Article

Relation of the Chaos Equation to God Perceived by Pascal, Nietzsche & Nightingale

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ABSTRACT

There is no reported equation that explains God. Evolutionary theory and many methods for rearranging thoughts were explained by the chaos theory. In this article, I explain God by a variable of a chaos equation as done in other previous studies. A representative chaos equation is given by \( Y(n+1) = p[1-Y(n)]Y(n) \). This equation has fixed and chaotic answers depending on the value of “\( p \)”. Continuous covariation is a necessary condition for the occurrence of chaotic phenomena. “Living” is a chaotic state because it follows continuous covariation with the environment. I contend that God perceived by Pascal, Nietzsche, and Nightingale can be explained by a relationship between fixed and chaotic answers. In living phenomena, time is a direction from a chaotic to fixed state and of decreasing entropy over time. Only the living function of creatures can decrease entropy. However, entropy increases over time in physical phenomena. Living creatures can recognize the time course as the opposing directions of entropy changes. In addition, they understand the direction of decreasing entropy beyond a Feigenbaum point as the power of God. Therefore, God can manifest as a process of decreasing entropy beyond a Feigenbaum point.

Key Words: God, chaos, evolution, rearranged thought, Feigenbaum point, entropy.

Introduction

Up until now, God has not been explained by a mathematical equation. The SEIQoL-DW (Schedule for the Evaluation of Individual Quality of Life-Direct Weighting) method, the KJ (Kawakida Jiro) method, the theoretical substruction, the mind map, dialectics, and Jean Piaget’s developmental theory can be explained by chaos theory because these methods involve rearranging of thoughts (Yanagisawa 2010). In addition, the evolutionary theory of the gene’s learning function was discussed in terms of the chaos theory (Yanagisawa 2011). Continuous covariation is a necessary condition for the occurrence of chaotic phenomena. “Living” follows continuous covariation with the environment, and therefore, it is a chaotic state.

God perceived by Pascal, Nietzsche, and Nightingale can be explained by a relationship between fixed and chaotic answers. In living phenomena, time is a direction from a chaotic to fixed state.
In living phenomena, entropy decreases with time, while in physical phenomena it increases. Living creatures can recognize the time course as the opposing directions of entropy changes. In addition, they perceive the direction of decreasing entropy beyond a Feigenbaum point as the power of God.

**Methods**

1. **Explanation of the chaos equation**

A representative chaos equation is given as

\[ Y(n+1) = p[1 - Y(n)]Y(n) \]  \hspace{1cm} (1)

A schema around a Feigenbaum point of equation (1) is shown in figure 1. Part A, B, and C represent fixed, localized chaotic, and expanded chaotic states, respectively. The Feigenbaum point is shown by an arrow.

![Figure 1: Schema around a Feigenbaum point in equation (1).](image)

2. **Relation of a continuous covariation to chaos phenomena**

Continuous covariation is a necessary condition for the occurrence of chaotic phenomena. Only fixed or all non-localized answers are produced without covariation. Localized chaotic answers always require continuous covariation. A phenomenon with covariation is represented in Part B or C. Because past phenomena are fixed, they are represented in Part A. Future phenomena are localized and non-fixed, and therefore are represented in Part B or C. Part C represents the chaotic state.
3. Relation of Pascal’s God to assertive thinking

Blaise Pascal believed in a religious God. His perception of God was the same as the God in the immutable Bible. He attempted to approach God through methods including a life of abstinence and rejection of human relationships. For example, he thought that marriage would obstruct him from approaching God. The Bible was understood as the only basis of God in the environment of Pascal’s lifetime. Because the immutable Bible is a fixed answer, it is represented in Part A of Figure 1. Laws and theories too are fixed answers. Because human relationships have the same meaning as adding a condition of continuous covariation, they belong to Part C. And since marriage is a human relationship, it is located in this part. Therefore, God destroyed by marriage is represented in Part A, which is the part with the fixed state. God perceived by Pascal is represented in Part A.

In his effort to approach God, he discovered many mathematical and physical laws. He approached the God in whom he believed. However, he sensed something other than the religious God when he predicted his death; it was the living phenomenon. He was afraid of being abandoned by the religious God. He put down his thoughts in Pensées. “He is a thinking reed” (Pascal 1910). Because there was no scientific theory to explain decreasing entropy, Pascal could not understand the relationship between the religious God and living phenomena. He stated another phrase about the mathematical and intuitive minds (Pascal 1653); they are represented in Part A and C, respectively. He never dismissed chaotic phenomena.

4. Relation of covariation to Nietzsche’s God

Friedrich Wilhelm Nietzsche lived in an environment based on the immutable Bible. God in the Bible is represented in Part A. Because the fixed thinking of Part A is assertive and absolute, it presses the others. Nietzsche could not sense God in the Bible, and therefore began to search for God on his own. Therefore, the death of God indicated by him (Nietzsche 1882) is not the death of Jesus Christ but rather the death of God of the Bible. Absolute thinking in modern natural science had been expanding in the northern Europe of Nietzsche’s lifetime. That is, the observed results were repeated with no change and were completely predictable. Living phenomena were denied because all changes were denied. Nietzsche felt this absence of living phenomena in the northern European culture. Absolute thinking in modern natural science is equivalent to God in the immutable Bible. He said, “God is death,” and to prove this, he chose to search for his own God. Therefore, the God sensed by Nietzsche is living phenomenon. “Living” is accompanied by a covariation with the environment. Nietzsche’s statement “God is death” is a fixed thinking such as Part A of Figure 1. In contrast, his sense of God is a dynamic phenomenon such as Part C.
5. Relation of change with time

The existence of time is equivalent to change. Time is an imaginary number, and its direct measurement is impossible by any clock. In all clocks, time is calculated by equations involving quantities such as length, angle, and frequency. All constants of the equations change with environment changes. Therefore, time cannot be precisely measured. Because absolute thinking had been expanding in modern natural science, this reality was ignored. A respective relationship between absolute thinking and chaotic thinking is given as follows. Isaac Newton postulated absolute time. This makes it an element of Part A in Figure 1. Leibniz postulated relational time. Leibniz’s time is represented in Part C. Newton was an overwhelming victor. An equation for time originating from changes was reported (Yanagisawa 2004).

6. Relation of the chaos theory to evolutionary theory with gene’s learning function (Yanagisawa 2011)

Living has the same meaning as experiencing continuous covariant relations with the environment. Time originates from changes with a covariant relation. Living creatures understand the environmental changes and adapt to them. Therefore, they are elements of Part C. Adapting to the environmental changes, living creatures impart changes the genes of for the next generation. This is an element of Part A. Living creatures change from a chaotic to fixed state beyond the Feigenbaum point. They can understand time and compare the present with the past. Einstein proved that time is an imaginary number and reality is a real number. By 60 days of fertilization, human embryos repeat many ancestral experiences of the 3.5 billion years. Being an imaginary number, time can be shortened. Living creatures can understand the difference between a real and an imaginary number.

7. The moment when Florence Nightingale Sensed God

Acting upon a divine message, Florence Nightingale provided nursing care to the victims of the Crimean War. Her state of thinking is represented in Part C. On the other hand, the state that she chose nursing is represented in Part A. Furthermore, she sensed the importance of environmental health from her nursing practice. Her nursing care for patients is represented in Part C. The Part A is of importance to environmental health. The turning point from Part C to A is the Feigenbaum point. Humans may feel some great power when they reach beyond the Feigenbaum point. This power is memorized as human’s experience.

8. Relation of the chaos theory to God

The ideas about God by Pascal, Nietzsche, and Nightingale are in concordance with decreasing entropy beyond the Feigenbaum point. In living creatures, genes are left if an individual is lifeless. Thus, living creatures continue the work of decreasing entropy beyond the Feigenbaum point. This has the same meaning as an immortal God. In living phenomena, time progresses in
the direction of decreasing entropy. However, in physical phenomena, time progresses in the
direction increasing entropy. Time progresses in the same direction in living as well as physical
phenomena. Living creatures understand the progression of time by relating to different entropy
changes. Living creatures control time with shortening or elongating their memories. Both are
the abilities of God.

Results

God can manifest as a process of decreasing entropy beyond a Feigenbaum point with time.

Discussion

What a human thinks after death cannot be reported as science. A living human feels God.
Living creatures leave information of environmental changes in their genes. This function can be
explained as decreasing entropy beyond the Feigenbaum point, i.e., from Part C to A. During this
function, God may be sensed. However, many generations pass while this function acts in the
evolution of living creatures. The birth of a new generation is a representative phenomenon
beyond the Feigenbaum point.

Decrease of entropy beyond the Feigenbaum point, occurs via two exclusive processes. One is a
method in which the number of covariant variables decreases. By this process, a simpler chaotic
phenomenon emerges. A representative case is prayer or ascetic actions in religion. Pascal used
this method to approach God. The other method is to change a variable of an equation without
decreasing the numbers of covariant relations. In this method, the value of “p” in equation (1) is
changed to about 3.5. A representative case of this method is the development of humans.
Piaget reported the change from a chaotic to fixed state as his developmental theory (Flavell
1996).

When human change their environment changes. In hardship, we pray to God. We hold the
memories of our ancestors’ overcoming many hardships. Therefore, we will also be able to get
over hardships. We pray for our ancestral abilities. Hardships are a chaotic state. However, this
state may change in future. The ancestral abilities are in a fixed state. We may feel the ancestral
abilities as the power of God when a hardship is overcome. To people, an action with decreasing
entropy is called love. In this article, God is concordant with the phrase in Testaments, i.e., “God
is love.”
Conclusion

In physical phenomena, entropy increases over time. In living phenomena, entropy decreases over time. Living creatures can understand time with increasing or decreasing entropy. Rearranging thoughts decreases entropy. The evolution of living creatures is also decreasing entropy. Decreasing entropy is sensed as “love”. When a chaotic state is changed to a fixed state beyond a Feigenbaum point, humans may feel great powers such as of God.

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References

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