

Logline: Stealing 1 million Facebook profiles, filtering them with face-recognition software and then posting them on a custom-made dating website, sorted by their facial expression characteristics.

## **Theory.**

Face-to-Facebook, smiling in the eternal party

Social networking is naturally addictive. It's about exploring something very familiar that has never been available before: staying in touch with past and present friends and acquaintances in a single, potentially infinite, virtual space. The phenomenon challenges us psychologically, creating situations that previously were not possible. Before the rise of social networking, former friends and acquaintances would tend to drift away from us and potentially become consigned to our personal histories. Having a virtual space with (re)active people constantly updating their activities is the basic, powerful fascination of the social network. But there's another attraction, based on the elusive sport (or perhaps urge) to position ourselves. The answer to the fundamental identity question, "who am I?" can be given only in relation to the others that we interact with (friends, family, work colleagues, and so on). And the answer to this question seems clearer after we take a look at our list of social network friends.

So an intimate involvement and (endless) questioning of our online identity (often literally juxtaposing with our physical one) is perpetrated in the social network game. But social network platforms are not public organizations designed to help support social problems but private corporations. Their mission is not to help people create better social relationships or to help them improve their self-positioning. Their mission is to make money. Economic success for these corporations rests on convincing users to connect to the several hundred people who await them online.

The market value of these companies is proportional to the number of users they have. Facebook is valued at around 50 billion dollars [1]: it sports 500 million users [2]. The game can often translate into a form of social binging in which the number of friends a user has is never enough to satisfy. But what kind of space is Facebook? Facebook is not home - it is way larger and more crowded. And it's not the street, because you're supposed to know everybody in your space. Facebook is an eternal, illusory party, under surveillance and recorded for all time. Its structure invites you to first replicate and then enhance your real social structures, replicating your experiences on your own personal "screen space".

In this unending party, you meet and join old and new friends, acquaintances and relatives. As with most parties everything is private, or restricted to the invited guests, but has the potential to become public, if accidentally shared. Here the guests' activity and interests are also recorded through their posts in different formats and media (pictures, movies, trips, preferences, comments). It's an induced immaterial labour with instant gratification. Guests produce content by indirectly answering the question "who am I?" and they get new friends and feedback in the process.

In fact, Facebook's subliminal mantra seems then to be "be personal, be popular, never stop." It has even gone so far as to make it difficult to notice when a friend closes their account (you need to check the friend's list to have any idea). The more successful (and crowded) the party, the more the private funders are happy to put money into it. The price the guests are unconsciously paying is that they are giving away their (constantly updating) virtual identity. Guests, in fact, organize their own space, and therefore their

own "party", offering the party owner (Facebook) a connected, heterogeneous group of people who share interests.

As such they offer what can be termed as "crowdsourced targeting" – the indirect identification of people's targets and desires by the users themselves. In fact the spontaneously posted data provides an endless (almost automatic) mutual profiling, enriching and updating the single virtual identities, in a collective self-positioning. But can profile data be liberated from Facebook's inexorable logic? The answer is yes, but it's important to focus on the core of the Facebook profiles and see how they are recognized as virtual identities.

First, the profiles sublimate the owners' (real) social actions and references through their virtual presences. Second, they synthesize their effectiveness in representing real people through a specific element: the profile picture. This picture, an important Facebook interface, more often than not shows a face, and a smiling one at that. Our face is our most private space and simultaneously the most exposed one. How many people are allowed to touch our face, for example? And generally speaking, the face is also one of the major points of reference we have in the world.

There are even "special" regions of the human brain, such as the fusiform face area (FFA), which may have become specialized at facial recognition [3]. Faces are now so exposed that they do not remain private, but are thrust into the public domain and shared (they can even be "tagged" by other people). So any virtual identity (composed of a face picture and some related data) can be stolen and become part of another identity, through a simple re-contextualization of the same data.

Furthermore, "face recognition" techniques can be applied to group vast amount of Facebook pictures. This process is also quite paradoxical, because the "surveillance" aspects (face recognition algorithms are usually used together with surveillance cameras) here are not used to try to identify a suspect or a criminal, but to capture a group people with similar somatic expressions. The resulting scenario is that different elements forming the identities can be remixed, re-contextualized and re-used at will. Facebook data become letters of an unauthorized alphabet to be used to narrate real identities or new identities, forming new characters on a new background.

And this is a potentially open process that anybody can undertake. It becomes more tempting when we realize the vast amount of people who are smiling. When we smile in our profile picture, we are truly smiling at everyone on Facebook. So any user can easily duplicate any personal picture on his/her hard disk and then upload it somewhere else with different data. The final step is to be aware that almost everything posted online can have a different life if simply recontextualized.

Facebook, an endlessly cool place for so many people, becomes at the same time a goldmine for identity theft and dating - unfortunately, without the user's control. But that's the very nature of Facebook and social media in general. If we start to play with the concepts of identity theft and dating, we should be able to unveil how fragile a virtual identity given to a proprietary platform can be. And how fragile enormous capitalization based on exploiting social systems can be. And it'll eventually mutate, from a plausible translation of real identities into virtual management, to something just for fun, with no assumed guarantee of trust, crumbling the whole market evaluation hysteria that surrounds the crowded, and much hyped, online social platforms.

[1] <http://www.guardian.co.uk/business/2011/jan/17/goldman-sachs-facebook-private-placement>

[2] <http://blog.facebook.com/blog.php?post=409753352130>

[3] [http://en.wikipedia.org/wiki/Fusiform\\_face\\_area](http://en.wikipedia.org/wiki/Fusiform_face_area)

## How we did it.

Through special custom software we collected data from more than 1,000,000 Facebook users. What we collected is their "public data" - some of their personal data (name, country, Facebook groups they subscribe to) plus their main profile picture and a few friend relationships.

We built a database with all this data, then began to analyze the pictures that showed smiling faces. The vast majority of pictures were both amateurish and somehow almost involuntarily or unconsciously alluring. And they are almost always "smiling".

It's also evident that the majority of users want to appear in the best shape and look. They are acting on Facebook's mandatory mechanism: establish new relationships. Facebook is based on the voluntary uploading of personal data and sharing it with friends. The more friends the better. Being personal and popular a Facebook user is exposing him/herself to many others, continuing to establish new relationships.

Once the database was ready, we studied and customized a face recognition algorithm. The algorithm used self learning neural networks and was programmed to "group" the huge amount of faces we collected (and their attached data) in a few simple categories. The categories are among the most popular that we usually use to define a person at a distance, without knowing him/her, or judging based only on a few behaviors. We picked six categories ("climber", "easy going", "funny", "mild", "sly" and "smug" - working definitions), with some intuitive differences, for both male and female subjects. The software effectively extracted 250,000 faces that were connected to the relevant public data in our database.

After grouping them, we started to dive into these seas of faces, with all the perceptual consequences. And we started to think about why we felt so overwhelmed.

In "The Love Delusion" essay, Dan Jones cites Martie Haselton's research, which indicates that men typically overestimate the sexual interest conveyed by a woman's smile or laughter. When men see someone of the opposite sex smile at them they tend to think "she must be interested." By the way, women simply see a smile. [Dan Jones "The Love Delusion", March 31 2007, New Scientist]

Further, Heather Rupp, a graduate student at Emory University in Atlanta completed a study about the difference between the reactions of women and men when looking at the same erotic images. Tracking the eye movements of study participants "the big surprise was that men looked at the faces much more than women did." Dr. Kim Wallen (who directs the lab where this experiment was performed) suggested that men scrutinize faces in pornographic imagery because a man often looks to a woman's face for cues to her level of sexual arousal, since her body, unlike a man's, does not give her away.

[\[http://www.nytimes.com/2007/04/10/science/10desi.html?\\_r=2&pagewanted=print\]](http://www.nytimes.com/2007/04/10/science/10desi.html?_r=2&pagewanted=print)

So the role of the face in establishing a potentially intimate relationship is stronger than generally thought. And this is also at the base of Facebook's social system. A Facebook user is supposed to have increasing numbers of friends, but the website can also be used to actively look for a new relationship, by exploiting the illusory capital of accumulated relationships, signified by switching (mentally or often practically) into the "single" (i.e. available) status.

In "The Social Network" movie Jessie Eisenberg/Mark Zuckerberg becomes more and more excited as the concept of Facebook gets refined and he lets it be known that "I'm not talking about a dating website". Facebook is not a dating website, but it works using the same triggering principles. And for a few million of its "500 million active users" it does become a dating website.

So by combining all this information we wanted to make this further step easier for everybody. We established a dating website [<http://www.lovely-faces.com>], importing all the 250,000 profiles. This step builds the virtual land that Facebook is always close to but never explicitly steps in, being just an enormous background to the active process of searching for potential sexual relationships.

The profiles will be definitively "single" and available, in a fairly competitive environment, with real data and real faces that users have personally posted. Their smiles will finally reach what they unconsciously really want: more relationships with unknown people, attracted by their virtual presence.

The price users pay is being categorized as what they really are, or better, how they choose to be represented in the most famous and crowded online environment. The project starts to dismantle the trust that 500 million people have put in Facebook.

The project talks about the consequences of posting sensitive personal data on social network platforms, and especially the consequences in real life. These consequences are always underestimated because we still instinctively tend to confine what we do online in the visual space of the screen. Face-to-facebook practically questions online privacy through one of the web's most iconic platforms. And as with GWEI and Amazon Noir we're not just making a sophisticated critical action against another giant online corporation, but we are also trying to formulate a simple hack that everybody can potentially use.

Everybody can steal personal data and re-contextualize it in a completely unexpected context.

And that shows, once more, how fragile and potentially manipulable the online environment actually is.

### **The Hacking Monopolism Trilogy**

Face to Facebook is the third work in a series that began with Google Will Eat Itself and Amazon Noir.

These works share a lot in terms of both methodologies and strategies. They all use custom programmed software in order to exploit (not without fun) three of the biggest online corporations (Google, Amazon and Facebook), exploiting conceptual hacks that generate unexpected holes in their well oiled marketing and economic system.

The process is always illustrated in a diagram that shows the main directions and processes under which the software has been developed. We found a significant conceptual hole in all of these corporate systems and we used it to expose the fragility of their omnipotent commercial and marketing strategies. In fact all these corporations established a monopoly in their respective sectors (Google, search engine; Amazon, book selling; Facebook, social media), but despite that their self-protective strategies are not infallible. And we have been successful in demonstrating this.

There are other common themes in the projects. In all of them we stole data that is very sensitive for the respective corporations. With Google it was the "clicks" on their AdSense Program; with Amazon we started to steal the content of entire books, and with Facebook we stole a huge amount of public data profiles. In all the three projects, the theft is not used to generate money at all, or for personal economic advantage, but only to twist the stolen data or knowledge against the respective corporations. In GWEI it was the shares obtained through the money created by the AdSense program; in Amazon Noir it was the pdf books distributed for free; and in Face To Facebook it is the collection of profiles moved with no prior notice to a dating website.

All the projects, indeed, independently claim that some of the corporation's "crown jewels", including their brand image and marketing approaches, can be hacked, focusing only on their established strategies and thinking in a "what if?" fashion. Furthermore, the projects were all based on a "hacking" idea that, although

pursued on a sophisticated level and with custom software, still could have been applied by anybody with similar results. This is one of the fundamental values of these projects. Finally, all the installations we exhibited did not use computers or networks, trying to be as coherent as possible with the projects, but focusing more on the display of the processes than on the technologies.

### **Authors' biographies**

Paolo Cirio works as media artist in various fields: net-art, street-art, video-art, software-art and experimental fiction. He has won prestigious art awards and his controversial works have been sustained by research grants, collaborations and residencies. He has exhibited in museums and art institutions worldwide. As public speaker he delivers lectures and workshops on media tactics.

[www.paolocirio.net](http://www.paolocirio.net)

Alessandro Ludovico is a media critic and editor in chief of Neural magazine since 1993. He's one of the founders of the 'Mag.Net (Electronic Cultural Publishers organization). He also served as an advisor for the Documenta 12's Magazine Project. He has been guest researcher at the Willem De Kooning Academy in Rotterdam. He teaches at the Academy of Art in Carrara.

[www.neural.it](http://www.neural.it)