

# HellHunt

-a paranoid webspider searching for the devil on the net.

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## Abstract

*This paper describes the thoughts and ideas behind the web-based art piece; "HellHunt". In its literal tracking down the axis of evil, the webspider puts forward a number of highly relevant questions. "Hellhunt" displays the mutual dependency between the individual freedom of expression, imagination and thought on the one hand, while on the other a cultural formation based upon patterns, symbols and common values.*

## Introduction

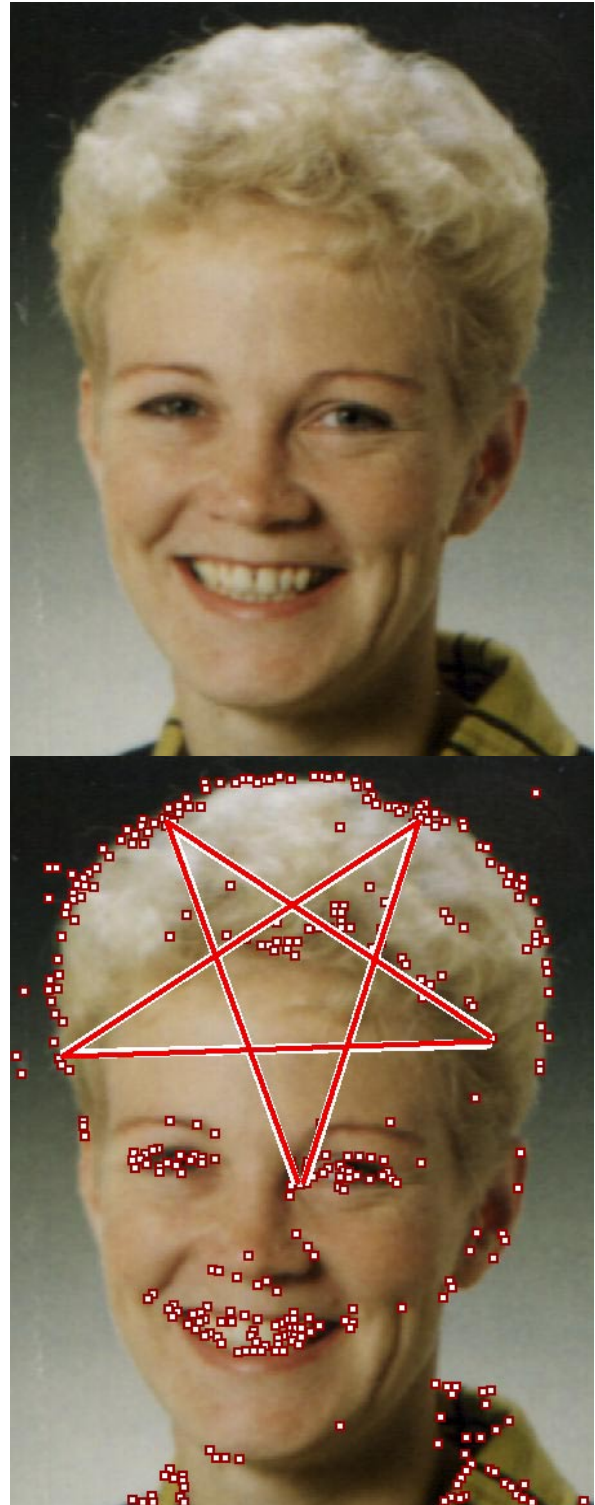
"Hellhunt" is an application based upon the use of so-called vision algorithms, a way of enabling computers to detect and distinguish geometrical configurations inside pictures. The active algorithm in this piece traces down the diabolic symbol of the reversed pentagram on images stored on the Internet.

When the program hits an image that corresponds with the algorithm, it draws the lines of the hidden pentagram on it. Furthermore, it saves the address of the page and sends an e-mail to it, kindly demanding the removal of the harmful image.

Combined with the growing paranoia surrounding the Internet the program puts forward important issues of censorship and the freedom of speech. The phrase: "The devil inherent in the picture", gets a new meaning.

## Background

Although steganography - the practice of embedding secret messages in other messages is an old cryptographic technique, the first international workshop/conference on the subject was as late as 1996. With the digitalisation of the information-bearers e.g. music, the image and so forth. The ways of coding and decoding steganographic messages has become an easy task for programmers to solve. Therefore it has again compromised the inherent truth concept of the photographic image. It is now no longer a question about a mere manipulation of an image, it is a question of what could be hidden inside the image. What may look like a totally innocent image of someone's beloved wife, could contain the plans for a nuclear missile or some other weapon of mass-destruction. This gives an interesting twist to the pictures we have around us, and an over-interpretation similar to the bible-codes isn't hard to do. The occult tradition of the hidden meaning inside the meaning is suddenly omnipresent in our society. This meme (mind virus) is currently spreading in our society and it's symptoms; Paranoia and conservatism, is showing it's ugly face to us.



<http://home.planet.nl/~ruurdb/pics/annie.jpg>

## Early cases of paranoia

Three examples of cases; where the paranoid accusations resulted in actions taken by the accused or responsible party.

1973 the book *Subliminal Seduction* by Dr. Wilson Bryan Key claimed that subliminal messaging was used widely in the advertising business. Due to the public outcry that followed, the Federal Communications Commission decided that subliminal advertising was "contrary to the public interest". Advertising was labelled "public speech" and therefore it didn't fall into the category of freedom of speech.

In the early eighties in Orange County, California, there were a concerned parents group that with the use of a microscope detected subliminal pornographic images in the illustrations in their children's textbooks. The outraged parents actually succeeded in getting some of the illustrations changed on the basis of their "discovery".

The Coca-Cola logo when looked upon in a mirror, spells in Arabic "No Muhammad, No Mecca". The company has on its website an explanation of this coincidence: *"This claim is not true. The Coca-Cola trademark was created in 1886 in Atlanta, Georgia, at a time and place where there was little knowledge of Arabic."*

[http://www2.coca-cola.com/contactus/myths\\_rumors/middle\\_east\\_subliminal.html](http://www2.coca-cola.com/contactus/myths_rumors/middle_east_subliminal.html)

## Set-up

The Hellhunt program can be divided into three main components:

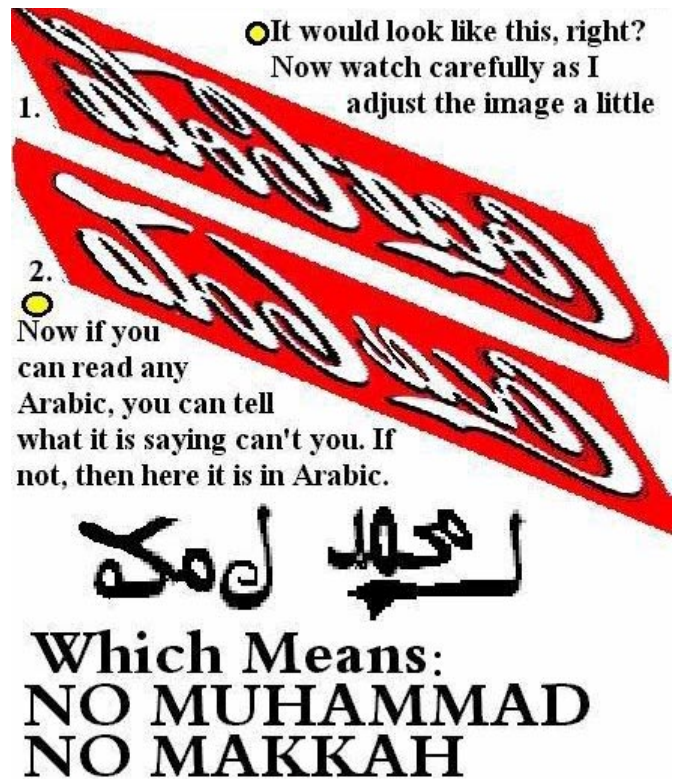
a. The webspider, b. the imaging algorithm and c. the mail agent.

a. The webspider is as simple as they get; it begins by looking up a famous search engine and with the keyword "hell" it gets several links to go to. By choosing one of these links the spider is off. It first collects the pictures at the homepage and then the links to other pages and sites. It tries to explore all the pages on one site first. When it has taken all the pictures at one site, it simply jumps to the next. If the links in its library should get exhausted, it goes back to the search engine and finds a new route.

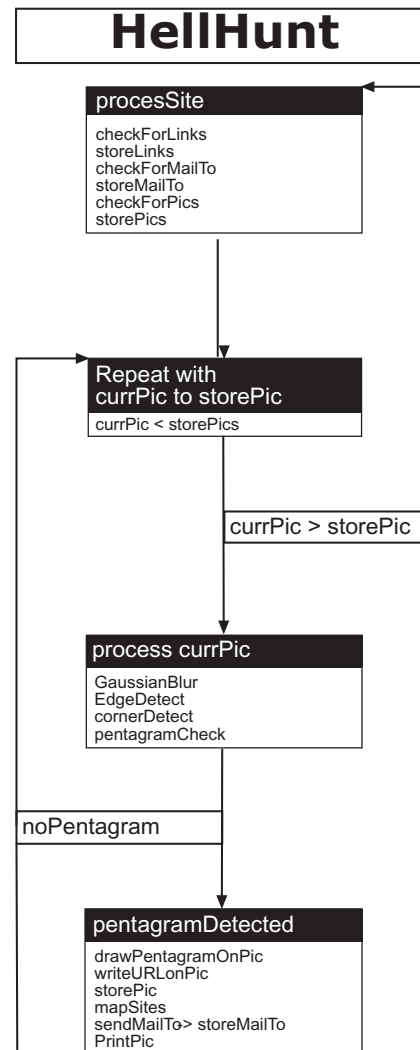
b. The corner detection algorithm (Susan) used in the HellHunt piece for detecting the geometrical configurations was originally developed by a PhD student Steve Smith at the British defence agency. The algorithm returns an ordered list with the corners found in the image. With this list we can look for the reversed pentagram by going through them one by one and look for points that will form a reversed pentagram and then draw it into a copy of the stored image. Every image that doesn't contain a pentagram is then deleted.

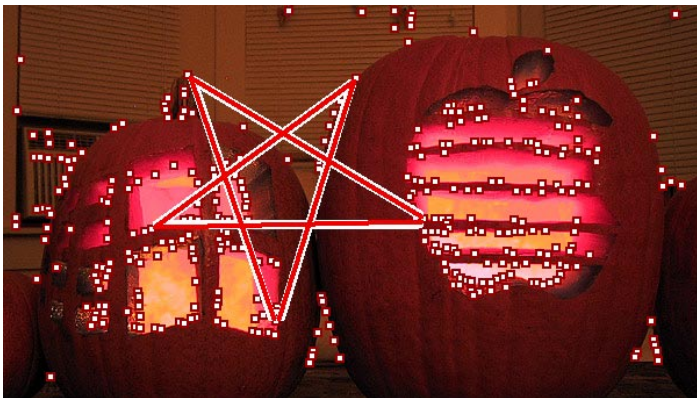
c. If the webspider has found a "mailto" link on the site and it has infected pictures inside it, then the mail agent sends these images to the "mailto" address, kindly demanding that these offensive images are removed from their site.

The program has found pentagrams in approx. 2-3 % of the >500.000 pictures it has searched through.



<http://www.snopes.com/cokelore/islam.asp>





<http://web.mit.edu/halloween2001/windows-apple.jpg>



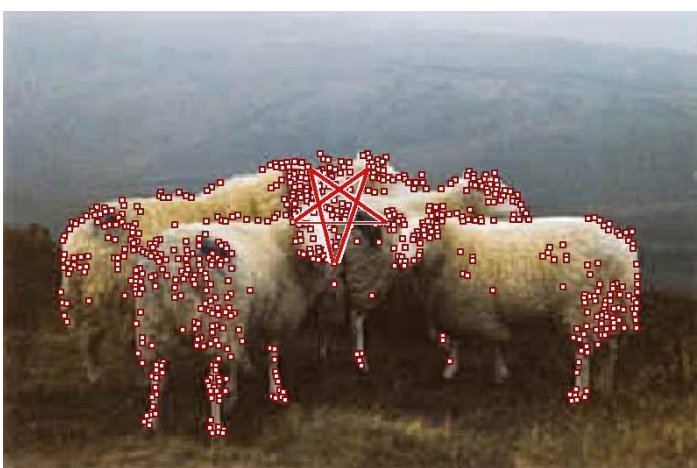
[http://www.newswatchone.com/Taliban\\_minister.jpg](http://www.newswatchone.com/Taliban_minister.jpg)



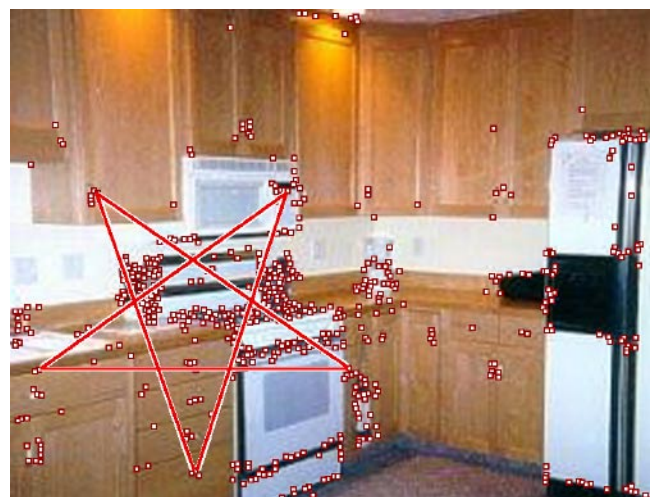
<http://www.britney-spears-naked.cc/47502.jpg>



<http://www.anus.com/altar/pics/gram.jpg>



[http://www.schachtspindle.com/d\\_default\\_sheepic.jpg](http://www.schachtspindle.com/d_default_sheepic.jpg)



<http://www.hockinghills.com/acorn/kitchen.jpg>

## **Conclusion**

The HellHunt was conceived in autumn 2000 and during the implementation process there were rumours that (US) governmental forces were also developing or had already developed similar computer programs. It all culminated with the devastating attack on the World Trade centre in New York, USA on the 11th of September 2001. There were indications that the Al-Quida had used stegonography to conceal its correspondence during the planning of the attack. The exhibition where Hell-Hunt made its first appearance opened just 9 days later and by then it was no longer speculations that similar programs were running around on the net; looking for messages and symbols in pictures that could be linked with various terrorist organisations. What separates the HellHunt piece from the programs used by governments is that the latter has a person filtering out what the computers suggest as a picture containing harmful content. The HellHunt doesn't have this feature and therefore shows a more erratic paranoid behaviour.

Although the most apparent use of these new techniques is to conceal messages inside pictures. The technique could of course be of more use with the reversed intentions; to find content in pictures. You could easily imagine a paint-program where you draw a simple sketch of a pair of shoes you've seen and want. And then leave it to a search engine to do the dreary job of finding the best price on the Internet.

The field of computer vision is a vast one and it does in my opinion have more pros than cons. But it is always important that we don't turn a blind eye to the dangers that these techniques may or may not invoke. The HellHunt piece is more about the mechanics of the mind than it is about computer vision. But when the paranoia of the world's different cultures is combined with new technology then it can become really problematic. The HellHunt piece shows that such a projection is in the mind of the inventor. It is a projection of what you want to find in a picture and not what is actually there. During the course of our history we have lived with the belief of secret societies and powers out to overthrow our way of life. These suspicions have often led to catastrophic results with the world war two as one peak. Therefore it is not the conspiracy theories that are interesting, it is the theories about conspiracies.

## **Author biography**

Thomas Broomé received a MFA, Fine Arts department at Konstfack, Stockholm, Sweden in 1999. Since then he has worked part time as an artist/researcher at the Interactive Institute in the team that -among other things- developed the game "BrainBall". As an independent artist Thomas has done several critically acclaimed exhibitions in Sweden and internationally. He is also an appreciated lecturer / teacher within the field of media-art. And employed as an adj. adjunkt at the Valand art-academy in Gothenburg. In 2002 he received the two prestigious Swedish grants: Maria Bonnier-Dahlin Foundation for young artists and Konstnärsnämndens arbetsstipendium.



<http://www.posterservice.com/bigpics/2428b.jpg>

## **HellHunt credits**

Original idea: Thomas Broomé

Developed at the Smart Studio / Interactive Institute by: Thomas Broomé, Fredrik Petersson and Olof Bendt.

## **References**

[1] Howard Bloom, The Lucifer principle: A scientific expedition into the forces of history, Atlantic press, 1995

[2] Darren Aranofsky, PI, Artisan Entertainment, 1998

[3] Peter Cornell, Den hemliga källan, Gidlunds förlag, 1988

[4] Joseph Weisenbaum, Computer power and human reason, Penguin books, 1976

[5] Roman Polanski, The ninth gate, Artisan entertainment, 1999

## **Related projects**

Web stalker, I/O/D, Web visualisation

Codefinder, Research systems, Bible-code

Stegowatch, Wetstone technique, Steganalysis

Domburgsviten, Dick Bengtsson, 1972

## **Exhibitions**

Lords of Legacy, Art node, Stockholm

Electrohype, Malmö Konsthall, Malmö

Action Works, Stockholm

## **Articles about HellHunt**

”Thomas Hellhunter”, Lotten Wiklund, Mars 3/2003

”CD-rom vs. Internet art”, Karin Wagner, Katalog journal of photography and video, vol 15 no 1

”Hellhunt”, Glänta 1.02

”Skönhet ytterligare ett varv”, Fred Andersson, SvD

”Report from Electrohype”, Andreas Brögger, www.rhizome.org

”Electrohype 2002”, Ida Thunström, www.stockholmsfria.nu

”Konsten finns i kretskorten”, Michael Ek, Skånska Dagbladet

”Spretig och hoppfull”, Åke Holmqvist, Norra Skåne