The Infinite in human daily life: a psychological approach

Luciana da Costa Marques

School of Electrical and

Computer Engineering

University of So Paulo

So Paulo - Brazil

Email: luciana.maraues@usp.br

Abstract—The idea of the Infinity in can be qualitatively sensed in human nature in different contexts. Psychology and Mathematics, two fields that are rarely seen together, can have a curious intersection, that is, the mathematical notion of Infinite and the human condition of Anxiety.

1. Introduction

The idea of the Infinity in Mathematics may be intuitively described as the concept of increasing something indefinitely, such as counting the natural numbers. The idea of constant increasing is easily found in Nature, even though resources and raw material are scarce in reality.

Infinity can be qualitatively sensed in human nature in many different contexts. However, Psychology and Mathematics are two fields that are rarely seen together and that can have a curious intersection. In this case, this article intends to expand the notion of Infinity in the psychologial aspect of human life, particularly in the human condition of Anxiety.

The idea of endless counting can be compared to the mind of a clinical Anxious person by the vastness of possibilities provoked by this type of feeling. Though life events' possible consequences may not be abstractively equal or similar to natural numbers, both have something in common inside an anxious mind: the possibility to always find another one.

1.1. Topics covered

The topics covered to complete this work comprehend basically the mathematical notion of the Infinite on previously provided reference work and also articles on the psychology of anxiety.

2. What is Infinite?

As previously stated, Infinite can be intuitively understood as something so big that it can always become bigger. It is not attached by any bound or limit.

2.1. Georg Cantor

Cantor was the mathematician that created the set theory and devoted his life to the Transinfinite. He was a highly religious devoted and his professional research was mainly motivated by it. He believed that mathematics was what God used to maintain his creation.

He believed that the idea of encountering lots of "infinites" could be a transcedental experience, similarly to be scaling a mountain and thus feel closer to God at each step closer to the top, but without actually reaching it.

Cantor's theories brought diversion to the academic community at the time, because it introduced uncertainty in a field that praises for logic and exactness. Curiously, he worked at the University of Halle, that is located in the city in which Martin Luther started the Reformation, a historical episode that also unbalanced a world of strong dogma and nothing was ever questioned.

3. What is Anxiety?

The feeling of anxiety can be intuitively understood as worry, nervousness, or unease typically about an imminent event or with an uncertain outcome. It is normal to face this throughout life. However, the feeling of anxiety is different from an anxiety disorder, in which the patient experiences this repetitively and that can get worse over time.

Anxiety can be the result of a perceived or real threat, but in lots of cases it can derive mostly from perceived ('problems only inside our heads'). One can really sense the notion of infinite inside an anxious' mind. Usually it encounters in episodes of excessive distress from an the anticipation of a feared situation.

Over thinking is not rare in this cases, and this is the main cause of the infinite notion in the comparison being made. Over thinking causes great distress towards a particular subject because it's usually accompanied by the imagination of all possible outcomes from the situation. As previously stated, Anxiety can be the fear an unexpected outcome, and when it's not known, there is a lot of room for imagination.

4. Conclusion

While there can e different types of Anxiety disorder, some main characteristic are common to all, such as over thinking and fear by anticipation of an unexpected outcome.

The following excerpt from "Auguries of Innocence" can be understood as a description from an anxious distress:

To see a World in a Grain of Sand And a Heaven in a Wild Flower Hold Infinity in the palm of your hand And Eternity in an hour (...)

Willian Blake

Blake's verses can be a description of an anxious thinking, because it mentions so beautifully seeing the endless in what could be simple things. This may be understood as a metaphor for the relation between the mathematical notion of the Infinite and the Anxious Mind, because the unlimited outcome possibilities can be perceived on the third verse ("Hold Infinity in the palm of your hand"), while other references to Anxiety are also present: seeing the world in a Grain of Sand (perceiving much more than what exactly is); and Eternity in an hour (being eternity a possible notion of the Infinite itself, the passing of time can be perceived more slowly when on an anxious episode).

References

- [1] https://www.healthline.com/health/anxietyin-children
- [2] https://astrociencianet.wordpress.com/2016/06/28/dangerousknowledge-conhecimento-perigoso-12/