

5. Drug の定義 : 構造理解

The word “drug” means anything that, even in small amounts, produces changes in the body, the mind, or both.

This definition, however, does not clearly separate drugs from what we usually think of as food.

The difference between a drug and a poison is also unclear.

All drugs become poisons in large amounts,
and many poisons are useful drugs in carefully controlled amounts.

Is alcohol, for instance, a food, a drug, or a poison?

It can be any of the three, depending on how we use it.

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6. 本当のほほえみと偽りのほほえみ：構造理解

The smile may no longer be an effective way to mask one's true feelings.

Some psychologists have claimed that true smiles and false smiles use different muscles.

For example, in the true smile, the muscles surrounding the eyes tighten,

while the cheek muscles pull the corners of the lips upward.

On the other hand, in the false smile, the muscles between the eyebrows move slightly,

while the muscles around the mouth pull the corners of the lips downward.

If the psychologists' claim is proven to be true, perhaps people will worry less about what they say

and more about which muscles to use when they smile.

[illegible]

7. 遺伝子と行動：構造理解

Genes, the basic parts of cells which are passed down from parents to children, may have something to do with human behavior.

In an experiment, scientists put flies into a glass tube and placed a light at the end of it.

Some of the flies began flying toward the light, some began walking, and some did not move at all.

On the basis of the flies' actions, they were separated into different groups:

flies that love light, flies that like light, and flies that like the dark.

The researchers found that these three groups of flies had variations in a particular set of genes.

This suggested to the researchers that

the variations in these genes might explain the differences in the flies' behaviors.

If genes influence behaviors in flies, why not in humans too?

[illegible]

8. ジェンダーバイアスとその克服：構造理解

Gender bias is deeply rooted in culture, and it is sometimes amazing

how fixed children's views are, even at an early stage of their lives.

We tend to find more boys than girls who wish to be professional athletes.

Doctors and scientists are often more popular as future occupations among boys,

though more girls have similar goals in these fields than a decade ago.

Gender bias is also rooted in perceptions. One day at a British school, four professionals

— a firefighter, a scientist, a ballet dancer, and a nurse — were invited to meet the students.

This was an occasion to challenge the gender bias held by the children.

They were excited to learn that a strong, muscular man was a ballet dancer,

and a rather short, slim woman was a courageous firefighter.

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