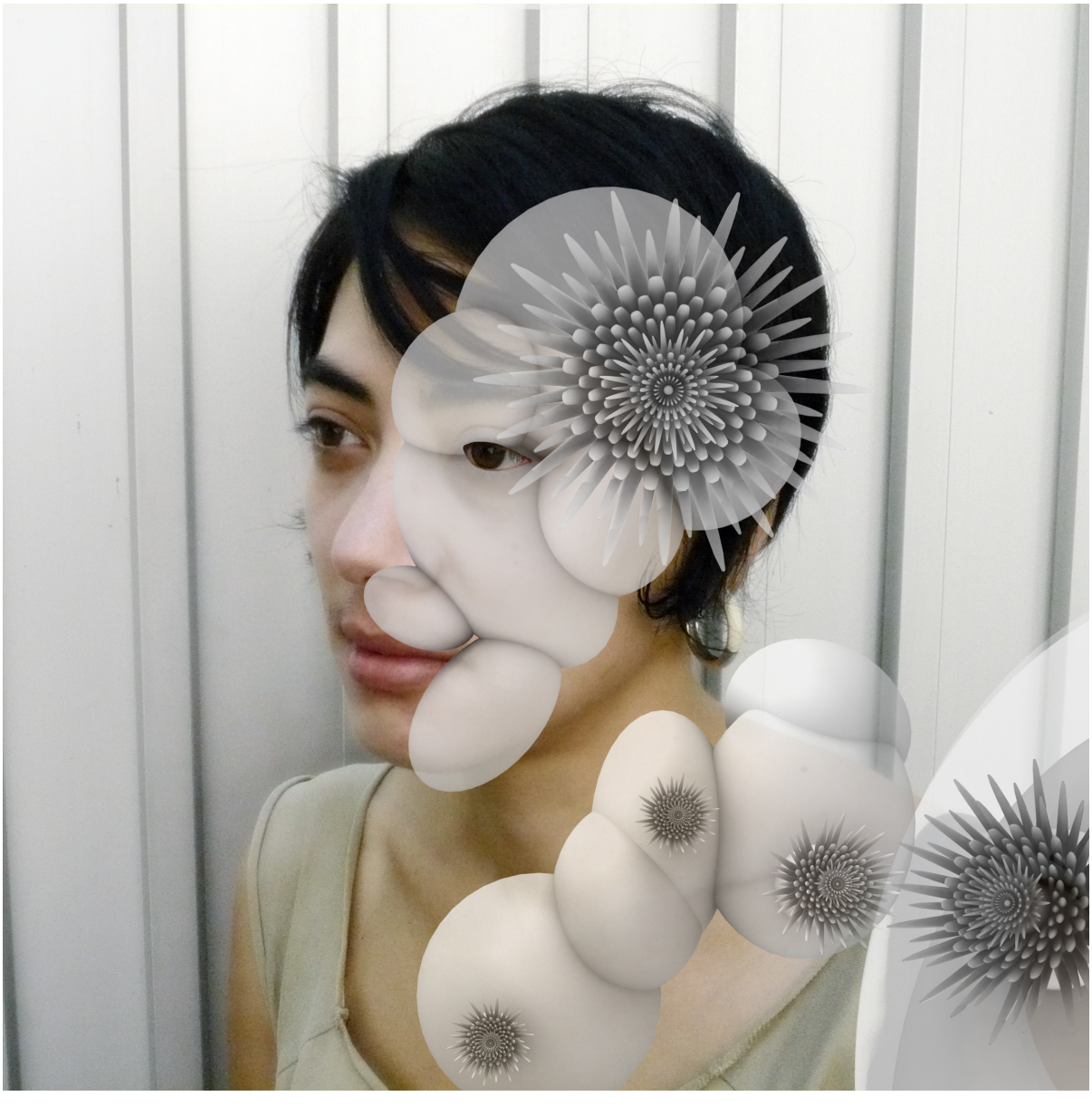
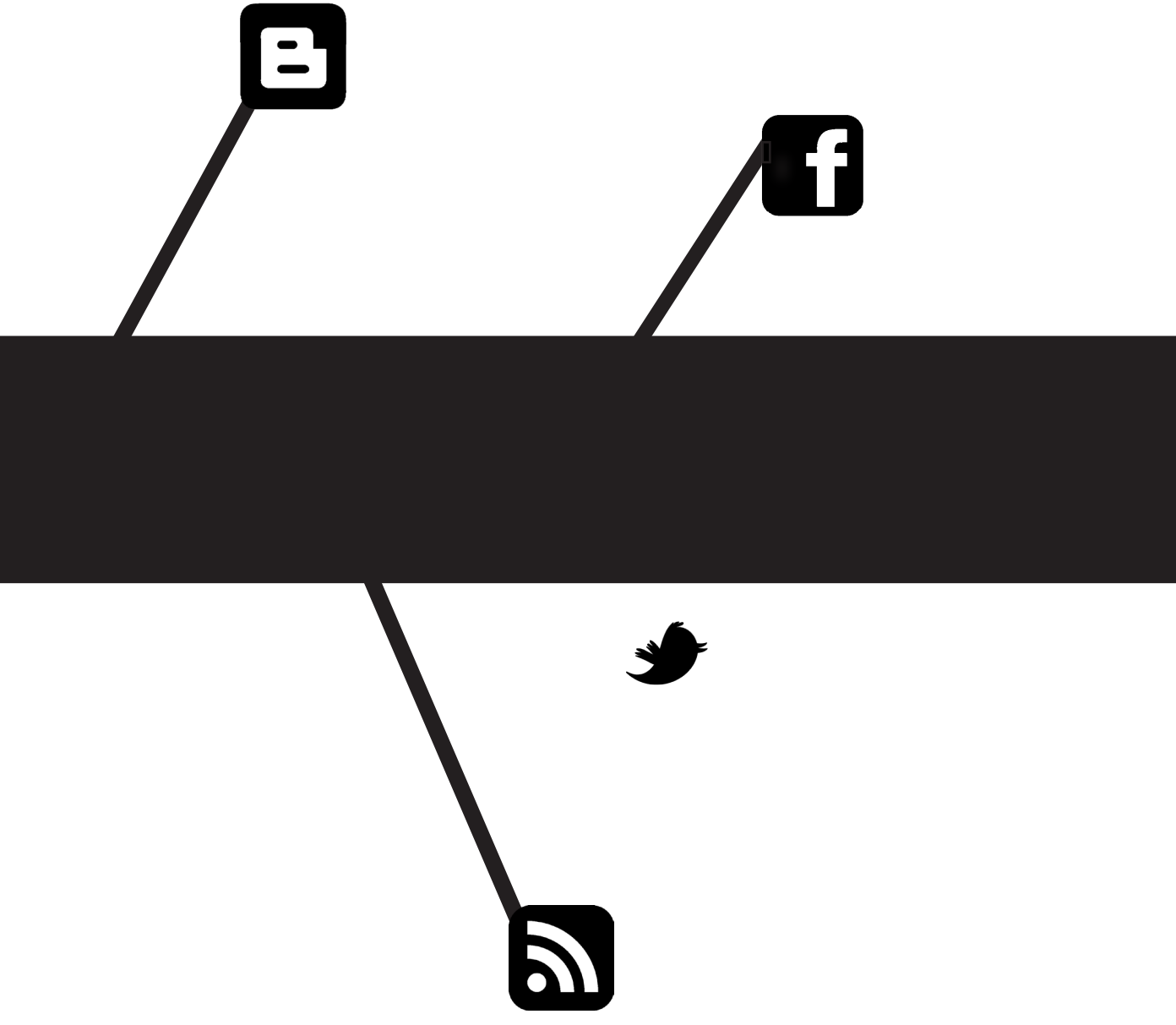
NO.1
Augmented Selves

Simone Ferracina
www.organseverywhere.com



AUGMENTED SELVES



The Machinery of Self-Production

Through contact, individuals influence one another's actions, and information about these inter-actions contributes to the definition of these individuals as people. The cumulative results of this feedback loop are generally geared toward projecting what Robert Ezra Park calls the 'truer self': the self we would like to be. [1]

For this reason sociologists liken the task of fostering consistent impressions of who we are to the stage performance of a character: a precedent for the motto 'Broadcast Yourself'.

In his seminal book 'The presentation of self in everyday life' Erving Goffman describes how these performances rely both on narrow communication — direct verbal communication and its substitutes — and on broad communication — a non-verbal, contextual, presumably unintentional transmission typically obtained by inference. [2]

My interest lies in speculating about the potential role of technology, and Augmented Reality (AR) in particular, in the machinery of self-production, both at the narrow and broad levels. It lies in imagining and sketching out the augmented self and its design.

Personal Fronts and Cyber-Identity

A front is defined by Dr. Goffman as the range of expressive equipment intentionally or unintentionally employed by the individual during his 'performance'. These sign vehicles include the setting where the interaction takes place and a range of personal attributes such as facial expressions, looks, racial characteristics, age, sex, clothing, insignia of office or rank, posture and speech patterns.

Of course, fronts in contemporary digital society have extended well beyond the boundaries of face-to-face synchronous interaction envisaged by Dr. Goffman. They have slowly moved into the realm of cyberspace.

During the nineties, when Virtual Reality (VR) promised to upload our disembodied souls to the internet and liberate them from 'meatspace'[3], cyber-identity predominantly explored lives played out through electronic personae in a digital medium that facilitated the anonymous multiplication of the self and the acting out of several identities.[4]

In the new millennium, a linear mode of cyber sociality has risen: that of blogs, home pages and online social media.

Users of websites such as YouTube, Twitter and Facebook create online 'profiles' that instead of branching out into

1.
Robert Ezra Park, *Race and Culture* (Glencoe, IL: The Free Press, 1950).

2.
Erving Goffman, *The Presentation of Self in Everyday Life* (London: Reaktion, 2006).

3.
Cyberpunk writer William Gibson, who famously coined the term 'cyberspace', once referred to the real world as such.

4.
See Sherry Turkle, *Constructions and Reconstructions of Self in Virtual Reality: Playing in the MUDs*, web.mit.edu/sturkle/www/constructions.html (accessed September 30th 2010)

possible parallel identities, aim at representing, documenting and digitally extending their own. A Facebook wall, to which the subject regularly uploads pictures, status updates and links, clearly aims at self-representation in the electronic medium: a digital front. The widespread success of these sites confirms that the relevance of virtuality is proportional to its involvement in the co-construction of reality.
In the following paragraphs I introduce some of the major trends at play in the appropriation of new media for the presentation of the 'cyborg self' and the possible creation of a new breed of technology-mediated fronts.

Networked Selves / Digital Nomads

Human beings are no longer discrete units plugged into the material infrastructure of their contiguous habitat; rather, they are nodes of a global network that supports remote and asynchronous interactions. As William J. Mitchell aptly puts it, through digital networks one can 'indefinitely multiply and distribute [one's] points of physical agency through space and time'.[5]
In the digital era, with communication and sensorium defined by connectivity rather than proximity, physical habitats are increasingly fragmented and scattered. I can more easily exchange asynchronous opinions with a friend in Brazil through the Facebook app on my smart phone than converse with an off-network friend that lives a few blocks from my apartment in Brooklyn. Connectivity, and access, are the new 'being there'.
The condition of subjects in this physically fragmented, digitally continuous environment is one of 'electronic nomadism'.
This term is introduced by Mitchell not only as a record of the disconnection of a subject's digital presence from the geographical location of his/her physical body, but also to suggest the return to the body of our technological appendices, largely made possible by miniaturization and digitization. In the presence of the electronomad, some of the traditional purposes of architectural containers come into question. What will be the destiny of phone booths, computer and music rooms, banks and bookstores? In the future, the civic value of architecture, rather than deriving from the ritualization and crystallization of power or program, may emerge from its potential for nomadic activation. Even homes may shed some of their domestic aura and resume a role of mere weatherproofed containers. When memory was stored in books and photo albums,

5.
William Mitchell, *Me++: the Cyborg Self and the Networked City* (Cambridge, MA: MIT Press, 2003).

music played from compact discs and records, secrets were tucked away in drawers and games stored in cardboard boxes, home was the manifestation of an existential dimension. Tweaking Bachelard, we could say that it was a collection of subject objects, 'organs of a secret psychological life'.[6]
Inhabiting was at once an act of accumulation and domestication of atoms, a calcification of tastes and memories and an expression (and impression) of identity.
Today most books, pictures, music, correspondence and games are created, stored and exchanged as bits on personal computers, smart phones and in the cloud. At increasing rate, the belongings of cyborgs abandon drawers to radiate directly from the body. They migrate from objects back to subjects.

Cohesive Interface

In this transformed technological and cultural framework, what is the future of personal computers and smart phones? What kinds of interfaces will mediate our reality and grant us tools to appropriate and extend it?
The evolution of computers, from the first institutional room-sized calculators to the current ubiquitous portable devices helps answer these questions in revealing a series of concurrent trends toward the digitization of information, the miniaturization of hardware, mobility and multi-functionality, wireless connectivity and increased access.
Extending and accelerating these trends, I propose that a comprehensive ambulatory interface be sewn into each person, an electronic envelope that would embrace subjects and mediate their every interaction with reality. Indeed, in a world where virtual objects increasingly exist alongside physical ones, such mediation may play a particularly significant role: individuals living in Augmented Reality may be chronically pulling the strings of the interactive content surrounding them.
I conceive Personal Augmentation Interfaces (PAI) as elastic frameworks controlling liquid and ever-transforming aggregations of hardware and software around the body. They preside over tags and passports, personal computers and wallets, telephones and credit cards, keys and cameras, global positioning systems and microphones, videogames and headphones, briefcases and watches, televisions and mp3 players. They are drawers pulled open to access photos, scrapbooks, letters, songs, drawings, magazines, social networks, signatures and notes. They are both private digital hearths and sockets plugged into the electronically connected fabric of the world.

6.
Gaston Bachelard, *The Poetics of Space* (Boston: Beacon Press, 1994).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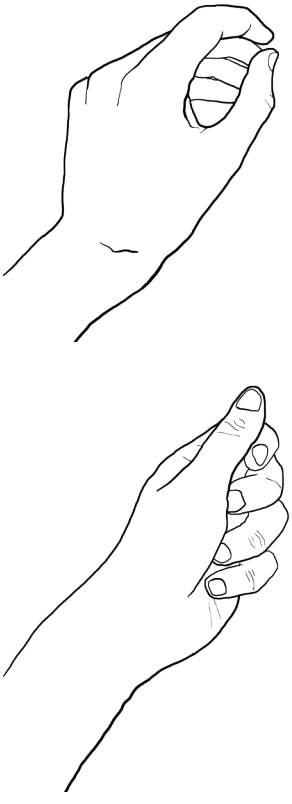
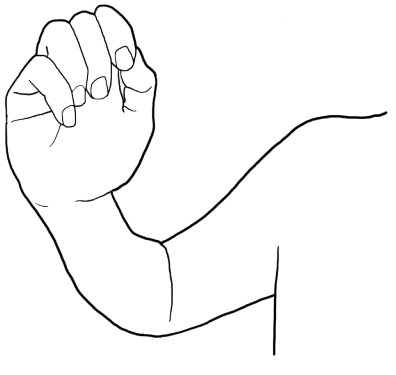
W 50th Street
W 49th Street
GREG
RADIO CITY
From: jenny@organseverywhere.com
Subject: Look at this!
Date: 21 October 2010
To: greg@organseverywhere.com
Greg,
let's meet at the museum bookstore. I'm searching for a book on Matisse.
Looking forward to seeing you!
xo Jenny



7.
Michael Benedikt, "Cyberspace: some proposals", in *Cyberspace: First Steps* (Cambridge, MA: MIT Press, 1991).



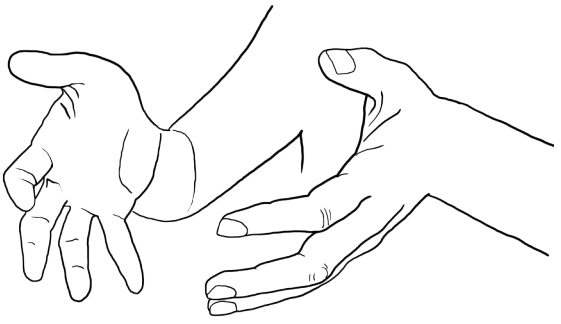
PAI will effectively take over a subject's digital presence and IP address (ID address?) and its operating systems will manage an array of prosthetic extensions and software applications. The interface itself will appear in the form of highly customizable computer-generated images and objects orbiting around a user. Camera and software technology will support intuitive gestural input without need for handheld controllers. Optoelectronic devices such as goggles and lenses will seamlessly ease subjects into the immersive space of mixed realities.
Now, if the electronic carapace provided by PAI can certainly represent a positive evolutionary step in cybernetic terms, how will it affect a subject's ability to interact with others and his/her ability to participate in society? I believe a starting point to address this problem may be the question of visibility.

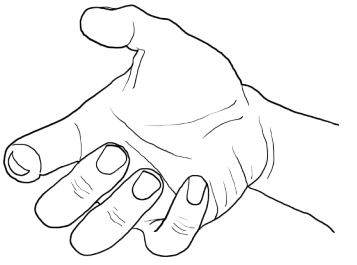
Sharing Augmentations

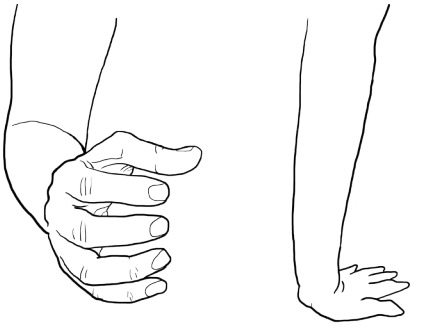
The level of visibility of each subject's electronic interface and the way PAI data will appear to other mediated subjects will be decided according to several factors, first of which is the negotiation of the desired level of privacy. We can nonetheless maintain that a minimum social codification of PAI related activities will require a certain degree of visibility and commonality. As illustrated by Michael Benedikt in the context of cyberspace, for the new media to be socially functional there needs to be a partially objective reality that people can see and share. [7]

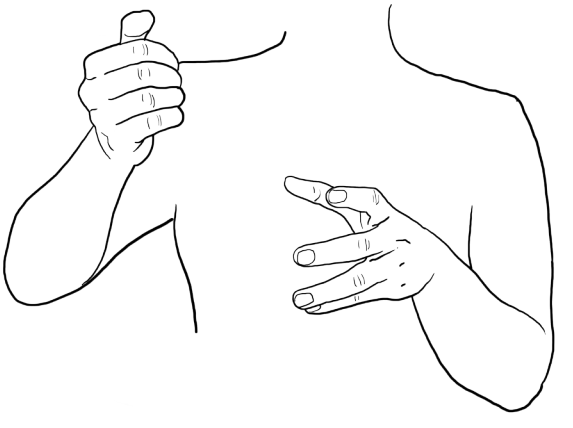
Gesturing

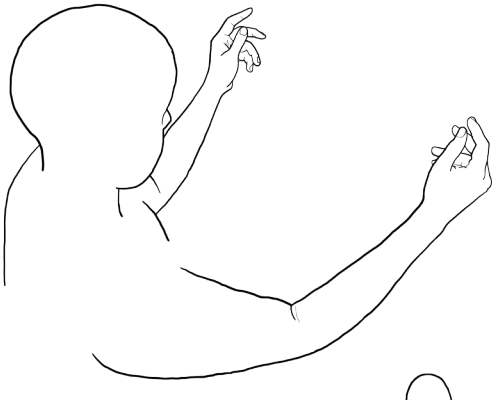
I explored the idea of visibility as a conveyor of context-sensitive frameworks to decode meaning in the *Gesturing* project. The project started with a series of pictures of bodies using implements: chairs, tables, scissors, newspapers, glasses, pencils, etc…
I then re-drew the bodies omitting the implements. This absence generated an uncanny collection of postures and gestures, irreconcilable with socially coded human action. By exploring the loss in meaning from pictures to drawings, I hoped to highlight the potential conflict between individual augmentation and social interaction.
The gesturing project illustrates that context in Augmented Reality is interface dependent and that two individuals using immersive interfaces can only attribute a logical and purposeful intent to each other's actions if they are sharing the same digital reality.

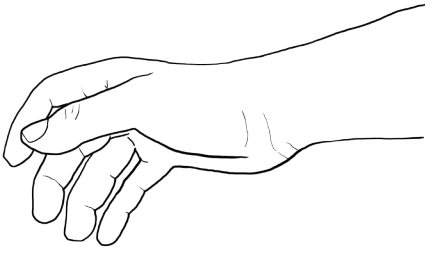


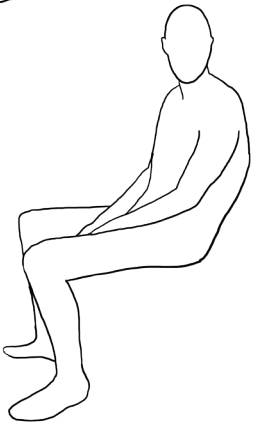


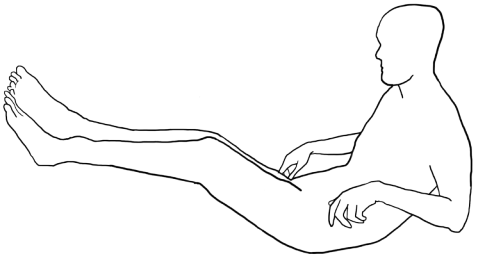












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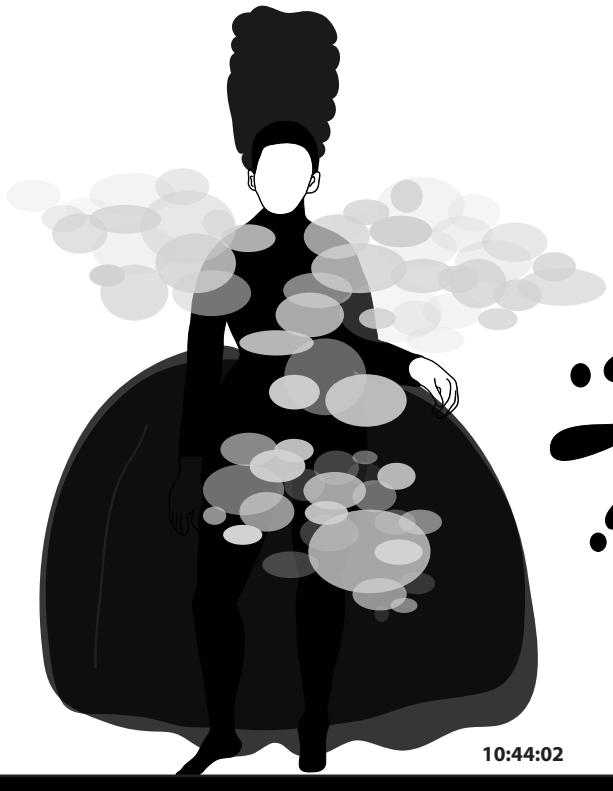
1. Digital Fronts

2. Metadress is...

3. Spatialized Selves



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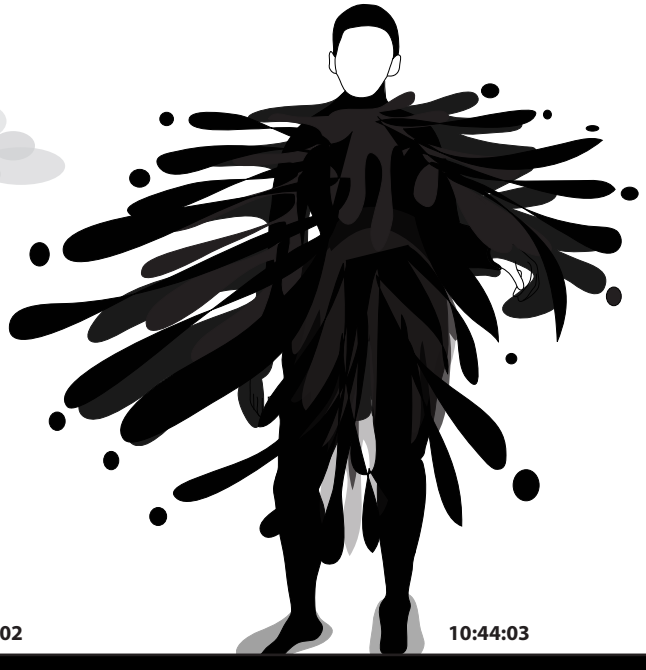


10:44:03

If PAIs express sociality by means of visibility and commonality, don't they become part of the machinery of self? Could they describe spatialized mixed fronts where digital and analog identity-building and symbol-producing strategies converge?

I started imagining what these new fronts may look like by formulating the notion of a digital dress mapped onto the human body or real world clothes: a metadress. The prefix meta is used here to indicate both membership to a separate layer of existence (the digital) and the availability of infinite variations parked adjacent to each other in the conveying belt of electronic potentiality. Dress clearly refers to clothing and, more generally, to fashion as a framework for signaling and communication.

Magical

Metadress belongs to what Sherry Turkle describes as a 'liminal' space of transformation and transition — virtual space — one where rules are overturned and new cultural symbols are allowed to emerge.[8] Metadress can therefore bring magic — the violation and contradiction of real life conventions — to real world subjects. Unaffected by gravity and other practical and material concerns, metadress encourages wildly free self-representations: manga-like exuberance, Alexander McQueen-like aggressiveness, infinite algorithmic re-combination, metamorphic changes, animation and growth.

8.
Sherry Turkle, *Life on the Screen: Identity in the Age of the Internet* (New York: Simon & Schuster, 1997).

Free of Function

The infinite and magical possibilities provided by the 'ether-realization' of fashion vis-à-vis the numerous constraints that characterize real world clothing persuade me that the role of the latter may in the future withdraw to a mere provision of mechanical and functional protection, while the digital medium will increasingly see to what Thorstein Veblen called the 'spiritual need' of dress.[9]

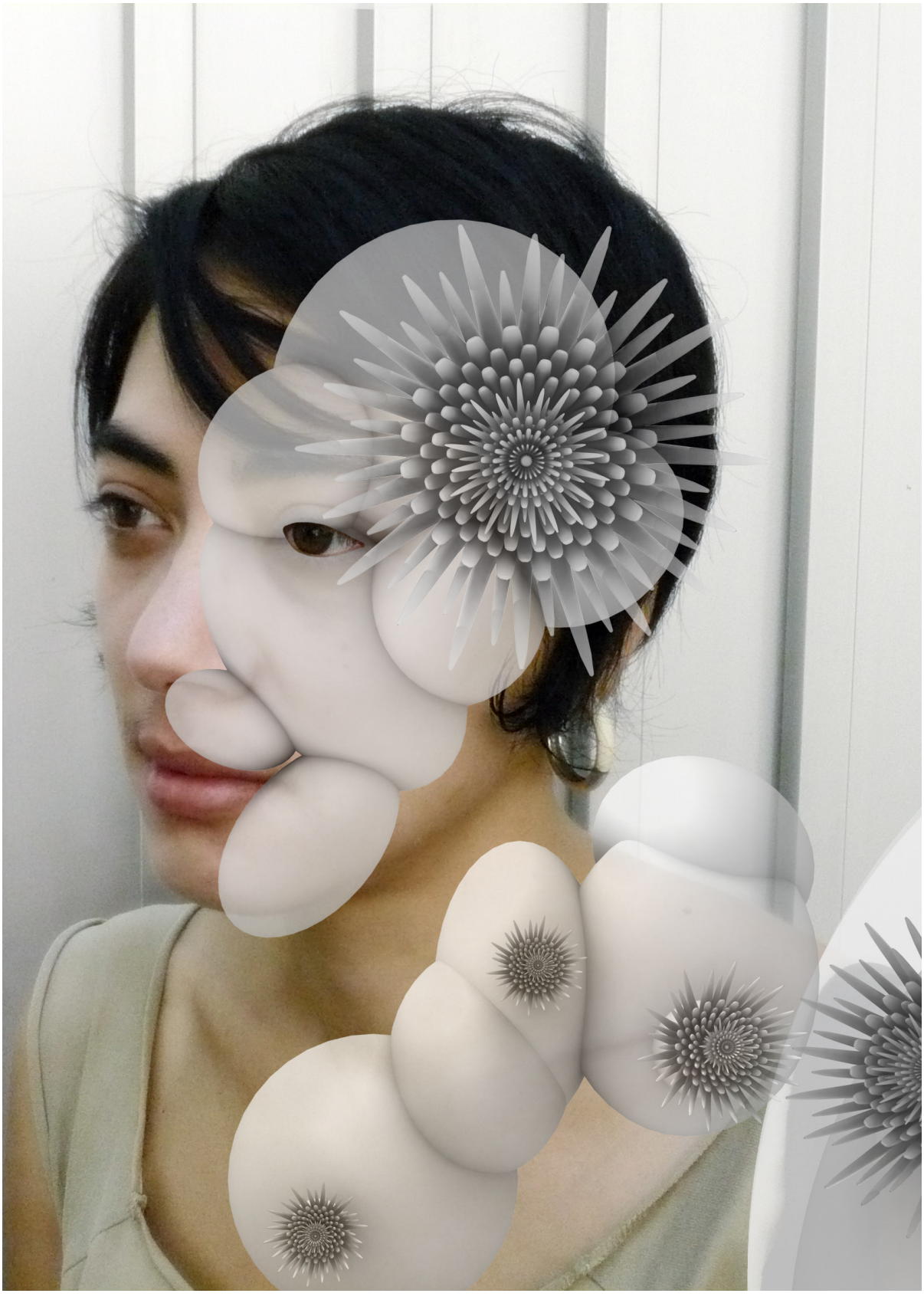
A similar coupling of aims to mediums may prove successful in other industries that, like clothing, have been traditionally caught between the demand for functional agency and higher artistic aspirations. Architecture could certainly find in this quasi-ontological separation a productive reformulation of its objectives 'beyond the immediate usefulness of buildings'.[10]

The future life of buildings may be split between two parallel and reciprocal streams: building as the static program-driven construction comprising structures and systems on one side, and building as an animate and liquid arrangement of information and communication patterns on the other.

This novel framework for architecture reverses Victor Hugo's famous prophesy to announce architecture's resurgence. It is also worth noting that the dual practice of architecture proposed here may supersede the questions of cost and constructability that challenge many contemporary digital productions.

9.
Thorstein Veblen, *The Theory of the Leisure Class* (New York; Toronto: Oxford University Press, 2007).

10.
Antoine Picon, "Continuity, Complexity and Emergence: What is the Real for Digital Designers?" in *The Real Perspecta 42,* eds. Matthew Roman and Tal Schori (Cambridge, MA: MIT Press, 2010).



Sustainable

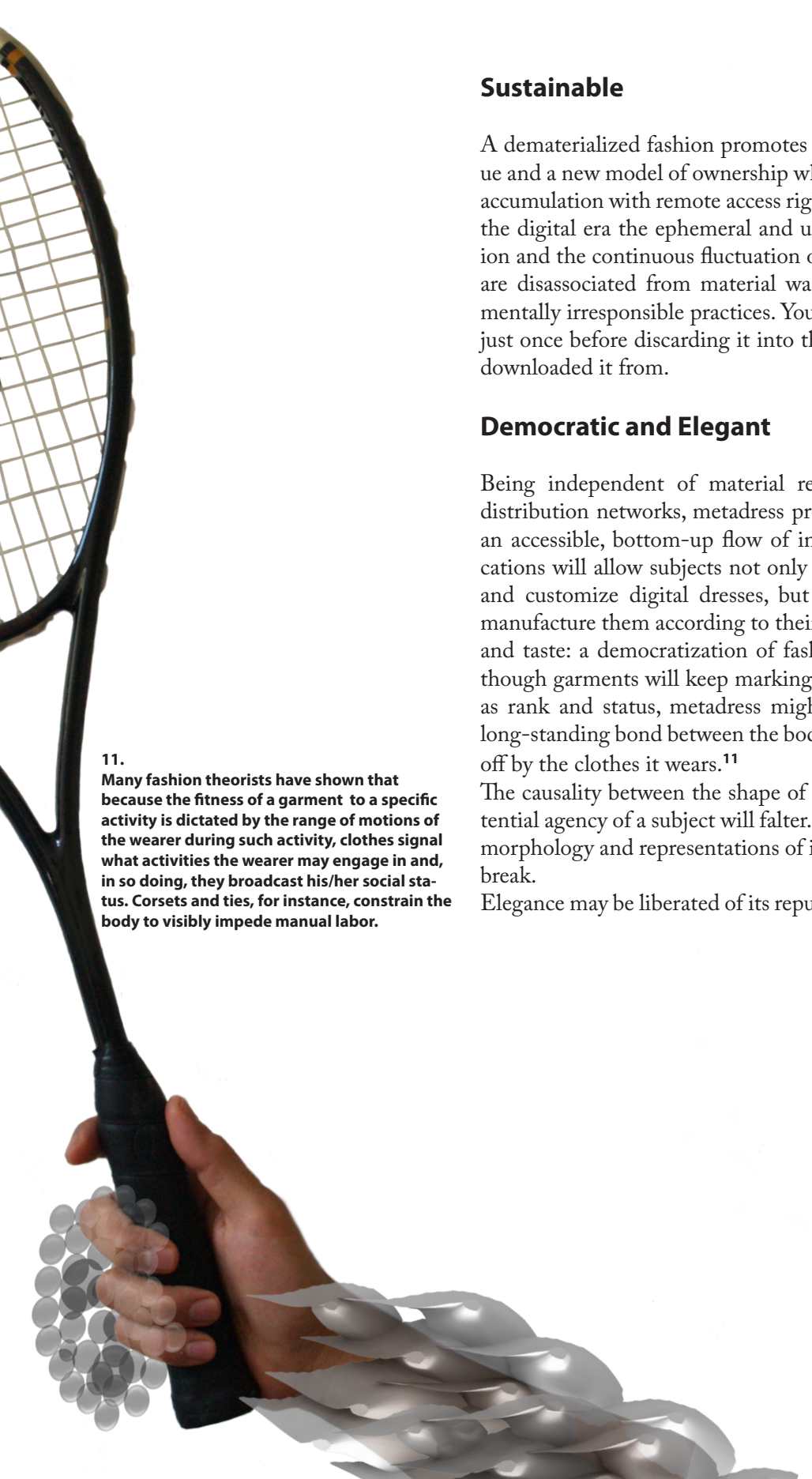
A dematerialized fashion promotes the digitization of value and a new model of ownership which substitutes on-site accumulation with remote access rights. The result is that in the digital era the ephemeral and unstable nature of fashion and the continuous fluctuation of trends and meanings are disassociated from material waste and from environmentally irresponsible practices. You may now wear a dress just once before discarding it into the indefinite cloud you downloaded it from.

Democratic and Elegant

Being independent of material resources, factories and distribution networks, metadress promises to develop into an accessible, bottom-up flow of information. PAI applications will allow subjects not only to purchase, download and customize digital dresses, but also to assemble and manufacture them according to their own sensibility, mood and taste: a democratization of fashion design. And even though garments will keep marking social differences such as rank and status, metadress might make a dent in the long-standing bond between the body and the signals given off by the clothes it wears.[11]

The causality between the shape of a garment and the potential agency of a subject will falter. The link between dress morphology and representations of idleness and labor may break.

Elegance may be liberated of its repudiation of productivity.



11.
Many fashion theorists have shown that because the fitness of a garment to a specific activity is dictated by the range of motions of the wearer during such activity, clothes signal what activities the wearer may engage in and, in so doing, they broadcast his/her social status. Corsets and ties, for instance, constrain the body to visibly impede manual labor.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Eloquent

In recent times, the analogy of fashion with language and the capacity of the former to signal clear meanings in everyday life have been challenged to the point that Lars Svenden states in his book on the philosophy of fashion that most clothes communicate very little. [12] As Svenden explains, the codes linking signifier (the form or color of a garment) and signified (its meaning) in fashion have a tendency to be short-lived and to change depending on context and are therefore semantically unstable.

I am interested in the potential for metadress to inject new communicative power into fashion. Firstly, digital garments created or assembled directly by the wearer may be better suited to convey specific meanings. Secondly, the digital medium promotes the integration of less elusive signifiers such as images, animation and text. Thirdly, a vital reciprocity between garment and context will replace the tenuousness of generic clothing and allow wearers to continuosly update their dress according to situations and moods. As William James famously remarked:

> We may practically say that he has as many different social selves as there are distinct groups of persons about whose opinion he cares. He generally shows a different side of himself to each of these groups. [13]

A subject may wear a pink cloud at home, a suit at work, pulsating and spinning hearts when the loved one appears, glowing equalizers on the dance floor and political refrains at a rally with friends. Communication through metadress may develop into a creative, responsive and articulate expression of self.

Of course, site specificity can go both ways: just as subjects might tune digital garments to different social selves, so can these be imposed according to customs, social norms or more personal motives. A school may map identical uniforms on the pupils walking around campus, a church may conceal shorts and tank tops with more appropriate digital attire, a home owner may dress his /her guests according to wall paper patterns, a department store may wrap passersby with items on sale and advertisements. As new possibilities of self expression arise, so do ways to control and exploit them.

12.
Lars Svendsen, *Fashion: a Philosophy* (London: Reaktion, 2006).

13.
William James, *The Philosophy of William James* (New York: Random House, 1953).


PROUD TO BE VEGAN
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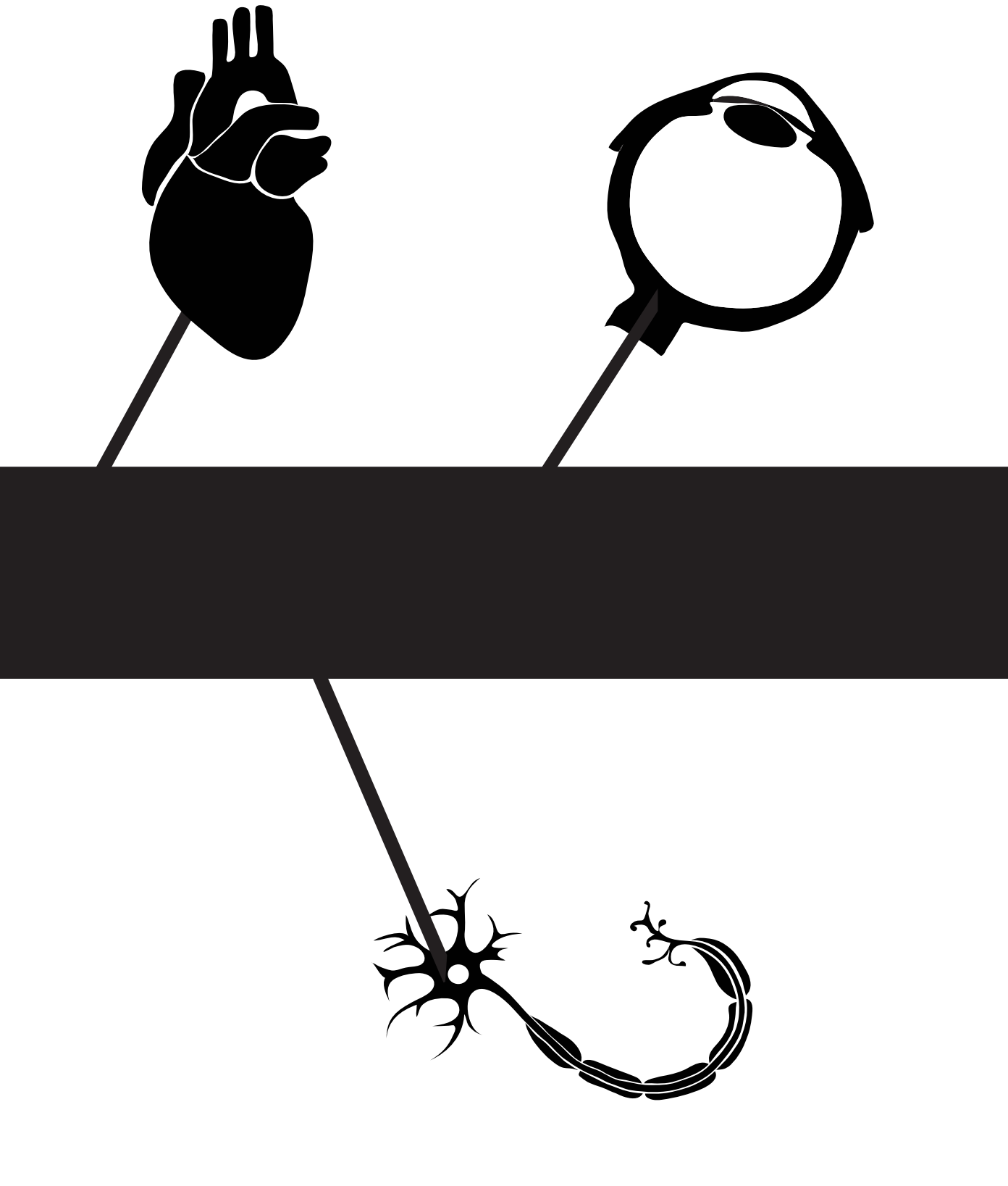
AT LOCAL

1. Digital Fronts

2. Metadress is...

3. Spatialized Selves



Leaking Out

Finally, I would like to briefly sketch out another modality of self-representation in Augmented Reality, one that extends beyond dress and embraces space as a medium to express identity. I will begin with two interesting accounts of the intuition that subjects leak out of the human body and into their environment.
In 'l'object, c'est la poetique', Francis Ponge locates the subject somewhere between his body and the objects surrounding it. He writes:

> 'The human being is a remarkable body that does not contain its own center of gravity. […] If we had only a body we would no doubt be in balance with nature. But the spirit is on the balance on our side. It needs an object as a mooring place or counterweight'. [14]

I find this quotation fascinating because it addresses the part of our existence that takes place outside of the vitruvian body, in the kind of spatialized self described by Bachelard's 'subject objects'.[15]
The idea that the center of gravity of the modern subject is negotiated in a relationship between interior and exterior is particularly powerful when discussing customization as a creative act of self-augmentation.

The second account of a diffusion of the body in its environment is represented by the work of fashion designer Hussein Chalayan. In 'The Buried Collection' the fabric used for the clothes had been previously buried in the ground and left to decompose and mold, as to infuse it with the mortality and decay of the human flesh of the wearer. In a collection titled 'Afterwords', Chalayan transforms chair upholstery and a table into nomadic wearables, thereby extending the field of influence of fashion to furniture and buildings. In 'readings' beams of red laser are shot away from the body and invest the surrounding environment with a ritual aura. As Nikolina Olsen-Rule remarks, the world conceptually becomes a symbolic surface; a 'fabric that clothes the body'.[16]
Similarly, customization in Augmented Reality has the potential to expand fashion into a digital field with which subjects overlay and map themselves onto physical space: a spatialized self.

14.
Quoted in Ton Verstegen, *Tropisms: Metaphoric Animation and Architecture* (Rotterdam: NAI Publishers, 2001).

15.
See Gaston Bachelard, *The Poetics of Space* (Boston: Beacon Press, 1994).

16.
Nikolina Olsen-Rule, "When All that is Solid Melts into Fashion - Fashion's Flirt with Modernity" in Nikolina Olsen-Rule and Maria Mackinney-Valentin, *Two Papers on Fashion Theory* (København: Danmarks Designskole, 2006), http://www.dkds.dk/media/forskning/working_papers_on_design/Two_papers_on_fashion_theory.pdf (accessed September 30th 2010).


SELECTED CHANNEL: SUNNY RED BY DJ ARCH
PROSPECT HEIGHTS, BROOKLYN

Extreme Customization

> The architecture of tomorrow will be a means of modifying present conceptions of time and space. It will be a means of *knowledge* and a *means of action*.
>
> Architectural complexes will be modifiable. Their appearance will change totally or partially in accordance with the will of their inhabitants.[17]

Architecture has long been engaged in the top-down practice of modifying the built environment, a process impermeable to the wishes of the majority of its inhabitants. Georges Bataille regarded with aversion this marriage of architecture with power, to the point of writing that 'it is in the form of cathedrals and palaces that Church and State speak and impose silence on the multitudes'.[18]
Augmented Reality promises to offset this imbalance by endowing people with the ability to overlay the environment with a digital canvas of their choice. In Gilles Ivain's words, everyone will 'live in their own personal cathedrals'.[19]
I use the term *extreme customization* to refer to this transformation of the phenomenological world by the digital projections of its inhabitants.
It is the apex of customization: the overturning of physics, zoning regulations, political and economic circumstances in favor of a personalised digital expansion and proliferation of space.
The future urbanites experience the city not only walking its streets and driving its highways, but also navigating its digital layers: turning them on and off, switching from one application to the next, generating new electronic envelopes, tuning, rating, bookmarking and sharing with friends. A place in the augmented city is not only identified by a set of real world coordinates, but also by the corresponding superpositions of digital 'channels'.

New laws and zoning prescriptions will emerge to define and regulate the behavior of these domestic layers in relation to the mineral city beneath them. New norms and codes will arise to negotiate the borders between spatialized subjectivities. New urban syntaxes will be developed to address the multiplicity of the mixed city and its different tempos. The augmented subject will liquidly expand and retract in space, flowing in and out of buildings in a digitally mediated continuum.

17.
Ivan Chtcheglov, "Formulary for a New Urbanism" in *Situationist International Anthology,* ed. Ken Knabb (Berkley, CA: Bureau of Public Secrets, 2006), http://www.bopsecrets.org/SI/Chtcheglov.htm (accessed September 30th 2010).

18.
Georges Bataille, "Architecture" in *Rethinking Architecture: a Reader in Cultural Theory*, ed. Neil Leach (London: Routledge, 1997).

19.
Ivan Chtcheglov, op.cit.

Broad and Narrow

In 'Domesti/city' Keiichi Matsuda identifies two modes in which extreme customization can operate: broadcasting and aggregation. The former refers to information directly projected by the user — a curatorial effort — the latter to the user-specific assemblage of feeds and channels that allow a personalized and subjective reading of the city.[20]
The structuring of urban augmentations around the terms *broadcasting* and *aggregation* interestingly parallels Dr. Goffman's distinction between narrow communication — the expression a subject gives — and broad communication — the expression a subject gives off . This suggests that even if the degree to which the subjective city is shared with others and therefore 'social' varies, a subject's reinvention of the city in augmented reality is regulated by mechanisms that are similar to those at play during the presentation of self in face-to-face interactions and belongs to the broader set of expressive strategies an individual employs to socially define situations and himself/herself. To a certain extent, the future city *is* the future self.

20.
Keiichi Matsuda, *Domesti/city - The Dislocated home in Augmented Space (2010)*, http://www.keiichimatsuda.com/kmatsuda_domesti-city.pdf (accessed September 30th 2010). See also his videos *Domestic Robocop* and *Augmented City 3D*.