Covid-19, SWA-algorithm and f-constant: the potential nature and dynamics of SARS-CoV-2

Rodolfo Alvarez Zambrano

Abstract— The purpose of this research was finding new information of SARS-CoV-2, by means of analytical processes based on SWAalgorithm (Scientific Writing Automation) and f-constant. The analysis was divided into two parts. First, we applied SWA-algorithm to a linguistic sample containing f-constant and derived a few deductions from there. Second, we applied SWA-algorithm to another linguistic sample containing the concept of SARS-CoV-2 and f-constant, and derived a few deductions from there as well. We ended up finding some aspects of the potential nature and dynamics of SARS-CoV-2.

Index Terms— Covid-19, f-constant, SARS-CoV-2, SWA-algorithm.

1 INTRODUCTION

HEN we think of Covid-19, many things come to mind. One of them has to do with the potential nature and dynamics of this disease because it seems, at this point we are still far from knowing everything about it.

The main goal of this publication is reporting some insights into Covid-19 and SARS-CoV-2. These insights are based on an algorithm, allowing for an on-the-go method of searching and explaining at the same time. Additionally, a pattern found we have called f-constant, helps performing the analysis more efficiently.

We begin with the literature review of the key concepts Covid-19, SWA-algorithm and f-constant. After that we analyze some linguistic samples including f-constant, through SWA-algorithm.

2 LITERATURE REVIEW

2.1 Covid-19

Coronavirus disease (Covid-19) is an infectious disease caused by SARS-CoV-2. It was first reported in Wuhan, China and has spread worldwide since then (World Health Organization, 2020; Wu *et. al.*, 2020).

2.2 SWA-algorithm

SWA-algorithm (Scientific Writing Automation) is an algorithm for automatic writing in the field of science, conceptually speaking (Alley, 2013; Alvarez, 2019, 2021; Brown, 2012; Chikuni & Khan, 2008; MacArthur *et. al.*, 2008; Peat *et. al.*, 2013; Wingersky et. al., 2008). Although SWA-algorithm was neither conceived as an algorithm, nor called that way, posterior analysis yielded the realization it is actually an algorithm, in the full sense of the word (Alvarez, 2019, 2021).

Rodolfo Alvarez. Professor, translator and Magister student (Chile). E-mail: rodolfo.alv.zm@gmail.com.

2.3 f-constant

f-constant is a linguistic pattern conceived for the purpose of this research, based on the word "fasting" and the concept of fasting. It is basically defined as the notion of "fasting abundantly", which conjugates as a VP adding information to an NP. It helps making a sentence non-semantic but grammatical (Alvarez, 2021; Chomsky, 1957).

3 DISCUSSION

In this section we discuss SWA-algorithm and the concept of fasting, and SWA-algorithm, SARS-CoV-2 and the concept of fasting.

3.1 SWA-algorithm and the concept of fasting

3.1.1 Initial considerations

First part of discussion section is devoted to the application of SWA-algorithm to the following sample:

Solid viscous ideas fast abundantly,

which is meaningless but grammatical (Chomsky, 1957).

3.1.2 SWA-algorithm applied to the sample "solid viscous ideas fast abundantly"

If we apply SWA-algorithm (Alley, 2013; Alvarez, 2019, 2021; Brown, 2012; Chikuni & Khan, 2008; MacArthur *et. al.*, 2008; Peat *et. al.*, 2013; Wingersky et. al., 2008) to the sample "solid viscous ideas fast abundantly", we will notice the sentence mentioned is grammatical, as previously stated. However we expect more than this observation from an algorithm of this nature, but it is a good starting point.

What else could SWA-algorithm find in this way? If we applied an infinite loop to this sentence, we may eventually face computations assigning meaning to this sample, therefore it would stop being meaningless semantically speaking.

How can SWA-algorithm evaluate the usefulness of a

73

procedure of this nature, meaning applying the infinite loop to the sample we are discussing? We think the algorithm has to review previous paragraph and create another infinite loop between that and this paragraph.

In this way, we conclude the point of applying and evaluating the usefulness of an infinite loop to the sample under discussion, is useless in itself. Therefore we have to continue with a different idea.

How can we apply SWA-algorithm (Alley, 2013; Alvarez, 2019, 2021; Brown, 2012; Chikuni & Khan, 2008; MacArthur *et. al.*, 2008; Peat *et. al.*, 2013; Wingersky et. al., 2008) to the sample "solid viscous ideas fast abundantly" in a different way? Maybe by means of a linguistic analysis in which the sample is syntactically parsed (Chomsky, 1957). However, this idea has to be discarded, since we are looking for new insights, not a revision of previous concepts.

Which ideas might be left then? We know the sample under discussion is grammatical, non-semantic and puzzling (Alvarez, 2019; Chomsky, 1957). Also, it is a sentence with a special kind of strange content. What would a sentence like this need to be semantic or partially semantic? Maybe it has to do with a metaphor of organic life.

Now the question is, any organic life? Probably not. This and previous points lead us to the following topic of discussion: how the concept of "fasting abundantly" (to be called f-constant from now on) can give us valuable insights into SARS-CoV-2.

3.2 SWA-algorithm, SARS-CoV-2 and the concept of fasting

3.2.1 Initial considerations

Second part of discussion section is devoted to the application of SWA-algorithm to the following sample:

SARS-CoV-2 fasts abundantly,

which is meaningless but grammatical.

3.2.2 SWA-algorithm applied to the sample "SARS-CoV-2 fasts abundantly"

In this case, we try to apply SWA-algorithm to the sample "SARS-CoV-2 fasts abundantly". Once we have done this, we are able to get some insights into the nature and dynamics of SARS-CoV-2.

This sentence is puzzling in itself, since it provides the virus with an ability only humans can apply into practice, which is fasting. Furthermore, it is not just fasting but fasting abundantly (f-constant), which makes the sample absolutely ungrammatical, so to speak.

If SARS-CoV-2 (World Health Organization, 2020; Wu *et. al.*, 2020) is able to fast abundantly, then we may state it has a mysterious, conscious nature of some strange kind. It may mean the virus getting weaker and spreading increasingly¹.

Furthermore, if SWA-algorithm (Alley, 2013; Alvarez, 2019, 2021; Brown, 2012; Chikuni & Khan, 2008; MacArthur *et. al.*, 2008; Peat *et. al.*, 2013; Wingersky et. al., 2008) is able to find such insights about the virus through the sample we are discussing, then the algorithm may fuse with the concept it tries to generate ideas about. We know a fusion of this kind already took place between SWA-algorithm and the concept of $d_{p/"p"}$ (Alvarez, 2020, 2021).

Before getting into considerations of SWA-algorithm fusion going out of control, let us see if the algorithm actually fuses to some degree with the sample under analysis, to see what happens.

The possibility of fusion between SWA-algorithm and the sample is likely in that sense, because of f-constant's seemingly mysterious nature. It is not clear whether it may happen in the end, after all.

Rather, it seems SWA-algorithm is falling a bit short of ideas in generating text on the sample being discussed. If this is the case, it is time to turn SWA-algorithm off and conclude this section with the ideas discussed already.

4 CONCLUSION

In this article, we came up with some insights into the potential nature and dynamics of SARS-CoV-2, by means of an algorithm and some analytical processes. It was found SARS-CoV-2 may have a mysterious and conscious nature of some strange kind. Besides, the algorithm yielded SARS-CoV-2 may be getting weaker and spreading increasingly as well, which matches current state of affairs concerning the virus.

¹ Linguistically speaking, we may apply f-constant to any NP performing the process of getting weaker and spreading incresingly, at least as a provisional statement.

REFERENCES

- A. D'Alleva, Methods and theories of art history. London: Lawrence King Publishing, p. 169, 2005.
- [2] C. Wu, X. Chen, Y. Cai *et. al.* "Risk factors associated with acute respiratory distress syndrome and death in patients with coronavirus disease 2019 pneumonia in Wuhan, China". San Francisco: JAMA Internal Medicine, pp. 1-2, March 2020.
- [3] E. Chikuni and M. Khan, Concise higher electrical engineering. Cape Town: Juta and Company Ltd, p. 544, 2008.
- [4] J. Peat, E. Elliott, L. Baur, and V. Keena, Scientific writing: easy when you know how. Hoboken: John Wiley & Sons, p. 5, 2013.
- [5] J. Wingersky, J. Boerner, and D. Holguin-Balogh, Writing paragraphs and essays: integrating reading, writing, and grammar skills. Boston: Cengage Learning, p. 3, 2008.
- [6] M. Alley, *The craft of scientific writing*. New York: Springer Science and Business Media, pp. 1-15, 2013.
- [7] N. Chomsky, Syntactic Structures. Berlin: De Gruyter, pp. 1-117, 1957.
- [8] R. Alvarez, "Beyond prayer/"prayer" duality: implications for language and cognition," International Journal of Scientific & Engineering Research, vol. 12. No. 12, pp. 741-742, available at https://www.ijser.org/onlineResearchPaperViewer.aspx?Beyond-prayerprayer-duality-implications-for-language-and-cognition.pdf, Dec. 2021.
- [9] R. Alvarez, "Black holes hypothetical language: conceptual, linguistic and algorithmic considerations," *International Journal of Scientific & Engineering Research*, vol. 12. No. 7, pp. 303-305, available at https://www.ijser.org/researchpaper/Black-holes-hypothetical-languageconceptual-linguistic-and-algorithmic-considerations.pdf, Jul. 2021.
- [10] R. Alvarez, "Scientific Writing Automation," International Journal of Scientific & Engineering Research, vol. 10, no. 7, pp. 1094-1095, available at https://www.ijser.org/onlineResearchPaperViewer.aspx?Scientific-Writing-Automation.pdf, Jul. 2019.
- [11] R. Alvarez, "Scientific Writing Automation applied to prayer/"prayer" duality," International Journal of Scientific & Engineering Research, vol. 11, no. 12, pp. 365-366, available at https://www.ijser.org/researchpaper/Scientificwriting-automation-applied-to-prayer-prayer-duality.pdf, Dec. 2020.
- [12] R. Alvarez, "What "from Chomsky on" means: reflections on language and lexicon," International Journal of Scientific & Engineering Research, vol. 10, no. 9, pp. 1638-1640, available at https://www.ijser.org/onlineResearchPaperViewer.aspx?What-from-Chomsky-on-means-reflections-on-language-and-lexicon.pdf, Sep. 2019.
- [13] T. Brown, Mathematics education and language: interpreting hermeneutics and poststructuralism, New York: Springer Science and Business Media, p. 217, 2012.
- [14] World Health Organization (2020). Coronavirus disease (Covid-19). https://www.who.int/health-topics/coronavirus#tab=tab_1.

