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DYSFUNCTION *and*
DECENTRALIZATION

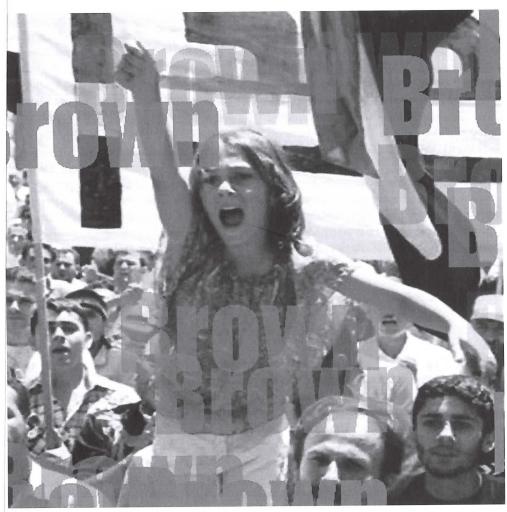IN NEW MEDIA ART AND EDUCATION

Figure 5.2: Robert Spahr (n.d.), CRUFT series.

of the Australian performance artist Stelarc has for some time dealt with the limitations of the physical body; the failures of the biological and the technological, and the possibilities of the cyborg. Many of his projects utilize technologies—mechanical, analog, digital—that augment the given capabilities of the human body, pointing to where the body fails and the machine succeeds. In his performance art, Stelarc presents the viewer with a dystopian take on the standing-reserve described by Heidegger. The body is literally turned into resource through its colonization by various technologies, providing structural support and energy for the various prosthetic additions.

Art and Overload

Art has often been used to provide the sensory organs with more information than can be handled at one time; from architectural forms that use scale to overwhelm the viewer, to sculptures that describe spiritual, mental, and geographic vistas that extend beyond the limits of human vision, to painted forms such as trompe-loile that confuse and delight the viewer, art has provided innumerable moments of shock and awe. Surely contemporary visual culture has expanded upon this oversaturation of information, creating not a cathedral that affirms the authority of the church, but a visual marketplace that centralizes the power of capitalism, an expansion of the visual density that Walter Benjamin (1999) saw in the arcades of turn-of-the-century Paris.

With the incorporation of mechanical technologies came the ability to replicate images and objects at a rate previously unavailable. These technologies also, as Benjamin famously argued, divorced the work of art from spiritual and ritual traditions; mechanical reproduction provided artists with new networks of production, transmission, and reception, as well as new strategies for political expression. In an age of digital replication, artists are continuing to explore new possibilities for creative expression and critical resistance. The new media artists that will be discussed in this section channel attributes of complex technological systems, exploring the possibilities found in examples of technological overload.

If failure is defined as the moment when digital technology does not work well enough, overload should be understood as when technology works well, but simply cannot handle the workload required of it. Overload occurs when circuits take on more than they can accommodate, such as in the case of the *etoy* TOYWAR discussed earlier. Through DDOS requests, *etoy* was able to shut down the *eToy* website, overloading the system through sheer volume. Overload often results in system failure. However, for the purposes of analysis, I will differentiate between failure and overload in terms of system functionality: failure should be thought of as lack, while overload a form of excess.

Many new media artists utilize strategies of overload. This is often a strategy that grows from the abundance of information in our heavily mediated social sphere. New media artist Robert Spahr deals with this overload, through work that looks at the types of visual experiences found on the Internet. In his "Cruft" series, Spahr composes digital collages by extracting images from the Internet, chosen by a computer program that searches images by keyword.

Borrowing the computer hacker term "Cruft" I have applied it to my current series of images. I create these CRUFT images by writing "recipes" (also known as an algorithm).

Figure 5.3: *ESCaperucita & Little Flying Hood* (2009), Nayda Collazo-Llorens.

An automated system follows the instructions, first harvesting selected source material from the Internet, and then processing that information into a CRUFT, generating images 24 hours a day, 7 days a week.

Spahr's work demonstrates the new media principle that Manovich terms "automation." Spahr writes the algorithms that collect the images, and is therefore freed from making decisions as to what images are collected. These composite images are catalogued on Spahr's website, where they are grouped by theme. The process is controlled through dialogue between the search engine and the artist; the artist edits the results for thematic and aesthetic impact, though occasionally the product pushes the boundaries of legibility. Each theme borrows images from different sources, with Spahr establishing relationships that have the potential to conflict and/or confuse. For example, in the *Mire* series, one image from Aljazeera.com is combined with one image from Whitehouse.gov every 26 minutes, creating a database of images that is constantly updating itself. The choice to combine images from Al Jazeera, the world's most popular Muslim media network that has broadcast messages from terrorists such as Osama bin Laden, with those of the White House website, is clearly intended to bring about a clash in belief systems and message. The collected *Mire* images creating an archive of these two media sources, documenting how they differ and align over time, and showing that, though the online informational stream is constantly shifting, many of the themes remain consistent.

Occasionally, Spahr addresses traditional art educational processes in his work. For example, in the series of images titled *Crayon Cruft*, Spahr pulls images from the website Asharq Alawsat,[1] the "leading International Arabic Daily" news source. He then combines the image with text of the name of one of the 100 Crayola colors, which contrast with the black and white background. In this manner, Spahr raises issues of media representation and artmaking, the bright colors and festive names of the crayons often contrasting with images depicting serious political issues or conflict (Figure 5.2).

In each of these projects, Spahr uses the infinite amount of contemporary media images to make comments on the infinite amount of contemporary media images. These images each depict overload, and due to their sheer number also overload the viewer through continual proliferation. This tactic is reminiscent of the notion of the "image collage" described by Castells in Chapter Four. However, where Castells was referring to a sociological form of collage, where cultures and customs combine, Spahr is creating layered images in the tradition of artistic collage, a radical gesture that attempted to disrupt the traditional mode of viewership by those accustomed to looking at mass-produced media images (Richter 1997).

to overwhelm. This feedback loop is pushed to the point of discomfort, the excess energy of the body used as resource for the piece.

As discussed previously, the notion of excess has been explored in the writings of George Bataille. His description of the "accursed share" presents a model of expenditure as a process that is central to social development, though he touches only briefly on the role that technologies play in the creation of excess. In *The Cruel Practice of Art* (1998), however, he writes about the relationship between art and the excess emotions produced by moments of destruction. Bataille describes the process of interpretation as a childlike impulse, and that images of destruction entice the viewer because they allow for a symbolic annihilation of the self: "What attracts us in the destroyed object (in the very moment of destruction) is its power to call us into question—and to undermine—the solidity of the subject."

Is this symbolic annihilation the subject of works that present overload in digital form? Each of the artists previously discussed presents varying forms of excess to the viewer: excess imagery, excess information, excess energy. Robert Spahr describes the process of creating this excess in his work as such: "So CRUFT serve as a mirror, reflecting back how we spend our excess energy. This excess energy and content also is part of the 24/7 cruft process. Creating art on a schedule that matches the 24/7 news cycle" (Spahr, personal communication, 31 March, 2009). As previously discussed, the writings of Georges Bataille speak to the productive force of excess. This technological excess can be seen as a force that disrupts the separation described by Heidegger as 'standing-reserve.'

New media artists such as Spahr, Collazo-Llorens, and LoVid present dysfunctional aspects of decentralized networks, in a manner that potentially overwhelms the viewer. In the process, the viewer is confronted with the overwhelming aspects of individual subjectivity, much in the manner that Bataille describes the way that art serves to destabilize the enculturation that comes with maturation. Acknowledging the properties of complex networks that channel noise in productive ways, new media artists can remind the viewer of the fluid possibilities of identity and artistic productivity in a network society.

Art and Noise

The third aspect of network dysfunctionality that I will discuss is related to failure and overload. Noise is the condition where the communicational aspects of the system are challenged, but communication still takes place. In the condition of failure, the system functioning is reduced due to lack: lack of signal, of power. This lack can result in the stopping of the system. In overload, the system is pushed to its limits due to an excess of signal or power, which can also cause it to shut down. In noise, the system still functions, but the product of this functioning is not what the system was designed to produce. The input does not match the output.

We have seen the ways in which noise operates within cybernetic systems. In such systems,

both organizations was limited. New media artists are often able to point to technological applications that are far removed from the initial design concerns of the technologies, and are not constrained by a bottom line, whether it be economic or academic. These are the examples of dysfunction, or "misuse," that Vuk Ćosić describes as "gestures of freedom."

New Media + Art = Failure

The first examples of network dysfunction I have categorized as "failure." Failure in technological terms occurs when a system does not work well enough. It does not receive the power or information that it requires to function to its fullest. In the previous chapter I presented artistic explorations of systems that do not, or cannot, operate to their fullest extent. Vuk Ćosić's *ACSII Cinema* are films transcoded using ASCII, so that they are visually fragmented, and challenging to watch, both in terms of the replacement of film grain with code, and also through their display in the Internet, accompanied by data transfer errors and glitches. Maryann (Mez) Breeze writes poetry in a language that borrows from English and HTML. These simulated glitches allow for numerous readings, and rereading, and also take into account the visual qualities of the text/code, which is presented in a manner similar to Ćosić's ASCII films. Australian performance artist Stelarc outlines the limitations of the human body through his multi-decade-long series of works that utilize a wide variety of technologies and philosophies, from aboriginal Australian practices to cyberpunk writings. Where Ćosić and Breeze utilize common technologies such as film and HTML code, Stelarc relies upon the funding and support of governmental organizations and independent arts benefactors to realize his sprawling works. In each case, these works point toward the often dysfunctional relationships between individuals and technologies that blur social, cultural, and personal boundaries in a manner that might best be described as a "machinic assemblage" (Deleuze and Guattari 1983). The failures that are referenced in these works point to the networked technologies used, and also to the failures in the viewer: failures of comprehension, of language, and of the human body.

New Media + Art = Overload

The second example of network dysfunction is described as overload. Overload in technological terms should be thought of as the system's inability to handle the amount of energy or information that it is designed to handle. In the new media works of art discussed previously, the continuously proliferating images on the Internet were combined through algorithms written by Robert Spahr. The images, text, and data are combined in a way that takes the decision making away from the artist, beyond the initial code. This type of generative art is described by Manovich as "automation," where the individual would not be able to combine the billions of images found online, but the computer can do so with ease, producing an amount of artwork that is only comprehended after the artist curates the selections into a series of works. Overload is also seen in the work of Nayda Collazo-Llorens, who

critical view of historical progress, could result in educational approaches that truly add to the discourse surrounding digital technologies.

New Media Art + Art Education = Accessibility

The next element of new media that I would like to consider relates to access. Digital technologies, while not completely ubiquitous on a global scale, are nonetheless widely accessible by multiple populations worldwide. Acknowledging the availability of new media technologies can only add to the range of practices being studied by art students. The Internet is useful as a tool for research, as a forum for critique, and as a site for promotion; even if it is not used directly in the creation of a work of art, it is still important as a part of the process. However, the distinction should be made between this common use of the Internet and a new media form of utilization. If an artist uses the Internet to produce a work of art, we should ask the following: "Does the use of the Internet change the way that we think about the way that we use it?" If the answer is "No," then it is not being used as an element of new media production.

The major difference between this use and prior artistic media utilization lies in the notion of creation. There are numerous traditions of art media creation, from painters mixing pigments to potters "inventing" glaze recipes. As Benjamin discussed, the uniqueness of a work of art prior to mechanical reproduction was based in no small measure upon the fact that the artist created it, as a unique image or object. New media artists may write their own code, or build their own machines, but this should not be a requirement for the designation of the label "new media artist." The accessibility of coding communities discussed earlier can allow individuals to write code in the model of Vuk Ćosić or Robert Spahr. Or, they may hire someone to assist them in the creation of a digital work of art that requires coding, in the interdisciplinary manner previously described. And, as discussed in the work of Keith Obadike, eBay promotes on their website that "almost anyone" can use their services. Social media forms allow users to interact and create with little to no prior experience.

This situation is not much different from Sunday painters or paint-it-yourself pottery boutiques. The main difference can be found in the venue for exhibition. These paintings and pots can be enjoyed by the maker, but they would probably not be found in major museum collections or galleries. With the accessibility of the Internet, the new media artist can display work alongside the canonical masterworks. While this is the case, it does not mean that the terrain is open for all to participate; there are still barriers to be found in the structure of the Internet, which is decentralized, not distributed (Barabási 2002). A small number of websites still control the flow of most of the information found online. A high pagerank by Google will bring far more visitors to a specific site than without. And, as Keith Obadike reminds

When using digital technologies, many types of dysfunction can occur, ranging from hardware malfunctions to software errors and human ineptitude. Many new media artworks employ various strategies of dysfunctionality in order to explore issues of power within societies and culture. *Dysfunction and Decentralization in New Media Art and Education* examines how digital artists have embraced the concept of the error or glitch as a form for freedom, where imperfection or dysfunction can be an integral element of the project. Robert W. Sweeny offers practical models and ideas for how artists and educators can incorporate digital technologies and integrate discussions of decentralized models of artistic production.

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