

Title: Telegram's voice messaging function in today's world of communication

Introduction

This paper will look at Telegram's voice messaging function and how it has altered the way users perceive speech and text across this communication medium. Relevant literature from Crystal's (2006) table on speech-like and text-like communication mediums will be used and Sproat's (2005) prosody of emotions will also be discussed in this paper.

Telegram was first introduced as a communication medium across all phones in August 2013 (*telegram.org, n.d*). Less than a year after its release, a voice messaging function (Figure 1) was unveiled to all users (*twitter.com*) and the number of monthly active users have exponentially soared ever since (Figure 2).

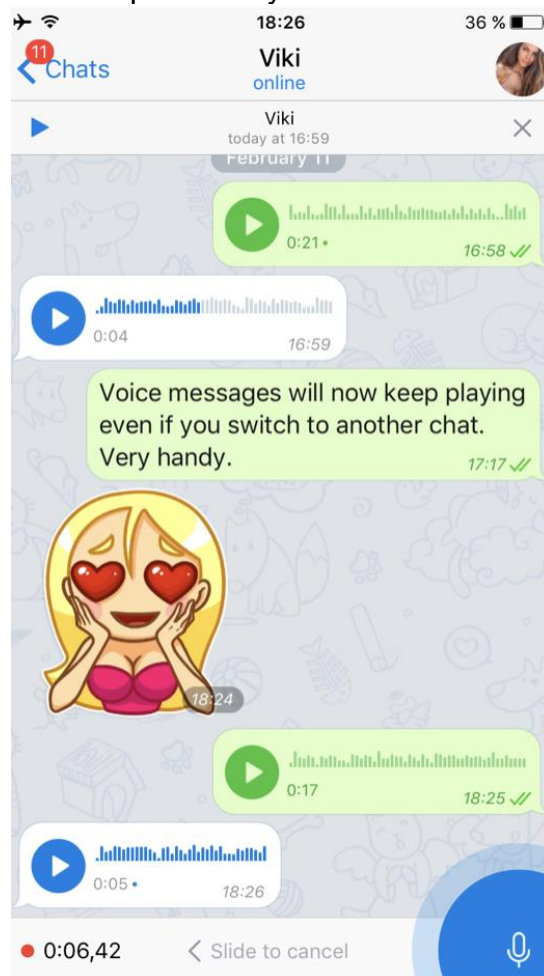


Figure 1 (Voice messaging function on telegram)
Source: <https://telegram.org/blog/voice-2-secret-3>

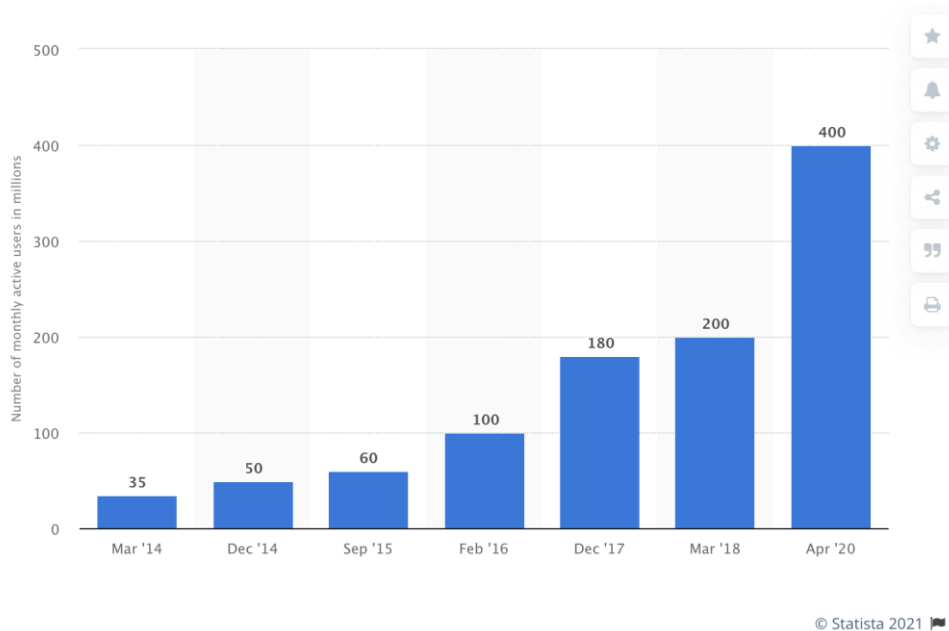


Figure 2: Number of monthly active Telegram users from March 2014 to April 2020 (in millions)

Source: <https://www.statista.com/statistics/234038/telegram-messenger-mau-users/>

With all its updates and introduction of different functions, the communication medium was touted to be the first most downloaded application worldwide in January 2021, surpassing giant communication mediums like Whatsapp, Facebook Messenger and TikTok (*in.mashable.com*). According to Crystal (2006), differences between speech-like and text-like conversations lie in a plethora of criteria as shown in Table 1. In the following section, I will be expanding on how the voice messaging function fits into the speech-like characteristics Crystal has outlined while also exposing how the voice messaging function obscures the fine line between speech-like versus text-like characteristics at the same time.

Speech-like	Text-like
time bound	space bound
spontaneous	contrived
face-to-face	visually decontextualized
loosely structured	elaborately structured
socially interactive	factually communicative
immediately revisable	repeatedly revisable

Table 1: Crystal, D (2006) Seven features of Communication between speech-like and text-like

Using Crystal's seven features to analyze how the language of the medium affects the properties used to communicate

Firstly, given that the voice messaging can only be performed when there is the presence of a chat, verbal or non-verbal, between the speaker and recipient on the application, the voice messaging function thus allows the existence of a direct and intuitive interaction between the speaker and recipient since the recipient is known. This differs from text-like communications, whereby the recipient is often “open” and undecided by the speaker thus this function fits nicely with the speech-like characteristic of being time-bound.

However when looking at the spontaneity of Telegram's voice messaging function, there is evidence and opportunity for time lag to be experienced between the time taken receiving the produced voice message and producing a voice message in response to the previously produced voice message. This is because the voice messaging function between the speaker and recipient need not be time-bound within a certain time period (Figure 3). There is no need nor demand (unless requested) for the recipient nor the speaker to immediately interact with each other since the voice message can be played at any time and can be re-played as well.

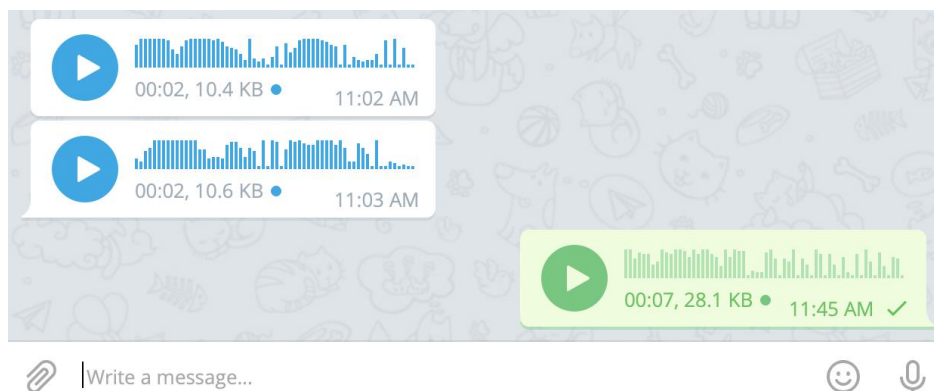


Figure 3: Time lag between recipient responding to the produced voice message by speaker

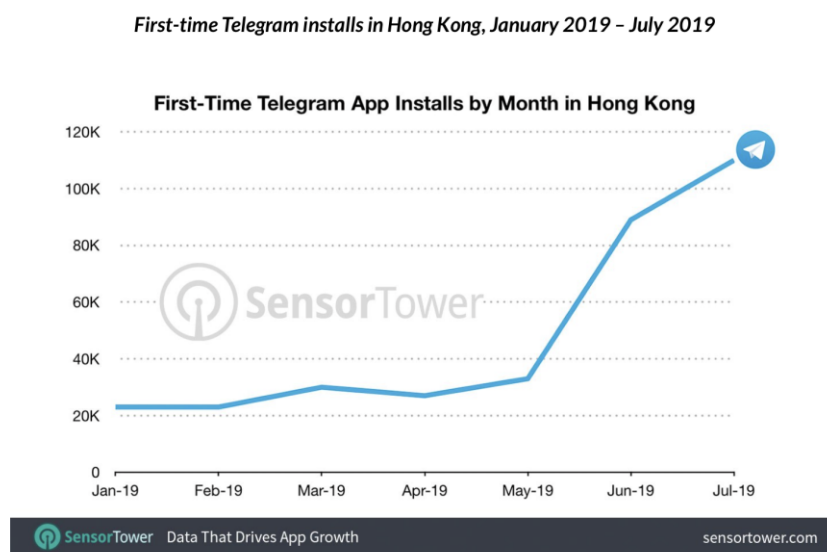
Source: *Author's own*

Moving on, the voice messaging function neither takes on the text-like characteristic of being visually decontextualized nor the speech-like characteristic of face-to-face interaction. This is because it is impossible for extralinguistic possibilities such as fonts, color and pictures to be experienced and produced via voice messages and the voice message function only requires the production of sound from one's own voice and not the speaker's or recipient's facial expressions and gestures.

In terms of the voice messaging function's structure, it predominantly follows the structure of speech-like communication of being loosely structured. Contractions are often present since the conveyed message is performed verbally and hence we can expect the speaker to use contractions just like in real-life verbal conversations. Furthermore, informal vocabulary can be used if both the speaker and recipient have previous knowledge of the semantics involved and like all speech-like

communication, obscenity is definitely present, just like long and coordinate sentences.

The voice messaging function allows for social interactivity given that it requires a relationship between the speaker and recipient in order for the voice messaging function to be utilised. In addition, the inception of the coronavirus pandemic and unrest across countries around the world has seen a proliferated rise in communication platforms being utilised formally and informally (Figure 4). Work spaces, where sociality used to be performed physically, has now been incorporated into the electronic space. Hence, it is reasonable for us to assume that the voice messaging function on Telegram would have also seen an increased usage of this function and increased social interactivity as well.



Source: [Sensor Tower](https://sensortower.com)

Figure 4: First-time Telegram App Installs by Month in Hong Kong due to the July 2019 civil unrest
Source: sensortower.com

Additionally, the voice messaging function on Telegram is prosodically rich despite only requiring the speaker’s voice to convey messages. This is because the voice messaging function affords users the production and interpretation of verbal cues which helps in promoting in-person communication more closely compared to the plethora of nonverbal communication platforms and features we are often exposed today (Sherman et al, 2013). Furthermore, acoustic features of the voice messages can be analysed by interpreting the sound waves produced from the voice messages as seen in Figure 3.

While the sound waves in Telegram does not allow users nor us to examine the specifics of sound we are looking at like pitch and tone, Sproat’s (2005) prosody of emotion comes in handy in this section. He claims that “voice quality” is not the main determinant of “naturalness” in speech synthesis, but natural-sounding prosody like intonation and duration. This ties in line with Maffolo and Chateau (2003;1375)’s claim that the ‘intonation of speech messages ... may affect the user’s interpretation of the semantic content’. They further elaborated by explaining that “in human-to-

human communication, a speaker may vary his voice to indicate, for example, frustration or happiness, or to be more convincing or reassuring when giving help” (Maffolo and Chateau., 2003, 1375), hence the presence of such prosody through verbal cues in the voice messaging function thus allows this function to be prosodically rich.

However, this function can also be seen partially conforming to the characteristics of being a text-like communication platform. This is because the function can be used to record facts and communicate ideas – especially so if the conversation context revolves around professional or formal contexts like work. The playback and speed feature on telegram further allows for the message to be perceived and understood at one’s own pace (*telegram.org*) hence it can be said that Telegram’s voice messaging function performs partially as a text-like communication tool as well.

When analysing if voice messages can be revised, an obscurity exists. Voice messages can be rephrased when one receives feedback or decides to rephrase whatever they have previously spoken about. Moreover, when the voice message is produced, errors spoken during the production of the voice message cannot be withdrawn since it is already incorporated in the voice message. Interestingly, interruptions and overlap cannot be experienced like other speech-like mediums as voice messages are not interrupted when the speaker is producing it – what gets interrupted is only the delivery and receiving of the voice message depending on internet connection and this does not interfere with the linguistic analysis of this medium.

Yet, analysis of this medium by drawing parallels with speech-like communication can only be applicable before 2019. This is because it also partially meets the criteria of being repeatedly revisable under the text-like communication criteria. Telegram’s introduction of the delete message feature for both the speaker and recipient in 2019 (*techcrunch.com*) implies that both the speaker and recipient are able to delete voice messages with errors inside and re-record these voice messages conveying the same message and this parallels with the text-like characteristic of errors being withdrawn through revisions. By deleting the error-laden voice message and producing the same voice message without the previously committed errors, the voice messaging function meets some characteristics of text-like communication. Hence, when analysing if Telegram’s voice messaging function coheres with being revisable or not, there is a grey area given Telegram’s ‘delete for everyone’ feature being involved and is dependent on the user’s decision to delete the error-laden voice message and re-record it or produce an additional voice message rectifying the errors in the previous message.

Speech-like	Yes/No/Partially	Text-like	Yes/No/Partially
Time-bound	Yes	Space-bound	Yes
Spontaneous	Partially	Contrived	Partially
Face-to-face	No	Visually Decontextualised	No
Loosely structured	Yes	Elaborately Structured	No

Socially interactive	Yes	Factually Communicative	Partially
Immediately revisable	Yes	Repeatedly Revisable	Partially
Prosodically Rich	Yes	Graphically Rich	No

Table 2: Features of Telegram

New kinds of communication the medium has enabled and its general effects on people and society

One positive effect this medium has enabled is the reinforcement of emotionality and intimacy between the speaker and recipient. With the advent of electronic communication, emojis, slangs and contractions have replaced commonalities of speech humans used to experience and produce when interacting with each other. The inclusion of the voice messaging function in Telegram brings back a piece of 'nostalgia' by incorporating it into the current popular communication medium. Furthermore, an experiment conducted by Fritsch (2019) revealed that emotionality and intimacy is one of the most apparent effects on people and society when using voice messaging to communicate with recipients. This is especially so for those who live abroad, away from their friends and families, and use voice messaging as a means of connecting and being in touch with familiar sounds in their life so as to go about their newfound change. Hence, it is inevitable that Telegram's voice messaging function allows for users to feel more emotionally and intimately connected between the speaker and recipient since there is emotional communication in the human voice, unlike the sharing of emojis, slangs and contractions where the verbal tone is often neutral or replaced by graphically rich illustrations.

Given that voice messaging exhibits both speech-like and text-like characteristics to a certain extent distinctively, it can perhaps be positioned that the medium has enabled a new kind of communication – it removes the instant from the 'instant messaging' world that we are so used to and has created a/an (instant) voice-messaging world in the world of instant messaging instead. This is because communication between the speaker and recipient need not be synchronous when using the voice messaging function, yet this function fulfils other characteristics of being a speech-like communication medium given it being prosodically-rich and socially interactive at the same time.

Conclusion

While many users are familiar with other communication mediums such as Whatsapp and Facebook messenger, the backlash in recent years over privacy and security concerns have seen throngs of users shifting towards Telegram, given its appealing encrypted and security features that rival other communication giants. The incorporation of the voice messaging function on Telegram since 2014 has created a new kind of communication across this communication platform. Instant messaging, as we all are familiar, is no longer very instantaneous with the voice-messaging function since there exists certain obscurities this function exhibits between speech-like and text-like characteristics. Perhaps we can see this as a new era of communication mediums in the electronic space? Regardless, it appears that

Telegram's growing popularity is set to continue in the near future and we can most likely expect more functions and features in this communication medium to revolutionise how communication takes place.

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