# The language of cancer as prime number cell sequences

### Rodolfo Alvarez

**Abstract**— The purpose of this article is proposing a new concept for the investigation of cancer cells within a group of cells. Basically, the idea is cancer works with a language based on prime numbers. To make the conception of this idea possible, a puzzling sentence is presented and from then on, some theoretical derivations are carried out, based on what has been mentioned.

Index Terms— arithmetic, cancer, language, prime numbers.

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### 1 Introduction

ANCER is a highly serious disease, with different degrees of severity, depending on some factors, for example the spreading of cancer cells in the body, and whether this spreading can affect vital organs.

The idea in this article is exploring a possible language through which the behavior of cancer and cancer cells, may work. However, in this case the language we will be exploring is not based on an alphabetical system. Rather, the language we will discuss has an arithmetic nature, basically based on prime numbers.

### 2 LITERATURE REVIEW

### 2.1 Cancer cells

Cancer cells are defined as uncontrolled, surrounding tissue-invasive cells (Lee, et. al., 2013). They are defined as abnormal cells undergoing uncontrolled growth (Hao & Yao, 2015) as well.

In that sense, we can understand cancer cells as uncontrolled, abnormal, surrounding tissue-invasive cells undergoing uncontrolled growth (Lee, et. al., 2013; Hao & Yao, 2015).

### 2.2 Language

To define the potential language of cells, one of its characteristics should be it is notalphabetic and nonverbal (Ryan, 2017). Another point, since this language is based on prime numbers, is its arithmetic nature.

In that sense we are talking about an arithmetic language for the behavior of cancer cells among a group of cells. For this, we need to define arithmetic, and then doing the same with arithmetic language.

### 2.2.1 Arithmetic

Arithmetic is the science of the determinations of numbers through numbers (Mohanty, 2008). For the purpose of this article, it will help constructing the concept of arithmetic language we deal with in next section.

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### 2.2.2 Arithmetic language

We can conceptualize an arithmetic language as a particular language allowing communication among cancer cells, which is nonverbal and nonalphabetic (Alvarez, 2020; Ryan, 2017). As this language is not alphabetic, we think it behaves through numbers, and is open to scientific exploration (Ryan, 2017; Mohanty, 2008).

### 2.3 Prime numbers

Prime numbers are those numbers that have two factors, i. e., one and the number itself (Kumar & Mozar, 2020). For the purpose of this research, they are the basis of the arithmetic language we referred to in previous sections.

### 3 DISCUSSION

In previous research, we have explored the metaphysical nature of COVID-19 (Alvarez, 2020). This has led us to think the metaphysical exploration of a disease does not have to be for coronavirus alone. In this case, it can also work for cancer.

We start the analysis by establishing what has already been proposed, this is the metaphysical nature of microorganisms (Alvarez, 2020; Bognon-Küss *et. al.*, 2018).

Specifically for the purpose of this research, we follow the linguistic method proposed by Alvarez (2018, 2019, 2020), and just like in 2020, in this case we use it to get insights into cancer.

To do what has already been mentioned, we can propose the following puzzling, meaningless but still valid sentence:

Cancer prays unconsciously

, meaning cancer may not have a consciousness in the technical sense of the word. However, we can speculate on a special type of intelligence governing its behavior. In any case we refer to the intelligence of microorganisms, meaning a system radically different in nature and complexity compared to human intelligence.

How may this kind of intelligence behave? Maybe there is a special kind of order in the distribution of cancer cells (Lee, *et. al.*, 2013; Hao & Yao, 2015) within a specific group of cells. We know we are dealing with a very mysterious and highly com-

plex kind of phenomenon but we have an idea to continue the discussion.

We propose the intelligence governing the behavior of cancer cells, may be based on a special kind of language (Alvarez, 2020; Ryan, 2017). As we already mentioned, this language is not alphabetic (Ryan, 2017) but arithmetic (Ryan, 2017; Mohanty, 2008). What kind of arithmetic? The idea we propose here is prime numbers (Kumar & Mozar, 2020).

For example, let us suppose we have a group of five cells in the body and we know some of them are cancer cells. How can we know how many cancer cells are in that group?

If we conceive prime number distribution as a matrix of 1s and 0s, we will notice prime numbers are the ones with only two 1s in each column.

Previous diagram shows numbers from 1 to 5 in sequential order. From them, 2, 3 and 5 are potential cancer cells since they are prime numbers.

At this point, it has to be said this criteria of analysis does not need to work at the physical, organic level we are familiar with. It could be the case this special distribution of cancer cells among a group of cells, takes place at the metaphysical level of cancer (Bognon-Küss *et. al.*, 2018; Lee, *et. al.*, 2013; Hao & Yao, 2015; Kumar & Mozar, 2020), with unknown interactions between it and the physical daily level we mentioned before.

### 4 CONCLUSION

In this research, we explored the implications of a new idea to the investigation of cancer for our understanding of this disease. It was found the idea proposed on prime numbers showing the distribution of cancer cells among a group of cells, is potentially true. It might take place at the physical vevel but it is not the only option. It could be the case the distribution we mention takes place at the metaphysical level.

Unfortunately, the potential communication aspect of cancer cells could not be solved. Besides, the dynamic behavior of cancer cells under the conditions proposed, remains a mystery.

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