EDITED BY
SUSAN YELAVICH
BARBARA ADAMS

DESIGN AS FUTURE-MAKING

BLOOMSBURY

4). Furthermore, each
contents were described
ɔn, ranging from how to
quantities, paired with
" was contained in each
iate—what to do with
of cookies didn't hold
uestions of how the
without? Should the
d this make each person
flect the similar concerns
sponse shelter and food
eated an environment
otiate, discuss, and
ted the residents of the
l this issue—even when
r position.
l to stimulate a more
velopment of plans
around emergency
lso simultaneously an
ın contribution. As we
new century holds,
support the human
ed frameworks and
ly antithetical to, or in
's, while sticking to old
ıch as access, power,
lefinition of design and
w contexts that question
nimum serve as a way to
esign to develop new
question in a twenty-

FASHION HACKING

Otto von Busch

Fashion System and Passivity

Over the last decades, there has been a tendency to describe fashion as going through a process of democratization. With fast and relatively accessible fashion and collaborations between cheap brands and high-profile designers, there seems to be a more fair distribution of fashion goods throughout western societies. Yet the term "democratization" makes us believe we now have access to the decision-making processes of fashion, while we are simultaneously, and quite bluntly, locked out of any control or having a mandate to influence the brand. Clothes are still designed far from us, and the goods come to us ready-made on the hanger. We are steeped in a system of pacification and total control of what is deemed worthy and what is right, even if we feel we can pick from an endless amount of choices. All sensibilities of dress are funneled through the enormous, but narrow, fashion economy.

Fashion may be the perfect example of the activity substitution philosopher Slavoy Žižek and psychologist Robert Pfaller both call "interpassivity."[1] Throughout history, this mechanism of substitution has manifested itself in historical wailers—women hired to cry at funerals—and can today be found in the canned laughter on television. For Žižek and Pfaller, interpassivity is a type of surrogate ritual that displaces or delegates agency. We trade one type of agency for another in what we consider a better deal. Fashion

may also be an example of interpassivity. The designer garment expresses some of my identity, as a complement to my own behavior. I submit to fashion in order to gain a claim to the zeitgeist, symbolic agency, or a sense of popularity. But at the same time, I position myself in an unreflected situation of submission. Through interpassivity, we give up our field of activity to a prepackaged one. In fashion this takes the everyday form of ready-to-wear.

One immediate response could be to start making things ourselves, a common practice of perceived independence. Making clothes at home has been an occupation since the beginning of textiles, so this is nothing new, but the motivation for these engagements has changed over time. The objectives of home sewing in the West were just a few decades ago still primarily those of economy or fit. Today, however, as with many other do-it-yourself (DIY) activities, the objective has changed to address instead questions of individual accomplishment, creativity, self-confidence, independence, self-reliance, development of skills and, not the least, lifestyle.[2]

As I will argue, there are DIY practices that deal not only with the hands-on activities of being frugal or repairing and making things, but with systematic and strategic application and repurposing, where these practices are inserted back into existing operating systems of society. These activities are dynamic design interventions, which insert new practices on a systemic and strategic level (**Fig. 1**). They are thus not isolated events, but interconnected with other actors, forces, and practices, forming new intersecting or complementary ecologies of practice. To get a clearer example of this we could look to the methods of hacking.

Hacking the Fashion System

Hacking is a contested concept. In popular media it connotes everything from dangerous cyber criminals and anarchic file-sharing pirates to obsessive programming geeks and car-tuning enthusiasts and usually some sort of countercultural rebels. Within hacker communities the term is also much disputed, not least the distinction between hacking as constructive or destructive. Programming guru Eric Raymond put the distinction simply as: "hackers build things, crackers break them,"[3] while media theorist William J. Mitchell paints a more nuanced description: "The best hacks are cleverly engineered, site-specific, guerrilla interventions that make a provocative point but aren't destructive or dangerous."[4]

Anthropologist Christopher Kelty suggests that hacking or, as he puts it, the practice of "geeks," introduces new entities into the world and is, in this

Fig. 1 Openwear Workshop, 2011. Photograph Zoe Romano. Courtesy Zoe Romano.

sense, constructive. Yet these new entities often overturn existing concepts and modes of representation, and can thus be seen as destructive. As Kelty notices, geeks are "involved in the creation of new things that change the meaning of our constituted political categories."[5] It is this constructive act—which in turn mobilizes a mix of entities, such as software or hardware, law, people, and practices—that makes the distinction too hard to draw. What from one producer seems like trespassing can, from the perspective of the newly introduced entity, seem as a rightful appropriation of everyday culture as exposed in the motto of the DIY magazine *Make*: "If you can't open it, you don't own it."[6]

This makes hacking a practice that highlights conflict and dissent simultaneously as it circumvents defenses and borders. When hackers build their own systems, even if the basic act is not in itself confrontational, it draws new borders, displaces power, and re-circuits established chains of command. When building a new system, it may become an incompatible counter-system and thus challenge consensus. In this way, hacking is similar to the "adversarial design" examined by interaction designer Carl DiSalvo, in which design exposes inconsistencies and disagreements and becomes a type of political design based on agonism and contestation.[7] With such an approach, design becomes a tool to provide, recognize, and express dissensus, and also construct paths for change. As DiSalvo notes, "adversarial design can identify new terms and themes for contestation and new trajectories for action."[8]

This political aspect of design also relates to a common misconception that hacking somehow dissolves power and is democratic, usually through examples of open-source software, the Linux operating system, or the online encyclopedia Wikipedia. But as highlighted by media theorist Alexander Galloway, the architecture of flat network structures and open protocols only shifts control from a highly visible, top-down command structure to a mode of control that is hidden inside the collaborative protocols themselves. Under the umbrella of collaboration, a systematic execution of power may reside that is just as effective as hierarchical oppression. As Galloway puts it, concerning the protocols for collaboration, "The contradiction at the heart of protocol is that it has to standardize in order to liberate. It has to be fascistic and unilateral in order to be utopian."[9] It is the interoperability between components of open systems that makes them dynamic and ready for change, thus encouraging interventions and contestation. But as mentioned, as hackers reorder the world, they are themselves forming new political arenas of dissensus.

To understand hacking as a practice, it must be examined on a systemic, strategic level. According to the Jargon File, the lexicon for hacker slang, the entry for hacker suggests that it is: "A person who enjoys exploring the details of

programmable systems and how to stretch their capabilities, as opposed to most users, who prefer to learn the minimum necessary."[10]

The programmable systems could be operating systems in general, various forms of apparatus, or more soft systems, such as the structural arrangement of culture, capital, or communication. Thus, from my perspective hacking is an activity to improve things by acquiring and disseminating knowledge of the inner workings of systems and a mastery of the techniques that modify these systems. Hacking means to open black boxes, reverse-engineer their circuitry, and build a new plug-in to the system, challenging it and releasing new capabilities from it.

Furthermore, I would suggest there is a distinct difference between the 1968 counterculture movement or other forms of popular protest, in which the key tactic has been to drop out of the system, subvert it, or make it stop by sabotage. Hacking is not about sabotage but keeping the power on. Not dropping out, but plugging in. This means that hacking does not aim to destroy, take, or overthrow power, but rather to tune and disseminate power, bending the system in a more desirable direction through hands-on interventions and constructive acts. Hacking a system advances it because you love it, not because you hate it.[11]

To take a hacker perspective on fashion would mean to reverse-engineer, modulate, and plug into its inner workings on a strategic level. Just as a software operating system involves not only code but also people, law, and practices, the fashion operating system involves not only a technical system of production, fabric, and seams, but also a cultural belief system, full of icons, rituals, cultural signifiers, and, not least, the everyday practices of people involved in the consumption and display of fashionable goods. Fashion hacking means to start applying a hacking mentality to the fashion operating system, challenging it, and contesting its influences in a systemic way. This could mean breaking the interpassive logic of consumerism as well as organizing DIY efforts with the aim of self-determination. Ultimately, hacking produces hands-on tools and engagements for self-reflection, challenging the interpassive imperative of consumption.

Some Examples of Fashion Hacking

Fashion hacking is a strategic and empowered endeavor that reverse-engineers the inner functions, practices, and rituals of fashion in order to build a plug-in practice. I will highlight three examples that trace different levels of hacking: Hacking-Couture by Giana González, Counterfeit Crochet by Stephanie Syjuco, and the OpenWear platform of Milan.

New York-based interaction designer Giana González runs the project Hacking-Couture. As a mix of programming practice, fashion education, and civic engagement, she organizes workshops in which participants reverse-engineer fashion brands, deprogram their visual language or code, and map this source code into charts. These charts are used to trace how a brand's components are constituted and identified in order to build further on the code. The participants later use old garments to reinterpret the code and render visible their own versions and executions of the code. They are, in turn, photographed and turned into new codes of the brand. As the participants "Chanelify" their old garments into new Chanel-like fashions, they use the same code as the brand, and their own creations can thus be regarded as authentic as the originals. To González, great fashion designers are masters of similar coding skills. A fashion programmer, like Karl Lagerfeld, may fully grasp the source code of his brand, explicitly read its historic code, and parse strong new codes in order to produce new programs or patches, but he does not share the process as open source. The Hacking-Couture workshops thus make the hidden designer source code available to amateurs as they engage in fashion code hacking.

This aspect of González's practice resonates well with the media ecologist Alexander Galloway's ideas about code being a stronger text: "code is the only language that is executable."[12] Code is thus not only a text or message, but also an actualizer. Code transmits an impetus or a force of execution. It wants to run, to control operations. "Code has a semantic meaning, but it also has an enactment of meaning."[13] For González, this means fashion code is not only in the shape and proportion of garments, but it is also executed by the wearer through posture and movement. In the end, González's workshops are a total code-recycling that renders the full hack visible, where visual code is first reverse-engineered and tuned by the participants and then re-executed in front of the camera in order to become open and authentic code again. It is a recycling activity that happens on two levels, material as well as visual. It also includes skill building on several levels, decoding brands and activities, as well as reverse engineering and appropriating in addition to the basic skill of sewing.

San Francisco-based artist Stephanie Syjuco's Counterfeit Crochet Project uses similar techniques of engagement (**Fig. 2**). Syjuco encourages participants to print out their desired "it-bags" as low-resolution images from the Web and enlarge them into full-scale pixelated patterns. These abstract depictions of online desire then become crochet patterns for the bags in which each pixel is translated into a crochet stitch. As amateur crafters reproduce their objects of desire, they turn their passion for upmarket handbags into basic crafting skills as they are "crafting their hearts' desires, and both laughing at and paying homage

ez runs the project
ɔn education, and civic
ıts reverse-engineer
nd map this source
d's components are
ode. The participants
isible their own
ɔgraphed and
anelify" their old
code as the brand,
ıs the originals. To
ing skills. A fashion
:ode of his brand,
in order to produce
; as open source.
gner source code
g.
ı the media ecologist
:: "code is the only
· message, but
ecution. It wants
but it also has an
ode is not only
ed by the wearer
shops are a total
code is first
e-executed in front
gain. It is a recycling
lt also includes
, as well as reverse
sewing.
eit Crochet Project
ıges participants
m the Web and
depictions of
ch each pixel is
heir objects of
: crafting skills as
l paying homage

Fig. 2 Counterfeit Crochet Gucci Bag, 2007. Photograph Otto von Busch. Courtesy Otto von Busch.

to the 'high-end' fashion world!"[14] If you squint your eyes, the counterfeit may even look like the real thing.

Just as the technical drawings of fine craft goods are outsourced for production, Syjuco also distributes her counterfeiting practice among pirate peers and global collaborators. Through this process, the counterfeits explore the limits of craft as technique and as a systemic political act in which questions are raised about the borders between copy and original, revaluing the worth of desire, labor, and exchange. To facilitate this process, Syjuco shares patterns and instructions online for knock-off production and encourages free-forming and a "healthy sense of experimentation on the maker's part."[15] Instead of using a small needle and thin yarn for high resolution and good finish, she promotes the use of thick yarn to make the process faster and easier. It is not a question of making a perfect copy with exclusive threads but instead to debase the original using common materials.[16]

Where Hacking-Couture has a more direct relation to hacking techniques and puts emphasis on tracing, deciphering, and reproducing once-exclusive brand codes, Counterfeit Crochet examines the modes of production and everyday craft dissemination through objects of desire. Syjuco negotiates a design dialogue between amateur craft, traditional skillfulness, and glamorously exclusive fashion through a systematic use of crocheting.

The Italian OpenWear project is a platform for open-source fashion (**Fig. 3**). The loosely organized initiative grew out of a series of media activism campaigns, such as the Euro May Day demonstrations against precarious work and a network of fashion designers mobilized for an activist fashion hoax during the Milan fashion week in February 2005. In this hoax, a group of activists created a fake brand called Serpica Naro (an anagram of San Precario, the patron saint of precarious workers) and staged a protest on the catwalk in front of the international fashion press. The participants shared an interest in emerging ideas of open-source software, self-organization, and new models of collaboration. The media campaigns formed a point of attraction for many young creative individuals wanting to network their practices into a sustainable alternative to the large-scale fashion industry.

The OpenWear platform has a digital presence focused on sharing patterns and production methods and is manifested physically through workshops and an emerging production lab. It follows the model of the popular hacklabs and fablabs (fabrication labs). These environments for making are spaces for sharing technical, small-scale production equipment for prototypes, and are scenes for local exchange of ideas and techniques. The OpenWear production space is called "WeFab," with the slogan "make the right thing," emphasizing the micro-ethics of sharing ideas and patterns and the

Fig. 3 Openwear Collaborative Clothing, 2011. Photograph Zoe Romano. Courtesy Zoe Romano.

community aspects of networked local production. The platform also acts as a ground for experimenting in new forms economies to support independent and small-scale entrepreneurs, for example, by buying bulk and pooling orders to get better prices or by sharing expensive equipment. The platform supports the local ecology of designers by facilitating the digital dissemination of ideas and patterns and the physical spaces and techniques of production. In this sense, OpenWear is a strategic assemblage of makers, exploring how to organize independent makers into larger networks on both digital and physical levels.

In an apparent paradox of DIY activities, Karl Lagerfeld, Chanel's famous designer, made a pattern for Burda Style, the online pattern-sharing site, in 2010. In a similar vein, for the spring/summer 2010 line, he also released a small crocheted clutch bag in an amateur style common on the online craft bazaar Etsy. Lagerfeld, who is very trend sensitive and often an early adopter of street culture for the catwalk, thus manifested a re-appropriation of styles very similar to those practiced by DIY fashion producers or Syjuco's distributed crocheters.

On the surface there seems to be little difference between the material outcomes of these two camps: you make a Chanel yourself through a Lagerfeld-designed pattern or you buy a real Chanel that looks homemade. Lagerfeld may even be educating some home sewers by sharing his patterns, so even Lagerfeld

may be "empowering users." So what is the difference between the DIY hacking and Lagerfeld's version?

First, we could draw a distinction between what I call "executables" and "instructables."[17] Executables are DIY techniques in which the act of production is intended to replicate an original plan, a double-click directive of action. Typical examples could be the assembly of plastic airplane models or IKEA furniture. The executable action does not take the user any closer to becoming an aviation engineer or cabinetmaker. Instructables, on the other hand, have the purpose of educating the user, like cookbooks. For every recipe you cook, you reclaim a part of the kitchen, and soon enough you can improvise and cook on instinct. Much of the hacker or open-source movement has a similar pedagogical imperative. Code is shared and commented upon by the programmer in order to make sure those who build on it further can understand how it works or how hardware is made. While Lagerfeld may be sharing his patterns, his aim is not explicitly to educate users or facilitate their advancement toward independent fashion producers, and it is not to build platforms upon which these skills can create new collaborations.

Second, and perhaps more important, when examining DIY practices, we must ask how these actions change our capabilities beyond what is offered within the narrow funnel of consumerism. How does hacking in a systematic manner distribute competence and increase capabilities to act and be free in the world? It is from such perspective of capabilities that fashion hacking becomes most apparent.

The Capabilities of Fashion Hacking

DIY craft projects, and especially hacking, reassemble the competence of design in new ways. Tasks once delegated to professionals are reclaimed and redistributed. All technologies and tools are agents "that rearrange the distribution of competence within the entire network of entities that have to be brought together to complete the job in hand."[18] Hacking highlights this distribution and opens it for collaborative intervention.

We could draw parallels between automation in industry and the action spaces offered to us through consumerism. As stressed by design researcher Sir Christopher Frayling, early anti-industrialism movements such as the Luddites were not anti-progress per se. Instead, their protests were concerned with how industrialism caused the fragmentation of working communities and changed the distribution of capacities and control of labor.[19] Automation in industry means attending the machine, not working with it.[20] Likewise, craftsmen were

"fighting for the status of a way of life: that is, retaining control at the point of production."[21] Being capable or able means to have influence or control.

According to economist Amartya Sen, one fundamental mistake we make when examining societal development is to focus merely on economy and access to commodities.[22] As Sen argues, possessing a commodity does not mean it can be actualized to one's advantage. It is easy to only judge commodities by their characteristics, as we believe that "[s]ecuring amounts of . . . commodities gives the person command over the corresponding characteristics. . . . However, the characteristics of the goods do not tell us what the person will be able to do with those properties."[23] Sen instead argues that we must look at "what the person succeeds in doing with the commodities and characteristics at his or her command."[24] We need to look at capabilities rather than commodities. Philosopher Martha Nussbaum, a collaborator of Sen's, suggests that capabilities "are not just abilities residing inside a person but also freedoms and opportunities created by a combination of personal abilities and the political, social, and economic environment."[25] Frayling approaches the notion of skill in a similar vein, in which it is not only a matter of internal ability but of control of "the circumstances [that] make possible any skilled activity."[26]

We usually believe that owning a fashionable garment immediately transfers its characteristics onto us, making us fashionable. But in this transaction, we are not in any sense in control of the capabilities of being fashionable. Instead, we have only dressed in an ephemeral incarnation of the zeitgeist and left all control of production to the brand or designer. Fashion hacking actualizes the skills, control, and systemic capabilities of fashion, that is, the ability to engage in fashion. As seen in the examples here, fashion hacking and, in the end, "fashion-ability," would mean a socially engaged participation in the fashion ecology beyond the mere act of choosing one garment over another. It instead resonates well with Nussbaum's idea that "[t]he notion of freedom to choose is thus built into the notion of capability. . . . To promote capabilities is to promote areas of freedom."[27] Fashion hacking realizes new, grounded freedoms in the realm of fashion beyond the parameters of the fashion industry's operating system. It happens on individual as well as on a systematic level as skills are networked into strategic capabilities for self-determination. To be "fashion-able" means having the ability and the freedom to choose beyond the current commodity interfaces of fashion consumerism.