

Exponential Accumulation of Possible Necessities

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Abstract

This formula does not come from students who are good at mathematics, nor from students who always answer on the board when the mathematics teacher is in class. I was not a vocal person in school. At 5th grade, I slowly fell in love with mathematics and created a personal blueprint as a life map, with only two questions at age 11:

1. When will I be 17 years old?
2. What do I need to do at productive age?

I did not explicitly write the formula on paper at the time, but here it is:

$$F(i) = \gamma^{i/R_\tau} \sum_{j=0}^i S_j \phi^j$$

I need to accept reality—no matter the failures in each episode that I cannot predict for sure. The life map with this mathematical formula is only possible when I feel late to continue learning. I finally believe that **possibility will be possible**, and we can accumulate. This calculation is based on **Every Accumulated Life Value Exposed**, through weighted summing, focusing on what we truly need, rather than defending unnecessary things.

1 Introduction

At 5th grade, I began reflecting on life mathematically. Using only the two questions above, I created a life map to model **accumulated possibilities**. The Exponential function formalizes this idea:

$$F(i) = \gamma^{i/R_\tau} \sum_{j=0}^i S_j \phi^j$$

It measures cumulative life potential through weighted experiences, providing insight into personal growth and decision-making.

2 Recursive Mentality

When facing fear in choosing a life path or feeling like living passively (as an NPC), the Exponential can quantify outcomes.

Example calculation at age 11:

- $S_j = 1$ for $j = 0..11$
- $\phi = 1.1, \gamma = 1.05, R = 20, \tau = 1$

$$F(11) = \gamma^{11/20} \tau \sum_{j=0}^{11} 1 \cdot 1.1^j \approx 1.0269 \cdot 21.38 \approx 21.95$$

Reflection:

- Living passively results in minimal accumulation; life loops recursively with little growth.
- Choosing the “1% life” path maximizes weighted experiences and growth.
- Even small, consistent contributions ($S_j = 1$) create significant cumulative potential.

Conclusion: Actively pursuing meaningful experiences is mathematically and philosophically superior to passive repetition.

3 Expressist Philosophia

At age 13, every moment—measured in tens of thousands of seconds—contributes to life’s accumulation. Using:

$$F(i) = \gamma^{i/R} \tau \sum_{j=0}^i S_j \phi^j$$

- $11/29 \approx 0.55$
- Weighted sum: $F(11) \approx 1.0269 \cdot 21.38 \approx 21.95$

Philosophically, this expresses **personal growth and nostalgia**: reflecting on past experiences, repetitions, and life choices.

- Nostalgia is optional; what matters is **accepting reality**.
- At 19, reflecting on past crises and mathematical calculations, I realize it is never too late to learn, to try, and to accumulate life potential.
- Each failure contributes to weighted growth; life is cumulative, not instantaneous.

References

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