

If I Were Alan Turing

If I were Alan Turing, I would act shortsightedly and selfishly. Let's call this method the greedy-greedy method. Greedy of the former means acting greedily according to the algorithm, and greedy of the latter means acting selfishly. The greedy-greedy method is expressed by maximizing the following equation.

$$\sum p_i w_i$$

Here, p_i is the profit of someone i , and w_i is the weight of the gain of someone i . That is, the greedy-greedy method means making a decision that maximizes the weighted sum of gains in the current situation. And the reason this is selfish is that the distribution of weights is biased toward me. For example, if the distribution of weights is a power law for people I am close to, I will do things that benefit myself and those close to me, and I will not give much thought to those who are not.

Looking at it like that, the part where I make a different choice from Alan Turing is as follows.

First, I will save my colleague's brother. This is because a colleague's older brother is a person who is relatively close to me (w_i is large), and therefore it is difficult to become more important than a colleague's older brother even if there are many people who are not related to me (w_i is small). Therefore, I will save my colleague's brother.

Second, I will not hide the fact that I deciphered Enigma. It goes against the rules of greedy algorithms (think shortsightedly). Hiding information while thinking about distant results is thinking too far into the future, and if that fails, I will take a big loss. Therefore, I will report my decipherment of Enigma.

So far, I've covered what I would do if I were Alan Turing. Using the greedy-greedy method, I insisted on rescuing my colleague's brother and reporting my deciphering of Enigma. The advantage of this method is that it is very easy to customize. For example, if we change the rules by which w_i is determined, we can act in altruistic instead of selfish ways.