Now we have all welcomed email into our lives en mass, we find our inboxes swamped with unwelcome spam, tempting our worst instincts with every kind of sleaze, urging in ever more obscure ways that we buy counterfeit watches, printer toner and erection pills. We should welcome Alessandro Ludovico's paper «Spam, the economy of desire» then, and face the fear and pain of spam together. Alessandro Ludovico's account on spam is an encompassing inquiry into the history of spam. He talks on the first spam ever, on the history of the term «spam» and its first usage, on the neverending fight between spammers and spam filters and the attention economy that results. He mentions academic and journalistic research in spam and references the publications available, going on to suggest a general classification of spam and analysis of its aims and results.

Spam is not just annoying: it can harm the working process severely, it can make people change their mail addresses, losing connections within social networks. To someone behind a public email address, spam grows to a constant, hour–by–hour exposure to the worst aspects of human nature, where spams appealing to worst forms of vanity, greed and perversion make us doubt the culture to which we belong and perhaps even ourselves. But even someone driven this crazy by spam occasionally pauses to be amused by some new ironical twist or new means of attracting attention.
This is the beginning of an interest in the phenomenon and development of spam and we will undoubtedly see more research in spam in the following years.

Alessandro is the continuous editor of Neural.it for already about 10 years. One could see this huge work reflected in the essay even in the way some references are done: Ludovico has already written on this and that in Neural.it before. One knows how much of «this» and «that» happens in the field of digital media culture and never stops being surprised at Alessandro’s capacities and enormous working potential to cover almost entirely everything.

Olga Goriunova, Alex McLean

Introduction

Spam, as one of the inescapable communication phenomena of our times, is a lively part of our everyday infoscape. Spam is extremely pervasive and effective for billions of persons whose (easy to spot and trade) personal and open communication door is constituted by few letters/numbers, an @ and some dots. With various final aims, from the fascinating advertisement of miraculous products to the so-called ‘phishing’, or tricking people into disclosing personal information for nefarious purposes, the spam entrepreneur knows almost perfectly how to verbally titillate his target. So spam isn’t not only about abusing a common (the smtp and pop3 protocols), and not only about technically surviving the frequent providers’ cuts of services, but mainly about continuously reinventing the concise language of good’s charm. And the endless literary war between software spam-filters and spammers will probably never have a winner. It’ll be played using different code/sign combinations to trick new filters and go through the verbal protection/censorship. With a constant retina overload, few tactical (key)words can make the difference.
Attention Economy

“A vast sector of modern advertising... does not appeal to reason but to emotion; like any other kind of hypnoid suggestion, it tries to impress its objects emotionally and then make them submit intellectually” (quote attributed to Erich Fromm).

The economy of attention, in an almost completely mediated public environment and landscape, requires something to emerge from the unbearable amount of signals we have to face. Spam on one hand pollutes our email personal environment and on the other hand is able to sometime emerge from its own grayness and capture our eyeballs. Even if in the jungle of trash communication, genuine personal messages become golden signals, the total amount of communication delivered by spam forces us to navigate in the most crowded words environment, searching for sense. This has to be coupled with the general sensible reduction of ‘spare time’ or ‘free time’ that again enhances personal communication. Thus being ‘personal’ a spammer could use words and tones usually forbidden in public, so he can easily be curse, or explicit, or too confidential. Everything happens between two windows on the respective screens. The spammer’s remote one, containing the bulk mail software in action and the local one of the spammed individual. So when commercial, or business communication almost physically enter the personal space, everything seems to be allowed. And the borders of this type of communication seem to be very subtle reaching unexpected limits in tone and words. Spam embodies the main paradox of the net: guaranteeing freedom of electronic communication could mean too much and too diverse communication one single targeted conscience can tolerate. The process of targeting the individual was massively applied at the end of seventies through the direct marketing practices, and it’d not be a coincidence that in the same period the first word processors software with ‘merge’ capa-
bilities from database of addresses were released. Actually I’ve received the first ‘bulk mail’ in the middle eighties, at age of 15, and this heavily ‘customized’ letters were establishing for the first time a different relationship, not anymore anonymous. If you think these concepts are of late seventies, think twice, because the DMA, Direct Marketing Association was founded in the United States in 1917. What the postal direct marketing announced was the personal space invasion. Spam seems to be the final test for the conquest of our neuronal space. John Thackara, the director of the ‘Doors of Perception’ conference and knowledge network, said that: «Our dilemma is not that we receive too much information. We don’t receive anywhere near the quantity of data it takes to overload our neurons; our minds are capable of processing and analyzing many gigabits of data per second—a lot more data than any of today’s supercomputers can process and act on in real time. We feel flooded because we’re getting information unfiltered, unsorted, and unframed. We lack ways to select what’s important.» In fact, we’re not yet trained to avoid unwanted information. In a textual environment we are still overcome by our primary instinct of being attracted by signs and so by words. And the spammer strategies are very focused on attracting attention. The use of capital letters, the «Re:» as reply, putting your email, or elusive names of man / women, in the ‘From:’ field are only few of the tricks successfully adopted in years. And let’s not forget that composing an effective subject is more than half of a spammer’s work. The subject field in the spam email is the place where the battle for the user’s attention takes place. It’s a matter of a second or a little more to see who won and who lost. It’s much faster than the advertisement on print, radio, and TV that used to be the fastest of all. So spamming, in a way, has completely digested the broadcasting and billboard advertisement culture, and as in its physical equivalent (the wood or metal mail box) you have to remove unwanted
stuff by hand, and chances are that some of the stuff will definitively attract your eyes. To avoid this addiction there should be strategies or products. A fake, but an ingenious one, is included in one of the latest projects by Alexei Shulgin. The ‘SeeFree Visual Spam Blocking System’ is advertised as a pair of glasses that can generate an augmented reality vision darkening the billboards and the rest of public advertisements. It’s interesting to note that the reality proposed is ‘augmented’ in terms of the ecology of the mind, but it contains, at the same time, much less information. I would also suggest that it’d be great if a new version of this imaginary device would also automatically darkening the email spam subjects on the screen freeing our eyes from always reading them.

History
The concept of unsolicited commercial proposal or advertisement delivered to your own door probably dates back to the first traveling salesmen at the end of the 19th century. At that time salesmen toured the countryside trying to sell their goods directly to the doors of their potential customers, without any previous appointment. But probably the first type of ‘mediated’ unsolicited advertisement delivered at home through physical mail is the printed one, and then the so-called telemarketing, sales proposals made through the telephone, both still widely used today. The first evolution to these two strategies was, at the end of eighties, that many advertisements were arbitrary sent by fax, still causing harsh reactions for the huge amount of wasted valuable thermal paper involved. Today this practice has been renamed as ‘spam fax’. The sending of non-solicited emails dates back to the 1st may of 1978, when the marketing department of DEC, the famous computer manufacturer, invited his users to assist to the DECSYSTEM-20 new models’ presentation in Los Angeles and San Mateo. The message was sent to all the west coast’s Arpanet
users even if the used software had limited space for the recipient fields. To overcome this limit, all the recipients were typed one by one (and some addresses were even added in the subject and in the body of the text, and that now can be read as an obscure presentiment). The mail caused bitter reactions, of course, and it's curious to note that Richard Stallman that was one of the recipients expressed a different opinion. At the beginning he defended the sender in the name of freedom of expression and then he realized that it was bad, but only, he said, because of the mail header that was too long, not for the contents. The word 'spam', that derives from the infamous canned meat's firm, was used in the eighties in the BBS and chat communities as a repetitive visual/sounding noise for driving out unwelcome guests. The word was used to describe an unsolicited mail for the first time on March 31 1993 by Joel Furr. He defined the act of sending recursive message onto the news.admin.policy newsgroup (caused by a software error) as 'to spam'. He was clearly referring to a popular

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FAX.ONE

Campaign Against Junk Fax Companies

Please help us confirm whether you wish to receive fax advertisements.

We are under the impression that you no longer wish to receive fax advertisements. If this is the case, please confirm your fax number so we can inform all the major fax marketing companies that you no longer wish to receive fax advertisements.

Fax number: ____________________________

Yes, this is my fax number and I DO NOT wish to receive anymore fax advertisements (please tick box)

No, this is not my fax number. My fax number is ____________________________

To confirm you no longer wish to receive fax advertisements, please fax back to: 9906 666666.

If you do not mind receiving further fax advertisements please do not reply.

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Monty Python sketch, first broadcasted in December 15, 1970, and then often re-broadcasted on the BBC. It was the final sketch of the 25th show of Monty Python’s Flying Circus, and it was very popular among computer enthusiasts. In the sketch a couple of customers are trying to order a breakfast without SPAM, the meat, from a menu that includes spam on everything in it. The sketch is irresistible and the word «Spam» is mentioned 94 times. A little less than one year later of the historic definition by Joel Furr, (on March 5, 1994) the first massive and in a way ‘official’ spread of spam was initiated by the infamous couple of lawyers Laurence Canter and Martha Siegel. They used bulk Usenet posting to advertise US immigration law services, and they never regret, stating that «(we) don’t see anything more wrong with that than advertising in a newspaper or on television on a topic not directly related to the article or the show you’re reading». Then from 1995 to 1997 the Floodgate Bulk Email Loader becomes the most used software tool for spamming. From then on spam has been grown exponentially till now with the support of software tool for sending millions of emails in hours. The Floodgate software is there no more, but it generated many successors as the current Dark Mailer that basically
exploits proxies or mail servers that can send emails from strangers, the so-called ‘open relay servers’.

**Mass Intimacy: The language of desire (sell)**

But the first question about spam may be: why sending so much annoying email to the world? The answer is simple: to make money. Lots of. The second question is how make that money? Obtaining percentages on every online subscription, or sale bought after a referred online contact. As we can see in the table compiled by a professional spammer, even with the percentage of one sell every 10,000 mails, the revenues can be at least attracting, taking in count that one million emails can be sent in a couple of hours, and that no further action then is required. ⁹ So the (sad) truth is that sending millions of pornography spam mails induce a few hundred persons to subscribe to porn online services and sending millions of ‘penis enlargement’ pills spam induce a few hundred persons to buy them. But what is the mechanism that lies behind the success in generating subscriptions and sell? First, the good old marketing techniques. As any experienced spammer would recommend: the more focused the email (target) list you have the more money you got back. And spam embodies a very different level compared to billboard, paper, radio and TV
advertisement: the intimacy. Its own style is based on this ‘confidential’ tone, mimicking the one we are used to, in personal email. So this ‘intimacy’ style (even if massively applied) has to strike a chord in the user subconscious. Every possible strategy will be used, focusing on the most effective ones. So the resulting spam scenario is one of ‘mass intimacy’ that amuses heavily using ‘personal insecurities’.\(^\text{10}\) The user, in fact, has to feel the sensation of being involved in a ‘special kind’ of communication, basically a personal one. Paradoxically enough, spam itself caused this inner ‘natural selection’ generating the lack of personal feeling, burying personal communication with huge amounts of commercial offers. Some basic marketing principles (being attractive, direct and personal) are pushed to the extreme in spam. The same product (viagra, for example) actually is advertised by way too many people in the same ‘direct’ style. Thus, to be effective, spammers have to tell their stories evolving their own communication strategies. So spam is, as one of its infamous subjects, «Strictly Confidential». Spam never wants to scream to the masses, but to ‘infiltrate’ our cultural and social filters and pose as a friend that is suggesting tips and tricks to improve our existence. It learned a lot from the viral marketing techniques that are based on the exploitation of personal relationships’ trust. Spam acts as an updated survey of the most basic desire and taboos incarnations (having sex with unknown people, owning status symbol objects, owning more money, being more healthy). It deals with some of the most common contemporary men’s social weakness, and the mirage of obtaining them quickly and without a big effort. Therefore spam seems to be mainly for men, because it relates to the quick and dirty power acquisition. For example one of the (admitted) current pharmaceutical marketing strategy is persuading us that we are all sick and that effectively translates into effective healthy based spam strategies.
A very basic taxonomy of spam sent for generate sells is:
— status symbol objects (Rolex, Cartier...)
— stuff that promises to overcome physical limits (pain, penis dimension, fat, ...)
— expensive stuff for cheap (OEM software)

The transition from mass marketing, to direct marketing, to spam marketing enables a deeper and more intimate communication. The attractive typical spam ‘unofficial’ proposal is a part of the ‘word-of-mouth’ style. And when this ‘word of mouth’ template is applied the user is induced to feel as being part of a restricted lucky elite, usually ‘by chance’. This concept is very well implemented in the ‘Toll-Free Number’ work developed by the Italian net artist Luca Bertini. It consisted of an action of a teasing campaign made by a sensual female synthetic voice, announcing a new mysterious product that will be launched soon. The product is never disclosed, but the automatic voice call, without previous notice, a huge amount of people, persuading them to call back the toll-free-number (tracing the personal phone numbers). Then a password to a non-existent ‘reserved area’ is given in exchange of the personal email. In this way the user’s private email is obtained and then sadistically spammed. So spam is not selling controversial goods, and not selling access to fabulous online services. I think spam is just selling dreams.

Deceiving: The language of deception (phishing)

If email direct marketing is the semi-legal part of spam, the so-called ‘phishing’ is the dark one. Phishing is a form of social engineering, characterized by attempts to fraudulently acquire money or sensitive information such as passwords, masquerading as a trustworthy person or business. The scam emails are usually very carefully written, and they sometimes got what they want: the trust of the deceived person. In fact, as the famous hacker
Kevin Mitnick says in his book ‘The Art of Deception’: «trust is the key to deception». It’s a (dangerous) communication game, and it’s all about the used codes. It’s quite similar to circulating counterfeit banknotes, or making fake passes for entering restricted areas. It’s not so much about the original reproduction accuracy.

It’s mainly about the pose and voice tone used during the scam. In the email grammar this can be translated in the subject and body text style. So mimicking the official tones, with all the usual conventions, or the confidential one including national prejudices, myths and rumors can lead to making people lose variable amount of money as a result of trust in some email messages.

Many of the used techniques have a long history. The ‘Hot Stock’ Spam, for example, pretend to hint a share that will increase its value a lot in a few days. The scheme is simple: the scammer has bought some shares, and after his spam, many have bought it too, making the price rise. At this very point the scammer sells all his shares, catching the rise, while the share starts to fall due to the sudden lack of buying requests. There’s even a study made on almost 40 spammed stocks (called Spam Stock Tracker), which tracked them in the spam’s subsequent days, demonstrating how much money one could have lost. Suggesting good stocks to buy in an ‘illegal’ way is not a new concept at all. In 1840 the stock exchange prices in London were transmitted to Edinburgh through the telegraph in code. An unscrupulous London’s broker tried to get hold of this valuable information corrupting two telegraph clerks, but then failing to pay them the promised half of the scammed money. He was then exposed to the authorities.

The scam focus is to evocate a daydream, dream of being rich or sexually irresistible, or being admired for wearing an expensive clock. Most of scams are clearly based on a fairy tale’s logic, indeed. They induce the need of sudden revenge against a grey life. But this is also a common theme of the much more involving
TV or billboard advertisement, so what’s the attraction of an email scam? I think it lays mainly in the ‘tongue in cheek’ style, that lights up the desire of a ‘once in a life’ opportunity. If you want, this is the old ‘American Dream’ rhetoric: changing your own life in a few. And in the network era nobody is stuck on his physical place. The opportunities can come out from everywhere through the network, so the Internet cornucopia can bring that long awaited chance.

A very basic taxonomy of spam sent for phishing seems to be based on two main concept: fear and fortune.

Fear (technology gone wrong):
— Account Verification (Ebay, PayPal, bank accounts)
— Account Violation (same as above)
— Account Disabilitation (same as above)
— Changed password

Fortune (unexpected money, becoming rich overnight):
— Hot Stocks
— Congratulations! (lottery winning)
— Mistaken identity for big inheritance
Request to transit huge amount of money for a percentage
«A spammer’s main objective when sending spam is to impersonate someone else. A spammer never wants to reveal his identity», — Spammer-X.¹⁶

One of the most famous scam, the so called Nigeria-scam, was the stage for a theatrical performance played by the renowned English actors Dean Cameron and Victor Isaac, titled ‘Urgent & Confidential, Dean Cameron’s Nigerian spam scam’.¹⁷ After assuming the identity of a sexually confused Florida millionaire, whose only companions were his houseboy and cats, he began a nine-month correspondence with the scammer. The show documents the real email and letter exchange, including fake documents and photographs sent as a proof by the scammer, becoming hilarious and theatrically descending into misunderstanding, desperation and deception. A similar approach is taken in ‘The Spam Letters’ book, written by Jonathan Land, an active external collaborator of the Negativland group.

He gathers some of the written ‘replies’ he sent to spammers masquerading as a multitude of characters that most of the time, are written in an absurd, sometimes hysterical, but always exhilarating style.¹⁸ Here the scam technique is turned back to its initiators and the collection of literary performances represents a somewhat multifaceted ‘virtual revenge’ for the readers/users, that finally can see some spammers verbally got down on their knees.

**Private marketing will trigger the next language war**

This need for revenge is largely shared among the frustrated users and this has lead not only to many Anti-Spam groups and public resources (as the Spamhaus project—one of the first serious blacklist of spammer vendors,¹⁹ or the useful SpamArchive,²⁰ a community resource that provides a database of known spam to be used for testing, developing, and benchmarking anti-spam tools) but also to some interesting conceptual development. One
of the (tested) strategies, even if quite radical, was the one written as a scientific paper by Aviel D. Rubin, Simon Byers and David Kormann, called ‘Defending Against a Internet–based Attack on the Physical World’. It describes a fairly simple software, written by this team, which can be used to subscribe the spammer victim to a huge quantity of advertising catalogs through their websites, flooding him/her of unwanted paper. The program automates a real case happened to Alan Ralsky, also known as ‘spam king’ who, after bragging on the Boston Globe about the money he made sending hundreds of millions of unsolicited commercial emails, saw his real-life mailbox clogged by tons of advertising papers after his interview was reported on Slashdot. A similar concept (connecting the production of spam to something physically produced) was expressed in 1998 by the american artist Nick Philip, in his ‘Nowhere.com’ installation. Nowhere.com was a fake internet domain that appears at that time as a return address of spam. At the Tokyo’s Intercommunications Center he connected all the email directed to the domain to a series of fax machines, and produced a 17 kilometers of thermal paper wasted in some trash-cans. The materialization of spam means to keep it out of the screen. The Spam Shirt initiative, is the reuse of spam as a ‘real’ object. The website offers the possibility of buying a customizable T-shirt with the spam subject of choice, and it’s commercially successful. Somehow the act of wearing publicly a spam is a way for exorcizing his omnipresence, also decontextualising it from the email frame. Another simple way of seeing spam out of the mail software is ‘Today’s Spam’, a blog whose posts are only spam messages. Reading the blog it feels like being in a wrong place, and out of one’s own mailbox, as if all the junk mail has been definitively confined to an ‘external’ blog. But changing the context would mean also to change the referring medium, so Spamradio, a continuous streaming of text-to-speech spam, with a hypnotic
musical background, is changing the visual in acoustic noise, mutating its nature and, at the same time rendering it as a pop artifact. The language of the «epistulae non grata», as they are defined in Latin by Danny Goodman, the author of the *Spam Wars* book, is a constantly mutating one. One proof is that even the group of the mailing list moderators’ that established a ‘spam critic’ nickname in spring 2003 (nettime’s_spam_kr!k!t), digging in the amount of spam that the list receives, periodically extracts the one with political or social cliché, or shows the amazing results of merging the list name in pre-written templates. The life of spam is intertwined with the anti-spam filter escaping. But escaping automatic language filters is a very old and fascinating activity played from the telegraph era till the Napster’s first restrictions based on a database of filenames. Actually the best (but far from perfect) spam filters are based on the bayesan approach, a statistical filtering that applies the Thomas Bayes theorem to quantifying uncertainty. This ‘uncertainty’ is strictly connected to the words and phrases composition, and the data cloud of these very words can be observed in the online work ‘uninvited words’ by Päivi Hintsanen in a sequential classification that reveals the recurrence of terms and at the same time the unsuspected richness of used language. In the end openness requires to deal with extremes. You can (partially) filter spam, but probably you’ll never definitively stop it or get used to it. Spam is open access reverse engineered, and ready to become the test bed for the next generation of marketing. If Erich Fromm was right, one of the basic human needs is to feel new emotions, and spam is full of (fake of) them. So, bringing (virtual) hope, desire and happiness, spam’d be an excellent model for some of the near future mass media communication. And if invasive advertisement is going to slowly become the norm, we’ll probably adapt to it through our own language skills, in order to avoid it (at any level) or indulge on it, now or in its future more subtle and sophisticated incarnations.