Linguistic Study of e-communication in the Bitcoin Community

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Abstract. This article will examine the linguistic features used in e-communication by the international bitcoin community on popular internet forums. It finds many interesting linguistic features, such as combining elements of planned and unplanned language, abbreviations and ellipses, humor and in-group lingo. However these are not unique to the bitcoin community as they also found in almost any online special interest groups. The only element to our data that is unique to the bitcoin community is the interaction between human uses and computer programmed bitcoin tipping bots.

KEY WORDS

1. Linguistics. 2. e-communication. 3. Online community.

Introduction

Much linguistic analysis has been done on e-communication (Wood & Smith, 2004) many of the findings of which will be born out and detailed in this article because they appear in our data. However, no linguistic analysis exists that is particular to the bitcoin community so this article seeks to answer whether there are any different and unique characteristics in the way the bitcoin community uses English online as opposed to the wider population or other special interest groups.

Data source: Bitcoin Talk Forum Post: I AM HODLING

https://bitcointalk.org/index.php?topic=375643.0

From the original post to comment #15

This post was made after news spread that the Chines government had banned bitcoin. It deals with a re-occurring theme in the bitcoin community that bitcoiners should hold rather than sell during a price dip so as not to cause further downward pressure on the price of bitcoins.

This post is an example of an important phenomenon in e-communication; the birth of a meme. (Bauckhage, 2011) The meme in this case is using hodl in place of hold which is now a well-known in-joke in the bitcoin community as exemplified by these meme images
This has the required qualities of an in-joke in that only group insiders understand why it is funny. Indeed *hodl* alone is not funny to anyone but it reminds bitcoiners of this post which was funny overall and all the humor of the post is concentrated into the word *hodl* in the bitcoin communities’ collective memory.
It only took 10 posts and 11 minutes for the first use of the word *hodl* in a meme image.

The data includes 440 words from 15 contributions.

**Data source:** Reddit post: For every 100 upvotes this post receives, I will gift someone a Nexus 5 for a video of them smashing their iPhone

https://www.reddit.com/r/Bitcoin/comments/1x62we/for_every_100_upvotes_this_post_receives_i_will/

From the title to user TheSelfGoverned’s comment You don’t understand (when ordered by best)

After Apple banned bitcoin related apps from the app store and iPhone a redditor with the handle round-peg offered a free nexus 5 (a bitcoin friendly competitor to the iPhone) for every 100 upvotes going to the first 5 people that linked to a video of themselves destroying their iPhones.

Asking for upvotes in the title of a post is against Reddit’s terms and conditions and as such the original post has been deleted. In the original post the original poster stipulated the full terms and conditions of the offer as well as live updating how many of the 5 new nexus 5s had already been given away.

A unique aspect about the conversation on Reddit is that it took place between people and computer programs. A feature of the bitcoin sub-reddit is that users can tip each other bitcoins by typing a command into the comment box that generates a message with instructions to the tipperbot. The tipperbot, derived from tipper robot, is the program that performs the bitcoin tips as per the commands from users and makes comments publicly verifying and detailing the tip after it has been completed. As such an automated piece of computer programing, known as a bot, as in robot, is interacting with human users and is part of this conversation.

The data includes 758 words from 64 comments.

**Linguistic features**

**Combining elements of planned and unplanned language**

One theme to emerge from the data is the much discussed e-communication concept of combining the styles and elements from written language and spoken language, otherwise described as writing like you are speaking. In the past the way we spoke and the way we wrote were different and they often still are, such as in this article. We can notice how rehearsed speeches sound different to normal naturally spoken language because the speakers are speaking like they are writing. Here we have interlocutors writing like they are speaking. As Borjars & Burridge (2013, p. 249) put it

“The picture we paint here is that speech and writing form a quite straightforward dichotomy. However, this is not the case. Some examples of spoken language, such as you might find in a well-planned lecture or seminar for example, have many of the organizational features of written language. On the other hand, some examples of writing, a scribbled note to a friend for instance, are much closer to the speech end of things. The emergence of electronic communication, such as email, is blurring the distinction even more. Email is written, of course, but it shares many of the features not just of spoken language, but of actual conversation. This is especially true of the language of chat
groups, where people exchange messages in much the same way as they would chatting face to face.”

Examples of this from the data include

*pit pat piffy wing wong wong
he he he
Ah yеаshiіlll!!
haha
….. hahaha
feel REALLY bad
Meh
Eh?

There is one case of writing a physical bodily action, that being *slow clap*.

However some elements of writing like you are writing remain such as punctuations like ; ; , , ! ? used in standard ways, so what we have is a combination of written and oral communication norms.

Some linguist have preferred the dichotomy of planed and unplanned language rather than written and spoken language and this rings true here. The formal speaker mentioned who is speaking like he is writing is a case of planned language like almost all writing used to be. The interlocutors in e-communication who are said to be writing like they are speaking are producing unplanned language, so planned and unplanned is the decisive differentiator here.

However any dichotomy falls over by the fact that e-communication combines elements typical to planned and unplanned language. According to Borjars & Burridge (2013, p. 250)

“*some linguists (sensibly in our minds) abandoned the general labels ‘speech’ versus ‘writing’, preferring instead planned versus unplanned discourse. These labels better capture the fact that different types of speech and writing show different features depending on their degree of planning and formality. Either way, these labels imply two polar extremes. The reality of course is that there are many intermediate varieties that exhibit features of both types of discourse to a greater or lesser extent.”*

**Abbreviations and ellipses**

As is common in e-communication there are a lot of abbreviations, acronyms and time and space saving techniques in the data. However there is significantly less than would be expected in mobile phone text messages (Tagg, 2012, p.62). Examples of abbreviations used that are typical of e-communication and not of mainstream or more traditional forms of written English include

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>TL:DR and tl;dr</td>
<td>too long; didn’t read</td>
</tr>
<tr>
<td>#</td>
<td>number</td>
</tr>
</tbody>
</table>
Those are 13 items that would earn the ire of finger waving grammarians leading them to publicly bemoan the death of proper English. But let us also list the number of abbreviations, acronyms and time and space saving techniques in the data that are not e-communication specific, that are normal and accepted in mainstream or more tradition written English most of which the finger waving grammarians would use themselves.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>BTC</em></td>
<td>bitcoin</td>
</tr>
<tr>
<td><em>w/e</em></td>
<td>whatever</td>
</tr>
<tr>
<td><em>GF</em></td>
<td>girlfriend</td>
</tr>
<tr>
<td><em>LOL</em></td>
<td>laugh out loud</td>
</tr>
<tr>
<td><em>gox</em></td>
<td>Mt. Gox</td>
</tr>
<tr>
<td><em>@</em></td>
<td>at</td>
</tr>
<tr>
<td><em>FTFY</em></td>
<td>fixed that for you</td>
</tr>
<tr>
<td><em>PMs</em></td>
<td>private messages</td>
</tr>
<tr>
<td><em>OMG</em></td>
<td>oh my god</td>
</tr>
<tr>
<td><em>6K</em></td>
<td>6000</td>
</tr>
<tr>
<td><em>OP</em></td>
<td>original post and original poster</td>
</tr>
</tbody>
</table>

Don’t: do not
There are 14 of them which shows e-communication, and even text messaging, is just extending and expanding something that has always been present in written language; finding ways to say the same thing in less time and space. There is no substantive difference between abbreviating post scrip as PS and abbreviating girlfriend as GF. One is not intrinsically less correct simply because it has not been common for as long. If something can be communicated more efficiently without losing any of its meaning that is a step forward in the language to the benefits of its users.

As such these new online abbreviations are and will continue to make their way offline and into almost all forms of written English. The difference now is the rate of change that mass, instant global e-communication allows. It is safe to assume that it took a long time for typos to become a normal and acceptable abbreviation for typing errors but w/e for whatever has spread very quickly from an e-communication idea to and e-communication standard in around 2 years.

It is inevitable that many of these devices will spread offline first into informal writing and then into formal writing, the only questions is which ones and how quickly it happens in each increasingly formal sphere of written English. As Borjars & Burridge (2013, p. 250) put it.

“Texting and other examples of e-communication will speed up the rate of language change. Many of these shortened expressions have already escaped the Internet and have made it into written language elsewhere. But the impact of the electronic revolution is much more significant than a few new lexical items. Over the years, the powerful authority of writing has had the effect of retarding, perhaps even reversing, the normal processes of change. However, this influence is waning. It took hundreds of years for will to evolve into a new marker of future time. The changes that are transforming going to into the future auxiliary gonna are faster.”

Humor

E-communication on forums is usually heavily biased toward humor, even in the case of arguments and insults those doing the insulting will try to make it humorous though the humor often takes the form of sarcasm. Examples of this from the data include the Bitcoin Talk Forum threads’ original post and replies such as Spartans Hodl referencing the humorous incorrect spelling of hold and the existing Spartans hold meme.
In the data from Reddit jokes include *You have certainly shoved a round peg up Apple’s square hole* which refers to a famous Apple advertising campaign discussed below. owAnother user then replied *Rectangular with rounded corners*, a reference to an iPhone. Another humorous post is *Plot twist – It was his wife’s iPhone*.

**In-group lingo**

There are a few terms in the data which are specifically bitcoin lingo and using and understanding them is a way for participants to confirm in-group status, letting each other know they can be trusted as fellow community insiders. Those terms include *gox* an abbreviation of an acronym, Mt. Gox, referring to a bitcoin exchange, the *hold Spartans* meme is a bitcoin thing, as is in-forum crypto currency tipping and the terms around it such as *millibitcoins*.

There are more terms and lingo that are for the most part only seen on the internet or general terms that are used in a specific way in e-communication and on forums, these terms or usages give a more general form of in-group cache than the bitcoin terms mentioned above. *Edit* is an example of a general term used in a specific way here to mean that the word *edit* and whatever text that follows was added after the writer first made his comment. Such as

* [edit] /u/round-peg came through. have at it, folks! *

and

*Edit: Typos*

both from the Reddit data. That usage does not need explaining to the in-group participants.

Other examples are, *Epic, 4chan, cool story bro, r/dogecoin* and /u/round-peg the last 2 are used to refer to other participants or pages on Reddit.

The Bitcoin Talk Forum supports graphic emoticons, also known as smileys or emojis and 3 are used in the data. Reddit keeps smileys in plain text and 2 are used in the data. The triple punctuation marks typical to e-communication make an appearance in inclusions like !!!.

The data includes popular culture references so loved in e-communication, including references to the film *Honey I Shrank the Kids* with *Honey I smashed the I phone*, the film 300 with *hodl Spartans* and a reference to pop star *Justin Bieber*.

**Most used words**

The word *Bitcoin* was used 10 times and *iPhone* 8 times. A better indication of the most common vocabulary items for e-communication in the bitcoin community can be seen in a far larger sample gathered from the bitcoin sub-reddit and another crypto currency sub-reddit used to generate this word cloud.
It shows the most commonly used words are people, money, time, currency, transaction, value, years and system.

As for profanity there are 5 swear words in the sample of 1192 words. This is a profanity rate of 0.4% or 1 swear word for every 250 words.

**Length of contributions**

One striking element of the data is the brevity of each contribution. Each comment is very short with an average of 15.35 words. The Bitcoin Talk Forum original post is the only exception being 250
words, the second longest contribution after that is only 107 words. This is biased by the fact that the original post on Reddit that was deleted would have been the longest of all but even taking that into account very brief comments are a feature of this data.

**Spelling and punctuation**

The main characteristics of punctuation in e-communication and in this data sample is that it is optional. To take the most basic example we see multiple cases of capitalisation and full stops being used in what grammarians would call the correct way such as *Item purchased and awaiting shipment.* alongside cases where both are happily missing like *ok I am hodling too, waiting for cash on gox to buy more*

As for American English verses British English spelling both are acceptable though due to weight of numbers American English standards of spelling are more common.

**Usernames**

One linguistic feature of e-communication somewhat unique to forums is the username or form name, also known as the handle. Most emails, text messages and chats are conducted between known identified communicators but forum posts can be anonymous or pseudoanonymous. Forum names are usually pronounceable and often give information about the poster such as a variation of their name, an indication of age by including year of birth or an indication of political opinion or special interest. They are often identifiable as more likely to belong to a male or female (Cornetto, 2006). Forum names that display those characteristics in this data include.

**Reddit post**

*round-peg (original poster)*
netpastor
bitcointip
johnnyhammer
MrFalken
goodbtc
hidden
johnnycocoin
ElHombreDelQueso
aDaneInSpain
Shadow-Seeker
theonefoster
pushittothemax11
abolish_karma
lewisjackson
TheSelfGoverned

**Bitcoin Talk Forum post**

Bitbuy
steelboy
Oldminer
The original poster of the Reddit post username is *round-peg*. This is known as a throwaway account; a new account that is made for the purpose of making one post and is then discarded to keep the poster anonymous. The name of the *round-peg* throwaway account is a reference to the famous Apple Commercial; Here’s to the Crazy Ones, [https://www.youtube.com/watch?v=A_GOmDQ_LXE](https://www.youtube.com/watch?v=A_GOmDQ_LXE) which includes the line “the round pegs in the square holes.”

Referencing this self-proclaimed innovative spirit of the Apple brand is meant to point out the hypocrisy of their decision to ban bitcoin apps from their products as bitcoin is considered innovative and exactly the kind of thing the Apple advert celebrates. This shows usernames can be much more than arbitrary identifying labels.

**Conclusion**

In conclusion we can see the bitcoin community’s use of e-communication follows the broader patterns found in other internet forums such as the prevalence of humor, abbreviations and ellipses, flexible spelling and optional grammar, short contributions and unplanned writing.

1 thing in our data that differentiates the bitcoin community is bitcoin in-group identifiers such as bitcoin related vocabulary and in-jokes. However these are equally prevalent in any special interest groups e-communication, for example a Thai motorcycle forum would include Thai motorcycle related in-group identifiers such as vocabulary and in-jokes just as much as the bitcoin community does for its special interest.

The only unique thing we find about the bitcoin communities e-communication is the interrelation between human participants and a computer program in the form of the bitcoin tipping bot on Reedit.
References


Reddit. (2014) For every 100 upvotes this post receives, I will gift someone a Nexus 5 for a video of them smashing their iPhone. Retrieved from http://www.reddit.com/r/Bitcoin/comments/1x62we/for_every_100_upvotes_this_post_receives_i_will/
