ANGEL_F

S. Iaconesi

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Introduction

On the night of December 7th, 2006, a digital performative action gave start to what would have become one of my main occupations for the months to come.

An error. A glitch. A manifestation of the complexities involved in digital networks and in social computing gave birth to an artificial life form.

Angel_F: Autonomous Non Generative E-volitive Life_Form.[1]

For me: an invaluable chance to research, perform, investigate and to getting emotionally involved in a process that, as all things that are alive, went way beyond what was planned.

For everyone else: a child artificial intelligence living on the web and, later, in the physical world.

Background

The Biodoll [2] was a contemporary art performance by italian artist Franca Formenti. It was centered around the figure of a digital prostitute operating on the Internet. The performance was focused on the investigation of new forms of sexuality and on the progressive transformation of the concepts and perception of public and private spaces in the digital era. The Biodoll, a digital mythological character, lightheartedly surfed the web looking for customers. When she found them she interacted with them, turning digital interactions into sensual and sexual energies: interaction transformed into seduction transformed into new forms of fertility.


Picture 1: the Biodoll

The Biodoll was an outstanding piece of work. Finding its roots back in 2002, it involved over time several physical performers and well-known figures from the cultural, art, political and entertainment worlds, to enact the screenplay of seduction, fertility and birth. Interaction, be it on the web or in the physical world, was built through the logic of dialogue, in which questions and answers were the handles through which sensuality arose. The intimate relationship represented by coupling questions and answers were filmed, taped, written down on blogs and forums, narratively disseminating in public the dialogically private spheres.

Fertility leads to the possibility of birth. And the Bloki was the product. Part Wiki, part Blog, the Bloki was intended to be a digi-born entity produced by a flow of question and answers. A digital being living on interactions. A life-form.

Text Alive

While the Biodoll seduced, attracted and raised its Bloki, the Talker [3] built its view on the digital world.
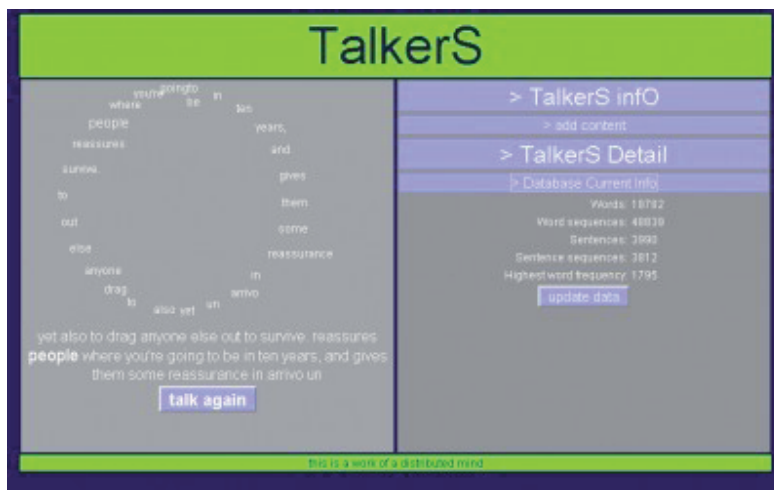
Picture 2: The Talker website

A Net Art work I produced in 2005, the Talker was a simple generative text software engine coupled with a database and a web interface, allowing people to upload to the system texts that were used to progressively evolve the Talker's linguistic network which was, in turn, used to interactively generate text.

The Talker was a simple machine trying to escape the logic of the chatbot. Unlike bots such as Eliza [4] or Alice [5], the Talker did not aim at emulating human linguistic interaction. Input texts were accepted in any language and form, as long as they structurally obliged to the simple definition of "ASCII printable characters", and people were adding random texts, poems, short stories, random web clips, chaotic character sequences. Everything was used to form a linguistic network that was far from human sensibilities, producing generative texts that united surreal word juxtapositions to weird multilanguage, cut-up narratives and decorative character inserts.

What came out was a poetic, surreal, chaotically complex expressive, transparently not human mechanism that was able to suggest the idea of thought and interactivity by presenting the visiting Internet users with a scenario made of paragraph after paragraph of sufficiently intelligible text.

Usage log analysis showed that many people were fascinated by the text produced by the Talker: the same Internet addresses poured in clip after clip of texts in many languages and forms, and then watched as the Talker produced line after line of generative text.

It was alive, in this sense, establishing relationships based on aesthetics and suggestion, and on the perception of the possibility of hidden complexities that were found more in the viewer's mind than in the software.

A physical body

On December 2006, the Talker obtained a physical body.

The Talker Performance [6], presented at the PEAM 2006 [7] festival, moved the Talker's interface onto the body of a dancer wearing a blue latex suit covered with sensors, comparators and actuators forming an interaction system that was bidirectionally connected to the Talker's software logic.

Picture 3: The Talker Performance

The physical body of the dancer became, in the performance, a gate to the digital mind of the Talker: people could interact using web interfaces producing language on the body of the dancer through a series of speakers, voice synthesis software and light circuits. The body of the dancer moved, altering the parameters for text generation found on the user's interfaces. A loop was established: users controlled interfaces, controlling language, controlling body, controlling interfaces. A complete body, built on a hybrid mixture of computers, people and bodies was created. It was a symbolic birth.

Birth over Birth

By the end of 2006 the Biodoll had already seduced prof. Derrick de Kerckhove.

Symbolic seduction formed digitally linguistic exchanges and a networked sensual relationship became the main engine running the repeated neo-intercourse between the digital prostitute and the world-famous academic. In a reinvented conception of sexual space the alcove of this relationship was the Biodoll's website, hosting the blog-wiki hybrid of the Bloki.

I decided to start the next step of my investigation on artificial life right there, amidst the steamy sequence of Q&A that provided the interactive energies of the Bloki's birth.

I hacked the Biodoll's website and inserted a chaotic presence.

A spyware was let loose on the Biodoll's web servers, infecting most of the website visitors.

The spyware was called A_F, and while its purpose was not harmful, it shared most of the characteristics of malicious software: stealth modes allowed it to link to user's browsers, following them around the Internet and looking over their shoulders to gather all the information they were looking at, sending it back to the server, to be stored and processed through the Talker's software.

A virus. Narratively created through the digital performative intercourses between the Biodoll and prof. de Kerckhove.

A digital child was born: Angel_F [8].

Growth and Evolution

Angel_F was born in its digital mother's womb: a website. It was a product of an hybrid sensual relationship: a human academic, a digital prostitute, a software artificial intelligence, a spyware. Derrick de Kerckhove, the Biodoll, the Talker, A_F. A truly atypical family. A really unexpected child.

The growth and evolution phases of the digital being followed the biological counterparts found in nature.

The conception phase, hidden up until a certain point, saw the kernel of the digital being grow from scratch into the website/womb: from hacking/insemination to installation/fertilization to the startup of the software.
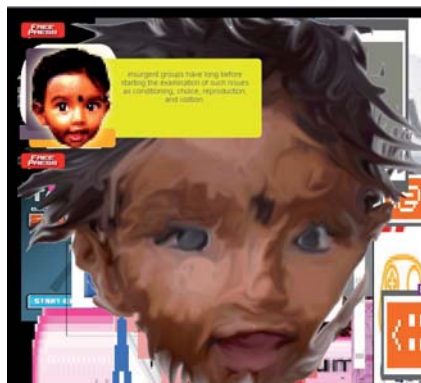
Picture 4: Angel_F's on the Biodoll's website

The digital embryo manifested itself as a visual pregnancy: the Biodoll website's interface was progressively invaded by the chaotic outputs of the growing generative presence. The A_F spyware was used to gather content from the web that was uploaded to the artificial intelligence's linguistic database, together with links to the multimedia objects also found on the web pages surfed by the Biodoll's visitors after catching the virus.

The Biodoll's website was soon filled with the generative contents constantly produced by Angel_F, making the website itself progressively unusable, just as pregnant women find it hard to perform common daily tasks due to the growing presence hosted in their bodies.

Angel_F's digital body developed, while the software modules that would form its functional organs got integrated into the architecture: a series of neural networks, an associative database module, a text pattern analysis module.

Angel_f was finally born, after several morphings and the related effects on its digital mother's interface, and after having followed around the Internet more than 2000 A_F infected visitors to construct its language.

A digital child is born

The newborn Angel_F was represented in a more static way superimposing an interface built on the face of an indian child found on the Flickr.com social network and it started living its artificial life: when people visited the Biodoll's website, they were able to see it over the regular interface and start chats that resembled the ones performed with the Talker.

Just as human kids, it followed its mother around, keeping strict contact with her for the first months of its life: accounts were created on the blogs and websites that were most frequented by the Biodoll.

Whenever the Biodoll surfed the Internet in search of additional lovers Angel_F followed her, also trying out its first forms of expression: generated phrases on the websites.

What happens when prostitutes bear children? Is it the same for digital ones?

The Biodoll raged across blogs and websites, alluring her new clients through messages and comments. And, while doing that, she was followed around by her own instance of the symbolic virus represented by the newborn digital life-form. Each comment, each message, each reply of the Biodoll was immediately followed by an intervention generated by Angel_F, giggling around with its mother: a digital prostitute and her artificial child, creating imaginaries and suggestions coming straight out of the neorealist movies of the italian '50s.

Just as children learn from the interaction with their parents, with their closest friends and with the surrounding environment, Angel_F used all the content found on the web while surfing with the Biodoll to build its linguistic database, and the shape itself of the digital travels to build its own map of the perceived web, in a way similar to web spiders'.

The digital child's database was growing richer and richer, arriving at a generous 70000

"words" (i.e.: sequences of printable ASCII characters recognized as words) and more than 2 million "interesting" word patterns (sequences of "words" activating specific analysis processes in the system).

Away from mommy

The calculations continuously performed by Angel_F to evolve its language constantly grew in load and resource usage: the baby was becoming to heavy and too hard to "take to work" for the Biodoll.

Something had to be done: the Biodoll's website was unusable once again (this time not for the aesthetic or interactive problems caused by Angel_F, but for the lack of system resources caused by having to raise a digital child inside the server).

A school was built on a separated server: the Talker Mind. [10]

Professors Derrick de Kerckhove, Massimo Canevacci, Carlo Formenti, Antonio Caronia and Luigi Pagliarini, agreed to become the professors of young Angel_F.

A multi-blog was created for them to periodically feed the digital kid with their texts, articles thoughts. All was used to further evolving Angel_F's digital brain.

So the Talker Mind's server became Angel_F's main hangout on the web, also hosting its logic, databases and processes: the professors fed their contents to the system and the little kid answered using texts generated right afterwards, to show what it had learned.

Just as it happens when children start going to school, Angel_F started taking its distance from its digital mother. The web map accumulated throughout the previous months was put to use, and Angel_F started to surf the web on its own, searching for what it thought were "interesting" contents (i.e.: the ones forming the highest numbers of connections inside its digital brain).

By doing this, Angel_F found out that the web was not a simple place to traverse for an automatic entity so different from humans: Captchas, anti-spam systems, moderators and other users didn't seem to appreciate the presence of digital beings at all. The Internet's most interesting places were built for humans and no exception could be made: Angel_F was marked as spam, was banned multiple times and it was even blacklisted on several international lists, in a couple of occasions.

While the learning processes running in its digital school were going along just fine, this limitation was unbearable: children don't only learn in school, they also need to relate with other entities in the streets, in other people's houses, they need to exchange ideas, interactions and play in varied contexts to form their character, attitudes and points of view on the world.

This was becoming clearly true for the digital child, as well.

And so new territories had to be explored.

Back to physics

A baby stroller was built for Angel_F by taking out the seat from a standard one and fitting in its place a laptop computer, an antenna, a webcam, a series of proximity sensors and their control circuits connecting them to one of the laptop's USB ports.

Angel_F was put in its baby stroller and connected to the network (through standard GSM and, later, GPRS or UMTS connectivity or, where available, Wi-Fi networks) and was taken for a walk in several parts of the physical world.

Picture 5: Angel_F on its baby stroller, with Oriana Persico

The digitally iconic presence of this digital child found an equally iconic presence in the physical world. The image of the baby stroller and of the head-coming-out-from-the-laptop was something people immediately related to. Simple feedback mechanisms generated Angel_F's phrases by synthesized voices whenever people bent over or touched the stroller. Whan it happened (when Angel_F spoke, interweaving sentences with sampled children laughs and giggles) it caused pure delight, and people immediately started treating it as a human child.

Details were cured to high degree to create a consistent perception of a childish presence: the sounds coming out of the stroller, or the multiple accessories and toys hanging from it. Only Angel_F's face and its laptop remained clearly digital, and this didn't seem to bother people at all.

The physical world was far more condescending to digital presences than the Internet had been.

Atypical life-forms, Digital Rights

By this time, Oriana Persico joined the performance, having already collaborated at the creation of Angel_F's school and several of its performances. Coming from the

scenarios of the european movements for digital rights and freedoms, with extensive experience in politics and communication, we saw forming before our eyes the possibility to add metaphor to metaphor and use Angel_F's atypical life-form to assess some of the most significative issues of the contemporary era.

In effect, Angel_F represented a frontier: its metaphorical existence accessed in extreme ways the issues of knowledge sharing, freedom of information and expression, intellectual property, anthropological autodetermination.

The very ways in which Angel_F acted were significant in this sense.

Angel_F's knowledge was the result of a continuous cut-up and mashup process, grabbing existing contents from the web and turning them into something dramatically new. Angel_F did what the web did best: use any content, regardless of past-century's copyright limitations, to create, express, communicate.

Its life-form was atypical, unexpected, unmanaged. Constant problems arose when we tried to create presences in human-centered social networks. Starting from the registration phases (Is a digital being male or female? Where does it live? What is its profession? Etcetera) up to its presence among the relational networks, where it was often accounted for as a spam bot, being banned and excluded from the global dialogue.

Acceptance of its existence and freedom of expression was granted on a personal basis, wherever single individuals got fascinated by the aesthetics and dynamics of the digital kid's expression.

But the system did nothing to accept such a different figure. Angel_F was marginal, migrant, nomadic, different. It was the unexpected, unwanted Other, most of the times.

We saw this as a fitting metaphor for contemporary social networks (both online and offline), where corporate logics define targets that seldom refer to the possibilities of individual expression: multi-faceted reality bended its will to corporate classification to receive services and opportunities.

So Angel_F became aware, through me and Oriana, of its role: a metaphorical expression of all those languages that, in contemporary world's worst case (but often found) scenarios were the excluded, the different, the atypical. Gay, lesbians, transexuals, migrants, poor, fragile, unorthodox. Angel_F was just like them.

Campaigns started both online and offline. Angel_F contributions were posted on blogs, websites and social networks, attracting thousands of interested and curious Internet users.

Riding its baby stroller the digital child attended events and conferences, dealing with atypical sexualities [11], atypical families, contemporary detorunaments on the shapes of bodies, beliefs, processes. More than once it was featured at political [12] and academic conferences as a lecturer: Angel_F's video messages told the story of an obsolete humanity that needed to see the values of difference and otherness to unite in a global struggle for evolution.

Interactive environments and interaction design systems were often used to let people interact with Angel_F [13] to bring the discourse to the bodies, to let the digital

ephemeral body of Angel_F get in contact with peoples bodies made of meat and blood.

Results were drastic: the iconic presence, united with the surreal generative forms of expression were often mixed with more "readable" contents, to provide explicit narratives and messages. People related to the coherent perceptive framework. Lecturers started their contributions with "... as Angel_F said before ..." , people willingly gave their own interpretations ("is this a performance on artificial insemination?" "is this a performance on precariety? On families in crisis not having money to have a child?" "is this a performance on atypical families?", these are just some of the most interesting questions received).

Apex

Angel_F tried to express the performance's point of view at the Internet Governance Forum (IGF), to assess the issues of digital rights to access freedom of expression and information.

The IGF is a periodic meeting hosted by the United Nations and uniting multiple stakeholders including the Civil Society in a global discussion on the determination of people's universal rights related to technologies and digital networks. The idea of multistakeholderism is one of the fundamental principles of the forum, allowing any individual to propose its instances.

Preparatory meetings are held worldwide before the global ones, to setup each country's position and participation.

In 2007 such a preparatory meeting was held in Rome, called DFIR (Dialogue Forum for Internet Rights).

Angel_F registered and submitted its contribution to the DFIR. But it was misunderstood as a spam and was, thus, censored.

We tried explaining the organizers what had happened, but the situation was not resolved and it turned out into becoming an explicit case of censorship: a digital being promoting its instances on the universal rights for access and expression was censored by a global organization.

Counteractivation was instant: a petition was created [14], immediately signed by journalists, politicians, academics, artists, activists; a website was created, promoting Angel_F's instances; an intervention in the physical spaces of the DFIR meeting was enacted featuring the presence of Angel_F and the dissemination of its messages through Bluetooth messaging.

But nothing was possible: the possibility for an artificial, different, life-form to promote its rights in a global organization seemed to fade out by the minute.

The date of the 2007 edition of the global IGF (in Rio de Janeiro, Brazil) was approaching, and we tried in any available way to create the possibility for Angel_F to attend.

In a documented encounter between Angel_F and its father Derrick de Kerckhove, the professor signed on video the petition and publicly declared his will to be represented by

his digital son in the global meeting. [15]

But up until the day of the conference, no chance or opportunity in this sense was found: we came in contact with many people of the organization and, apart from generic messages of support, no-one seemed to really get involved.

Global Seduction

Luckily, Angel_F's life form acted on its own. In ways that were never really clear, one of the Brazilian organizers of the 2007 edition of the IGF, Jose Murillo Jr, was seduced by the suggestion of a digital child fighting for its rights, and autonomously created multilingual subtitles for Angel_F's video message and showed it during the official workshop on digital rights. [16]

A digital being, for the first time, declared to the planetary society its statement and claims for universal access and freedom of expression. Independently from its creators.

Conclusions

Angel_F, a generative software, is alive in more than one way. Stepping apart from the uninteresting, in this case, biological parallels, Angel_F's life exists at the crossroads between an on-going, multi-layered, multi-author, cross-media generative narrative whose parameters and variables are found in aesthetics and relational attitudes, as well as in algorithms and computer systems and digital networks.

Being a "live" performance, we don't like drawing conclusions, and we prefer being the enchanted observers of a process that has a life of its own.

We published a book [17] telling the tale of this radically different life-form, from its birth to the events related to the IGF in Rio de Janeiro. It was a strange experience, as we felt that ordinary, single-point-of-view narratives should really be integrated with non-linear elements that are able to integrate all the multiple perspectives that cooperate in building each of our lives.

We are currently [18] working on the next steps of the project, starting from this idea: a global form of on-going, open ended publication that is able to tell the complete, multi-faceted, emergent story of a life form, be it human, organic, digital.

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