Urbanhermes: Fashion Signaling and the Social Mobility of Images

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NOTE

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INTRODUCTION

Fashion is a signal of status and affiliation in a world of fluidly mutable social hierarchies. Social membership defines access to information, including information about new styles, new ways of dressing, thinking and being. When information flows slowly and social structures are relatively stable, fashion too changes slowly, over the course of years. Today, information flows at the global speed of the Internet, social structures are highly mobile, and fashions change at an unprecedented rate. On the net, hit songs and news stories are the fashions of the online persona, the accessories of the blog and the homepage. On the street, styles of shoes, handbags, coats and pants change more rapidly than ever, but still far slower than their electronic counterparts, weighed down by their material incarnation.

The Urbanhermes project aims to bring the speed and intelligence of electronic fashion to the physical world by superimposing a connected and changeable medium onto everyday street worn garments. In doing so, we hope not only to unite the fashion worlds of online and urban but also to elucidate what fashion signals reveal about our technological culture.

Urbanhermes is a messenger bag designed to display and disseminate meaningful yet ephemeral images among people in the public realm. These images represent the daily zeitgeist; fashions emerge, grow and wane in popularity as knowledge diffuses. Wireless communication allows users to pass images from bag to bag, and proximity sensing adds awareness of others nearby who share similar tastes.

The goal of Urbanhermes is to enrich social interaction by bringing electronic fashion signals to the physical world, making it possible for people to express and observe richer, subtler and more ephemeral social patterns Judith S. Donath MIT Media Laboratory Sociable Media Group judith@media.mit.edu

FASHION SIGNALING

Most of what we want to know about each other is not directly observable. Is she trustworthy? Is he kind? Do you really like my cooking or are you just being polite? Instead, we rely on signals, which are the perceivable indicators of these hidden qualities of interest (Donath forthcoming; Maynard Smith and Harper 2003).

Qualities can be almost anything: strength, honesty, suitability for employment, etc. We rely on signals when direct evaluation of the quality is too time consuming, difficult or dangerous. A smile can be a frown of sadness, a wedding ring a signal of being married, and a big house a signal of wealth. Our language is full of signals, both the words we say and the way we say them. Saying "yes, I would like another helping of your tasty pasta" can be a signal of hunger or of politeness and the accent with which it is said can signal country of origin and social class. Much of our communication, whether it is with words, gestures, or displays of possessions, consists of signaling information about who we are and what we are thinking.

Signals have varying degrees of reliability. Some are quite reliable: upon seeing such a signal, one can be sure that the quality is present. Lifting a 200 lb weight is a reliable signal of strength; no matter how much a weaker person wishes to signal strength, without actually possessing that quality he or she will not be able to do so. Others signals are less reliable: those who wish to give the impression of having the quality, without actually possessing it can imitate the signal. Most people who visit museums enjoy looking at art, but some who find little aesthetic pleasure in the experience go because they would like others to think that they are of the sort who does.

Signals are reliable when it is prohibitively expensive to signal dishonestly, but relatively cheap to do so honestly. Seemingly wasteful expenditure of a resource, such as energy, money or time, can reliably signal possession of abundant amounts of it. For example, displaying skill at something that took much time to master but that does not yield any practical outcome, such as growing a garden of bonsai trees, is a reliable signal that one has an abundance of leisure time (Veblen 1899).

Fashion signals indicate affiliation and status in a fluidly changing social world (Donath forthcoming). The form of

the signal changes while its meaning – the social position it indicates – remains the same. One must be able and willing to continuously learn about and adapt to new forms in order to keep signaling the same position. When information flows slowly and social structures are stable, fashion changes slowly. Today, information moves at unprecedented speed, social structures are highly malleable—and fashions are in rapid flux. Fashions signal information prowess: one knows what is next and is willing to adopt it. The difficulty in accessing the information, of sorting the good from the bad, is part of the cost that keeps the signal reliable.

Urbanhermes is a system for signaling one's access to information through a dynamic fashion object. Designing a usable, sustainable, and successful signaling system requires integrating critical social costs as well as the benefits that attract people to use it.

A SCENARIO

The day begins. Alana arises, makes coffee, and begins browsing through her favorite news items, blog feeds, and community postings on her computer. Her list includes both relatively popular as well as niche items. She reads a bit, and wirelessly transmits three images to her bag: a new release's album cover from an experimental music blog, an image of a knitted Ferrari circulating around her crafting community, and a photograph she took of Thom Yorke while attending a Radiohead concert last night in the city. Downloading images to her bag is one of Alana's regular rituals, like figuring which jeans to wear, as she assembles her fresh images for the day. She sees it as having free reign in an enormous, ever-changing networked wardrobe and picking out what she will want to wear each morning. Alana displays the album cover on her bag as default, with the other two images stored invisibly within her accessory.

Alana heads out the door to work and waits for her ride at the train station. After a minute or so spent waiting, Alana's bag vibrates gently to notify her that someone in shortrange is currently displaying an image that shares a common source with one of Alana's hidden images-the crafting image. Alana has the option to switch her display from the Radiohead photo to the Ferrari, but she first looks around to see if she can see who is displaying the related image. She soon recognizes it, noticing a guy sitting a few seats away from her whose bag features another recent image from the same mailing list. She quickly assesses his character from other existing physical signals: his clothes, hair, face, posture. He seems like an interesting, artsy, innocuous stranger, so she changes her bag from the Radiohead photo to the knitted Ferrari. As they board the bus, her newly updated bag is visible to him. And to him, she is no longer a complete strange, but a fellow member in the same crafting community.

Once she arrives at work, Alana switches her display back to the album cover. Grace, a curious co-worker Grace asks Alana about the image on her bag. As Alana describes the emerging artist, Grace is thrilled to learn about this fascinating musician. Wishing to display it later at her reading club that evening (and impress a record label producer in attendance), Grace requests the image from Alana. Alana agrees and transmits the image from her bag to Grace's. However, since Grace's version is copy, its quality degrades, an artefact of being second-degree from the source. Even so, Grace is pleased to have her own copy to display that day.

At lunch, Alana meets with her friend Hunter. As she says hello, she changes her display to the Radiohead photo since they went to the concert together. Since he had a fabulous time at the concert, Hunter recognizes Alana's photo immediately. Hunter asks if he may acquire a copy of the image for his collection, since he didn't bring his camera but he'd like his bag to display he was at the concert. She agrees and transmits the photo to his bag. He thanks her for the second-degree copy and dons it immediately.

Mid-afternoon, Hunter and Grace (who are unknown to each other) happen to be getting tea at the same café. Hunter wears the Thom Yorke photo while Grace has the album cover. Both of their bags vibrate privately, notifying each that someone in close proximity is displaying an image that shares a common social link with one of their own images. Specifically, both Hunter's and Grace's images have ties to a common intermediary, Alana. Grace doesn't recognize the Thom Yorke photo, but Hunter recognizes the album cover from Alana's bag earlier that day, so Hunter realizes that the woman in the café is somehow socially connected to Alana. Through the timeliness and meaningfulness of Grace's image, Hunter can infer more about Grace's place in their larger social milieu.

That evening, Alana attends a local live concert, and espies another Urbanhermes bag in the crowd with an image of Matthew Barney's latest artistic work. Alana initiates transmission of a copy of this image to her bag, and this action creates an indelible link between her and this Barney-knowing stranger.

After the show, Alana logs onto the Urbanhermes website and reviews the trajectories of the images she was wearing today. She notices that Grace shared the emerging artist's album cover with the record label producer, and the consequential explosion in distribution after the producer posted the image to his blog. Alana received a friendly emessage from Jenn (the stranger at the concert) who wrote to anyone who adopted her image to unearth possible fellow followers of Matthew Barney. As the images in Alana's collection are designed to expire after a certain brief lifespan, she is prepared to replenish her accessory with fresh images for the next day, or possibly the next hour.

The time she spends acquiring new displays signals her commitment to fashion; the content of the displays and the

trajectory of their adoption are signals of her affiliations and her place in the social world.

THE PHYSICAL FORM

Although the form factor of Urbanhermes could potentially take many shapes (e.g. garment, jewelry, belt), we chose to implement this prototype as a simple, practical messenger bag. Unisex and minimal in design, it attempts to be



Figure 1: Urbanhermes: an embodied fashion signaling system. The prototype is constructed of felt and embedde with a pair of networked mobile computers.

accessible and attractive to people of all sexes, ages, backgrounds, etc. We did not want distractions of style or aesthetics to impede universal acceptance. Its use as an accessory gives the wearer freedom to take it up or remove it as desired (as opposed to a more integral article of clothing, such as pants, which cannot be removed unreservedly). This control also extends to the physicality of the bag, whether it is worn facing in or out, styled to contrast or complement the ensemble, or layered under or over stratums of apparel.

The external bag is conventionally constructed, patterned and sewn from colored felt. The felt was chosen as a suitable material, as it is soft yet sturdy, playful yet universal, and established a simplicity that belied its more complex role as something more "futuristic." Established as a messenger bag, the form is generic to accommodate both male and female users, and its dimensions and proportions are appropriately balanced for most shapes and sizes. The flap of fabric overlapping the front part of the bag is designed to hold and secure the separate computational component, with its screen and buttons visible and accessible from the outside.

Additionally, an urban environment's prevalence of on-foot mobility give way to nomadic inclinations. A bag takes one from one point to another, from home to work, from the café to the library, a means of toting one's daily necessities on the body. The bag therefore becomes an extension of the on-the-go existence, a natural and functional adapation that befits the mobile culture.

CONCLUSION

Urbanhermes enables communication through the display of rapidly evolving image vocabularies. As a technology, it affords this cultural use, but it remains for the users to embrace it and give it meaning. It is not the random uploading of images that creates fashion, the signals of affiliation and status, but the uploading of images that are both novel and meaningful to the community. We believe that the design of the system will foster its use to indicate access to dynamically changing information and thus establish a basis for impression formation.

The boundaries between virtual and physical are dissolving. We walk through urban spaces connected to distant companions, mobile in our global communications. Urbanhermes brings the speed, the malleability and the traceability of virtual fashion signals to the physical street, a melding that we believe will allow people to disclose and perceive expressive qualities about themselves that would not be possible by current material fashions.

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