

桜美林大学大学院

2025 年度Ⅲ期入試

博士後期課程 国際学術研究学位プログラム

心理学研究領域

専門外国語(英語)試験

問題用紙

受験番号	氏名

- * これは問題用紙です。答えは解答用紙に記入してください。
- * 用紙が配布されても合図があるまで開かないでください。
- * 試験中、監督の許可なしに、部屋の外に出ることはできません。
- * 不正行為に対しては厳正に対処します。
- * 試験終了後、問題用紙も回収しますが、メモなどは消さなくてもかまいません。

【問題】以下の二つの文献を参考にし、Reference 2 の下線部について心理学の研究方法の具体的な例をいくつか挙げ、それらの方法論的問題について二つの文献を参考にして 800 字以上で述べなさい。その際にこの問題に対する解決のための方法論についても言及すること。

回答欄が不足する場合は裏面や空欄を使用して良い。

(回答時間 50 分)

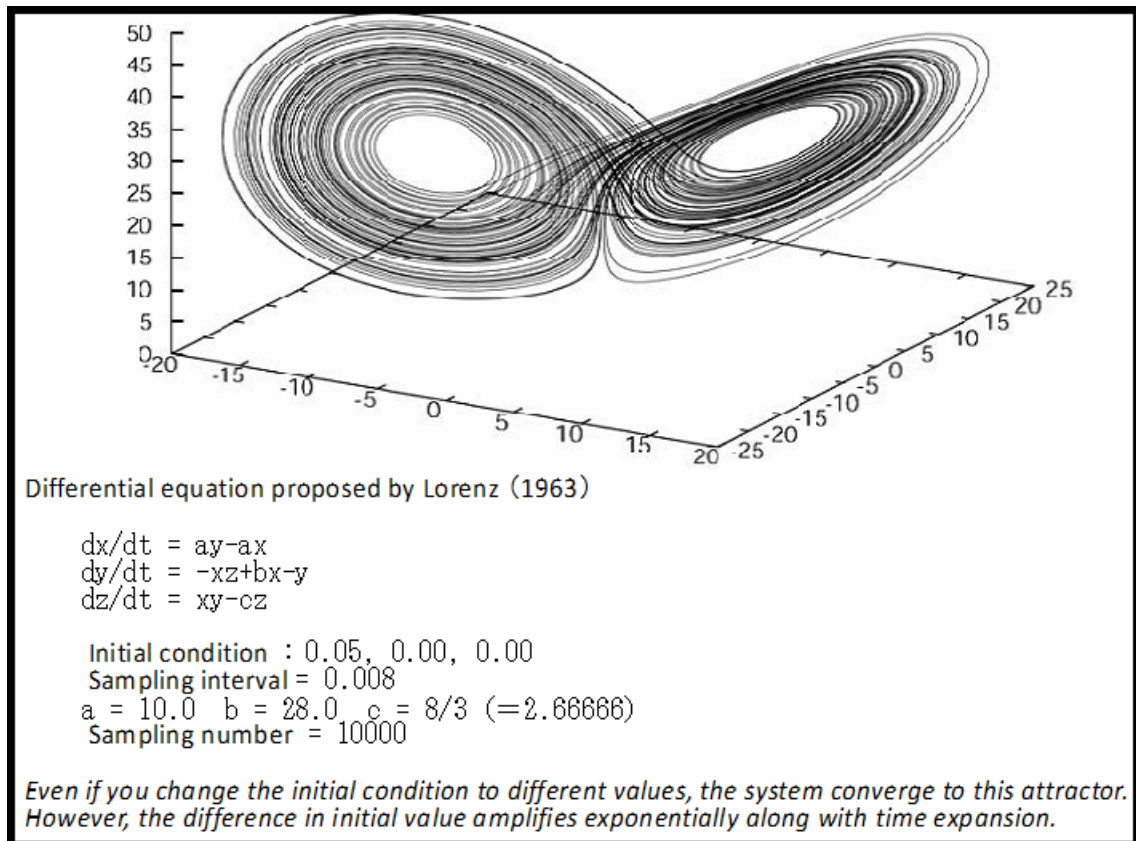
Reference 1

※問題本文は著作権上、web ページに掲載することができません。
出典を参考にしてください。

出典：

https://en.wikipedia.org/wiki/Chaos_theory

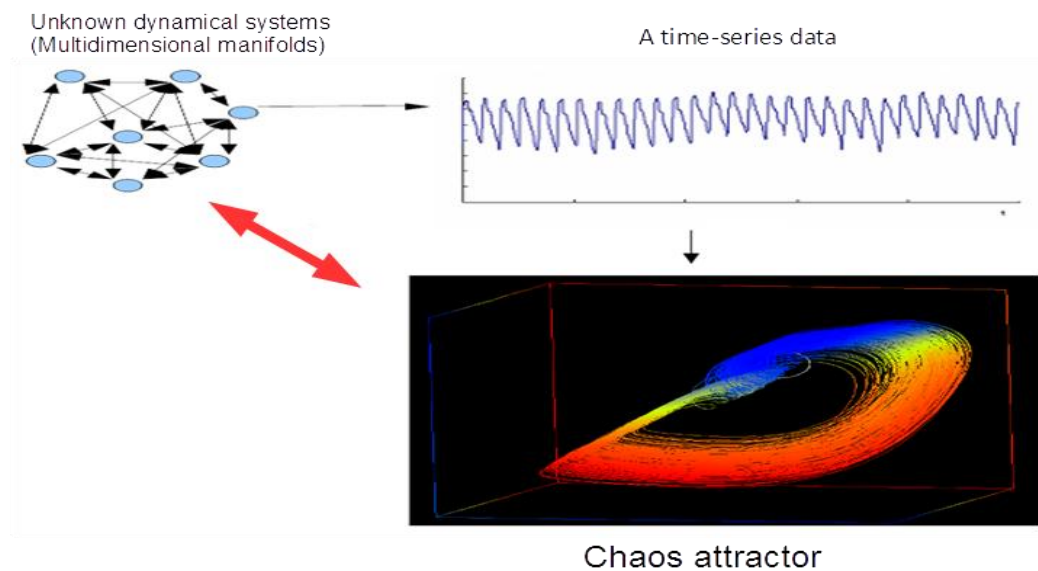
This is the famous differential equation proposed by Lorenz in 1963. This was calculated using a state of the art IBM computer of that time and it led to the finding of chaos. Even if you change the initial condition to different values, the system converge to this attractor. However, the difference in initial value amplifies exponentially along with time expansion. Although Lorenz's study is famous worldwide, in Japan, Ueda who was a graduate student of Kyoto University, also discovered the chaos attractor in 1961. His finding was later named as the Ueda attractor or the Japanese attractor.



Chaos provides a worldview, “complex phenomenon does not necessarily consist of numerous factors or numerous degrees of freedom”. Or we can say that complex behavior can be generated from simple deterministic equations, or that subtle difference in initial values get larger along with time expansion. These things can be attributed to the nonlinearity that produces chaos.

In the analysis of chaos, we take out one variable, which is a time-series data from “unknown dynamical systems” or “multidimensional manifolds”. This data contains “much” information because, in principle; the behavior of this variable includes not only the variable itself, but also other factors and variables that interact with this variable. The behavior of the factor is not a simple fluctuation of one variable, but it also contains the “whole” background information. So you can say that chaos attractors are low-dimensional mapping of the multidimensional manifolds. Moreover,

the part and the whole are inseparable, thus, perhaps we can say that in conventional science, we have been partially cutting out the linear parts of the whole that originally interacts in a non-linear dynamics.



Reference 2

※問題本文は著作権上、web ページに掲載することができません。
出典を参考にしてください。

出典：

Sandra L. Bloom (2019). CHAOS, COMPLEXITY, EMERGENCE, AND SELF-ORGANIZED CHANGE.

Creating PRESENCE.

<https://learn.lakesidetaining.org/wp-content/uploads/2024/06/Chaos-Complexity->

[Emergence-and-Self-Organized-Change.pdf](https://learn.lakesidetaining.org/wp-content/uploads/2024/06/Chaos-Complexity-Emergence-and-Self-Organized-Change.pdf)

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CHANGE. *Creating PRESENCE*.

[https://learn.lakesidettraining.org/wp-content/uploads/2024/06/Chaos-Complexity-
Emergence-and-Self-Organized-Change.pdf](https://learn.lakesidettraining.org/wp-content/uploads/2024/06/Chaos-Complexity-Emergence-and-Self-Organized-Change.pdf)

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Emergence-and-Self-Organized-Change.pdf)

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Creating PRESENCE.

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Emergence-and-Self-Organized-Change.pdf](https://learn.lakesidettraining.org/wp-content/uploads/2024/06/Chaos-Complexity-
Emergence-and-Self-Organized-Change.pdf)

Taira Suzuki (2016). New Perspectives of the Theory and Method of Psychology: The Eastern
Paradigm of Sciences of Human Being as a Whole. Psychology as a complex system. The 31st
International Congress of Psychology.

MEMO ご自由にお使いください。
