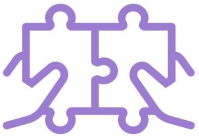
01번 의미 매칭 과정

Meaning matching process



[1] Meaning matching is the process of recognizing elements (referents) in the message and accessing our memory to find the meanings we have memorized for those elements.

[2] This is a relatively automatic task.

[3] It may require a good deal of effort to learn to recognize symbols in media messages and to memorize their standard meanings, but once learned this process becomes routine.

[4] To illustrate, think back to when you first learned to read.

[5] You had to learn how to recognize words printed on a page.

[6] Then you had to memorize the meaning of each word.

[7] The first time you saw the sentence "Dick threw the ball to Jane," it required a good deal of work to divide the sentence into words, to recall the meaning of each word, and to put it all together.

[8] With practice, you were able to perform this process more quickly and more easily.

[9] Learning to read in elementary school is essentially the process of being able to recognize a longer list of referents and to memorize their denoted meanings.

02번 기계론적 생물학의 개념과 업적

Concepts and Achievements in Mechanical Biology

[1] The idea of the machinelike brain has inspired and guided neuroscience since it was first proposed in the seventeenth century, replacing more mystical notions about the soul and the body.

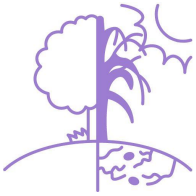
[2] Scientists, impressed by the discoveries of Galileo, who showed that the planets could be understood as inanimate bodies moved by mechanical forces, came to believe that all nature functioned as a large cosmic clock, subject to the laws of physics.

[3] And they began to explain individual living things, including our bodily organs, mechanistically, as though they too were machines.

[4] This idea that all nature was like a vast mechanism, and that our organs were machinelike, replaced the two– thousand–year–old Greek idea that viewed all nature as a vast living organism, and our bodily organs as anything but inanimate mechanisms.

[5] But the first great accomplishment of this new "mechanistic biology" was a brilliant and original achievement.

03번 기후 변화로 인한 농업 생산성 저하의 위기



The crisis of declining agricultural productivity due to climate change

[1] There is little doubt that climate change will make it harder to produce enough food for the world's growing population and will alter the seasonal timing, availability, and quality of water resources.

[2] To avoid extending agriculture into already environmentally threatened areas, the current rate of agricultural productivity growth will have to be doubled, according to the World Bank, while minimizing the associated environmental damage.

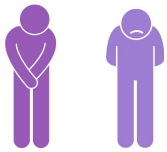
[3] In the extreme event of a 5'C warming, agricultural productivity would be likely to decline throughout the world, particularly in the tropics, even with changes in farming practices.

[4] This could mean that more than 3 million additional people could die from malnutrition each year.

[5] Even the more likely 2'C warming would produce new weather patterns challenging conventional agricultural practices, and between 100 million and 400 million more people could be at risk of hunger.

04번 죄책감과 수치심의 차이

The difference between guilt and shame



[1] Guilt must be distinguished from shame.

[2] The difference lies in how widely the bad feeling is generalized.

[3] Guilt focuses narrowly on the action, whereas shame spreads to the whole person.

[4] Guilt says, "I did a bad thing."

[5] Shame says, "I am a bad person."

[6] Research based on that distinction has repeatedly shown that shame is usually destructive, whereas guilt is usually constructive.

[7] This may be worth keeping in mind when you deal with your assistants and workers, or your children, or your students (or even your romantic partners).

[8] How do you criticize them when they do something wrong?

[9] Calling their attention to what they did wrong may seem necessary, but phrasing your criticism in terms of being a bad person (e.g., "you liar") is not nearly as constructive as allowing them to be a person who did a bad thing (e.g., "you shouldn't have lied").

05번 과학과 기술의 발전이 삶의 질에 미치는 영향

The Impact of Science and Technology on Quality of Life

[1] Success at innovation will have a major impact on the quality of life in the years ahead as will failure.

[2] Perhaps a vaccine can be found to prevent cancer.

[3] Perhaps an effective means will be found of providing clean, inexhaustible, affordable energy for the entire planet.

[4] Perhaps there is a large asteroid hiding somewhere and intent upon destroying the Earth – a catastrophe that, through innovation, can perhaps be prevented.

[5] The quality of life in developed countries today heavily depends upon advancements in science and technology – and this is increasingly becoming the case for all the world's nations.

[6] But the benefits of scientific advancements often accrue, not simply to the individual investor but to society at large, thus making it essential that the general public support both education and research in science and technology.

[7] Only in this manner can our children and grandchildren hope to enjoy a standard of living higher than that of the generations that have preceded them.

06번 참여자 관찰의 이점

Benefits of Participant Observation

[1] Attempting to quantify human behaviour and reducing this behaviour to a set of statistics is difficult and likely meaningless.

[2] Instead, anthropologists rely on qualitative research, which involves long–term observation of, and participation in, the daily lives and activities of the people they are studying.

[3] This is known as participant observation, and its value cannot be overstated, even in contemporary research.

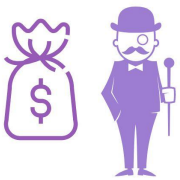
[4] Living in close proximity to the study group, learning their language, and participating in their daily lives allow anthropologists to develop a much deeper understanding of the range of human behaviour.

[5] The adage "See me as I do, not as I say" is remarkably accurate when studying human behaviour.

[6] For both anthropologists and the general public, trying to understand other people by listening, observing, and even participating goes a long way toward dispelling some of the stereotypes and intolerance we hold for other ways of living.

07번 독점 기술과 사회 계층의 분화

Monopoly technology and social class differentiation



[1] Exclusive technology can be used only by the elites who have access to required resources, and have the aptitude and means to benefit from special training.

[2] Agriculture requires warmth, rainfall, and soil, which are not available for people living on high mountains and dry deserts.

[3] The invention of writing led to the formation of a class of scribes and elites, who had the necessary time and means to learn writing, and had access to books that were hand copied and kept in libraries away from the general population.

[4] This led to a division of the population into the literate lords and priests with knowledge and power, who ruled over the illiterate common people.

[5] When a technology is new, it tends to be used only by the elite to increase inequality; as the years go by and the cost keeps falling, it becomes more affordable for everyone and thereby more egalitarian.

08번 이상적인 날이 일상이 될 수 없는 이유

The reason why an ideal day can't be a daily life

[1] Oftentimes people talk about their "ideal day."

[2] Perhaps they like sleeping in, only to be woken up by the calming sounds of the ocean's rising tide.

[3] Breakfast mimosas replace brunch, and they lie on the beach with a good book and a year-round tan.

[4] This is often defined as your ultimate day.

[5] And while it sounds fun in theory, the reality is you will likely not be living your ultimate day every day.

[6] It is not practical, and to be honest, it would not be as special if you did it every day.

[7] Think of it like buying your dream car vs. renting it for a week.

[8] If you buy the dream car, eventually you have to change its oil, replace its tires, be concerned about parking it and getting scratches – your dream becomes tainted with problems.

[9] But if you occasionally rent the car, you get all the joys and fun of it without having to worry about the problems.

[10] That's what an ultimate day is more like, which is why making an ultimate day your every day is problematic.

9-10번 우수한 유전 형질을 지속하는 자연 선택

Natural selection to sustain superior genetic traits

[1] Change is a common trait of living things.

[2] Each living thing changes as it grows older, but more important forms of change occur from one generation to the next: Children are different from their parents.

[3] Nature cannot plan ahead and design a certain kind of change.

[4] Instead, nature produces changes that are essentially random.

[5] That is, the complicated processes that mix the genes of two parents to produce a unique set of genes in the baby sometimes produce novel outcomes in the form of new traits.

[6] However, powerful forces react to these random changes.

[7] As a result, some random changes will disappear, whereas others will endure.

[8] The process of natural selection decides which traits will disappear and which will continue.

[9] For example, imagine that one baby was born with no ears, another with one leg longer than the other, and the third with eyes that could see farther than the average eye.

9-10번 우수한 유전 형질을 지속하는 자연 선택

Natural selection to sustain superior genetic traits

[10] Having no ears or having legs of unequal length would probably be disadvantages, and natural selection would not preserve these traits for future generations.

[11] A significant improvement in vision might, however, be selected to remain because the baby who grew up seeing better than other people would be able to find more food and spot danger from a safer distance.

[12] The genes for better vision would therefore remain in the gene pool (assuming that this baby would grow up and have babies), and so in future generations more and more people would enjoy this improvement.