

'Let's talk business' – Narratives used in email and phone scams

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Abstract. 16th century 'face to face' persuasion scams adopted to letters, telephone, fax and Internet with the development of new communication technologies. In many of today's fraud schemes phone numbers play an important role. Various free-to-use on-line tools enable the scammers to hide their identities with fake names, bogus business websites, and VoIP services. These fake businesses or personas can appear more legitimate when connected to a phone number, enabling a faster, more personal contact to the victims. With the typology of a sample probe of 374 emails, commonly used in business proposal scams, the emails were categorized and tested to see how believable the proposals sound once the scammers were contacted by phone. The research can be explored in a 5-channel interactive audio installation called 'Let's talk business' that uncovers which business proposals and scam schemes are commonly used, and how believable the proposals sound once the scammers are called.

Keywords: phone scams, audio installation, interactive storytelling, reverse engineering, activism.

1 Introduction

Phone fraud can be described as a 'fraudulent action carried out over the telephone' and can be divided into 'fraud against users by phone companies' (cramming, slamming), 'fraud against users by third parties' (809-scams, dialer programs, telemarketing fraud, caller ID spoofing) 'fraud against phone companies by users' (phreaking, dial tapping, cloning) and 'fraud against users by users' (vishing, SMS spamming). The different fraudulent actions can also be divided into technical hacking, social hacking, and mixes of both. (Rustad, 2001) The 'phreaking' subculture, which is also seen as a forerunner of hacking culture, makes use of both technical and social hacking tactics. By the middle of the 20th century technophiles started exploring the US AT&T network. Listening to the sounds during the in-band signaling connection process, they learned how the network was set up, which metadata was transferred, and were able to reverse engineer the routing of each call. These 'phone phreaks' created so called 'blue-, red-, or rock boxes' to dial tones and other audio frequencies to manipulate the phone system. With these devices it was possible to make free long distance phone calls, which was illegal and called 'toll fraud'. They also used social engineering techniques to impersonate operators and other telephone companies. Important representatives of this subculture include John 'Captain Crunch' Draper, Steve Jobs or Steve Wozniak, who later founded Apple Computers. In the 80s computer hackers began to use phreaking methods to find telephone numbers of business modems to exploit them. Due to technological advancements, phreaking has lost its popularity, but is still marginally practiced. (Lapsley, 2013)

Whereas 'phreakers' mainly focused on technical hacks, curious anti-scam activists called scambaiters adapted more of the social engineering tactics to find methods to

safely communicate with scammers, finding out how the scams work in order to warn potential victims. This paper focuses on the 'user to user fraud' that is done by email and phone scams. Typically these scams involve storytelling and some sort of social engineering, where the fraudster creates a hyper-realistic 'too good to be true' situation for a mark, in order to extract sensitive data and/or money from the victim. (Maggi, 2010) (Mitnick, 2002) These scambaiters host informative websites where scams are reported and host forums where people can discuss suspicious business proposals. There are several forums dedicated to either specific scam genres (e.g. romance scams or rental scams) or used technology (e.g. email scams, phone scams). One of these platforms is 'Scamcallfighters.com', a non-profit organization that maintains a user-contributed database of phone numbers that are used in scam attempts. This organization aims to help people who are under threat of financial loss due to phone scams. On their website they widely publish scam related phone numbers, details of scam incidents and inform about ongoing cybercrime attacks. Confidence tricksters often attack victims who have already been scammed, duping them to pay even more money. The best defense against phone scams is knowledge about this type of scams and a public blacklist.

The artwork 'Let's talk business' is an outcome of an exploration with the aim of understanding in which scam narratives phone numbers are used and how the narratives are extended when the scammers are approached by calling them. Therefore this paper addresses the following issues:

- In Section 2 a sample of scam emails taken from an anti-scam database are categorized into 10 scam types with the focus of the top 5 countries from which the phone numbers originate.
- Section 3 documents the process of calling scammers and the design of the artwork 'Let's talk business'.
- In Section 4 the artwork 'Let's talk business' is contextualized in a historical canon of related telephone artworks.

2 Related works

In 1922 Laszlo Moholy-Nagy wanted to prove that the intellectual approach to the creation of a work of art is in no way inferior to the emotional approach. He called a sign manufacturer and ordered 'three steel panels of diminishing size, covered with white porcelain enamel and bearing a simple geometric design in black, red and yellow'. He didn't provide any sketches, nor did he supervise the execution of his order. (Kac, 1992)

In 1969, the Chicago Museum of Contemporary Art hosted the exhibition 'Art by Telephone'. In the cover text of the catalog, Jan van der Marck explains that the exhibition was planned to record the conceptual art trend. The exhibited artworks should be conceptualized and designed by the artists in their countries. These concepts were transmitted to Chicago and then executed on-site at the museum on their behalf. The telephone was a fitting medium to communicate the instructions between artists and the ones who were entrusted with the production of the artwork. Inspired by Laszlo Moholy-Nagy's experiment, no drawings, blueprints, or written descriptions were allowed. These calls were recorded and made into a vinyl record. The sound recording became the show, as the works were never fabricated. Artists included Jan van der Mack, Richard Artschwager, John Baldessari, Robert H. Cumming, Dick Higgins, SolLeWitt, Bruce Nauman, Wolf Vostell amongst others. (Art by Telephone, 2010)

By the 1970s Andy Warhol supposedly had no more substantial involvement during the production of his paintings. The printer Rupert Smith once claimed that even Augusto the security man was doing paintings. Andy was giving a lot of instructions on what the paintings should look like and which colors the printer should use over the telephone. (Colacello, 2014)

In spring 2011 Terri C. Smith curated the exhibition 'It's for you - conceptual art and the telephone' at the Housatonic Museum of Art in Bridgeport, Connecticut. (Smith, 2011) The exhibition brings together artworks that use the telephone as a medium or as a mediator, which fit the category of 'ludicrously simple ideas, but one that allows itself to be complicated and expanded through a myriad of formal and intellectual approaches'. The artworks use language-as-media, democratic impulses through audience participation and broader distribution methods. During the exhibition people performed John Cage's 'Telephones and Birds', where three people perform the work using bird-calls and public service messages from phones.

In early works the telephone has been used to remotely produce artworks by giving instructions. Later, the phone was used to connect artists with strangers or as an interface to access prerecorded audio messages. Whereas the act of dialing a number, talking and listening remained similar, the technological systems changed from landlines to mobile and VoIP telephony.

In Yoko Ono's piece "It's for you" the artist might call the gallery as part of her Telephone Piece, providing direct contact between artist and the audience. Pietro Pellini's work 'Al Hansen on My Telephone' is an archive of the Fluxus artist Al Hansen. When the phone rings in the gallery, short audio clips of him talking about art, life, the Ultimate Akademie and other topics can be listened to. (Smith, 2011)

Other recent artworks include 'The representative' by Carey Young. In the installation visitors are invited to 'get to know' the call center agent, who normally represents large corporations to the public. The agent was hired by the artist and was scripted to talk about certain topics based on interviews with the agent (Young, 2006). In 2006 the !Mediengruppe Bitnik created the artistic intervention called 'Opera Calling'. They placed cell phones, so called 'audio bugs' within the auditorium of the opera house in Zürich, in order to give the outside public a possibility to access the performances. The performances were also retransmitted to the public through a calling machine that called each person in Zürich individually. (!Mediengruppe Bitnik, 2006) The artwork 'The evidence of things not said' by Afshar, Brunenthaler, Schulze is a prepared public phone booth, where people can listen to an archive of racist incidents documented in Austria by the anti-racism organization called Zara. (Afshar, 2009)

3 The Narratives used in Email scams

As a raw dataset I took a sample probe of 374 emails with phone numbers that were collected over a time period of three weeks from Nov. 11 to 30, 2014, from the 'scammed.by' scam email database. In 2010 this website was created under the name 'baiter_base', a place for scambaiting activists who document the activities of Internet scammers. The website provides a service to send in suspected scam emails, which are then automatically analyzed, categorized and published. From the emails we then I extracted the phone numbers per country. The numbers were most frequently connected to the following countries: Benin (113 emails), Nigeria (90 emails), USA (32 emails), South Africa (23 emails), Burkina Faso (18 emails). These top five countries, in total 277 emails, were further categorized according to their narratives structures. Table. 1. and Chart 1. illustrate the ten different scam schemes

that originated from these top ranked countries. In the following paragraphs, each scam scheme is described with an example email snippet.

	Benin	Nigeria	USA	South Africa	B. Faso	Total
Fund transfer	56	43	6	14	11	130
Beneficiary payment	14	13	-	1	1	29
Product selling	17	9	2	-	-	28
Follow up	9	10	5	-	-	24
Lottery Winner	8	2	4	6	1	21
Service offer	1	6	10	2	-	19
Next-of-Kin	5	3	0	-	4	12
Package found	3	3	4	-	-	10
Refugee	-	1	-	-	1	2
Orphanage	-	1	-	-	-	1
Total	113	91	31	23	18	276

Table. 1. Scam schemes of the top 5 countries

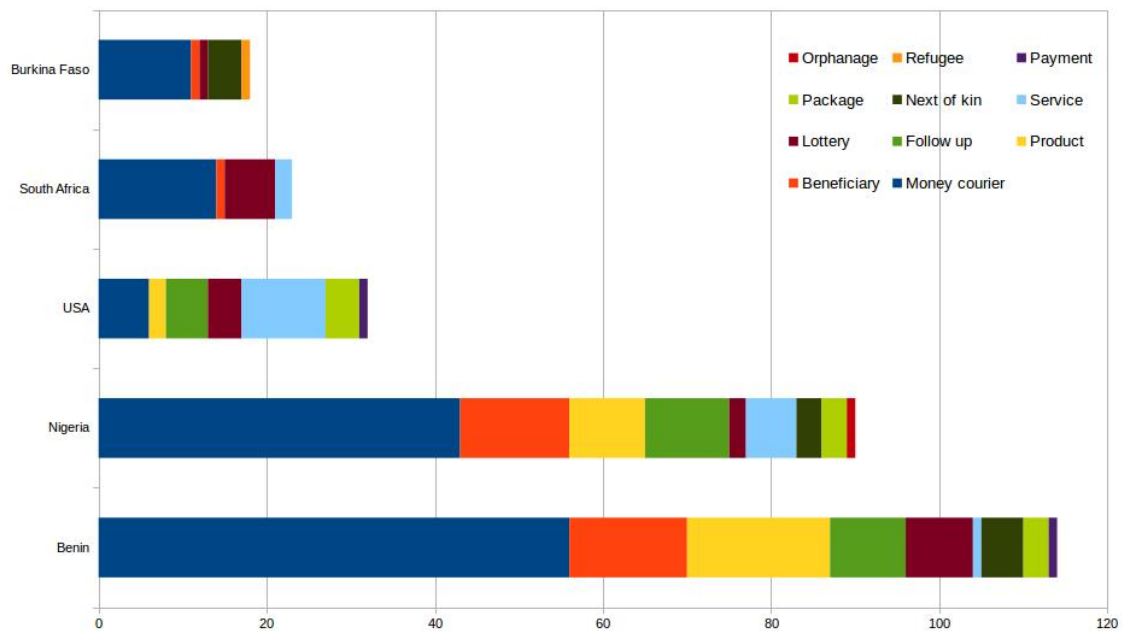


Chart. 1. Graphical representation of the scam schemes of the top 5 countries

3.1 The 'Fund Transfer from Bank' Scam

In this scam attempt the fraudster claims to be (or be related to) a bank representative who offers a high sum of money to be transferred to the victim's account. Normally a small service charge has to be paid for finalizing the paper work and sending the money to the victims account:

I have Paid the fee for your Cheque Draft. But the manager of ECo Bank Benin told me that before the check will get to you that it will expire. [...] Finally, make sure that you reconfirm your Postal address and Direct telephone number to them again to

avoid any mistake on the Delivery and Let me repeat again,try to contact them as soon as you receive this mail to avoid any further delay and remember to pay them their Security Keeping fee of \$45 for their immediate action. [...] You can even call the Director of BELLVIEW DIPLOMATIC COURIER COMPANY DR.UGO LORD with this line +229-██████████

3.2. The 'Beneficiary Payment' Scam

A bank representative contacts the victim because of a beneficiary payment that the victim should receive, mostly without any further details. The victim is asked for personal information and advised to get in touch with the bank:

This is the second time we are notifying you about this said fund. Please as a matter of urgency, you are required to verify the following information and inform us if you are aware or know anything about this. This morning Mr. John T. Kehoe came to the office claiming that you have instructed him to come and receive the payment on your behalf with some representatives.

I have ask them to come back tomorrow as they did not provide any power of an attorney from you which will proof that you thoroughly send them, This was to enable me contact you to verify how genuine this people are to you. We wait for your call on +234-██████████ or email at ██████████ and urgent respond to this bank so that you will be giving an immediate response.

3.3. The 'Product-selling' Scam

The victim is contacted by a shop owner or bank clerk who wants to ship a valuable product to the victim, which has already been paid for. A small fee for sending or insuring the item has to be paid in advance:

You are advised to fill this application form and return it back to us as to enable us proceed your ATM VISA CARD. Being desirous of availing the facility of using ATM Visa Debit card, I/We furnish the information below. [...]

3.4. The 'Follow-up' Scam

The follow-up scam addresses former scam victims who fell for an unsolicited offer and paid money to a fraudster. An organization like the Nigerian EFCC, the US FBI, the UN or World Bank claims to compensate a number of scam victims. The victims just have to provide evidence that they lost money and can then get some amount of money refunded:

This is to bring to your notice that we are delegated from the UNITED NATIONS in Central Bank to pay 50 victims from your country who has being Victims of Internet scam .The United Nations has decided to pay you \$8,500,000 USD (Eight Million Five Hundred Thousand Dollars) each. You are listed and approved for this payment as one of the scammed victims to be paid this amount [...]

This email is to all the people that have been scammed or extorted money from [...] We found your email in our list and that is why we are contacting you [...] Contact Pastor Johnson Morris immediately for your Cashier Cheque.

3.5. The 'Lottery Winner' Scam

The recipient of the email supposedly won in a lottery, often run by the Spanish state, El Gordo and La Primitiva. Other lotteries include the Microsoft lottery, where people win by just using Microsoft products or email lotteries where email addresses win a prize. Sometimes, fraudsters claim to represent a multinational corporation that

draws an employee lottery and contact the company workers worldwide using the work email addresses.

Please have you received the USD\$2.850,000.00 that your email ID won for you? If this email ID is still active and working feel free to contact Dr.Bankole Williams of EcoBank Plc to claim your winning fund. Contact person: Dr.Bankole, Tel: +229 [REDACTED] Once you contact them they will instruct you how to receive your winning fund. Congratulation once again...

3.6. The 'Service Offer' Scam

In this scam type, scammers offer cheap services e.g. credit loans for very cheap rates and with low interest rates:

We, GLOBAL FINANCIAL SERVICES Credit Union offers loan at a very low interest rate of 3% per year [...] Have you been turned down by your bank? Do you have bad credit? Do you have unpaid bills? Are you in debt? Do you need to set up a business? Worry no more as we are here to offer you a low interest loan. Do not hesitate to contact us on the telephone, fax and email address below for further clarification(s)

3.7. The 'Next-of-Kin' Scam

The victim is contacted by a bank representative, barrister or lawyer seeking someone to stand in as next-of-kin, in order to inherit a sum of money from a deceased person:

However, it's just my urgent need for foreign partner that made me to contact you for this transaction; I got your contact from the professional data base found in the Internet Yahoo tourist search when I was searching for a foreign reliable partner. [...] I have the opportunity of transferring the left over sum of (\$10.5 Million Dollars) that belongs to late Mr Rudi Harmanto, from Indonesia who died along with his entire family in the Asia Earth Quake (TSUNAMI, DISASTER IN INDONESIA / INDIA. 2004, and since then the fund has been in a suspense account. [...] according to the laws and constitution guiding this banking institution, stated that after the expiration of (10) years, if no body or person comes for the claim as the next of kin, the fund will be channel into national treasury as unclaimed fund. Because of the static of this transaction I want you to stand as the next of kin so that our bank will accord you their recognition and have the fund transfer to your bank account. Hence, I am inviting you for a business deal where this money can be shared between us in the ratio of 50/50. [...]

3.8. The 'Package Found' Scam

In this scam attempt the scammer claims to be a representative from a logistics company or Homeland security official, who contacts the victim because of an undelivered package that was found at an airport freight station. In order to release the box and discuss further steps, one should call a number:

[...] I am writing to you regarding on your abandoned consignment box worth 4.5 million dollars...so kindly reconfirm your full address, Full name, Phone number, and nearest Airport. I wait for your urgent and positive respond. you can call presidency officer MR DAVID BROWN Who is the incharge of releasing the box to me. Call +229 [REDACTED] or email [REDACTED]

3.9. The 'Refugee' Scam

In the refugee scam a young woman is seeking a person overseas who can help her as a trustee to transfer money from the family's bank account. Parts of her family died in a plane accident, so she also provides a link to a western news agency, where background information about the tragic story can be read. She is now trapped in a refugee camp where she has limited access to the Internet. To get in contact with her, she shares the cell phone number of a pastor she can trust:

My name is Miss Samira Kipkalya Kones, 23yrs old female and I held from Kenya in East Africa. My father was the former Kenyan road Minister. He and Assistant Minister of Home Affairs Lorna Laboso had been on board the Cessna 210, which was headed to Kericho and crashed in a remote area called Kajong, in western Kenya. [...] After the burial of my father, my stepmother and uncle conspired and sold my father's property to an Italian Expert rate which they shared the money among themselves and live nothing for me. [...] So I decided to run to the refugee camp where I am presently seeking asylum under the United Nations High Commission for the Refugee here in Ouagadougou, Republic of Burkina Faso. One faithful morning, I opened my father's briefcase and found out the documents which he has deposited huge amount of money in one bank in Burkina Faso with my name as the next of kin. [...] I am in search of an honest and reliable person who will help me and stand as my trustee so that I will present him to the Bank for transfer of the money to his bank account overseas. [...] the only person I have now is Rev Pastor. Godwin Emmanuel (+226 [REDACTED]) Please you can get me through Rev Pastor Godwin number Please if you call him tell him that you want to speak with me he will send for me in the hostel, Kisses and warmest regards

3.10. The 'Orphanage' Scam

The orphanage scam involves NGO's who seek monetary assistance for local orphans or orphanage institutions. By supporting their causes one can help to build schools or libraries and support their free-time activities:

Please join the efforts between Life and Death to change the lives of children in Nigeria by supporting the orphanage call +234 [REDACTED] [...]

4 The development of 'Let's talk business'

After categorizing the scam narratives we proceeded to call the scammers. Prior to calling scammers, we wanted to know what means were necessary to stay anonymous and safe without leaving a trail that could lead to us. An interview from the 'Area 419' podcast series explained one method for setting up a connection to a scammer. 'Area 419' was a popular radio podcast that aired on a weekly basis between Feb. and Oct. 2010. (Area 419, 2010) The podcast covers background stories of the scambaiting forum 419eater.com; advice on scambaiting, including interviews with scam-activists and audio clips of phone calls with scammers. Podcast #2 includes an interview with a scambaiter called 'SlapHappy', who talks about his experiences with calling scammers. He uses a VoIP service and has a worldwide plan to call any landline for free. When a scammer doesn't fully trust him in an email conversation, he calls them to build up his trustworthiness. For him it is hard to realize that there is a criminal talking on the phone, trying to persuade him to pay money. Often, the poor connection quality and the scammers' thick accent make a conversation hard to understand. He uses the 'cold-calling' method to call the scammer and improvises during the conversation.

Next a VoIP account was setup under this pseudonym including a worldwide landline-calling package. The Quick Time Player software was used for recording the voices of the scammers. Before calling the scammers we created a fictional persona with name and country of origin. When a connection to a scammer was established, the scammer was informed that the email was received, but not all relevant parts fully understood, so the situation and the next steps should be explained to us once again. Then the scammers had time to explain the situation and how we should proceed further.

The installation consists of five modified SPAM-cans (see Fig.1 [C]) that are normally used to store precooked 'SPiced hAM' produced by the Hormel Foods Corporation. According to Merriam-Websters dictionary, the naming of unwanted mass advertisement as 'Spam' originates from 'the British television series Monty Python's Flying Circus in which chanting of the word Spam overrides the other dialogue'. The sketch premiered in 1970, but it took until the 1990s for mass emails, junk phone calls or text messages sent out by telemarketers to be called 'spam'. (Templeton) While most of the scam emails tend to end up in the SPAM folder, we chose to mediate these stories through physical SPAM-cans.

Contact microphones and audio players are attached to four of the cans, so that visitors can listen to the scammers' different narratives that were recorded. The fifth device has two buttons: one button connects the visitor to a randomly chosen number from a scammers database, the other button disconnects the call. Next to the work is an information board providing instructions for talking to the scammers. With the fifth can we want to provide the visitor with an opportunity to be anonymously connected with an scammer. This is an experience of being nervous about who will answer the phone, trying to understand the narrative, and judging whether one would fall for such an offer or not. By providing instructions to the visitor, we want to pass on some guidelines and open questions that the visitor can ask the scammers. The guidelines include 'Play along to figure out the scam', 'Never tell any personal information' or 'You are talking to criminals - still they are humans! Open questions can help the scammers to tell more about themselves or their schemes; 'Tell me what do we do next?', 'How can I trust you?' or 'Is this operation safe?'. On a wall next to the pedestal are two clocks indicating 'Local' and 'Nigerian' time (see Fig. 1 [A]). The best placement for the work is on a 50x50x130cm pedestal (see Fig. 1 [B]). Inside the pedestal there is a computer with an Internet connection that ables the anonymous VoIP communication between the visitor and the scammer.



Fig. 1. Setup of the artwork

5 Conclusion

The ‘scammed.by’ database was found to provide valuable datasets that can be further analyzed for our purposes. It offers possibilities to categorize scam messages by scam type, country or phone carrier, which offers interesting perspectives for further investigations. When calling the phone numbers, we recognized that not all phone numbers seemed to be in use and some phone numbers appeared in several e-mails, even if the narratives or the characters’ names were slightly altered. Through this experiment we experienced that the phone conversations were very personal in comparison to the emails: some scammers were very open to explaining their shady businesses, others preferred to use email and keep the phone conversation as brief as possible. Some of the scammers used voice-morphing software to anonymize their natural voices resulting in a disturbing effect. The conversations with the scammers were recorded, and some of the stories were edited and can be listened to through the SPAM-cans in the art installation.

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