemplo, que Flusser menciona em algumas ocasiões, de uma alavanca em operação. Quando a vemos funcionando, não é mais possível olhar para qualquer vara de madeira ou metal, sem que ela nos lembre do seu potencial para ser aplicado com a mesma finalidade. É gracias ao conceito que tal função e significado são adquiridos por aquilo que não passava de um pedaço de madeira.

Há inúmeras outras passagens nos escritos de Flusser em que surgem menções implícitas à concepção de design. No que vem a seguir, entretanto, irei me limitar aos textos que exibem essa designação no seu título. Em “Sobre a palavra design” (Flusser, 2007, p. 181), Flusser começa com a exploração etimológica da palavra, colocando ênfase no sentido de propósito, plano, intenção, meta. Surpreendentemente, chama atenção para um sentido que, de fato, está contido na etimologia da palavra, mas do qual ninguém ou poucos se apossam: design significa também esquema maligno, conspiração, ou seja, significados relacionados com astúcia.
e fraude, o que rebate no significado verbal de tramar algo, simular, proceder de modo estratégico. Isso leva à síntese de que “o designer é, portanto, um conspirador malicioso que se dedica a engendrar armadilhas” (ibid., p. 182).

Na sua ressonância com mecânica e máquina, mecanismo, do grego *mechos*, design, como o próprio nome diz, designa algo que tem por objeto enganar, portanto, constitui-se em uma armadilha, assim como máquina é um dispositivo de enganação. Associativamente, esse contexto leva a técnica, do grego *techné*. Flusser não explora aí esse termo até as suas correlações com poiesis e episteme, uma extensão que me parece oportuna, antes de se mencionar a tradução de *techné* por *ars*, em latim. Isto porque, compreender a relação entre arte e técnica, que está pressuposta na noção contemporânea de design, pressupõe recuperar as distinções e complementaridades, que vêm do grego, entre *epistéme*, *techné* e *poiésis*. *Epistéme* denota conhecimento, o verdadeiro conhecimento, diferente da opinião, o conhecimento das causas que são necessariamente verdadeiras. Implica a mistura entre ciência e saber e envolve o esforço racional para substituir a opinião, *doxa*, que é o conhecimento acerca do contingente. Divide-se em *praxis*, *techné*, e *theoria*. *Techné* refere-se à habilidade, à arte de produzir, no sentido de método envolvido na produção de um artefato, de um objeto, ou seja, o *know how*, o saber fazer. Para os gregos, a *techné* significava não apenas as atividades e competências do artesão, mas também as artes da mente e as belas artes. Por isso, estava indissoluvelmente ligada à *poiésis*, essência do agir, fazer como criação, dar forma, o que dá sentido ao fazer, o sentido último da *techné* que é transfigurada pela *poiésis*. Desde muito cedo, a palavra *techné* foi ligada à palavra *epistéme*, sendo ambas modos de nomear, cada uma a sua maneira, a própria ideia de conhecimento. Disso se pode concluir que a importância e o papel decisivo da *techné* não residem simplesmente no fazer ou na manipulação dos meios, pois, inseparável de *poiésis* e *epistéme*, *techné* é forma de criação e forma de conhecimento.

Desde os gregos muita coisa mudou no modo como o binômio da arte e da técnica passou a ser compreendido. Não mais entrelaçado aos sentidos de *epistéme* e de *poiésis*, o campo semântico de *techné* estreitou-se, enquanto romanticamente o
significado de poiesis, concebida como processo criador, passou a ser sobrevalorizado. É também para essa problemática que Flusser chama atenção quando afirma que, embora design, máquina, técnica, ars (arte em latim) e Kunst (arte em alemão) estejam intimamente relacionados, desde a Renascença, essas relações foram sendo crescentemente negadas, dividindo a cultura em dois ramos estranhos entre si: o científico, quantificável, de um lado, e o qualitativo, estético, de outro. Entre os dois, o design se alojou, justamente porque conecta técnica e arte.

Contudo, tal explicação não é suficiente. Flusser quer resgatar o sentido de engodo e malícia. Para isso volta aí ao exemplo primitivo de uma alavanca, cujo design, técnica e arte têm por meta enganar a lei da gravidade. Neste ponto, torna-se claro que a malícia, a astúcia, o engodo e a fraude não carregam o sentido de perversidade, como se poderia pensar à primeira vista. Levando-se o significado de design suficientemente longe, revela-se o desígnio que está na raiz do homo sapiens e na base de toda cultura: “enganar a natureza por meio da técnica, substituir o natural pelo artificial por meio da técnica. (...) Com astúcia nos transformar de simples mamíferos condicionados pela natureza em artistas livres” (ibid., p. 184). Isso nos leva a pensar que é a astúcia do design que compensa a fragilidade e vulnerabilidade física da inserção do ser humano na natureza. Flusser termina seu argumento com uma frase sensacional: “o ser humano é um design contra a natureza”. De fato, sem a mediação do design que permitiu ao humano enfrentar o desequilíbrio entre suas forças e as forças naturais, a espécie não teria sobrevivido. Contudo a trapaça parece ter nos levado longe demais, pois, afogados em gadgets, perdemos “a fé na arte e na técnica como fontes de valores”. Com isso, Flusser antecipa uma questão candente, ou seja, que o design humano na sua evolução tenha chegado ao ponto de assistirmos hoje à passagem do Holoceno para o Antropoceno, colocando em risco a própria continuidade da espécie na biosfera. Mas esse é um tema que não irei desenvolver aqui, pois nos desviaria do propósito deste artigo que é explorar o leque aberto por Flusser sobre o conceito de design.
Tudo depende do design

É com a frase acima que Flusser se endereça para outras concepções possíveis de design, entre elas, a de forma no sentido de modelo a que o fenômeno é submetido para poder ser controlado, justamente o que os códigos computacionais realizam quando criam formas sintéticas, eternas, mas, paradoxalmente, nem por isso, imutáveis, pois são formas algoritmicamente manipuláveis (ibid., p. 192).

Outro dilema encontra-se nas duas faces do design como progresso e obstrução. Como superar a obstrução em prol do seu outro lado? Objetos de uso são algo mais do que objetos, ou seja, são mediações, eles são tanto objetivos quanto intersubjetivos, não apenas problemáticos, mas dialógicos. Isso significa que, no processo de criação dos objetos, comparece a questão da responsabilidade, o que permite falar de liberdade no âmbito da cultura. “A responsabilidade é a decisão de responder por outros homens. É uma abertura perante os outros. Quando decido responder pelo projeto que crio, enfatizo o aspecto intersubjetivo, e não o objetivo, no utilitário que desenho. E se dedicar mais atenção ao objeto em si, ao configurá-lo em meu design (ou seja, quanto mais irresponsavelmente o crio), mais ele estorvará meus sucessores e, consequentemente, encolherá o espaço de liberdade na cultura.” (ibid., p. 195)

A questão da liberdade constitui-se em um dos leitmotifs da obra flusseriana. Desde a Filosofia da caixa preta, Flusser (1985) transcendia a análise dos aparelhos e meios técnicos em geral para o campo da cultura “na busca de uma alternativa viável de existência em liberdade” que encontra no homo ludens sua figura conceitual privilegiada. É o jogo, figura crítica da criação, que surge como “alternativa possível na busca pela liberdade” subvertendo o automatismo dos aparatos culturais (Baio, 2013).

Assim também, do dilema entre obstrução e progresso, Flusser extrai algumas conclusões que iluminam criticamente as produções de objetos de uso que servem apenas ao consumo pelo consumo, cuja exacerbação produz o esquecimento da única
forma de progresso que é aquela que segue na direção dos homens. De resto, tem-se aí um esquecimento tal que leva a entender o design responsável como algo retrógrado. Flusser antecipa uma brecha de luz na produção de objetos de uso imateriais, como programas de computador e redes de comunicação, quando permitem que sejam percebidos os outros homens que estão por trás desses designs, tornando visível sua face mediática, intersubjetiva e dialógica. Isso resultaria em um código ético do design que, longe de se impor na forma de preceitos prévios, brotaria dos procedimentos de conduta em ato.

O mais admirável texto de Flusser sobre design é aquele em que, sob o título de “Design como teologia” (ibid., 206-213), é proposto que, para o design do futuro, seria necessário confrontar o conceito ocidental de design com noções orientais. Quando observamos como as formas surgem entre as mãos de um oriental, como por exemplo, os ideogramas escritos com pincel, flores de papel ou os gestos ritualísticos e ao mesmo tempo leves, naturais, da cerimônia do chá, não se trata, em nenhum desses casos, de uma forma que se impõe sobre algo amorfo (como seria a ideia ocidental), mas, ao contrário, “fazer surgir de si mesmo e do mundo circundante uma forma que abarque ambos”, ou melhor, uma forma de imersão no não-eu do papel, do pincel, da tinta, do ritual. “Enquanto no Ocidente o design revela um homem que interfere no mundo, no Oriente ele é muito mais o modo como os homens emergem no mundo para experimentá-lo”. Para este último, o design é estético, no legítimo sentido que este tem de “experienciável” e, no dizer de C. S. Peirce, o que tem de admirável.

No momento em que o código alfanumérico, que dominou na ciência ocidental, especialmente desde Gutenberg, perder sua hegemonia para o código digital dos computadores, este que, em princípio, apresenta semelhanças com os códigos orientais, pode-se esperar que transformações substanciais se ponham a caminho no Ocidente. O que se busca, portanto, é uma aproximação estética com a vida, de que a ciência ocidental nos alijou. Mas “não é essa uma hipótese ousada, aventurosa?”, pergunta Flusser. Ele mesmo responde que seu texto “deve ser lido como ensaio, isto
é, como a tentativa de formular uma hipótese”. E não são as hipóteses as formulações mais criativas e inovadoras do espírito humano? Não estão nelas as iluminações que se responsabilizam pelas grandes descobertas na arte e também na ciência? Se confiarmos nisso, é, portanto, mister aguçar nossa escuta para Flusser e para as suas hipóteses explicativas.

Referências

Michael Hanke

Vilém Flusser’s Philosophy of Design: Sketching the Outlines and Mapping the Sources

Abstract

This article analyzes the sources of Vilém Flusser’s philosophy of design, which are found, primarily, in three books and one architecture magazine: *Vom Stand der Dinge — eine kleine Philosophie des Design* [On the State of Things — a small philosophy of design], edited by Fabian Wurm (1993); *The Shape of Things — a philosophy of design*, edited by Martin Pawley (1999); *O Mundo Codificado. Por uma filosofia do design e da comunicação*, [The Codified World — towards a philosophy of design and of communication], edited by Rafael Cardoso (2007); and the special edition on Vilém Flusser of *Arch+*, a Journal for Architecture and City Planning, titled *Virtuelle Räume — Simultane Welten* [Virtual Spaces — Simultaneous Worlds] (1992). Flusser’s contributions draw on conceptual constructs from different periods between 1970 and 1991, as well as different disciplines and contexts, such as culture theory, anthropology, media revolutions, telematics, also known as, digital culture, and design itself. However, his design concepts are primarily based on philosophy and influenced by Heidegger and Plato, whose ideas he applies throughout his work.

Keywords: Vilém Flusser; Philosophy of Design; Objects of Use; Culture Theory.

1. Introduction

A comprehensive investigation of Flusser and Design requires a preliminary critical examination of particular texts he produced throughout his career. The most relevant design publications which we will examine here are: first, his book *Vom Stand der Dinge — eine kleine Philosophie des Design* [On the State of Things — a small philosophy of design], edited by Fabian Wurm (Flusser, 1993a); second, a similar selection in English titled, *The Shape of Things — a philosophy of design*, edited by Martin Pawley (Flusser, 1999); and a third book, *O mundo codificado. Por uma filosofia do design e da comunicação* [The codified world — towards a philosophy of design and of communication] (Flusser, 2007), which was published in Brazil and edited by Rafael Cardoso. In addition to these books, a fourth source is the special edition of a journal of architecture dedicated to Flusser with the title *Virtuelle Räume — Simultane Welten*
[Virtual Spaces - Simultaneous Worlds] (Flusser, 1992). The journal is Arch+ Zeitschrift für Architektur und Städtebau [Arch+ a Journal for Architecture and City Planning], and represents the discovery of Flusser in the field of architecture, which must be taken into account in this context of design. Setting aside the many unpublished manuscripts, his essays in these four publications represent the essential references for a critical reading and analysis on the topic of design in Flusser’s work.

2. Collections – Wurm and Pawley

Like many of Flusser’s books, Wurm’s and Pawley’s collections of articles were not produced or edited by Flusser himself, but published posthumously by an editor who selected the texts and assembled them. This selection, nineteen in the case of Wurm, and twenty-two in the case of Pawley, depended on the knowledge the editors had of the flusserian texts – a complex situation, since they are written in different languages and appear in different journals, by different editors. Seventeen articles found in Wurm’s as in Pawley’s selection are identical, so we can consider these the most basic and relevant.

Martin Pawley (1938-2008), was a British writer, teacher and critic, and considered “one of the most insightful and provocative commentators on contemporary architecture and design” (Jenkins, 2008). Fabian Wurm, for many years was an editor of the design magazine Design Report (DR), where 10 of the 19 articles in the book edited by him had been published, all between 1989 and 1991. Eight of the ten are first publications, signifying that Flusser obviously wrote them specifically for the magazine, and wrote the articles on this particular subject to take advantage of this publication opportunity. The other articles were published for other purposes and in other contexts.

The subtitle of DR is Mitteilungen über den Stand der Dinge [Reports on the state of things]. The title of Wurm’s selection of Flusser’s articles, Vom Stand der Dinge, obviously refers to the subtitle of the magazine. One of the articles Flusser published in DR, again, has the title Der Krieg und der Stand der Dinge [War and the state of things], so we can assume that Flusser was inspired by the subtitle of the magazine for the title of this essay. This article, in Pawley’s, edition is translated as “War and the State of Things”, but the title of the book,
edited by Pawley is not *The State of Things*, as in Wurm’s edition, but *The Shape of Things*, a clearer reference to design.

However, neither Pawley nor Wurm give us sufficient information about the circumstances of the first publication of Flusser’s works on design, which is relevant to understanding why Flusser turned to this topic in the first place. Wurm at least gives us a hint. The first of the series of articles on design, “Design: Obstacle for/to the Removal of Obstacles”, first published under the title of *Gebrauchsgegenstände* in Basler Zeitung [Objects of Use], September 8, 1988, is considered a paper for presentation at the *Vortrag auf dem Internationalen Forum für Gestaltung* - IFG [International Forum for Gestaltung – IFG], in Ulm, September 2, 1988. However, this information is incomplete. Moreover, the very name of the town of Ulm should raise suspicion. The IFG is the successor of the legendary *Hochschule für Gestaltung* - HfG, founded after the second World war in 1953 by Inge Scholl and Otl Aicher as a follow up to the Bauhaus, together with Max Bill, who was also a scholar from Bauhaus. This tradition is also revealed by the fact that Walter Gropius inaugurated the HfG on October 2, 1955.1 The HfG, having closed down in 1968 because of financial problems, was succeeded by the IFG, and restarted its activities in 1988 with the first of a new series of conferences, *Gestaltung und neue Wirklichkeit* [Design and New Reality], a title considered programmatic for the new IFG. From then on, its homepage reads, “the institution [the Ulmer Kuhberg, as is the name of the location] plays a role again when design themes are discussed. The forum succeeded in gathering renown personalities from the area of design, art, economy and politics as speakers and moderators for their events.”2 As one of these important personalities, the homepage names Vilém Flusser, along with other names like Zaha Hadid and Daniel Libeskind.3 And Flusser’s appeal to dealing critically with new digital media, and exploit their full potential to the benefit of mankind, corresponds to the fundamental idea of a social Utopia similarly developed by the Bauhaus and the HfG: to change society by design (Gestaltung) (Humpenöder, 2016, p. 12).

---

1 http://www.hfg-archiv.ulm.de/die_hfg.ulm/timeline.html
3 http://www.hfg-ulm.de/14.html
The first congress on September 2-4, 1988, *Gestaltung und neue Wirklichkeit* [Design and New Reality], consisted of seven symposiums, the sixth of them entitled *Freiheit – Verantwortung – Gebrauchsgegenstände* [Liberty – Responsibility – Objects of Use]. Roundtable participants included: Vilém Flusser, presenting *Gebrauchsgegenstände* [Objects of Use], and Dr. Dietrich Mahlow, who Flusser met in 1987, when Mahlow planned an exhibition with him and Jacques Derrida at the New York Guggenheim-Museum. This exhibition project titled, “The Image of Thinking,” was never implemented. There are several letters on the matter in the Flusser Archive, and Flusser mentions the project in the article *Abbild – Vorbild oder. Was heißt darstellen?*, published in *Lob der Oberflächlichkeit* (Flusser, 1993c, p. 306). On this roundtable with Flusser, Mahlow spoke about *Wie das Denken in die Kunst kam und was sie bewirken kann*, and Prof. Dr. Klaus Krippendorf presented, *Zum Kontext des Artefakts*. The table was chaired by Florian Rötzer. Flusser also met with Karl Gerstner, Jürgen Claus and Max Bill. There is no evidence that Flusser had any contact there with Max Bense, who passed away in 1990. Bense taught at the HfG until 1958, and for his poetry series *rot*, Flusser translated a poem by Haroldo de Campos in 1966. Nevertheless, Flusser was obviously inspired to reflect on design as a topic through these circumstances, and he takes a rightful place in this intellectual history.

In light of this information, we can safely say that Flusser’s first article on design, republished in *DR* (# 9, 1989) was an invited speech delivered to the IFG-congress in 1988, and originally titled “*Gebrauchsgegenstände*” [Objects of Use]. Coincidentally, Flusser had reflected on this topic already in Brazil and frequently published articles on the subject, some of which are collected in the book manuscript *Coisas que me cercam* [Things that surround me], from 1971, treating objects of use like bottles, carpets, pots and wheels (FLUSSER, 1993b, p. 5). This, perhaps, led to him being considered capable of contributing to the topic of the congress and therefore to his invitation. In any case, “Things that surround me” reflects the culture-nature debate, and the transformation of nature into human culture as one of the basic undertakings of man. So design is related to Flusser’s philosophical anthropology and other related matters. Seen this way, a series of further articles of Flusser contribute to the topic of design in his approach.

In addition to the main title, the subtitle of Wurm’s collection – a philosophy of design – is also flusserian, which shows an emphasis on philosophy. In all probability, few who

---

4 http://www.hfg-ulm.de/31.html
work in design are as deeply interested in philosophy as Flusser was. In fact, Flusser’s first cut, which is known to be always the deepest, was by philosophy, and this always underlined his approach to other subjects - as in turning to communications, this turns into a philosophical reflection of communication, and this is also the case with design. Moreover, Flusser's framework is a philosophy of design, and not so much a theory of design.

2.1

Unlike Pawley, who does not organize the articles into chapters, Wurm organizes the nineteen articles in four chapters: theoretical fundamentals of design; the state of things; objects and buildings; and prospects.

The first article Flusser wrote on design is “Gebrauchsgegenstände” [objects of use], published as “Design: Obstacle for/to the Removal of Obstacles” in DR (#9, 1989), and presented at the Gestaltung und neue Wirklichkeit at the round-table on “objects of use”. This explains why Flusser initially reflects on two concepts: “objects of use” and “Gestaltung” [creating things]. As objects of use, in other words, “culture” (1999, p. 59), they have been developed by other people, and “were projected as designs on the part of the people who went before” (1999, p. 58). They “are therefore mediations (media) between myself and other people, not just objects” (p. 59). Therefore, they are not only “objective”, but also “inter-subjective” and “dialogic”. And dialogue for Flusser is derived from Plato’s concept of dialogue, which requires, in Greek – logon didonai, the justification of anything that was said by providing additional reasons (what again guarantees the dynamics of the process). Since objects of use for Flusser are dialogic, they require “responsibility” from those who produce them towards their fellow men and followers, paraphrased as “the decision to answer for things to other people” (p. 59). Focusing only on the object implies the detriment of the intersubjective component of culture/objects of use: “the more I direct my attention towards the object in the creation of my design (the more irresponsibly I design it), the more the object will obstruct those coming after me, and the area for maneuver in the culture will shrink” (1999, p. 59). And “the current situation of culture […] is characterized by objects of use whose designs were created irresponsibly, with attention directed towards the object” (1999, p. 59-60). This situation has a longer history, which, for Flusser, goes back at least to
the Renaissance, and not only to the industrial revolution, where modern man and his scientific and technical progress have their starting point.

This progress has such a hold that those creating designs meanwhile forget that other progress, progress in the approach to other people. Scientific and technical progress has such a hold that any act of creating designs responsibly is thought to be a backward step. The current situation of culture is as it is precisely because creating designs responsibly is thought to be backward-looking. (1999, p. 60)

Flusser’s hope was that the new “‘immaterial culture’ beginning to grow”, which probably even “would not be less obstructive”, and “probably restricts freedom even more than the material one” (1999, p. 60), but nevertheless “spontaneously directed towards other people”, would be “instructed by the immaterial itself about how to create designs responsibly” (p. 60), and turns visible their “mediated, inter-subjective, dialogic side” (p. 61).

Here we find typical elements of Flusserian theory: critique of the current cultural situation, including scientific and technical progress, a strong emphasis on dialogic and the social constitution of the human being, and the impact of the digital revolution, to name only a few. He also uses these elements in the context of design, which is to be expected if we consider that he was invited in order to defend his position.

The second article on design, published in *DR* (# 10, 1989), is “Shamans and Dancers with Masks,” a typical Flusserian title in respect to its baffling function. It begins with a radical dialogism even schooled on Ernst Mach: the only existing reality are relations, “we are in effect knots of relations (connections) without any core (any ‘spirit’, any ‘I’, any ‘self’, indeed without anything at all to ‘identify’ ourselves by). […] To put it another way: The ‘I’ is then that abstract point at which concrete relations begin” (1999, p. 104). And a “person” is such a “nodal intersection in the mutually intersecting social and inter-subjective fields” (p. 105), *persona* being the Latin translation of what earlier had been called a *mask*. Masks are like social roles, and therefore the ‘I’ is that which one says ‘you’ to” (p. 105). Society represents a network made up of masks “condensed into ‘persons’” (p. 105). This poses the question where masks come from, what makes up “the design of a mask” (p. 106). And as masks “are themselves inter-subjective forms”, “the question of the design of masks is an inter-subjective issue. This means: That which I am, I only became through a collective ‘dialogue’”, a reciprocal relation: “The ‘I’ is not only that which one says ‘you’ to, but also that which says ‘you’” (p. 106). And this movement towards the other, fellow man implies
the possibility of asking questions, an observation that leads Flusser to a quite peculiar definition of design. “Design means, among other things, fate. This process of asking questions is the collective attempt to seize hold of fate and, collectively, to shape it” (p. 107). What we witness here is dialogism and existentialism applied to design.

Flusser’s third article in DR (#11, 1989), Why Do Typewriters Go ‘Click’?, had been published in 1988, in a newspaper that was not related to the topic of design. Consequently, the article doesn’t address the topic. It treats a theme that Flusser treated in uncountable occasions: the change from letters to numbers, from linear to punctual culture, the process by which “numbers […] break out of the alphanumeric code and make themselves independent” (1999, p. 62). The core of the media revolution, whose logic can be seen in the mechanism of the typewriter, is described by Flusser thus: “Numbers abandon the alphanumeric code in favor of new codes (the digital code, for example) and they feed computers. Letters (if they want to survive) have to simulate numbers. This is why typewriters go ‘click’” (p. 62).

Clearly, this is more an article about media change (the reason for the article being reprinted in a magistral selection of contributions on media theory). Another reason for the article’s relevance to design is that “the cultural revolution now under way is all about […] the ability to set alternative worlds alongside the one taken by us as given” (p. 65), i.e. the design of new (virtual) realities. This is a crucial change that turns mankind from subjects (that are as such related to objects) into projects on the basis “(t)hat we have started to learn how to calculate” (p. 65), a thesis that forms the title as well as the essence of Flusser’s last book From Subject to Project.

The fourth article in DR (#12, 1989) is “The Lever Strikes Back”, a fine masterpiece in the application of Marxian thought (Flusser affirms he has “a solid Marxist basis”, 2002, p. 199), as it is based on the idea that man develops machines, extensions of human capabilities, that eventually strike back on him, changing him and the whole relation between man and machines: “the ‘Man/machine’ relationship was reversed, and Man did not use machines any more but was used by them. He became a relatively intelligent slave of relatively stupid machines” (1999, p. 52).

Nowadays, in times of “the second or ‘biological’ Industrial Revolution” (1999, p. 52), we are able to construct new machines – the Internet of Things – that, similarly, will strike back on us, but they will be a lot smarter, and: “This is a problem of design: What should
machines be like if their striking back is not to cause us pain? Or, better still: if it is to do us some good?” (1999, p. 53). Referring to his example of “stone jackals”, Flusser elaborates: Naturally, we can design them in such a way that they lick us instead of biting us. But do we really want to be licked? These are difficult questions because nobody really knows what they want to be like. However, these issues need to be addressed before one can start to design stone jackals (or mollusc clones or bacterial chimeras for that matter). (1999, p. 53-54)

And, considering such issues more interesting than stone jackals, Flusser turns directly to designers and asks them: “Are designers ready to address them?” (p. 54). So the question here is about the consequences that the construction (i.e. design) of new artificial intelligences have on human beings and their life-world.

Flusser’s fifth article in DR (#14, 1990) is “Design as Theology”. Here he analyzes the impact that the difference between the “only two peaks in human civilization” (p. 74), namely the two cultures of the West and the East, have on their respective world-views, “the fundamental difference between East and West” being “their attitude to life and death” (p. 75), which again explains the title. The outcome of this difference is that “in the West, therefore, design produces people who engage with the world, in the East it is the way in which people spring up out of the world so as to experience it” (p. 72). From the Western attitude arose Greek philosophy, Jewish prophecy, and hence Christianity, science and technology, and from the Eastern attitude an aesthetic and pragmatic approach to life difficult for Westerners to fully understand (p. 75). Nevertheless, the new “digital computer codes” (p. 73) might be a basis for “a blurring of East and West that […] is expressed in the design of post-industrial (‘post-modern?’) products” (p. 74). Also in this essay, Flusser draws on prior studies, having delved in Eastern thinking in the sixties.

It is only after these efforts that Flusser writes the article “About the Word Design”, published in DR (#15, December 1990), which both Wurm and Pawley posit as the first of their collections, obviously to open with a conceptual framework (“Fundaments” is the chapter title by Wurm). Flusser indeed outlines, with a few brief strokes, the field of design – a word, as a noun, connected to intention, plan, scheme, basic structure, also to draft, sketch, to simulate. The element of deception implied here has to do with “the fact that ‘design’ is related to ‘sign’” (1999, p. 21), derived from Latin signum, and signs are always treacherous – as Umberto Eco, who Flusser admires and refers to (but not in this context), stated, semiotics, the doctrine of signs, is about everything that can be used to lie, i.e. to conceal
anything, including truth (Eco, 1987, p. 26). Defining design as “the basis of all culture” means “to deceive nature by means of technology, to replace what is natural with what is artificial”, and this is why “(t)he words design, machine, technology, ars and art are closely related to one another, one term being unthinkable without the others” (Flusser, 1999, p. 18). The importance the word design has in contemporary discourse results from “our awareness that being a human being is a design against nature” (1999, p. 19). This omnipresence of design implies a devaluation of great ideas, the material and the work behind them, a “devaluation of all values”, referring to the famous phrase coined by Nietzsche, which Flusser regularly draws on without referring to its source, as in this case. This postmodern relativization applies also to Flusser’s article itself, that could have been designed in another way: “Everything depends on Design” (p. 21).

In “War and the State of Things”, published in DR (#16, 1991), Flusser, referring to Goethe, one of his favorite authors whose work accompanied him throughout his entire life, builds his reflection on Goethe’s recommendation, “that Man be ‘noble, generous and good’” (p. 30). But this would, if applied today, require a redefinition of what the meaning of the word good should be, and also the term Man. The term Man, “after the demise of humanism”, can no longer be used in a general sense. When Goethe’s phrase was transferred to the debate about design, it could be reformulated to “Let Man be elegant, user-friendly and good” (p. 30), which is the outline of this article in question. Even though he refers to the examples of rockets, paper-knives and arrow-heads, Flusser does not intend “to argue against the progressive improvement of design as a result of war”, because if “in their day our ancestors in East Africa 100,000 years ago had not designed arrow-heads that were at the same time elegant, user-friendly and good (and that could kill with elegant convenience), then we would probably still be laying into each other or into animals with our teeth and nails” (p. 31). Even if it “may be that war is not the only source of good design”, it is, at least, one of them (p. 31). Using the discrimination between “pure good (‘moral’ good), which is good for nothing”, and “applied good (‘funcional’ good)”, between which “there can be absolutely no compromise, because in the end everything which is good in the case of applied good is bad in the case of moral good”, Flusser comes to the conclusion that, “Whoever decides to become a designer has decided against pure good”, and always remains “trapped within the ambit of funcional good” (p. 33). Unfortunately, everything that is good for something can be misused, and thus “is pure Evil”; “wherever there is a purpose for
anything, you will find the Devil in wait”, and: “Since the technicians had to apologize to the Nazis for their gas chambers not being good enough – i.e. not killing their ‘clients’ quickly enough – we have once more been made aware what is meant by the Devil” (p. 34). But despite knowing all this, we insist “that the designer should be noble, generous and good”; Flusser ends by returning to Goethe’s opening phrase.

In “With as Many Holes as a Swiss Cheese”, DR (#17, 1991), first published under the title Einiges über dach- und mauerlose Häuser mit verschiedenen Kabelanschlüssen [Some remarks about houses without roofs and walls, but with diverse cable connections] in Basler Zeitung # 69, March 22, 1989, the manuscript “Häuser bauen” [Building houses], proposes one of Flusser’s main thesis, which he frequently presented and varied on various occasions: the revolution in communications destroys the traditional dichotomy between private and public – the house/home, which, until then, had been a closed entity, preventing any intrusion from the outside had lost its function as a shield because of material and non-material channels serving communication media, and therefore become perforated, riddled with holes like Swiss Cheese (thus the title). This is about the structure of housing in the electronic age, the loss of privacy and vice versa the privatization of public space. It is not stricto sensu a question of design, because none of these elements were planned. The dialectics of private and public, based on the principle that, “One goes out to experience the world, and there one loses oneself, and one returns home in order to find oneself again, and in so doing one loses the world that one set out to conquer” (1999, p. 82), which Hegel called the ‘unhappy consciousness’, is no longer operative. As material and immaterial cables have turned the ‘home-as-one’s-castle’ into a ruin, as Flusser affirms, “with the wind of communication blowing through the cracks in the walls […] what is needed is a new type of architecture, a new design” (1999, p. 83). The key heretofore, according to Flusser, is that architects and designers “provide a network of reversible cables”, instead of one-way directed cables, that come along with the danger of “unimaginable totalitarianism […] a technological revolution that would go far beyond the competence of architecture and design” (1999, p. 83). This situation demands that we face the adventure that the new network represents to us, and do it successfully.

In “The Designer’s Way of Seeing”, DR (#18-19, 1991), as the ninth of the DR articles, Flusser makes an initial reference to his media theory, which conceives of media as extensions of human physical abilities, in this case, the eye. Seeing, according to this theory,
“has undergone a series of technical improvements since the invention of the telescope and the microscope”, and more recently, “the ability to condense all time into a single point in time and see everything simultaneously on a television screen” (p. 39). This is considered a last and most recent step in a development that had already begun in the third millennium A. C. in Mesopotamia, when people by looking upriver foresaw floods and droughts and on the basis of these observations “marked lines on clay tablets indicating canals that were to be dug in the future”. In those days, “these people were thought of as prophets, but we would call them designers instead” (p. 39). Yet, foreseeing the future course of the river is not just a look into the future, since it provides knowledge about the form of all watercourses, and on a more general level to the form of all trajectories in which bodies move in gravitational fields, and thereby to eternal forms (p. 40). What we perceive through “fleeting phenomena” is what Plato called, according to Flusser, “the eternal, immutable Forms (‘Ideas’)”, and this marks also the beginning of theory - “in Greek, ‘truth’ and ‘discovery’ are the same word – i.e. aletbeia” (p. 40). Even though nowadays we no longer share the view that forms are discovered, but rather invented, nevertheless, as Flusser elaborates, “forms, whether discovered or invented, whether made by a heavenly or human designer, are eternal – i.e. free of all time and space” (p. 41). Once again, as he so often does, Flusser refers to Plato, but he adjusts his theory to our present state of knowledge, and this means: “All eternal forms, all immutable ideas, can be formulated as equations, and these equations can be translated from the numerical code into computer codes and fed into computers” (p. 41). The computer “can create ‘numerically generated’ artificial images” (p. 41), and looking at them the eye “continues to look at eternity, but this is now an eternity that it can manipulate”, and this is what makes up “the designer’s way of seeing” (p. 42). Flusser thus, in his typical fashion, ties together his reflections on the technical image and computational processing with basic philosophical Platonic theorems, and applies this to a new challenge, design, which is the focus of the magazine he wrote the article for.

The last article, published posthumously (Flusser had passed away in 1991) in DR (#20/21, June, 1992) out of a total of the ten, is title “About Forms and Formulae” and makes a similar argument. In ancient times it was believed that the “Eternal God” had formed the world, but after neurophysiology had “sussed Him out”, now “every self-respecting designer” is capable of doing so. But the freedom to invent forms is limited by our central nervous system, that (pre-)configures how we perceive the world. “The world
only accepts those forms that correspond to the program of our life” (p. 36). Yet we have invented methods and machines capable of proceeding similarly, therefore we can, “(a) part from the world computed by the central nervous system, [...] also live in other worlds” – “Cyberspace” and “virtual reality” (p. 37). Any form or algorithm that can be expressed numerically can be fed via computer into a plotter. “And there you have it: worlds ready to serve” (p. 37). Just as the Creator did in the course of the much-celebrated six days, we are now the designers, and this changes our concept of reality: “‘Real’ means anything we, with our social status, efficiency and perfectionism, give form to by use of the computer” (p. 37).

However, Flusser would not be Flusser if he left it this way. The idea that we have figured out the Eternal God might be hubristic or pretentious, which is why he ends the article, referring to the myth of Prometheus, “Perhaps we think we are just sitting at computers, while in fact we are chained to Mt Caucasus? And perhaps there are eagles already sharpening their beaks so as to peck out our livers” (p. 37-38). Flusser may have been a theorist of new media, but he was just as well their critic.

The article “The Ethics of Industrial Design?”, published by Wurm and Pawley, but not published in DR, was first published under the title “Ecological and anthropological feedback between tools and their users. Ethics in Industrial Design?”, and synthesizes Flusser’s thoughts more precisely. At the same time, it has a strong similarity to the idea in The Lever Strikes Back. It was a lecture that Flusser gave in English, in Eindhoven, Netherlands in April 1991, at a congress of the Akademie Industriële Vormgeving Eindhoven, AIVE [Design Academy Eindhoven]. It was first published in the congress papers, titled “Ethics in Industrial Design?” (Report Verlag Symposium April 20, 1991, ed. v. Fré Ilgen, Eindhoven, Stichtag Akademie Industriële Vormgeving). Thus, the subtitle that Flusser uses, “Ethics in Industrial Design?”, which was then later used as the main title of the article, was obviously borrowed from the theme of the congress. The rearrangement of the title also obscures that the article primarily focused on the feedback between tools and their users, and only began to address design from this perspective, whereas the title of the publication inverts this relation.

In the past, designers pursued the production of useful objects, and their ideal was pragmatic, i.e. functional, and rarely affected by moral and political considerations. Moral norms were established by the public, either based on a superhuman authority or by means of consensus, or a combination of both. But this has changed. “The question of the morality
of things, of the moral and political responsibility of the designer, has [...] taken on a new significance (indeed an urgency) in the contemporary situation” (p. 66). The reasons for this are threefold. First, the public no longer lays down norms. Although there are still a string of authorities (religious, political and moral), their power for defining public norms has diminished, “not least because the communication revolution has destroyed the public sphere we had known hitherto” (p. 66). Due to the plurality of culture and society any generalization of norms would have to proceed in an authoritarian manner and is therefore deemed to fail; science, the only authority more or less intact, can provide only for technical norms, but not for moral ones (p. 67). Secondly, industrial production, including design, has developed into a complex network, organized by the division of labor, which also divides personal responsibility within the greater set norms. This leads to a “lack of moral responsibility that follows logically from the production process” that produces “morally objectionable products” if there is no “ethical code [...] to be followed by design” (p. 67). Thirdly, in the past it was tacitly agreed that moral responsibility for a product lay with the user, not the producer. Flusser’s striking example of this is the situation where if someone stabbed somebody else with a knife, it was he who was responsible and not the designer of the knife (p. 67). However, this has changed with automated machines. Flusser’s question, “Whom should one hold responsible for a robot killing somebody?”, and the possible answers: the person who constructed the robot, or the one who set up the computer program, an error in construction, programming or production, the branch of industry that produced the robot or the whole system to which this complex belongs (p. 67-68), resonates with the contemporary problem of killing drones. Not addressing “these questions can lead to total lack of responsibility”, which is not a new problem, as Flusser demonstrates in “War and the State of Things” (see above). In the Nuremberg trials, a letter written by a German industrialist to a Nazi official was made public. “In it, the industrialist timidly begs to be forgiven for having constructed his gas ovens badly. Instead of killing thousands of people at one go, only hundreds were being killed” (p. 68). This demonstrates, that norms are no longer applicable to industrial production, that there is no single author of a crime, and that “responsibility has been so watered down that in effect we found ourselves in total irresponsibility towards acts resulting from industrial production” (p. 68). Flusser’s recourse to the Gulf War as a recent case and the example of a helicopter pilot whose helmet is synchronized with the guns, with the go-ahead for an attack that can be given by the blink of
an eye (p. 68), remotes to the killing drone above. If the ethical problems of design are not addressed, as Flusser’s ending appeal urges that the cases referred to would be “merely the opening stages of a period of destruction and self-destruction” (p. 68). Once again, Flusser ties together a philosophical, ethical and political perspective to aspects of contemporary culture and to design.

“Shelters, Screens and Tents” was a lecture given in Graz, Austria, in 1990, at the culture festival Steirischer Herbst. The first of these series in 1990, which was continued up to 1995, “Steirischer Herbst ’90”, chose the title “nomadology”, understanding mobility as an intellectual principle and an artistic impulse. The festival papers were published under this title: auf, und, davon. Eine Nomadologie der Neunziger, Graz: Droschl 1990. The first encounter and the publications of the book brought together authors reflecting on flight and forced migration (apart from Flusser, we have here Peter Sloterdijk). In the German title “Schirm und Zelt”, Schirm refers to umbrella, something that offers shelter, just like a tent, but “Schirm” also means “screen”, what explains the English translation of the title to “Shelters, Screens and Tents.”

Umbrellas/shelters/tents belong to the list of objects we are surrounded by (the above invoked coisas que me cercam - things that surround me). But apart from their long history, “architects (and tent-designers in general)” have not yet perceived that they are dealing with the wind and not with gravity, “that the danger with shelters such as tents is not their falling down but their being swept away all over the place by the wind” (p. 55). But this will change, as “(p)eople will learn to think more ‘immaterially’ as soon as walls have been torn down” (p. 55). Tents differ from houses in their higher degree of mobility, which is not a bad start for “an analysis of the cultural change bearing down on us” (p. 56), and this change is marked by the revolution in communications and media in general, technical images in specific. “The fact that the tent wall is woven – i.e. a network – and that experiences are processed on this network, is contained within the word screen. [...] Since ancient times, the screen wall has stored images in the form of carpets. Since the invention of oil painting, the stored images are in the form of exhibited pictures. Since the invention of film, they have been stored, in the form of projected pictures, since the invention of television, it has acted as a screen for electromagnetically networked images; and since the invention of computer plotters, the tent wall, now in an immaterial form, has made possible the subdivision and diversification of images thanks to the processing of its network.” (p. 57) The screen wall processes this
network and makes the tent “a creative nest” (p. 57), and so once again Flusser adapts his theorems (like communications revolution, techno-image theory, contemporary culture) to the congress theme of mobility and its creative momentum.

“The Factory”, one of the two works first published by Wurm’s edition, was a talk given to an entrepreneur’s round table — Unternehmergespräch der Aktiengesellschaft für Industrieplanung (AGIPLAN)), in Mühlheim/Ruhr, 1991, and the theme of the round table was “Fabrik der Zukunft: Rückkehr der Architektur” [The Factory of the Future: the return of architecture]. The written manuscript by Flusser, titled “Homo faber”, again, gives a hint on how Flusser proceeded: he had his stock of theoretical basics (theorems, an expression used by himself), and adjusted them to the respective context of the event for which he was invited or participated, a sort of give and take. This could be criticized as an opportunistic adaptation to a given situation; but it can also be considered the other way around, as a proof of the strength of his theorems, which were almost universally applicable. Basic philosophical matters rarely change substantially.

“The Factory” in fact is a compressed version of Flusser’s anthropology. The categorization of Man as homo faber (being less zoological than anthropological and also less ideological as homo sapien sapiens) “means that we belong to those kinds of anthropoids who manufacture something” (p. 43). This is why “‘factory’ is the common human characteristic, which used to be referred to as human ‘dignity’” (p. 43). If we want to know how Neolithic human beings lived, “we can do no better than study pottery working-floors in detail”, as “the science, politics, art and religion of the society of the time, can be traced to factory organization and the manufacture of pots” (p. 43). Similarly, if we see human history as the history of manufacturing “the following rough periods can be distinguished” according to the popular means used: “hands, tools, machines, robots” (p. 44). The hands being the primordial organs for manufacturing (and turning), “tools, machines and robots can be regarded as simulations of the hands which extend one’s hands rather like prostheses”, or extensions (Flusser uses this expression, made popular by Marshall McLuhan in this context, in Portuguese in some manuscripts). As the tools used have a feedback on their users, as expressed in the article already treated above, fabrics “are places in which human beings become less and less natural and more and more artificial, for the reason that the things turned into other things, the manufactures, strike back at the human being”, and thus they are “places in which new kinds of human beings are always being produced: first, the handy-
man, then the tool-man, then the machine-man, and finally the robot-man. [...] This is the story of humankind” (p. 44-45).

The first Industrial Revolution is the one from hand to tool; it creates a new form of human existence, governed by culture, by whom the human being is now protected and imprisoned (p. 45). The second Industrial Revolution is the one from tool to machine, but whereas in the case of the tool, the human being is the constant and the tool is the variable. Similarly, in the case of the machine, the latter is the constant and the human being is the variable, being ever replaceable. As a consequence, “(t)he second Industrial Revolution has cast the human being out of his culture just as the first one has cast him out of nature” (p. 45). Next, the third Industrial Revolution, “the one from machine to robot” (p. 45), in which “in terms of the simulation of hands and bodies” tools are empirical and machines are mechanical, “robots are neurophysiological and biological” (p. 46), and this will bring forth a new type of factory and culture. This includes also space, topology, “or, if you like, architecture” (p. 46). Homo faber, before the invention and use of the tool, had no defined location, he could act and operate anywhere. The production of tools, however, demanded specialized factory areas cut out of the environment (“for example, where flint is hewn out of rock, and others, where flint is turned into something else”, p. 46). In machine culture, human architecture has to be subordinated to that of machines, with “enormous concentrations of machines forming clusters in a network of interaction”, “the structure of factory architecture in the nineteenth and twentieth century” (p. 47). Robots then change this structure again fundamentally. Now, wherever the human being “goes, stands or lies, he carries the robots with him (or is carried around by them), and whatever he does or suffers can be interpreted as a function of the robot” (p. 48). Thus, “the giant industrial complexes of the machine age die out like the dinosaurs and at best [are] exhibited in historical museums”, the people, now connected by reversible cables, no longer stuck to places defined by the machine architecture. And this is what Flusser names “a telematic, post-industrial, post-historical view” (p. 48). It requires “the becoming immaterial of the factory” (p. 49), in other words new schools for manufacturing and learning, “i.e. acquiring, producing and passing on information” (p. 50). Flusser writes in 1990, this might sound utopian, yet “it is nothing but a projection of tendencies that can already be observed” (p. 50).
“Bare Walls” was first published under the title “Walls” in *Main Currents* in 1974. The article is similar, but not identical with the chapter “Walls” in the book *Things and Non-Things* (Flusser, 1993b, p. 27-32), and probably a short version of the latter.

Walls are considered to belong to those things we are surrounded by, perhaps more than anything else. When naked (bare), they remind us that nature, taken for granted, “has to be transformed into something man-made: culture”, awakening “the human will to form a design” (p. 78). When Flusser affirms that “(s)trong out against walls, Man identifies himself as a creature who opposes the formless chaos represented by the world” as part of “the activity of the human spirit working against entropy”, he draws on a position developed as early as his first book, *Língua e realidade* (1963), where this function of erecting negentropic structures against the entropic condition of nature is essential for the development of culture. The paradigm for this construction of informational structures is language, but this is only one part of culture, and Flusser, not only due to the influence of Ernst Cassirer and his *Theory of Symbolic Forms* extends this insight to other elementary constituents like art, religion, philosophy and science, etc., and, consequently, also to design.

Nevertheless, apart from being constructed, once constructed, culture is a fact. “It is a mistake to say that culture is made by human beings and is therefore the realm of human freedom. For everyone living in a culture, it is something taken for granted just as nature is” (p. 78). With regard to objects of culture, we can establish a relation of ‘philosophical distance’, and on this basis, as “creatures of reflection and speculation”, “develop a philosophy of culture” (p. 79). And culture appears to us in the form of a steady growing collection of things that we place up against the four walls of our dwelling to cover up their nakedness. This becomes even more plausible when we pay attention to the fact that one of the walls can turn “into a window without any glass in it” (p. 79), in other words, a screen, and in this way Flusser relates the topic of walls to media theory. Together with the three remaining walls the screen turns the house into a theater and man to an actor on the stage, and: “Culture thus appears as ‘fiction’ (in the sense of fingere, ‘to form’, ‘to design’)” (p. 79). This is part of the human effort “to impose his will on nature”, which in the end he cannot succeed, but even knowing this, “Man will still go on filling the space between the walls with things, as witnesses to his power of design” (p. 79). Thus, the first appearance of the term design in Flusser is here in this article, written in 1974, long before his contact to *DR* in 1989-1991, the German translation of design here being “*Gestaltung*”. His reflections on
design, we can claim therefore, are an outcome of his cybernetic culture theory, in which culture is seen as a negentropic project set up against the entropic void that nature is to us.

In “Wittgenstein’s Architecture”, from 1991, he turns to one of his most strongly influencing authors, Ludwig Wittgenstein. Flusser draws a parallel between the architecture of Wittgenstein’s Tratatus logico-philosophicus and the house Wittgenstein had built as an architect in Vienna. The short article was first published in Welt/Fall (Mönchengladbach 1991), which documented an installation by the editor Mischa Kuball in Wittgenstein’s house.

“Form and Material”, from 1991, was first published as a contribution to a book edited by Wolfgang Drechsler and Peter Weibel (Bildlicht, Vienna, 1991). Flusser had a kind of ambiguous relation to the idea of immateriality. In 1985, under the impression of the famous exhibition in the Paris Centre Pompidou, Les Immatériaux (the “immaterial” or “the non-material”), by Jean-François Lyotard, Flusser adopted the idea of a liquefaction of the material part of information, called zero dimensionality in his scheme of abstraction. But in Form and Material he begins with the remark that “a lot of nonsense” is being spoken about ‘immaterial culture’, which is why he wants to clear away the distorted concept of ‘immaterial’ in this article (p. 22). The word materia is a translation of the Greek hyle, originally meaning “wood”, in Latin, and hyle is the opposite of form, morphe. So the opposition hyle/morphe is equivalent to “matter”/“form”, where matter is “stuff”, in the sense of the “material world”, the material world being stuffed into forms (p. 22). This represents the classical Greek philosophy of Plato and Aristotle, a constant in flusserian thought. After some philosophical detours (like the idea of materialism, that matter (stuff) is reality), nowadays, “under pressure of information technology, we are returning to the original concept of ‘matter’ as a temporary filling of forms” (p. 23).

When talking about “immaterial culture”, what is meant is “a culture in which information is entered into the electromagnetic field and transmitted there” (p. 24). But here, according to Flusser, are two misunderstandings, one about “the term immaterial (instead of high-energy)” and the other about the concept of information. The opposite of “material” is not “immaterial”, but “form”.

“If ‘form’ is the opposite of ‘matter’, then no design exists that could be called ‘material’. It is always in-forming. […] Design, like all cultural expressions, illustrates that matter does not appear (is not apparent) except insofar as one in-forms it, and that, once in-formed, it starts
to appear (become a phenomenon). Thus, matter in design, as everywhere in culture, is the way in which forms appear” (p. 26).

On the other hand, speaking of design using the dichotomy material/immaterial is not completely beside the point, as “(t)here are in fact two different ways of seeing and thinking: the material and the formal” (p. 26). Whereas the Baroque period was material, ours is more formal, and thus “the history of painting, for example, can be seen as a process in the course of which formal seeing (with some set-backs of course) takes on a leading role over material seeing” (p. 26). Material seeing results in representations (like animal paintings on cave walls), the formal one in models. But the point in this development is formalization and not immaterialization, as shown in the example of Cézanne and carried to the extreme in Cubism, which is why one “can therefore say that this sort of painting that, moving [...] between material and form, between the material and the formal aspect of phenomena, it approaches that which is referred to, incorrectly, as the ‘immaterial’” (p. 27).

All this, however, is just a lead-up to so-called ‘artificial (synthetic) images’, in German “synthetische Bilder”, images that display algorithms (p. 27). “Such artificial images can be referred to (mistakenly) as ‘immaterial’, not because they show up in the electromagnetic field but because they display material-free, empty forms” (p. 27). When in the past, the matter was “formalizing a world taken for granted”, now it is “realizing the forms designed to produce alternative worlds. That means an ‘immateriel culture’, though it should actually be called a ‘materializing culture’” (p. 28). At issue here “is the concept of in-formation”, which means “imposing forms on materials” (p. 28). This leaves no room for anything such as the ‘immaterial’. “For the ‘immateriel’ or, to be more precise, the form is that which makes material appear in the first place. The appearance of the material is form” (p. 29). And as a materializing culture this is a culture depending on design. In this way, Flusser, once again, brings together his reflections on the new possibilities of computational processing with traditional concepts of philosophy. It is worth noting that in this article he also attributes the achievement of artificial images not to the revolution in information technology (as he does many times, indeed), but to the history and development of painting.

“The Submarine”, the second of the two first essays in Wurm’s edition, belongs to the series of Flusser’s philosophical fiction (see also Flusser, 1998a, and his Vampyroteuthis

5 In this phrase, the English translation in Pawley (1999, p. 26) is wrong, confusing material and formal seeing. See the German version in Wurm (1993a, p. 110).
infernalis, Flusser, 1987b), a narrative and literary form treating philosophical issues, in which we encounter Flusser as a sci-fi writer and master of irony. It tells, from a futuristic perspective, the history of a submarine that was designed and built in the 20th century to save the world by installing a human (and humanistic) world government, but that was destroyed by the human beings, because they were unable to rid themselves of the evils of the world and the suffering of mankind. Flusser saw himself in the humanistic tradition of Erasmus of Rotterdam and thereby of an ironic philosopher of the Enlightenment (Flusser, 2002, p. 62).

These, then, are the nineteen articles we find both in Wurm’s and in Pawley’s collection on Flusser’s theory of design, and therefore we can consider them prima facie, the essential ones for the topic.

2.2

Pawley’s book contains all the articles of Wurm’s, except for two: “Brasilia” and “City Maps”, which are included in Wurm, but not Pawley. Urbanism, we understand, therefore is not considered a part of design here. This presumably is also the reason why the article “Städte entwerfen” [Designing Cities], which appears in Flusser’s Writings (2002, p. 172-180), was not included by either Pawley or by Wurm, even though the word design is used here explicitly. On the other hand, we have five articles in Pawley’s book we do not have in Wurm’s: “The Non-Thing 1” and “The Non-Thing 2”, “Carpets”, “Pots” and “Wheels”, all taken from the book Dinge und Undinge [Things and Non-Things].

The two articles that Wurm has in his collection and that Pawley did not include in his—and we can presume, as Wurm’s is one of his two sources, rejected them for some reason—were written by Flusser in 1970, some 20 years earlier, before those explicitly on design and published as newspaper articles: “Brasília”, the first, in the German Frankfurter Allgemeine Zeitung, on Jan. 3, 1970, and the second, “Projetos Superpostos”, translated to German as “Stadtpläne” [City maps], also published in Portuguese in 1970, in the Brazilian Folha de São Paulo. Both treat the urban project of Brasília, the new capital of Brazil that had been inaugurated in 1960, and belong to a series of publications Flusser made on this topic (apart from Brasília also on other cities like São Paulo and Ouro Preto, in Brazil, in addition
to San Gimignano, Rome and others, some of them unpublished manuscripts). In the beginning, Flusser was enthusiastic about the project of Brasília, but later rejected it, an attitude that can be considered representative of the general reception of this project: when it was built, Brasília was celebrated as a model of architectural modernism, whereas even one of its architects, Oscar Niemeyer, in 2001 considered it an unsuccessful experiment. Flusser does not only write on the cities mentioned, but also very often draws on the history of first settlements that were transformed into the city — polis — in Greek antiquity and structured by three basic elements, then moves to Italian medieval towns with a similar structure, to point out the change in the contemporary structure of private and public, and moving on to future telematic cities with a totally different structure. Obviously Wurm considers it worthwhile to include at least two articles of these reflections on culture and urbanism, whereas Pawley thinks differently.

Brasília is, like Canberra, Washington D.C., or Ottawa, a planned (designed) city, and the concept underlying this plan is treated in Flusser’s article Brasília. The planning aspect is even more explicit in the second article, City maps (Stadtpläne), as the city, finally completed, is the implementation of a prior existing plan, and with this understanding belongs to the field of design. In the case of Brasília, ideas about the future of the Brazilian nation and its inhabitants, the “new man”, is part of the project, and this again implies a series of political, philosophical and other aspects, addressed by Flusser, so that the thematic range is long and way beyond design aspects sensu stricto. Perhaps this is the reason why some – like Wurm – include this in their concept of design and others – like Pawley – do not. Relevant in this context is a series of flusserian articles, like Designing Cities, not included neither by Wurm or Pawley, published in Flusser’s Writings (2002, p. 172-180), and written in 1988 as a chapter of the book From Subject to Project (see below).

The five articles contained in Pawley’s collection, which are not found in Wurm’s, are The Non-Thing 1, The Non-Thing 2, Carpets, Pots, and Wheels. All the articles in Pawley, as he states, which are identical to the selection of Wurm, were actually taken from Wurm’s edition. However, these five were taken from the book Dinge und Undinge. Phänomenologische Skizzen [Things and non-things: phenomenological sketches] (1993b). This again is a German version of a project, which had already been concluded in 1971, but was not published in Brazil under the title “Coisas que me cercam” [Things that surround me]. The book Dinge und Undinge – Things and Non-Things contains sixteen chapters altogether, from
which Pawley has selected the five. Even if they were the most emblematic, the others could, and in fact also should be taken into consideration, as they were united by the author himself. Apart from the non-things, carpets, pots and wheels, and the introductory chapter, also titled *Things that surround me*, Flusser dedicates proper chapters to bottles, walls, streetlights, gardens, chess, sticks, the bed, the atlas, the lever, the dipper and soup, obviously a much broader scope of objects of use than the ones selected by Pawley (1993b, p. 11-139).

“The Non-Thing 1”: Until recently, our environment (*Umwelt*) consisted of things that belonged either to nature (natural things) or culture (artificial things) (p. 85). But this has changed: now non-things flood our environment, “immaterial information” (p. 86). Information of course is not new, as the “word *information*”, that “has to do with ‘form in’ things”, indicates (p. 86). But now the “material basis of new-style information is negligible”, its materiality “can be discounted” (p. 87). We have become less interested in things and more in information, and the structure of society and environment change accordingly. “All things will lose their value, and all values will be transformed in information. ‘Revaluation of all values’” (p. 88). Nietzsche, once again. The impact of this informational revolution, which produces a new human being “who is not concerned with things, but with information, symbols, codes and models” (p. 88) can only be compared to that of the first Industrial Revolution. Similarly, much like a farmer in 1750 AD, who had more in common with a farmer in 1750 BC than with his son living in 1780 AD, we – the elder – have more in common with people from the age of the French Revolution than with our children, if they are *digital natives* (although this expression is not used by Flusser, this is what he means). They don’t use their hands anymore, only their finger tips, as they “tap on keys so as to play with symbols” (p. 89). And this “advent of the non-thing in our environment is a radical change,” but one that “will not be able to alter the basic mode of existence, being unto death” (p. 89). This last expression, “being unto death”, in German “das Sein zum Tod”, once again is a reference to Heidegger, one of Flusser’s strongest influences.

In “The Non-Thing 2”, Flusser turns to the fundamental importance of the hand within the anthropology of man. Ever since human beings have been human beings, they handled their environment using their hands. By this operation, grasping, possessing and transforming them, things as such come to be, and this brings forth two worlds: “the world of ‘nature’ (of things that are to hand [*vorhanden*, in German] and to be grasped) and the
world of ‘culture’ (that of handy [zuhanden, in German], in-formed things)” (p. 90). Flusser, once again, refers to Heidegger; in German, the dichotomy vorhanden – zuhanden is easily detectable as a reference to Heidegger’s “Vorhandensein” and “Zuhandensein”. Therefore, until recently it seemed “that the history of humankind is the process whereby the hand gradually transforms nature into culture” (p. 90). However, this opinion has been overthrown by the development of non-things like a computer memory or electronic images, which “are non-things simply because they cannot be held in the hand” (p. 91). They convey information, and this cannot be grasped by the hand, the hand having become dysfunctional. Fingertips have become the essential part, which is why they “have become the most important organs of the body” (p. 92). For pressing keys – and process information – only fingertips are needed. This connects everybody, with no exception, to programs, and so the society of the future will be one “without things” and a “classless […] society of programmers who are programmed. […] Programmed totalitarianism” (p. 93). This makes it necessary to more closely analyze the term ‘program’, the “key term of today and tomorrow” (p. 94). Now we understand why Flusser chose the numbers 1 and 2 in the title Non-Things: they are two ways of treating the same idea. Additionally, of such fundamental importance that they are also relevant for design, which is always a design of things.

“Carpets” belong to the category of everyday objects of use that Flusser analyses as cultural objects, last but not least in order to understand the nature of human beings, a traditional philosophical question (“What is man?”, of Immanuel Kant, one of Flusser’s references). Culture is the key to the answer: “Nothing human is natural. That which is natural about us is unhuman” (p. 95). And carpets, as analyzed in the eponymic article, are an example. Historically, their origins lie in Egypt, China, India and Persia, a perspective that Flusser frequently assumes in order to underline the origins of our present culture (he sees and defines himself as Mediterranean). Their process of production is a part of the cultural process and so its analysis also makes this transparent. Knotting carpets is not spontaneous, it requires and follows a plan, which is “why the carpet-maker has recourse to designs that have been worked out exactly in advance and that are fully aware of the fact that they are only pretexts” (p. 97). The carpet weaver “engages with the material by following a design that is prescribed for him, making this design so as to cover up the material”, and in this way “aims at an appearance” (p. 97). He conceals “the truth” of his efforts “by means of beauty”, i.e. the final result of the piece he brings forth.
“Pots”, among the oldest of human objects of use, in a certain perspective resemble “those forms that the Ancients referred to as ‘immutable Ideas’” (p. 99), and with “the Ancients” Flusser refers to Plato, the author cited more often than any other, and his theory of forms. “Pots are considered to be empty forms”, and Flusser, in this article attempts to look at “‘pure form’ phenomenologically” (p. 99). Filling a pot with water means giving form to the water, which again implies an informational structure, which is why the pot is an epistemological tool. Similarly, Flusser’s example for the difficulties arising from this, like the idea of a nation, in his case de Gaulle’s “certaine idée de la France”, that has to be filled up with elements, leading to unsettled questions concerning also science in general. If we look at the world from this “potter’s point of view”, we can see behind its phenomena the forms that “in-form” them (p. 101). “Behind the apple the sphere, behind the tree-trunk the cylinder, […] and, recently, behind apparently formless, chaotic phenomena (such as clouds and rocks) so-called fractal forms” (p. 101). Thus, we have nowadays “developed a new pottery technology, an electronic ceramics”, that allows to “display empty, but coloured, so-called artificial images made of algorithms on computer-screens” (p. 102). This reveals “what pottery is all about”, namely, “producing empty forms in order to in-form what is amorphous”, which is exactly “what the Lord was doing on the first day of Creation” (p. 103). Hereby, Flusser returns to the initial phrase of the essay quoted from the Bible, “Like a potter’s vessels shall the peoples be broken to pieces” (p. 99), which demonstrates once more Flusser’s wide range thinking strategy, making use of all sources of human intellectual strivings form the Bible to philosophy and reflections on new media.

In “Wheels” Flusser proceeds similarly in presenting their history, starting with the sharp but concise remark that one of the most lasting consequences of Nazism “is the way in which the swastika has been turned into a kitsch object” (p. 117). The swastika’s origin is the wheel of the sun, which is why this symbol is ubiquitous in so many archaic cultures, standing for the cycles and epicycles of day and night, summer and winter, birth, death and rebirth, etc. (p. 119). But then, all of a sudden, arose “the incredible idea of building a wheel that would turn in the opposite direction of the wheel of fate. A wheel that, if placed in the Euphrates, would turn the waters round so that they would not flow into the sea but into channels”, which is, “from our point of view, a technological idea” (p. 119). Nevertheless, it seems that this period has come to an end, because the new technology dispenses of the wheel. In our “post-industrial situation” we can verify a “slow but irreversible disappearance
of wheels”, that “no longer tick away in electronic equipment […], and once biotechnology has taken over mechanics, the machines will no longer have wheels but fingers, legs and sexual organs” (p. 117). So it seems that the circle of the wheel is coming to an end.

These articles included in a selection on design go beyond the scope of design in a traditional sense, as they are taken from a book that intends to propose a kind of phenomenology of culture understood via its materiality of objects, objects of use produced by human beings in order to establish a cultural counterpart to the natural part of our Life-World (a term coined by Edmund Husserl and highly valued by Flusser (Flusser, 1987a), although not used in this context). This is also the scope of a conference held in Weimar at the Bauhaus University in 1997, *Vilém Flusser: Design und die Philosophie der Lebensformen* [Vilém Flusser: Design and the Philosophy of Life Forms] (Flusser, 1998b).

### 3. Cardoso’s Collection

Cardoso’s book contains ten articles that were published both in Wurm’s edition and in Pawley’s, and three articles from the five that Pawley published, but Wurm did not. Additionally, he has six articles on the theory of communication taken from Flusser’s *Writings*, edited by Andreas Ströhl (Flusser, 2002). As Cardoso’s sources are, as he also states, the books of Wurm, Pawley and Ströhl (Cardoso in Flusser, 2007, p. 217-218), he does not offer any additional editorial achievement, but translates what had been selected by others into Portuguese. This is of course helpful but does not go beyond what the other editions already have contributed to our knowledge on Flusser’s ideas of design.

### 4. Arch+

The special edition of *Arch+*, number 111, 1992, a magazine for architecture and urbanism, was dedicated to the recently deceased Vilém Flusser. Hitherto unpublished is a long interview that the editor, Sabine Kraft, had made, together with Philipp Oswalt, with Vilém Flusser, titled *Virtual Spaces – Simultaneous Worlds* (1992, p. 33-52). This is the only new contribution on behalf of Flusser. All the other texts are republications, among these three
that were published in Wurm’s collection (*Bare Walls; Form and Material;* and *Shelters, Screens and Tents*). The interview is divided into eight chapters: cyberspace; ephemeral, dialogic architecture; life-space, outer space, quantum space; the “everlasting presence” (*nunc stans*); moving between virtual worlds; telepresence; cerebralisation; designing relations. Regarding the last point, post-historical thinking is about relations, and architects, when designing buildings, should not focus on objects, but on relations (1992, p. 49-50). Relevant to design, to summarize, is the discussion of new computational information processing.

5. Designing Cities

Flusser’s “Designing Cities”, translated to English and published in his *Writings* (Flusser, 2002, p. 172-180), unites the aspects of design with architecture and city planning. Published here as a separate article, it is originally a book chapter of *Vom Subjekt zum Projekt* [From subject to project]. In this posthumous publication, and unfinished final work, Flusser argues that the new cultural phase of man, postmodern digital society, changes the traditional relation between object and subject and allows the new possibility of a projecting subject, which explains the title *From Subject to Project*; the subject is no longer seen as indispensably attached to an object, but advances together with the development of technology and becomes projective. Apart from cities, a series of further basic elements of human culture are now becoming newly designed - the German verb used, *entwerfen*, its noun being *Entwurf*, translates in English to design - under the new conditions, each treated in a proper chapter: houses, families, bodies, sex, children, technology and labour (“*Städte entwerfen*”, “*Häuser entwerfen*”, etc.). Philosophically Flusser here refers to Heidegger, as Flusser himself testifies: “The concept of ‘Entwurf’ [outline, design, project] since Heidegger is used in a new sense. It means more or less the point from which on we decide to invert our being-thrown-into-the-world (unser Geworfensein in die Welt), to pro-ject ourselves.” (Flusser, 1994, p. 25, our translation) Heidegger’s concept of ‘Entwurf’ (see e.g. Heidegger, 2006, p. 235; p. 260), according to Flusser, only has to be adjusted to the new possibility of recoding numbers into concepts (Flusser, 1994, p. 25). This demonstrates how strongly Flusser was influenced in his design-theory (but of course not only here) by Heidegger. Moreover, it is Plato that speaks to us, because Heidegger undertakes an interpretation of Plato’s theory of truth (*aletheia*), and
this heideggerian interpretation again is Flusser’s source. This recourse of Flusser to Heidegger in this context is also pointed out by Siegfried Zielinski, the long-term director of the Vilém Flusser archive, in his essay *Entwerfen und Entbergen* (2010, p. 50-52), referring to Flusser addressing the subject in his *Kommunikologie weiter denken* (Flusser 2009, p. 180-181).

Whereas the term “entwerfen” corresponds to “to design”, “entbergen” is used by Heidegger in his adaption of the Greek aletheia-concept of truth, and means something like “become uncovered” (“Entdecktheit”, Heidegger 2006, p. 222). In other words, putting it more simply, grasping that which actually exists means to uncover phenomena in order to perceive its true structure. Designing things, therefore, means to structure them and thereby reveal their true “forms”. This is a reception of Plato’s theory of truth, based on ideas and forms. Thus, we are led into a highly complex philosophical debate. Nevertheless, Flusser always comes back to these roots when he outlines the potential of man changing from a state of being subjected to becoming a designer of his objects of use, as the title indicates, *Vom Unterworfenen zum Entwerfer von Gewohntem* [From being subject to a designer of the habitual] (Flusser, 1989). Finally, it is clear that Flusser’s theory of design is philosophically based upon the philosophies of Plato and Heidegger – Plato through the theory of forms and Heidegger through his theory of *aletheia*, the uncovering of truth.

References

Andrew Hieronymi,
Autotelic Digital Play:
Flusser and the Gesture of Smoking a Pipe
(a slide show)

Abstract

This essay takes the form of a slide show that juxtaposes selected quotes from various authors and primarily from Vilém Flusser’s essay “The Gesture of Smoking a Pipe.” These excerpts are accompanied by a selection of short video documentaries of interactive installations created by some of my former students. This juxtaposition of quotes and videos, places side-by-side Flusser’s description of ritualistic, impractical everyday gestures, and the playfulness of interactive art experiences. As Ian Bogost argues in his essay “The Cigarette of this Century,” our 21st century smartphone addiction is comparable to the 20th century cigarette addiction. By contrast, could interactive art provide the same kind of magical, autotelic experience, away from our production and communication concerns, as pipe smoking has provided Flusser?

Keywords: Flusser, Autotelic, Gesture, Interactive Art, Play, Physical Computing, Flow

See: http://ahieronymi.net/autotelic/
Priscila Arantes and Sergio Nesteriuk

Programming the Visible:
Conversations between Vilém Flusser and Harun Farocki

Abstract

The 2016 São Paulo exhibition “Programando o Invisível” [Programming the Invisible], showcasing works by the artist and filmmaker Harun Farocki (1944-2014), questioned the role of images in the 21st century, and particularly those images constructed by computer algorithms for video games. One of the videos in the exhibition captured the dialogue that took place between Farocki and Vilém Flusser (1920-1991) in 1986. In this theoretically rich and promising video, titled “Shocking sentences, shocking images: a conversation with Vilém Flusser,” they discussed the hegemony of images and of their power in programing our visibility. The theme is one of the central questions in both their works, as if the filmmaker and the philosopher were speaking about the same thing, although in different and complimentary ways. Their works similarly urge a reflection about the possibilities of creation of a critical perspective in face of our image culture, and they both emphasize the question of freedom in a society increasingly programed and dominated by technical images.

Keywords: Harun Farocki, Vilém Flusser, mídia, image, video games, flow

The motto of the exhibition Programming the Visible, presented at the Paço das Artes in São Paulo, 2016, was the questioning of the nature of XXI century images. The exhibition brought together a number of works by the artist and filmmaker Harun Farocki (1944-2014): Parallel I-IV (2014), Interface (1995), and Phrases of Impact, Images of Impact. A conversation with Flusser (1986).

Harun Farocki (1944-2014) is internationally known for his critical exploration of images that make up the world. Having made a number of films, many of them inspired by Bertolt Brecht and Jean-Luc Godard, the artist, in the last years of his life migrates to the world of contemporary art creating film-installations that discuss the relationship of man with the universe of technical images.

In 2010, he participated in the 29th International São Paulo Biennial with the video installation Serious Games, a reflection on computer animation, which employed
images focusing on violence. The work takes as its starting point the therapeutic process developed with North American soldiers who had been through traumatic situations in the Middle East.

*Programming the Visible* presented not only part of the creative universe of Farocki, but also examined the differences between images captured by optical devices and those built by computer algorithms. In addition, the exhibition discussed the nature of contemporary images and also their “power” in the construction of the ways we see and perceive reality. The title of the show, in this sense, could not be more appropriate. What we see is not only created by programed codes, but the way we see is also programmed; we live wrapped up in a world that is programmable and manipulated by machine codes. The computer image, thus creates “parallel” worlds that affect trajectories: the image itself is the world/reality we live in.

*Parallel I-IV* (2014), one of the works presented in the show, is a film installation which consists of four parts, each addressing the language of games. It reflects upon snippets of popular games, usually narrated by an essayistic voice-over. In these films, Farocki investigates the devices used for the construction of images throughout the history of art, such as the Renaissance perspective. The work is a film-installation about the “history” of images as well as the representation strategies throughout history.

In the first film of this series, created in 2012, Farocki analyzes the style of the computer graphics in games of the 1980s, which used images without depth of field composed of horizontals, verticals, and points. In the second and third films (2014), the artist analyzes the productions utilizing perspective and depth of field. In the fourth film, one of the latest works created by the artist in 2014, which has as its protagonist the hero-inspired games from Los Angeles in the 1940s, from pre-apocalyptic imagery, and from Western movies. Many of the sequences are frightening and violent; showing film sequences of street fights, persecution, and threats at gunpoint.
In these films, Farocki addresses a fundamental question: the fact that we live immersed in a world of images that have decisive influence over the way we see and approach reality. He discusses the nature of images in the twenty-first century, which unlike optical images, separate themselves from reality by creating their own “reality” with particular rules and characters. “The hero had no parents or teachers. He had to learn by himself what the rules were,” says a voice-over in one of the films that are part of the exhibition.

The work of Farocki, in this sense, seems to assume a tangible political dimension in line with the works of Jean-Luc Godard, master at creating terrifying beautiful takes, even if based upon the discomfort of contemporary life and its inherent violence.

Didi-Huberman, in his essay “Como abrir los ojos” [How to open your eyes] states that Farocki spent his life obsessed with the same question: “why, how, and in which way do the production of images participate in the destruction of human beings?” (Huberman 2013).

To deal with the violence in the world by giving back even more violence, is perhaps Farocki’s strategy, in order to reflect on the malaise of the world: “Elevar el propio pensamiento hasta el nivel del em ojo (el enojo provocado por toda la violência que hay en el mundo, esa violência a la que negamos estar condenados). Elevar el propio enojo hasta el nivel de una tarea (la tarea de denunciar esa violencia con toda la calma y la inteligencia que sean posibles).” [To raise our own thoughts to eye level (anger caused by all the violence in the world, this violence that we refuse to be condemned to). To raise our own anger to the level of a task (the task of denouncing this violence with all the calmness and intelligence that is possible.)] (Huberman 2013: 14).

**Shocking Statements, Shocking Images. A conversation with Vilém Flusser**

It is interesting to see how the issues of *Parallel I-IV* echo in *Shocking Statements, Shocking Images: A Conversation with Vilém Flusser* (1986), another work present at the
exhibition, in which Farocki asks the philosopher Vilém Flusser to analyze the first page of the German sensasionalist tabloid Bild Zeitun. Taking place decades before the series Parallel, this interview provides disturbing answers to many questions about the contemporary uneasyness. Here, images, texts, and sources reinforce each other to create both shocking media and reality effects.

It is important to point out that many of the questions in this interview bring up discussions that were already developed by Flusser in the publication of Filosofia da Caixa Preta [Philosophy of the black box], released in 1985, a year before the interview.

In Filosofia da Caixa Preta, photography is taken as an example, which makes possible the development of a critique of the relationship between technology and society, an example from which Flusser arrives at the concept of technical images. Photography is a basic model, a device whose characteristics will acquire new meaning in film, video, television, and more recently, in computer generated images. In this sense, Filosofia da Caixa Preta is not only a book about photography, but rather about the production of technological images, which change the way we relate to the world. Photography in this context works more properly as a pretext with which to check the functioning of our society marked by the collapse of the text and the hegemony of media images.

The advent of the technical image marks the beginning of a new relationship with the visible, with structures that are different from the written language model: technical images are surfaces that aspire to be representations of the world, but in fact hide their real dimension, which is none other than that of being an image.

The exercise employed by Flusser is, precisely, upon perceiving a new stage of the culture contaminated by the explosion of technology and media, to cast a critical eye onto other devices seen as black boxes, devices whose interior programming are completely opaque and uncertain.

Due to the action of the techno-social programs, the subject tends to become programmed and a programmable worker, who is expected to respond to questions
posed by the technical apparatus. In other words, what we really see, in a world dominated by technical images, is not the world, but certain predetermined concepts relative to a world impregnated with the media structure.

The interview thus emphasizes important points of Flusser’s discussion: the hegemony of the world of images and their power in programming our visibility.

It is interesting to note that, unlike other texts by the philosopher, in this interview, Flusser develops an “applied philosophy.” He carries out a thorough exercise of reading the subliminal relations between text and image on the first page of the German tabloid, unmasking the way the expressive codes interrelate in the creation of slogans and demagogic discourses.

The theme of violence, which is one of the topics placed on the front page of the newspaper, more specifically concerning a person who was shot, is reinforced by the way the text and image intertwine, creating a subliminal way to treat violence as something trivial. Flusser says in one of the excerpts from the interview: “The text states: She had to kneel. Shot in the neck. And here the image breaks the text. Therefore, if someone looks at the image, a powerful point can be obtained. Very important, which is to say, (...) even before we go crazy trying to understand what that page really wants to say (...). The situation constructed here is built in a deliberately chaotic manner with the intention to burst into our consciousness. Its intention is to eliminate our consciousness. Its intention is to prevent our conscience, so that we can supposedly absorb the message at a low level of consciousness and will not understand it correctly. What we are looking at here, is an apparently transcendent form, a ‘kitschified’, brutalized reduction of human dignity by a robust demagoguery.”

At the end of the video, Flusser calls attention to the fact that the interview is also an image — since the interview is being filmed — and in this sense, the viewer must have a critical and reflective view in relation to what he/she sees: "I honestly believe that when someone watches us on TV, this must be said. We must make an
appeal to the viewer now, and say: “use this critical skill, because we are using the ‘word’ against ourselves.”

This is the point where Flusser’s philosophy wants to intervene: to produce a reflection on the possibilities of creation and a critical view with freedom in an increasingly programmed society dominated by technological images. Thus, it is also necessary that we be suspicious of images, since they are codes, and as such, programmable.

**Game Design: Between Vilém Flusser and Harun Farocki**

In *O Mundo Codificado* [The Codified World], Flusser (2007) defines design as an area in close harmony with the world of communication. Far from seeing design as a separate language, both are encodings of the world: “Design, like all other cultural expressions, shows that the matter does not appear (is unapparent), unless it is informed, and thus, once informed, begins to manifest itself, becoming a phenomenon. Matter in design, like any other cultural aspect is the way shapes appear” (Flusser 2007: 28).

That is to say, for Flusser, unlike a modernist vision of design in which form should follow function, the form of something, the artifact, carries with it the sense of in+forming, that is to say, to create something with intent: “Every manufactured object, in turn, aims to transform the user's relationship with its surroundings in order to give him some advantage. By completing a possibility of use, the artifact becomes both model and information. For example, once you see a lever in operation and once you see the principle employed, it is no longer possible to look at any wooden stick or metal without recognizing its potential application for the same purpose. What was before a simple piece of wood acquires a specific function and meaning by the existence of a concept, that is, to inform is also to fabricate” (Flusser 2007: 13).
Faced with a massive entertainment device, one of the main intentions of a game designer is to project and implement strategies and various resources that support the ubiquity and immersion of the player. In this way, it is possible to keep the player in what Mihaly Csikszentmihalyi (2008) called “flow”: a state of extreme concentration (or absorption) in the activity per se, as if the ego gets dissolved before an autotelic phenomenon.

However, what the literature in this area seems to ignore is precisely the limits that these (and other) game design issues reveal. The flow deprives the individual player and her “suspension of disbelief”, of a critical detachment from the artwork (the “game played”), as well as from an expansion of potential experiences that games can offer, just by confining users within certain desired parameters.

And it is precisely in this gap that Farocki thinks of games: between the real, the imaginary, and the symbolic — to make use of the psychic realms proposed by Lacan. By appropriating, mediatizing, and subverting the logic of games, the artist places them in a kind of digital non-space, a palimpsest under which other texts are revealed; the invisible behind that which he called “operative images”: images that start from a technical operation in order to restore or create a given reality.

Unlike what was done with Serious Games, in which he addressed a game created by the US Army, in the installation Parallel, consisting of four videos, Farocki employed four different commercially launched games to explore relevant issues which escape not only the game players, but game critics as well.

In the first video of the Parallel installation, elements of nature such as fire, water, and trees serve as a reference to show a kind of “leap” in just thirty years of digital image representation, from a few points on the screen, to lines, until reaching the representation of the three-dimensional (3D) space. As stated in the video, the 3D image creators did not have to wait for a Renaissance, because digital technologies allowed images out of their symbolic dimension into a “new constructivism.” The example of a designer alternating his/her gaze between two monitors to create clouds in a 3D scene is emblematic: on one of the screens he/she operates the interface of a
software program while on the second, the result of handling forms a virtual sky composed of different layers of clouds. Unlike the Greek painter Zeuxis, who had painted grapes so perfect that birds were attracted to his canvas, computer images intend to attract human beings created by their own designs. Farocki believes that, in the same way that photography liberated painting for the avant-garde movements, the three-dimensional images will assume the function of cinema, freeing other possibilities.

The second video touches upon spatiality: space, its surfaces, its limits and the emptiness. Beginning with the ontological assumption that “the world does not exist if I'm not observing it,” Farocki focuses the reflection on the attempt to understand the (in)finitude of space created by these operative images. “How far can you get?”, asks the voice in the video, while the images show attempts to overcome unscalable or even invisible borders programed by the games.

The third video in the installation explores issues of displacement, showing the control of a camera in a type of big zoom in/out that allows one to exit from an almost microscopic view inside a battlefield scene, zooming out to a distance that reveals a silent scenario with no sounds, suspended in a kind of big emptiness — “the world ends as a board,” a voice tells us in the video. Through manipulation of the game programming code, one can cause the camera to penetrate objects and solid surfaces showing them, as if they were hollow inside. The absence of collision provides other ways to experience space in this “new constructivism.” By breaking the immediate relationship between matter and form, the artist reinforces the hyper-real (Baudrillard 1981) in the manifestations of time and space created by the direct manipulation of the player, thus stimulating new forms of cognition and imagination. “Like a child who rips a doll apart in order to know the mysteries of representation,” the video narration concludes.

In the fourth video, Farocki investigates extreme situations involving characters controlled by the player and their interactions with NPCs (Non Player Characters) guided by the programming of an AI (Artificial Intelligence) algorithm. In addition to
the “gratuitous violence,” one of the tactics used is to keep the character still when controlled by the player before an NPC, that is to say, not to act or look for ways of interaction that a gamer usually seeks. This adopted distancing reinforces the estrangement of the public towards something that is presented both as familiar and strange (unheimlich). Thus emerges an intrinsic diegesis that asks us not only about the simulation or mimicry of human behavior, but about the limitations of human freedom. In sum: to what extent life in society could also not be considered programmed or programmable? How far does the player control his/her own life? To what extent can his/her own life be considered a big game?

**Final Thoughts: (Re)programming the (in)visible**

We argue that by proposing new ways of encoding and decoding the world, Farocki assigns new possibilities for the use of an artifact, thus valuing not only its model, but especially the potential of its program.

Nevertheless, we can expand this consideration if we have for a base other aspects present in the term “design,” both in its use as a noun and as a verb. For Flusser (2007), even the most ordinary meanings of the term evoke “perfidious and cunning” dimensions: “The design word occurs in a context of trickery and fraud. The designer is therefore a malicious schemer dedicated to engendering traps” (Flusser, 2007: 182).

Thus, the artifacts of which Farocki appropriates can be understood as machinic processes, deception devices — the lever itself, example used by Flusser, has as its main mechanical feat the cheating of gravity. Similarly, the philosopher believes that the designer causes the appearance of the form and, therefore, should be regarded as an impostor who seduces men to consider ideas “deformed.”

---

6 One of the paradoxes observed in games is a phenomenon known as the “uncanny valley”, in which the closer to a perfect representation of the human figure a character is, the greater our fear of it, and therefore, the player’s empathy diminishes as representation becomes frightening real.
The dichotomous separation promoted by the Enlightenment between the realms of art and the technology of machines was already unsustainable in the nineteenth century, beginning with the emergence of technical images. For Flusser (2007), it is precisely modern design that will fill this gap, as a link between these two worlds that explains their internal connections and make viable a new form of culture.

“This is the design that is the foundation of every culture: to cheat nature through technical means, replace the natural with the artificial, and build machines from which we ourselves arise as god. In a nutshell, the design behind all culture consists of, with cunning, the transformation of simple mammals conditioned by nature into free artists” (Flusser 2007: 184).

Thus, it is also possible to consider the work of Farocki, as that of a facilitator in the understanding that a photograph, a film, or a game reaches their audiences in increasingly mediated and mediatized forms, unmasking, manipulating or often hiding their secrets, their invisible codes. And the more this process is repeated, the more obvious it becomes. Therefore, like the player of a game, the contemporary subject, might be understood as a deceiver who is at the same time deceived—even if this visibility is being hidden under other codes.

Bibliographic References


Lucas Bambozzi
Espaço informacional: o que se vê e o que não é aparente

Abstract

This paper discusses spaces permeated by connectivity and communication flow. It approaches “place” as a field of semantic migrations in which architecture tends to include the invisible aspects of communication technologies. The paper also discusses creative processes and artistic experiments that propose ways of “seeing” and of visualizing electromagnetic fields, radio waves, wi-fi and cellular signals generated by media networks. These artworks point to the invisible dimensions of spaces with intense urban circulation, such as the São Paulo city center, where there is a dramatic convergence and crossing of signs and systems.

Keywords: informational space, electromagnetic fields, obsolescence, site-specific mobility

Espaço informacional: premissas introdutórias

“A escrita é então o que permite passar de uma poeira à outra. Daquela que maquia àquela que mata. (...) A visão da visão. Após termos visto o que eles não nos mostram, sabemos melhor o que é ver, vemos melhor o que é saber.” Poeira dos Olhos, Jean-Paul Fargier (1993).

O entendimento da ideia de obras do tipo site-specific na arte contemporânea, indica a potencialização do significado e da complexidade de um trabalho através de sua relação com o contexto. Em uma visão mais ou menos ampliada, estamos falando de uma análise de contextos, de um suposto diálogo intencional com o entorno, de diferentes qualidades da noção de lugar, de processos de fricção da arte com a história, com a arquitetura, com as tensões percebidas num determinado espaço. E a identificação da exterioridade da obra em um entorno envolve também o espaço público compartilhável.
Considera-se uma suposta desmaterialização da noção de site a partir dos anos 1970, quando os circuitos passam a incorporar obras onde “o mapeamento sociológico é explícito”, como definido por Hal Foster em O retorno do real (1996). Ao observar a prática de artistas como Michael Asher, Marcel Broodthaers e Hans Haacke, Miwon Kwon acrescenta a essa visão, uma definição de site que inclui também uma série de operações ocultas, como por exemplo a “estrutura cultural definida pelas instituições de arte” (1999).

Em função da ampliação do debate em torno das qualidades e diferentes noções do lugar, o site passa a não ser mais estritamente físico, mas incorporado de um sentido discursivo e social, a ser decodificado em suas qualidades constituintes. O que parece não estar sendo devidamente enfrentado é o da especificidade de um contexto permeado agora por novos fluxos de comunicação, nem sempre visíveis ao redor.

Falemos então de sistemas que flertam com a arte a partir da ótica da comunicação, e se intrometem em áreas da arquitetura. Trata-se de um constituinte do espaço que não molda diretamente a paisagem mas o próprio olhar, borrando a nitidez dos detalhes, ou se infiltrando na percepção feito zumbido em frequência indistinguível - atuante no espaço, “presente” por assim dizer.

Mas ao invés de nos adentrarmos em digressões técnicas da comunicação envolvendo sinal e ruído, a proposta aqui é abordar elementos do entorno que se revelam como aparição, como componentes de um espaço habitado por intervenções de natureza nem sempre conhecida.

Hannah Arendt nos indica como juntar coisas aparentemente distintas ao discorrer sobre as coisas que tem a qualidade de “aparecer,” em sua crítica ao pensamento metafísico em A Vida do Espírito (1991). Segundo Arendt, o erro e a ilusão são inerentes às práticas tanto do cientista como do filósofo, e nada escapa a uma renovação da ideia de aparência, enfatizando o valor da superfície - e o que escapa da (mera) aparência. Trata-se de um pensamento aprofundado sobre o querer, o pensar, o julgar e outras capacidades intelectuais da mente (traduzido como espírito para evitar aproximações com positivismos ou mentalismos vulgares, segundo notas
da tradução) através do qual a autora define a própria política da esfera pública, como “o espaço da aparição.”

Rosalyn Deutsche, em seu artigo “A arte de ser testemunha na na esfera pública dos tempos de Guerra,” sobre a obra “Projeção Hiroshima” de Krzysztof Wodiczko, retoma o pensamento de Arendt, comentando que, ao enfatizar aparição, a autora estreita as relações entre a noção de esfera pública e a visão, abrindo, “sem saber, a possibilidade para que as artes visuais possam ter um papel no aprofundamento e expansão da democracia.”

Este artigo de Deutsche aborda o papel que artistas contemporâneos (no caso do artigo, Wodiczko), desempenham no sentido de revelar ou tornar visível a participação de segmentos da sociedade apagados ou relevados ao esquecimento. É uma posição que se refere não exatamente a uma forma metafísica, mas à alteridade, que nos diz da aparição do outro, “questão que é da ética e política do viver juntos num espaço heterogêneo.” (2009).

Deutsche sugere que trabalhos como o de Wodiczko buscam estender a esfera pública, possibilitando àqueles que foram tornados invisíveis, “fazer sua aparição.” Naturalmente esse processo envolve a conclamação de um espectador disposto a responder a essa aparição, como uma capacidade de visão a ser exercitada.

Em Projeção Hiroshima, realizada no Japão em 1999, Wodiczko deu a um prédio traumatizado pelos horrores da guerra o status de sujeito falante, resgatando-o de sua condição muda. Em The Homeless Projection, o trabalho estimula uma leitura pública permeada pela agressividade com que as ações de renovação do de uma área pública embelezada pela lógica da especulação urbana esconde e omite as contradições da história e dos excluídos.

Essas e outras projeções em grande escala de Wodiczko dão visibilidade a certos assombros sociais. Ao enfatizar a ausência, elas também nos pontuam o quanto a informação imaterial pode estruturar o espaço público de forma tão potente como o a arquitetura construída fisicamente -- inclusive em termos de construção de um espaço comum que valoriza o outro como elo fundamental desse ambiente.
compartilhado.

São trabalhos que se adentram também no político de forma direta, nos sugerindo um estado híbrido, em uma presença imaterial, que se torna potente ao ir de encontro à fisicalidade de espaços de circulação. Os projetos de vídeo de Dan Graham relacionados à arquitetura (desenhados para interação social em espaços públicos) também foram marcos no que se refere a um entrelaçamento entre o social, o espaço arquitetônico e a imaterialidade das imagens.

Walter de Maria, em O Campo de Raios (1977) cria uma obra de grandes proporções, com 400 postes de aço inoxidável, cuja forma só pode ser percebida do alto, em sobrevoo pela região desértica do Novo México nos EUA. A incidência de raios não é frequente como se poderia supor, e os visitantes que se aventuram a conhecer a obra in loco geralmente identificam qualidades outras, “que não podem ser capturadas por fotografias ou descrições” (GIBSON, 2004) mas por experiências sensoriais ao longo das diferentes fases do dia. Interessa aqui o quanto a obra preenche o vasto espaço de suposições e expectativas – para além dos fenômenos naturais suscitados.

São trabalhos e projetos que talvez façam ecoar o pensamento de Bachelard: “a imaginação aumenta os valores da realidade” (1989 p. 219), sugerindo que a imaginação funciona como disparador de estímulos aos aspectos não revelados de um lugar.

**Estratégia reversa: antever para entender**

“O que se vê provém do que não é aparente”. A partir dessa frase de Paulo de Tarso, mais conhecido como o apóstolo São Paulo, Paul Virilio comenta em O **Espaço Crítico** o quanto a característica imaterial das formas televisivas, tão emergentes a partir dos anos 1980, reafirmam aspectos da metafísica. Se o que se vê não é aparente, há um questionamento “não apenas da visibilidade como fundamento da credulidade ocular
ou ótica, mas como validade moral, ética e científica”.

Trata-se porém de se fazer ver, uma vez mais, “tornar visível”, em formas de detecção de presenças, num sentido que oscila, não exatamente no campo metafísico, mas de produção simbólica, que tangencia o poético talvez.

Exemplos dessa conjugação entre componentes antes vistos tão separadamente, entre campos muito distintos, vem se somando aos poucos e desenhando o que poderia ser considerada uma política da visibilidade, onde busca-se entender o invisível para que se possa viabilizar aparições, seja para que tenham voz e presença, seja para que possamos reagir ou negociar com os contextos que as geram.

Se a relativização da visibilidade apoiada em projeções é uma qualidade típica de trabalhos que lidam com a luz, a alegoria da Caverna de Platão seria um exemplo ancestral de uma fantasmagoria bastante convicente. Mas para um maior delineamento das políticas de visibilidade mais atuais, que envolvem camadas de informação mais complexas, talvez seja necessário ir além das situações projetivas, envolvendo a necessidade de detectar o que as camadas invisíveis representam politicamente – quando não promovem a emergência de questões sociais.

Tomemos a cidade como indutora de especificidades que fogem ao espectro da visão. A avenida Paulista por exemplo, em sua paisagem mais imediata, representa tipicamente um tipo de poder centrado no mercado financeiro, abrigando ainda inúmeras agências e sedes bancárias. Mas curiosamente, é acima do nível da avenida, situada na topografia mais alta da cidade, que vemos uma outra camada da paisagem, dominada pelo poder das comunicações, que se faz notar tanto em sua imagem mais aparente, seja nos cartões postais que exibem as principais torres de transmissão de

---

7 Segundo Virilio, uma questão similar já se sobressaía com o debate teológico sobre o telescópio de Galileu: “pode-se afirmar que se assistiu realmente a uma missa através de uma luneta?”

8 Pode-se dizer que o poderio econômico da Avenida Paulista vem migrando, desde os anos 80 para a Avenida Luis Carlos Berrini, quando escritórios e empresas fugiam dos altos valores do metro quadrado da Avenida Paulista. No entanto a concentração de empresas na Berrini aponta notadamente para um novo fluxo de capital, com foco nas multinacionais da informática (Microsoft, Terra, HP, Oracle, Lucent, Sun, Samsung, Qualcomm, etc), das operadoras de telefonia móvel brasileiras (Claro, Vivo e Oi) e empresas de comunicação como a própria Rede Globo, que se instalou na região da Berrini em 1998. Mas importa observar que as operações de transmissão das centrais de telefonia, assim como a das TVs abertas continuam sobretudo na região da Paulista.
TV da cidade, seja na sua parte “invisível”: as interferências causadas pela maior concentração de poluição derivada de campos eletromagnéticos até hoje já medida em um centro urbano no Brasil, e talvez no mundo.


Na região estão mais de 35 estações de rádio e TV segundo a Anatel, em dados de 2006. A recente proliferação das antenas emissoras de sinal de celular também tirava vantagem da topografia, formam uma nova camada intersticial de emissão de campos eletromagnéticos, em uma nova faixa de onda, situada no topo de muitos prédios entre 10 e 20 andares, tanto residenciais como comerciais, em um desenho de paisagem que remete mais às periferias do que a um centro econômico. Trata-se de uma densidade de sinais de fato crítica na região, constituída por amplo espectro de frequências, diferentes potências de sinais e gerações de tecnologias (equipamentos mais antigos, não otimizados, tendem a demandar maior potência), o que se soma a antenas emissoras e receptoras de internet via rádio e à pesada infra-estrutura de conectividade necessária para a operação de escritórios, residências, agências
bancárias gigantes, hotéis, hospitais e centros comerciais, em sistemas de menor escala mas em vasta quantidade.

Com isso considera-se a avenida uma zona crítica e emblemática, onde fantasia, mito, ciência e geopolítica se misturam, em uma espécie de triângulo das bermudas: carros com circuitos eletrônicos falham, teclados musicais captam vozes de rádio, hospitais necessitam blindagens em salas de cirurgia, aparelhos elétricos são danificados sem motivo aparente, certas aves perdem sua orientação de vôo, algumas pessoas se sentem mal, além de muitas outras fantasmagorias relatadas com frequência. Ou seja, a associação da avenida a campos eletromagnéticos enigmáticos é tão evidente que ela se constitui também como um local afetado política e socialmente pelo que não se vê, estando imersa em um nuvem de poluição eletrônica (invisible smog). Isso não constitui novidade para os moradores que passam a considerar essa estranha especificidade, em seu dia-a-dia. A avenida Paulista tem as especificidades conhecidas de uma obra, não de arte, claro, mas de uma confluência arquitetônica que inclui o invisível como parte de sua constituição.

Se na análise de Rosalyn Deutsche a aparição se dá a partir de um outro excluído da sociedade, aqui é todo um poderio econômico que se emerge, de forma totalitária, fazendo representar tanto o executivo como o precariado que opera a partir do trabalho imaterial, alheios e ignorantes da sua exploração pelo capital cognitivo, que lança seus tentáculos pela conectividade em tempo integral, sem trégua.

Novos assombros, novos incômodos surgem a partir de sistemas pervasivos e ubíquos, muitas vezes de funcionamento errático ou ligados a finalidades capciosas, aumentando genericamente as malvadezas dos pacotes de tecnologias que nos vendem em nome do progresso ou das cidades inteligentes.

Nesse campo sempre surgem mais perguntas que respostas: “Como ver, apreender, narrar essas máquinas que nos fazem visíveis e que no entanto escapam à nossa percepção e ação?” indaga Fernanda Bruno⁹ a respeito dos dados que se intrometem ao nosso redor, em máquinas que sabem muito de nós e pouco sabemos

---

delas. “Como negociar com elas, como contestá-las, contrariá-las e eventualmente sabotá-las?”, continua Bruno.

Em uma série de projetos ligados a minha prática artística, busco uma aproximação entre sistemas físicos, sua presença material e sistemas de comunicação que envolvem fluxos imateriais, apontando as especificidades, tensões e conflitos advindas desse cruzamento.

São formas de visualização de informação que podem se dar pela geolocalização, pelo acesso a uma rede ou por distúrbios causados em sensores ou mesmo corpos presentes num determinado ambiente.

A perspectiva de visualização de campos eletromagnéticos (EMF) por exemplo é uma das buscas recentes em trabalhos de minha autoria como no projeto “Das Coisas Quebradas” (2012). O projeto converte o espaço informacional que nos rodeia em um sistema “objetificado”, que representa um processo geralmente invisível. A máquina tem como input as variações de leitura dos sinais que circulam no espaço aéreo (sinais de Radiofrequencia RF, ou campos/ondas conhecidas como Extreme Low Frequency ELF ou Electric Magnetic Fields EMF), cuja saturação em determinados ambientes pode ser preocupante em vários aspectos.

A partir desses dados, o sistema se acelera e executa movimentos em uma máquina que culminam com uma ação destrutiva dos aparelhos celulares estocados (ou dispensados pelo usuário), o que para muitos pode representar uma espécie de acerto de contas com o consumismo associado às tecnologias que observamos hoje. Junto ao mecanismo de destruição da máquina, um monitor LCD mostra um gráfico que informa ao público a interação que ocorre no sistema: informações relativas à leitura da densidade da potência no ambiente (milliwatts por metro quadrado – mw/m²) são escritas na tela, nos permitindo deduzir o que acontece entre as medições e o funcionamento da máquina. Através desse componente digital da máquina, podemos saber por exemplo, qual foi o pico dos sinais nos últimos minutos, o momento em que o sistema iniciou as operações e há quanto tempo está em funcionamento. Esses e outros dados tornam visíveis informações que geralmente
nos são omitidas.

Em seu conjunto de relações, o projeto sugere a abertura de sistemas fechados, em alusão ao “clareamento” das caixas pretas, apontado por Vilém Flusser (1985). Potencialmente, podem também permitir o pensamento crítico a partir de uma condição onde todos são responsáveis pelo que ocorre nos espaços de circulação pública. Seu funcionamento leva em consideração um fluxo de informação que é produzido coletivamente, em interações entre o público e o sistema.

O fluxo de comunicação aumenta e passamos a ser responsáveis pelo que circula ao nosso redor. São novas formas de ver o espaço que nos rodeia, permeado de consumo, de valores, de ideologias, de informação privada imersa em espaço público.

Em “Do Teto Invisível” (2013), uma trama de centenas de metros de fibra ótica preenche o espaço aéreo de uma sala (CCBB-RJ, 2013) representando o espectro de interferências produzidas por sinais EMF de telefones celulares. As interferências detectadas pelo sensor de campos eletromagnéticos resultam na oscilações de cores e de intensidades de luz no espaço (através da conversão dos sinais em pulsos luminosos de um projetor de vídeo que “acende” os feixes de fibras óticas apontados para a sua lente). O sistema permite pressentir as intensidades das operações no ambiente onde se situa a instalação, pois se associa diretamente à visão do que se passa no nosso entorno.

Trata-se de um protótipo de um projeto que ambiciona algo mais que a representação de sinais invisíveis ao nosso olhar. É intenção de dar a uma obra a possibilidade de “produzir” espaço e não apenas “estar” no espaço.

Tomando emprestada a base sociológica contida nas definições de uma obra site-specific, projetos como esse encontram companhia cada vez mais numerosa de autores, artistas, hackers, ativistas e pesquisadores de várias áreas, na intenção de fazer ver a política anexada aos fluxos de comunicação que nos escapam. As performances sonoras de Vanessa de Michellis, as Wi-fi Panoramas (antenas DIY) de Bengt Sjölén, Adam Somlai-Fischer e Usman Haque, as caminhadas elétricas de Christina Kubisch, os Light Painting wi-fi do grupo Immaterials, as Spirit
Fotos de Luis Hernan são alguns exemplos de projetos nessa linha.

Figura 2: Montagem da instalação Do Teto Invisível no CCBB-RJ, 2013 [imagem do autor]

O próprio espaço social, agora hiper-conectado, já nos tem levado a repensar a natureza do lugar, em uma série de atualizações, passando por exemplo, pelas mídias locativas, como vem fazendo o artista Claudio Bueno em suas pesquisas e projetos artísticos, em especial quando nos indaga, “que lugar é este?”

10 sugerindo “um lugar difuso, de difícil circunscrição, que pode não estar somente aqui, nem lá, mas no lugar entre um e outro” (2010), talvez entre nós e as coisas, entre o que circula em torno de nossos corpos e reverbera no espaço.

Equacionando sentidos entre o que se vê e que se interpõe à visão ou entre o que se escuta e o que se percebe como ruído, há que se assumir que o sentido dessas

10 Dissertação de mestrado sob orientação do Prof. Dr. Gilberto Prado, apresentada junto ao programa de Artes Visuais da Escola de Comunicações e Artes da Universidade de São Paulo em 2010.
obras pouco ortodoxas, é criado a partir do atrito de referências, em confluências de signos e cruzamento de sistemas.

Nesse campo ainda indefinido, haveria então toda uma “signagem” a ser (re)codificada em associação a esses projetos, em obras onde o sentido é criado a partir do atrito de referências, em confluências de signos, em busca de uma relação sinal-ruído que permita que tudo signifique, de forma expressiva, como queria o poeta e semioticista Decio Pignatari (1984), ao utilizar o termo signagem, para se referir a códigos icônicos e audiovisuais, que se diferenciariam dos códigos verbais ou 'linguagens' estabelecidas.

Como “rami” em sala de cinema, como paisagem já permeada de fumaça, tornando mais opaco o campo de visão em modo contínuo, o que temos é talvez um fluxo que molda o espaço e aos poucos nos atinge, pelos mais variados meios de percepção.

Uma vez que vemos sempre com essa poeira nos olhos, que arranha o ato de ver, e por isso afeta mais diretamente a consciência do ruído, precisamos “saber melhor o que é ver, para vermos melhor o que é saber”, parodiando a epígrafe de Jean Paul Fargier que abre este texto.

A quem, senão aqueles que flanam com os aparelhos sensórios em estado de alerta, caberia apontar essa fuligem que nos rodeia? Resta confiar em algo. Pois já assumimos que enxergar esse invisível, que constitui também o locus da política, é entender o constituinte primordial de um lugar ou espaço.

Referências:


11 Termo difundido por Décio Pignatari em Signagem da Televisão, para se referir a códigos icônicos em contraposição aos códigos nitidamente verbais que produzem "linguagens".


Abstract

This paper addresses the issue of how to use translation as a method to understand archives. To this end, this paper proposes an intersection between Vilém Flusser’s reflection about his own writing method and the artistic experience of Mabe Bethônico as translator of the archives of the geologist and geographer Edgar Aubert de la Rüe.

Keywords: Vilém Flusser. Translation. Mabe Bethônico. Contemporary Art.

“E será somente na medida em que conseguir sintetizar tais espíritos em minha mente, que terei dado a palavra à coisa.”

Flusser (2013)

Em seu ensaio *A escrita*, Vilém Flusser (1920-1991) observa que o homem só poderá realizar a tarefa hercúlea de decupar a história, as bibliotecas e os arquivos – para, em seguida, programá-los em códigos digitais – depois de elaborada uma teoria e uma filosofia da tradução, até então, inexistentes (Flusser 2010). O comentário de Flusser sobre a tradução como uma chave de reflexão para o pensamento da transcrição da história alfabética para as memórias artificiais é o ponto de partida deste ensaio.

Cabe notar que a tradução tem um papel primordial em sua produção, visto que é procedimento e matéria para construção de seu texto. Em a *Retradução enquanto método de trabalho* (Flusser 2013), Flusser explica que sua prática de escrever é permeada pelo ir e vir entre várias línguas e pátrias. É, nesse sentido, uma reflexão teórica que parte de uma experiência de vida (Seligmann-Silva, 2014). Como pensar a tarefa de decupar os arquivos, tendo a tradução como método? É a indagação que pretendo perquirir.
Para tal, proponho um entrecruzamento entre o pensamento de Flusser sobre a escrita\textsuperscript{12} e a experiência artística de Mabe Bethônico\textsuperscript{13} como *tradutora* dos arquivos do geólogo e geógrafo Edgar Aubert de la Rüe (1901 - 1991). Considerando as devidas distâncias à construção dessa ponte\textsuperscript{14} imprevista, surge a partir de uma imagem – a que se vê pela janela no momento da escrita.

Em 1991, na abertura da conferência inaugural, na Universidade do Ruhr-Bochum, Flusser explicita seu posicionamento sobre o despropósito da separação entre o que chama de “ciências do espírito e da natureza”, e explica que seu interesse pela comunicação humana decorre do fato de essa ser uma área em que, talvez, não haja sobreposições entre as ciências, mas, um lugar onde elas possam irradiar seus conhecimentos (Flusser 2014: 30-31). Não me aterei a essa questão, contudo, recorro a ela, aqui, para explicitar minha intenção, ao aproximar universos distintos – colaborar para o alargamento das fronteiras entrepráticas. É nessa torcedura entre tradução e arte que minha reflexão se organiza.

A pesquisa de Mabe Bethônico em museus, arquivos e bibliotecas parte do entendimento de que esses espaços são potencialmente campos ficcionais\textsuperscript{15}. O projeto no Museu de Etnografia de Genebra tinha como intenção a investigação sobre estudos biográficos\textsuperscript{16}. O contato com a coleção fotográfica, os documentos em

\begin{itemize}
\item[\textsuperscript{12}] Com relação às discussões sobre uma escrita contemporânea que não se restringe ao alfabeto, a partir da reflexão teórica de Vilém Flusser (cf. Pato, 2012).
\item[\textsuperscript{16}] Essa é uma pesquisa que a artista vem desenvolvendo e é o tema da próxima *Pós* Revista do
papel e os cadernos de viagem de Edgar Aubert de la Rüe levaram a artista a tomar
conhecimento da visita técnica do suíço ao Nordeste brasileiro, durante uma missão
da Unesco para mapeamento das riquezas minerais da região. O livro _Brésil aride: La
tvie dans la caatinga_ é o resultado dessa viagem, que durou vários meses. É a partir desse
encontro inesperado que Bethônico começa a indagar sobre a tradução como prática
artística17.

Antes de adentrarmos no tópico do texto, faz-se necessária uma introdução sobre
o papel da escrita no pensamento de Flusser. Em _A escrita_ ele retoma os motivos que
levaram à invenção do alfabeto e mostra como o uso da escrita, concebido como a
ordenação do pensamento em forma de linha, está associado à própria noção de
história e de progresso. Em suas palavras: “[...] é um engano querer acreditar que
sempre houve história porque sempre aconteceram fatos [...]]. É um engano, pois
nada aconteceu antes da invenção da escrita, tudo apenas ocorria.” (Flusser 2010: 22)

Para o autor, a escrita permitiu ao homem desenvolver técnicas de interpretação e
crítica, aprimorar o pensamento lógico e, assim, construir o conhecimento científico e
histórico. Dessa forma, a edificação da escrita se constituiu, inicialmente18, na busca
por um “engajamento antimágico” (Flusser 2010: 29): ela se formula a partir do
afastamento do homem pré-histórico de uma imagética ligada aos mitos e à
representação.

Em linhas gerais, ao descrever os procedimentos da escrita, Flusser distingue dois
tipos de instrumento para escrever: o de “inscrição” e o de “sobrescrição”. O
primeiro corresponde à inscrição de sinais em objetos, como quando o homem usa
uma cunha para fazer incisões na argila. O segundo, à sobrescrição da tinta no papel,
com os pincéis de pena de ganso, a máquina de escrever ou um _software_ de
processamento de texto.

---

17 Bethônico, M. Um viajante depois do outro, um guia ou dois sobre a caatinga (Bethônico 2014a:
15-16).
18 Flusser situa o período de criação do alfabeto aproximadamente no século 20 antes de Cristo, no
Oriente Médio.
O autor propõe uma análise comparativa entre o aprimoramento das técnicas de escrita e o processo de aceleração pelo progresso. Um exemplo dessa relação, observado por ele, é a diferença entre os dois tipos de instrumento. Enquanto inscrever é tecnicamente mais complicado – por exigir força, paciência e cautela –, demanda menos: apenas uma ferramenta afiada e uma superfície rígida. Por outro lado, o desenvolvimento das ferramentas de sobrescrever criou estruturas cada vez mais complexas (como os processadores de texto), mas construídas para serem rápidas e fáceis de usar.

A escrita, para Flusser, é composta por duas intenções: ao mesmo tempo em que corresponde ao ato de enfileirar sinais gráficos para expressar um pensamento anterior, comporta também o desejo oculto, daquele que escreve, de imprimir no leitor uma ideia. Há entre os dois propósitos, afirma, uma contradição que gera uma tensão na escrita. Essa mesma condição é observada, segundo ele, na dialética entre o pensar e o escrever. Ao escrever, somos obrigados a parar para pensar criticamente sobre o que escrevemos; nesse sentido, a pausa representa um ato de resistência à produção desenfreada.


Isto posto, argumenta, a programação, ou prescrição, representa a consolidação de uma dinâmica que esteve presente na prática da escrita desde o início. Desde sempre estivemos enredados em mandamentos sagrados, leis, constituições e manuais de uso. Por conseguinte, programar é transferir para as máquinas grande parte das prescrições de funcionamento antes atribuídas ao homem; com os programas, “[...] prescreve-se aos aparelhos”. (Flusser 2010: 71)
Essa análise leva o autor a afirmar que todo o esforço da história e do conhecimento científico para dessacralizar os textos sagrados – e interpretar, classificar e tipificar o homem e a natureza – cumpre-se na linguagem da programação. Entretanto, ele ressalta, a programação não pode ser entendida como um instrumento da escrita, por não ser “[...] apreendida por meio de categorias históricas, políticas e éticas” (Flusser 2010: 72), e por demandar a criação de novas categorias.

Ao compreender a escrita como um método técnico de codificação e descrição das representações, Flusser conjectura se as máquinas não estariam mais aptas do que o homem a desempenhar o papel de organizadoras do conhecimento e da história. Não se pode, de fato, negar a eficiência dos computadores em seguir prescrições e cumprir tarefas antes atribuídas ao homem, como calcular, planejar e diagramar, entre tantas outras. Contudo, a peculiaridade da análise de Flusser é afirmar que o homem não estaria se preparando para abandonar a escrita apenas por uma impossibilidade inerente ao código: “Se nós devemos abrir mão do alfabeto, isso se dará provavelmente porque estamos nos esforçando para superar a consciência histórica. Estamos cansados do progresso, e não apenas cansados: o pensamento histórico comprovou-se irracional e homicida. Essa é a verdadeira razão (e não a desvantagem técnica do alfabeto) pela qual estamos preparados para desistir desse código.” (Flusser 2010: 72)

No que diz respeito aos prós e contras dessa transformação, especula-se sobre o impacto e as implicações da construção de memórias artificiais. Como frisado anteriormente, para Flusser, a definição dos “parâmetros” que regerão a transcrição da história alfabética para as memórias artificiais representa o grande entrave do processo.

Estamos de volta ao início do texto, o entrave disparador. Como pensar a tarefa de decupar os arquivos, tendo a tradução como método? Volto-me, agora, ao trabalho de Mabe Bethônico, no livro, _De como Mabe Bethônico percorreu a caatinga na Suíça, nos arquivos do autor viajante Edgar Aubert de la Rüe_ (Bethônico 2014a), em que se
propõe traduzir o livro Brésil aride, do suíço Edgar Aubert de la Rüe, da língua francesa para o português.

Cabe notar que a primeira experiência de Mabe Bethônico em arquivos resultou, entre outras ações, em um banco de dados. Em entrevista, a artista me diz que não tem um site sobre sua obra porque essa linguagem foi durante muito tempo o próprio trabalho. Curioso pensar que hoje a artista atravessa à tradução; seria esse um ato de resistência à produção desenfreada?

É com o objetivo de explicar sua prática de escrever que Flusser articula o ensaio Retradução enquanto método de trabalho. O texto aborda o início: “Nasci em Praga, portanto, bilíngue” e segue pelas fases de sua vida – o alemão é a língua da infância, junto com o tcheco, o inglês, a de seus estudos e da comunicação, o português, a de seu exílio e o francês, a de sua volta à Europa, das conferências e do presente em que sistematiza o método.

Assim segue e, diante da necessidade de designar a palavra às coisas, diz ele, “[...] me vejo obrigado a dar a toda coisa várias palavras [...]”. Trata-se, pois, “[...] de adequar as várias palavras uma à outra, para finalmente adequar tais adequações à coisa”. Para chegar à precisão do texto, seu método consiste em traduzir a informação que quer comunicar entre as línguas que domina.

Dessa forma, para escrever é preciso atravessar as línguas que estão “inscritas” em sua biografia. Seu método se constitui nesse processo de aproximação da coisa pela retradução da palavra. Um procedimento que se funda no processo de ir e vir entre línguas, a construção do texto se torna um jogo, em que constrói pontes – do alemão,

---

19 Telling Histories, no Kunstverein Munich, em colaboração com Liam Gillick, Ana Paula Cohen e Maria Lind, 2003. Sobre o projeto Maria Lind comenta, em entrevista: “The way the archive was organized was very much influenced by the Brazilian artist MabeBethônico’s choice. She made a kind of journey through the archive and divided it into collections: exhibition files, catalogues, and photo-documentation and press clippings. She also wrote shorter texts and excerpted things from interviews she made with our administrator, who has been here for twenty-five years. Some of these texts were then shown on the walls and she also set up a database, which is super useful, whereby visitor to the show could ask how many times a particular artist has shown at the Kunstverein Munich, how many visitor the Kunstverein had in 1991, what were the exhibition in 2000 and so on”.

(Lind 2011).


20 Entrevista realizada no atelier da artista, em 05 abr. 2016, em Belo Horizonte.
para o inglês, então para o francês e o português, mais uma vez de volta ao inglês, para nutri-lo novamente. Se, ainda assim, permanecer insatisfeito, diz ele, “[...] volto para o alemão e começo tudo de novo”. Durante a conferência de Bochum, ao descrever seu ofício de escritor, Flusser avisa que sua arte é a escrita e é a ela que se refere quando fala de arte (Flusser 2014: 188.192).

Concordo com Seligmann-Silva, ao afirmar que é a partir do “transcender das pátrias” que a reflexão teórica de Flusser acontece (Seligman-Silva 2014: 225), no efeito, por exemplo, causado pelo exílio, em seu processo de criação. Talvez, no próprio lugar ocupado pelo estudo da comunicação humana em sua obra – como uma reflexão teórica sobre as possibilidades de armazenar, de processar, de disseminar informação adquirida. Desde o colapso do humanismo, desde Auschwitz e Hiroshima a imagem do ser humano ficou difusa (FLUSSER, 2015, p. 32), de sorte que traduzir e retraduzir constituem uma operação de precisão, de retenção da imagem e da informação que se perde.

Em seu belo ensaio “A falsa primavera”, Flusser descreve a natureza que vê pela janela como se, entre a paisagem e a memória dela, algo tivesse se perdido, uma desilusão. Diz ele: “A paisagem que vejo quando olho pela janela não é como deve ser, e as coisas lá fora não sabem como se comportar. É meados de fevereiro e a paisagem deveria estar coberta pelo manto do inverno. Os prados deveriam dormir, protegidos pela neve. [...] Assim deveria ser a cena. Mas a que vejo é diferente.” (Flusser 2011: 107).

Na paisagem em desacordo, o funcionamento de seu ofício de escritor. Estaria Flusser traduzindo paisagens? É o que coloca Rainer Guldin, num interessante artigo em que aproxima a viagem do viajante (Vilém Flusser, Mabe Bethônico e Edgar Aubert de la Rüe) com a prática do tradutor: a experiência que vivenciamos ao viajar para outras paisagens pode ser exposta em termos de tradução (Guldin 2014: 177). Cabe lembrar que Flusser se exilou no Brasil, em 1940, fugindo dos horrores da

---

guerra, tendo permanecido aqui até 1972, quando retorna à Europa, em um dos momentos mais duros do regime militar no país\textsuperscript{22}.

Em sua autobiografia(\cite{flusser2007}), publicada no início dos anos 1970, Flusser descreve suas primeiras impressões sobre a paisagem do sertão brasileiro, em viagem que fez à região, no início dos anos 1940. Nessa obra, o escritor se refere à natureza como monótona e decepcionante. É nesse sentido que Guldin comenta: “Flusser traduz e retraduz suas experiências através da divisão cultural e temporal. Como muitos outros expatriados antes dele, Flusser associa o país e a vida que foi forçado a deixar a uma visão idealizada da paisagem em que ele nasceu e cresceu, e projeta, no novo ambiente, sua sensação de solidão e desorientação.” (\cite{Guldin2014:178}).

O texto de Guldin segue numa comparação entre as visões de De la Rüe e Flusser diante da paisagem brasileira e de seus contextos biográficos, mas o que me interessa aqui é o ponto em que o autor observa que a recusa da paisagem não significa um distanciamento, pelo contrário – “minha pátria é minha língua”\textsuperscript{23} – Flusser se dedica ao português “[...] como desafio e como tarefa de vida.” (\cite{flusser2006})

Voltemos ao livro de Bethônico. Ao pesquisar nos arquivos do Museu de Etnografia em Genebra, o desejo da artista era trabalhar com imagens da paisagem da região. Todavia, aos poucos, no revirar dos arquivos de De la Rüe, ela se depara com fotografias de feiras do Nordeste, de cercas de casas populares do sertão, de tipos de vegetação da caatinga. Bethônico não conhecia a caatinga descrita por De la Rüe, assim como desconhecia a língua francesa. Na verdade, seu projeto em Genebra estava vinculado ao seu ofício de pesquisadora-artista, a uma bolsa de pós-doutoramento cujo objeto eram os arquivos do Museu de Etnografia: a proposta, um estudo biográfico, o método, a tradução e o desafio, a \emph{traduzibilidade} da viagem pelo sertão, pelos olhos do cientista suíço. Pela janela, o que vê é o manto de neve sobre a cidade onde nasceu De la Rüe: “Estar em Genebra e percorrer a caatinga num texto em francês era uma experiência de encontro e desencontro. A distância geográfica somava-se aos contrastes de tempo à minha janela: trabalhava sobre a terra brasileira,

\textsuperscript{22} Em 1964 é decretada a ditadura militar no Brasil, que vigora até 1985.

\textsuperscript{23} Frase de Fernando Pessoa, do \emph{Livro do Desassossego}, citada por Caetano Veloso, na canção \textquote{Língua}.
seca, plana, quente e, lá fora, as montanhas de neve úmida ou o vento frio constante de Genebra, la Bise. Eu buscava dias iguais, mas eles não coincidiam, quem sabe a mesma luz, um mesmo céu limpo.” (Bethônico 2014a: 17)

Chamou-me a atenção o fato de uma artista que se dedica aos arquivos e acervos como lugar potencial para tensionar os limites entre história e ficção comece a pesquisar a tradução como prática. Lembrei-me da busca por novos parâmetros de que falava Flusser e do ato de forçar as palavras à coisa. Ao ponderar sobre a tradução como prática, a artista indaga até que ponto o zelo da tradução não despojaria a própria criação. Entretanto, me parece ter sido justamente esse seu desejo, “forçar” os arquivos no sentido de indagar sua “autoridade”. O desacordo é claro, difícil não notar a insistência da paisagem que permanece indiferente, ao desejo e à palavra.
Referências

Bethônico, Mabe (2014a). De como Mabe Bethônico percorreu a caatinga na Suíça, nos arquivos do autor viajante Edgar Aubert de la Rüe. Belo Horizonte: Capacete.


Nothing that relates to Vilém Flusser is ever simple or straightforward. So, it is hardly surprising to find an overload of complexity in an exhibition that attempts to come to grips with his relationship to ‘the arts’, that most slippery and protean of contemporary tropes. The question driving the ambitions of the curators – Siegfried Zielinski and Baruch Gottlieb (in cooperation with co-curator Peter Weibel) – seems to have been, how much Flusser can we squeeze into a medium-sized gallery space? Depending on the visitor’s openness to multiple viewpoints, the answer is either ‘a lot’ or ‘too much’. The curators did not make things any easier for themselves by breaking down the mythic media thinker into any one of his multiple facets. To approach the topic via his writings on art and the artists in whom he took critical interest would have been an entirely appropriate way to proceed. To scrutinize his impact on subsequent developments in art and media, after his death in 1991, would have been challenging. To consider Flusser’s own explorations of the borders between philosophical speculation on language and early experiments in digital art would have been thought provoking. To attempt to do all of these, at once, without any subdivision or hierarchy, while adding to the mix a generous helping of archival material, plus more than a passing nod to the role of exile in shaping the contemporary intellectual landscape, is the course upon which the curators finally settled. A reverse 4½ somersaults with pike from a three-meter diving board. The degree of difficulty makes it all the harder to judge the imperfect results.
The curators’ own appraisal of their efforts is more modest, as can be gleaned from the introductory text accompanying the exhibition:

Always journeying, out of place, not belonging to any academic discipline, and out of time in a twofold sense, the exhibition invites the visitor to embark on a minimal parcours that tracks the fleeting and fleeing life of Vilém Flusser as a model of the violent context that we call the twentieth century.

Minimal parcours, indeed. Were the visitor to attempt to watch all the videos and read all the texts contained in the exhibition, the least amount of time required would exceed the number of hours (eight) the gallery is open on a given day. A Flusserian conundrum, to be sure, and one the infernal provocateur himself would likely find entertaining. The absence of further explanatory texts, apart from the introductory and biographical ones, adds another layer of paradox to the riddle. Is it reasonable to demand even more text from an exhibition awash in ring binders stuffed with letters and papers, vitrines filled with books and typescripts, quotations and writing occupying every available bit of wall space? Possibly not; but two or three judiciously sized curatorial blurbs, expounding the central strands, would have made it easier to discern the exhibition’s intentions and meanings. Signposts, as it were, amidst a jumble of signs. Something that Flusser’s open-ended oeuvre requires, especially for the viewer/reader coming to him for the first time.

The first dilemma that poses itself to the visitor is which way to turn. Conventional exhibition logic would suggest beginning with the small biographical section, comprised of historical photos and mementos. These include young Vilém’s Hebrew prayer book, one of the few possessions carried out of his native Prague into exile, movingly inscribed after his death with a note from his widow Edith to their children, as well as a selection of books once belonging to the great man. Convention, however, is flouted by the fact that the biographical section stands directly behind the viewer as s/he gazes upon the panel bearing the introductory text. The visitor may well be tempted to move in the opposite direction, where the larger than life image of Flusser giving an interview is projected onto a wall, catty-corner to the visually intriguing installation of Dietmar Kamper’s ARCA-Black Box-la chose (2000). The predicament of what to look at first and which way to proceed is one that repeats itself throughout the exhibition. Perhaps this disruption of design is intentional – a kinesthetic demonstration of the principle of Bodenlosigkeit that underpins the show.
It is notoriously difficult to circumscribe Flusser, and words such as ‘multifaceted’, ‘heterogeneous’ or ‘elusive’ almost inevitably creep into discussions of his work to disguise the perplexity he inspires even in admirers. To their credit, the curators make no attempt to reduce him to a simplified label or palatable version of himself. Rather, the exhibition takes the opposite tack and addresses head on the willful complexity of his oeuvre. Major themes are distributed in pervasive mode, running through successive works without explicit connections forged between them. Objects recur in various guises, often referencing texts well known to readers of Flusser but rarely indicated. The typewriter, for one, makes at least three appearances: once in the shape of Flusser’s own AEG Olympia Dactyntel Senior, another time in the form of Peter Weibel’s work *Eletrical Typewriter* (1971) and a third time as the installation piece *Egomachine* (1974), by Nam June Paik. The latter is accompanied by a label bearing Flusser’s assessment of the artist: “This Nam June Paik is to philosophy what I am to judo”.

This humorous, if uncharacteristically frivolous, appraisal evinces one of the major themes of the exhibition: Flusser’s direct engagement with the production of visual artists. Though not usually remembered as an art critic, Flusser authored a considerable number of exhibition reviews in newspapers, as well as essays in exhibition catalogues. Many of his favourite artists are represented here, particularly those with whom he maintained personal relationships in Brazil during the 1960s and 1970s, such as Niobe Xandó, Samson Flexor and Mira Schendel. An untitled series of five monotypes by the latter, belonging to the collection of the Neues Museum, Nuremberg, is one of the high points of the exhibition. Joan Fontcuberta’s *Herbarium* (1984), presented alongside an introduction to the work by Flusser, is fitting tribute to his continued engagement with visual art even after achieving fame as a media thinker.

The selection of more recent artworks chosen for their presumed dialogue with Flusser’s ideas is slightly erratic. Some are literal and almost programmatic in their relationship to the exhibition – such as Andreas Henrich’s three graphic exercises *VF-Trajektorien* (2015) or Cyriak Harris’s *Chimpnology* (2014), dubiously deployed to illustrate Flusser’s prediction (in the 1991 lecture, “Hypertext”) that “a million chimps will necessarily type by chance all past and future texts on typewriters and produce such hypertexts”. Others – including some of the most powerful works in the exhibition, like Matthias Müller’s *Vacancy* (1998) or Alex Flemming’s *Flying Carpet* (2005) – seem more than a little lost in the miscellany of past and
present, art and non-art, documentation and display. In the case of Müller’s video, as with other works involving sound, the mishmash of ambient noises and soundtracks bleeding together into an acoustic muddle seriously detracts from appreciation of the artist’s conception.

The confusing soundscape is not the only flaw in the exhibition’s design. Problematic lighting – too dark in places, too bright in others – generates conditions that are far from ideal for viewing many of the works on display, particularly some of the videos. Rustic exhibition panels of untreated plywood divide the gallery space into compartments that often do not allow sufficient distance for viewing works on the wall while, at the same time, enclosing larger areas in which a potpourri of objects compete for attention, more screaming over each other’s voices than initiating any sort of dialogue. Despite the considerable collective experience of the curators, the adaptation of the exhibition to the gallery space of the Akademie der Künste gives the impression of having taken place in a hurry, perhaps as an afterthought to the prior staging of the show at ZKM Karlsruhe, where the exhibition was shown between August and October 2015.

Then again, the clutter and chaos may be intentional. There is a conscious attempt to enact the proverbial disorder of the polymath’s mindscape. Flusser Hypertext – a stage-set piece consisting of a table bearing an old MacIntosh computer, diskettes and a ring binder containing papers that explain a 1990s project on e-publishing conducted at the Kernforschungsinstut in Karlsruhe – is halfway between museum display and science fair exhibit. Its ambition to transform process and research into something that can be apprehended as diorama borders on the disingenuous, particularly in light of the crucial distinction between object, image and surface in Flusser’s thinking. Of course, Flusser himself was certainly not averse to hamming it up for an audience. The performative aspect of his persona, visible in many of the documentary videos and photographs included in the exhibition, was ready and willing to collapse meaning into appearance. It is entirely possible that the cheesy pseudo-scientific look of some of the artworks on display is a knowing instance of irony, in the late great postmodernist tradition of the 1970s and 1980s. Nowhere is this more the case than in the productions of Louis Bec for his Institut Scientifique de Recherche Paranaturaliste. A word of explanation from the curators would have helped dispel the lingering suspicion that the work is little more than an elaborate joke shared by Flusser and Bec and played out on a gullible public.
At no point in the exhibition is the staged display of turmoil brought into sharper relief than in relation to Lisa Schmitz’s three large photographs of the Flusser Archive taken during its period of permanence in Cologne. /TMP/In-pressis-verbis/Flusser (2000) depicts the quiet and order of the archive, which contrasts so strikingly with the bluster and noise with which the media circus of the 1980s surrounded Flusser’s launch into fifteen minutes of stardom. For anyone familiar with the depth and duration of archival time, these pictures are the real deal – no mere strategy of enactment or display, but sensitive depictions of the space of memory embedded into place and ritual. The prominence given to them suggests that the curators are aware that the time has come for Flusser to find his true level within the intellectual tradition of the twentieth century. With the increasing importance of exile, migration and nomadism as phenomena of our age, there is no longer any need to clothe Flusser in the trappings of maverick philosopher or media iconoclast. As stability gives way to emergency and coherence to chaos, his theoretical fragilities are fast transforming into existential strengths. The prophet of groundlessness has found a place to settle; and his baggage now demands to be unpacked rather than scattered about.
In the spring of 2016, from March 19 to May 07, the third iteration of the exhibition *Without Firm Ground—Vilém Flusser and the Arts*, curated by Baruch Gottlieb and Siegfried Zielinski, was showcased at the West Den Haag. A review of the second iteration of this exhibition at the Akademie der Künste, in Berlin (November of 2015) was written by Rafael Cardoso and is included in this issue. The exhibition was first showcased at the ZKM, Karlsruhe, where it was co-curated by Peter Weibel. The West Den Haag iteration consisted of five rooms with a bit less material than the previous versions. It also included videos, books, diagrams, manuscripts, and a few objects by and about Flusser's multidimensional work and life. The Hague exhibition,
like the others, was also accompanied by an international symposium, titled *Transcoding Flusser: Synthetic Thinking*.

The symposium took place at the auditorium of the Royal Academy of Art (KABK) and was organized and moderated by Baruch Gottlieb and Steffi Winkler, with support and careful visual documentation by West Den Haag. The round table included ten Flusser scholars working in different disciplines who examined Flusser’s provocative suggestion that computer codes and synthetic thinking might free us from the tyranny of linear thinking. The format privileged dynamic discussions among the participants as well as between the panel and the public. Archived on Vimeo is video documentation of all discussions moderated by Baruch Gottlieb and Steffi Winkler, in addition to the twenty-minute presentations by Fiona Hanley, Rainer Guldin, Katerina Krtílova, Peter Mahr, Marcel René Marburger, Arjen Mulder, Simone Osthoff, and Polona Tratnik over the two-day event.

Discussions and presentations on Vimeo:
http://www.westdenhaag.nl/exhibitions/16_04_Flusser/more2
Complete information about the symposium at the West Den Haag website: http://www.westdenhaag.com/exhibitions/16_04_Flusser/more

Flusser Studies is going to publish part of the proceedings in the fall issue of *Flusser Studies* (Flusser Studies 22).

Photos by Gordon Meuleman (courtesy West Den Haag)
Biographies

LUCIA SANTAElla is a Brazilian CNPq researcher at level 1 A. She is a Professor in the graduate program of Communication and Semiotics, and in the graduate program in Technologies of Inteligence and Digital Design at the PUC-São Paulo. She received her Ph.D in Literary Theory from the PUC-SP and a Livre-docente title in the Sciences of Communication by USP—Universidade de São Paulo. She has oriented two hundred and forty Masters and Ph.D. dissertations, published forty two books, in addition to organizing another fifteen. Additionally, she has published around four hundred articles in Brazil and internationally. Among the honors she received is the Jabuti award (2002, 2009, 2011, 2014), the Sergio Motta award (2005), and the Luiz Beltrão award (2010). lbraga@pucsp.br

MICHAEL HANKE holds a Masters degree in communication from the University of Bonn, Germany (1984); a Ph.D in semiotics from the University of Essen, Germany (1991), two post-doctoral appointments, the first at the University of Siegen, Germany (1991-1992), and the second at the Free University of Berlin (2014-2015), in addition to an habilitation in communication sciences from the University of Essen, Germany (1998). He was a visiting professor in institutions in Belo Horizonte, Cologne, Weimar, Mainz, and Berlin, and his research focuses on the area of communication, with emphasis in communication theory, semiotics, discourse analysis, intercultural communication and the work of Vilém Flusser. He is currently an associate professor in German Language and Media at the Federal State University of Rio Grande do Norte, Natal, Brazil. Recent publications include entries about the concepts of “Communication”; “Communicology”; and “Public/Private Space”, in Flusseriana – An Intellectual Toolbox (Minneapolis: Univocal, 2015); and the book Kommunikation – Medien – Kultur. Vilém Flussers Signaturen der telematischen Gesellschaft (Berlin: Kadmos, 2016). michaelhankebeaga@yahoo.com.br

ANDREW Hieronymi explores the sensation of movement in digital games. He creates interactive installations emphasizing the kinesthetic learning experience involved during the act of playing. He has lectured and exhibited internationally in art venues and media festivals and is an Assistant Professor of New Media at the School of Visual Arts at Penn State University. ath13@psu.edu
PRISCILA ARANTES is a researcher, curator, and professor based in São Paulo. She is the director and curator of the Paço das Artes since 2007. Arantes developed postdoctoral research at Penn State University (USA) and currently teaches in the graduate program in Design at the Universidade Anhembi Morumbi. Between 2007 and 2011, she was the program director of the Museu da Imagem e Som. In 2010, she was a member of the editorial board of the Bienal de São Paulo’s Revista Polo de Arte Contemporânea. She has served a juror at Capes/MEC and was member of the history, theory, and criticism committee of the ANPAP. Among her publications are the books Arte@Mídia: perspectivas da estética digital (Senac, 2005); and Re/escrituras da arte contemporânea: história, arquivo e mídia (Sulinas, 2015). priscila.a.c.arantes@gmail.com

SERGIO NESTERIUK is one of the pioneers of games studies in Brazil, beginning his research in 1996 and earning his Masters (2002) and Ph.D. degrees (2007) in this area. Since 2003, he is professor of Game Design teaching in the undergraduate and graduate Design program at the Universidade Anhembi Morumbi, where in addition, he leads a number of research projects. With Priscila Arantes, he co-curated the exhibition “Games + Art” held in partnership with Paço das Artes. He is a consultant and frequent juror in games and animation awards. nesteriuk@hotmail.com

LUCAS BAMBOZZI is an artist based in São Paulo, Brazil, producing installations, single channel videos, short films, interactive projects and large-scale projections. His works have been showcased in solo and collective exhibitions in more than 40 countries in venues such as the MOMA, NY; the ZKM; the Frankfurter Kunstverein, ISEA-Ruhr; ISEA/Albuquerque; Laboral, Arco’s Expanded Box; Http Gallery in London; Havana Biennale; Laboratorio Arte Alameda in Mexico City; ŠKUC gallery; Zero1 San Jose; Bienal de Artes Mediales in Chile; BIM Buenos Aires; WRO Biennale and many venues in Brazil, including the São Paulo Bienal. He has curated, among others, the following exhibitions: SonarSound (2004); Digitofagia (2004); Life Goes Mobile (2005 - 2006), O Lugar Dissonante (2009), On Off (2012-2015), Multitude (2014) and Visualismo (2015). He is one of the creators of the Festival arte.mov Mobile Media Art (2006-2012), of the Labmovel project (Honorary Mention at Ars Electronica 2013), and of the Multitude exhibition. He teaches at FAAP Visual Arts School in São Paulo. bambozzi@gmail.com
ANA PATO is a curator, a PhD candidate at the University of São Paulo, and a FAPESP researcher fellow (2013-2016). In 2015, she was a researcher-associate at the Museum of Modern Art of Bahia, and in 2014, the chief-curator of the 3rd Bahia Biennale. She was the project director of the Associação Cultural Videobrasil between 2000 and 2012. Pato is the author of the book Expanded Literature: archive and quotation in the work of Dominique Gonzalez-Foerster (2012). pato.ana@gmail.com

RAFAEL CARDOSO is a writer and art historian, holding a PhD from the Courtauld Institute of Art. He is the author of numerous books on the history of Brazilian art and design, among which: Design para um Mundo Complexo (Cosac Naify, 2012); Impresso no Brasil, 1808-1930: Destaques da História Gráfica no Acervo da Biblioteca Nacional (Verso Brasil, 2009); and A Arte Brasileira em 25 Quadros (1790-1930) (Record, 2008). He is also active as an independent curator, including the major exhibitions Do Valongo à Favela: Imaginário e periferia (Museu de Arte do Rio, 2014); Rio de Imagens: Una Paisagem em Construção (Museu de Arte do Rio, 2013), From the Margin to the Edge: Brazilian Art and Design in the 21st Century (Somerset House, London, 2012) and Eliseu Visconti: A Modernidade Antecipada (Pinacoteca do Estado de São Paulo, 2011). His works of fiction have been translated into German, Spanish and Italian; and a new novel, O remanescente, is forthcoming 2016 from Companhia das Letras, in Brazil, and S. Fischer, in Germany.

lado.b@hotmail.com

SIMONE OSTHOFF is a Brazilian born and US-based scholar focusing her research on experimental art practices and decolonial histories. She is Professor of Art and Critical Studies in the School of Visual Arts at the Pennsylvania State University, and holds a Ph.D. from the European Graduate School. Osthoff is a Fulbright Fellow and frequent participant and organizer of symposia. Among her publications is Performing the Archive: The Transformation of the Archive in Contemporary Art from a Repository of Documents to an Art Medium. In 2013, she joined the editorial board of the international journal Flusser Studies. sosthoff@psu.edu