

Classics are not \_\_\_\_\_. If you \_\_\_\_\_ the word “classic” in the dictionary, you will learn \_\_\_\_\_ means a work \_\_\_\_\_ or \_\_\_\_\_ as of the highest quality.

In ancient times, paper was expensive and the \_\_\_\_\_ didn’t exist. Therefore, \_\_\_\_\_ books to the next generation took far more effort and resources compared to today.

The fact that we can still read classics \_\_\_\_\_ around 2,000 years ago means that every single generation \_\_\_\_\_ has \_\_\_\_\_ as valuable enough to \_\_\_\_\_.

China has \_\_\_\_\_ a cultural teacher to other Asian countries. Ancient Chinese \_\_\_\_\_ had deep \_\_\_\_\_ society and human nature without the \_\_\_\_\_ science, and their ideas were put into simple and beautiful words.

And now, finally, science has \_\_\_\_\_ the insights of \_\_\_\_\_. \_\_\_\_\_ . What does the latest science say about the ancient \_\_\_\_\_ in Chinese classics?

Classics are not just old. If you look up the word “classic” in the dictionary, you will learn that it means a work being sorted or classified as of the highest quality.

In ancient times, paper was expensive and the printing presses didn’t exist. Therefore, leaving books to the next generation took far more effort and resources compared to today.

The fact that we can still read classics written around 2,000 years ago means that every single generation up to this day has classified them as valuable enough to be transcribed.

China has long been a cultural teacher to other Asian countries. Ancient Chinese philosophers had deep insights into society and human nature without the help of science, and their ideas were put into simple and beautiful words.

And now, finally, science has corroborated the insights of past great thinkers. What does the latest science say about the ancient wisdoms in Chinese classics?

classify	分類する	philosopher	哲学者
printing press	印刷機	insight	見識、洞察
therefore	それゆえに	corroborate	裏付ける、支持する
transcribe	書き写す、翻訳する		

## Chinese Classics and Neuroscience #2 Praying for Rain is Effective

In ancient times, people believed in \_\_\_\_\_ the clouds that punished and \_\_\_\_\_ them. However, Xunzi, a philosopher of \_\_\_\_\_ Warring States period, \_\_\_\_\_ the existence of gods. For example, Xunzi \_\_\_\_\_ that \_\_\_\_\_ rain never \_\_\_\_\_ rain, and human actions had nothing to do with the actual weather. He said that when it rains, it will happen even if you don't pray for rain. However, he \_\_\_\_\_ that praying for rain \_\_\_\_\_, not because \_\_\_\_\_ any effect on nature, but because \_\_\_\_\_ people. Recent psychological studies have \_\_\_\_\_ that Xunzi was right. When people \_\_\_\_\_ and have done everything realistically within their power, they are most likely to \_\_\_\_\_ to \_\_\_\_\_, \_\_\_\_\_, donations to gods, \_\_\_\_\_, or performing magic. All of these measures are scientifically \_\_\_\_\_ producing the \_\_\_\_\_ result. However, by \_\_\_\_\_ the fiction, they can convince themselves that they aren't helpless, and \_\_\_\_\_. As a result, they at least feel that they \_\_\_\_\_ and will therefore be less anxious, and able to go on to make their \_\_\_\_\_. Xunzi \_\_\_\_\_ that a \_\_\_\_\_ king has to be \_\_\_\_\_ that gods are \_\_\_\_\_. However, the king also has to understand that \_\_\_\_\_ want to \_\_\_\_\_ by believing in supernatural beings. Gods and \_\_\_\_\_ don't exist, but completely denying them is also \_\_\_\_\_.

In ancient times, people believed in supernatural entities above the clouds that punished and rewarded them. However, Xunzi, a philosopher of Confucianism in the late Warring States period, explicitly denied the existence of gods. For example, Xunzi argued that praying for rain never brought about rain, and human actions had nothing to do with the actual weather. He said that when it rains, it will happen even if you don't pray for rain. However, he added that praying for rain is effective, not because it has any effect on nature, but because it affects people. Recent psychological studies have proven that Xunzi was right. When people are in a crisis and have done everything realistically within their power, they are most likely to resort to prayers, rituals, donations to gods, consulting oracles, or performing magic. All of these measures are scientifically ineffective at producing the desired result. However, by preserving the fiction, they can convince themselves that they aren't helpless, and haven't given up. As a result, they at least feel that they are in charge and will therefore be less anxious, and able to go on to make their best effort. Xunzi implied that a wise king has to be clear that gods are fictional. However, the king also has to understand that the masses want to feel at ease by believing in supernatural beings. Gods and Heaven surely don't exist, but completely denying them is also irrational.

## Chinese Classics and Neuroscience #3 Caigentan and Happiness

“The \_\_\_\_\_ person does not look around for good fortune, and \_\_\_\_\_ rewards \_\_\_\_\_ for that lack of concern. On the other hand, heaven gives \_\_\_\_\_ to those \_\_\_\_\_ avoiding it.”

The latest findings from Evolutionary Psychology has \_\_\_\_\_ new \_\_\_\_\_ regarding this \_\_\_\_\_ from "Vegetable Root \_\_\_\_\_," which was written in the Ming \_\_\_\_\_. From an \_\_\_\_\_ point of view, happiness is only about \_\_\_\_\_ survival and \_\_\_\_\_, and our \_\_\_\_\_ system is not programmed to keep us happy all the time. For example, evolution provided \_\_\_\_\_ during sexual activity to encourage humans to reproduce. At the same time, evolution also programmed these pleasant feelings to quickly \_\_\_\_\_. If the happiness \_\_\_\_\_ last forever, the very happy individuals would not bother to look for another \_\_\_\_\_ opportunities and their genes would not \_\_\_\_\_ the next generation.

If we go after these pleasant sensations \_\_\_\_\_ main source of happiness, they disappear as soon as you get them, and you have to start all over again. \_\_\_\_\_ suffering could be this never-ending \_\_\_\_\_ of happiness, which \_\_\_\_\_ to be in a constant state of \_\_\_\_\_, \_\_\_\_\_, and dissatisfaction. Even when feeling joy, one can still \_\_\_\_\_ the fear of losing it. Endless pursuit of happiness makes us \_\_\_\_\_ and \_\_\_\_\_ and, as "Vegetable Root Discourse" indicates, only those who are \_\_\_\_\_ to happiness can truly be happy.

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“The principled person does not look around for good fortune, and heaven rewards contentment for that lack of concern. On the other hand, heaven gives misfortune to those obsessed with avoiding it.” The latest findings from Evolutionary Psychology has brought to light new comprehension regarding this quote from "Vegetable Root Discourse," which was written in the Ming dynasty.

From an evolutionary point of view, happiness is only about encouraging survival and reproduction, and our physiological system is not programmed to keep us happy all the time.

For example, evolution provided pleasant sensations during sexual activity to encourage humans to reproduce. At the same time, evolution also programmed these pleasant feelings to quickly subside. If the happiness were to last forever, the very happy individuals would not bother to look for another breeding opportunities and their genes would not be inherited to the next generation.

If we go after these pleasant sensations as our main source of happiness, they disappear as soon as you get them, and you have to start all over again. The root of suffering could be this never-ending pursuit of happiness, which causes us to be in a constant state of tension, restlessness, and dissatisfaction. Even when feeling joy, one can still be plagued with the fear of losing it. Endless pursuit of happiness makes us exhausted and discontented and, as "Vegetable Root Discourse" indicates, only those who are indifferent to happiness can truly be happy.

Vocabulary List: No. 30 ~ 48

## Chinese Classics and Neuroscience #4 Human Nature is Evil

Xunzi is famous for claiming that human nature is \_\_\_\_\_. Unlike his \_\_\_\_\_, Xunzi argued that people are not \_\_\_\_\_ good, and one's goodness is \_\_\_\_\_ his or her learning and efforts. He believed that \_\_\_\_\_ overcoming our \_\_\_\_\_, and his \_\_\_\_\_ perfectly \_\_\_\_\_ the latest findings from neuroscience.

The brain \_\_\_\_\_ by adding new parts on top of the older parts. The newest part of our brain is the neocortex, the organ of intelligence. Almost all the \_\_\_\_\_ and \_\_\_\_\_ are provided by the neocortex, and it is this organ that reads and listens to this very \_\_\_\_\_. On the other hand, the older parts of the brain still control our \_\_\_\_\_ functions and emotions. No matter how smart and sophisticated we are, \_\_\_\_\_, eating, sex, and \_\_\_\_\_ are still \_\_\_\_\_ to our survival and reproduction.

The neocortex \_\_\_\_\_ position because it does not connect directly to muscles. When the neocortex wants to move the body, it \_\_\_\_\_ signal to the old brain, asking the old brain to move the muscles. For example, although breathing is a function of the brain \_\_\_\_\_ requires \_\_\_\_\_ or input from the neocortex, the neocortex can temporarily control breathing, as when you consciously decide to hold your breath. However, if the brain stem \_\_\_\_\_ that you need more oxygen, it will ignore the neocortex and take back control. Similarly, the old brain sometimes makes us violent, \_\_\_\_\_, and selfish even when the neocortex wants us to be nice and moral.

Everyone \_\_\_\_\_ this tendency \_\_\_\_\_ because evolution discovered that it is occasionally helpful for \_\_\_\_\_. Biologically speaking, our \_\_\_\_\_ nature is bad, and we need to \_\_\_\_\_ to stay good. We have to \_\_\_\_\_ and give more strength to our rational self through learning and experience, \_\_\_\_\_ Xunzi argued.

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Xunzi is famous for claiming that human nature is evil. Unlike his preceding philosophers, Xunzi argued that people are not inherently good, and one's goodness is the fruit of his or her learning and efforts. He believed that staying moral required overcoming our innate evilness, and his view perfectly coincides with the latest findings from neuroscience.

The brain evolves by adding new parts on top of the older parts. The newest part of our brain is the neocortex, the organ of intelligence. Almost all the intellectual and rational capabilities are provided by the neocortex, and it is this organ that reads and listens to this very sentence. On the other hand, the older parts of the brain still control our bodily functions and emotions. No matter how smart and sophisticated we are, breathing, eating, sex, and reflex reactions are still critical to our survival and reproduction.

The neocortex is in an unfair position because it does not connect directly to muscles. When the neocortex wants to move the body, it sends a signal to the old brain, asking the old brain to move the muscles. For example, although breathing is a function of the brain stem that requires no thought or input from the neocortex, the neocortex can temporarily control breathing, as when you consciously decide to hold your breath. However, if the brain stem detects that you need more oxygen, it will ignore the neocortex and take back control. Similarly, the old brain sometimes makes us violent, greedy, and selfish even when the neocortex wants us to be nice and moral.

Everyone harbors this tendency to some degree because evolution discovered that it is occasionally helpful for propagating genes. Biologically speaking, our inherent nature is bad, and we need to make an effort to stay good. We have to cultivate our empathy and give more strength to our rational self through learning and experience, just as Xunzi argued.



## Chinese Classics and Neuroscience #5 The Butterfly Dream

You have probably \_\_\_\_\_ the story “The Butterfly Dream” by Zhuangzi, a Chinese philosopher who lived around 4th century BC.

One day, Zhuangzi \_\_\_\_\_ that he was a butterfly, a butterfly \_\_\_\_\_ and \_\_\_\_\_ about, happy with himself and doing \_\_\_\_\_. He didn't know that he was Zhuangzi. Suddenly, he woke up and there he was, \_\_\_\_\_ and \_\_\_\_\_ Zhuangzi. However, he could not tell if he was Zhuangzi who \_\_\_\_\_ that he was a butterfly, or a butterfly dreaming that he was Zhuangzi.

What does this \_\_\_\_\_ tell us?

A neuroscientist may take it as \_\_\_\_\_ how \_\_\_\_\_ our perception is. The latest findings from neuroscience \_\_\_\_\_ that the world we think we see is not the real world, but \_\_\_\_\_ a simulation of the real world in our brain. We \_\_\_\_\_ only our model of the world, and not the world itself.

For example, when you see a tree, you are not actually perceiving the “real” tree but a \_\_\_\_\_ - \_\_\_\_\_ image of the \_\_\_\_\_ your brain creates. The brain \_\_\_\_\_ from \_\_\_\_\_ such as the eyes, processes those inputs, and then activate neurons \_\_\_\_\_ a model. \_\_\_\_\_, when we \_\_\_\_\_ the world out there, we’re not really comprehending the world out there but \_\_\_\_\_ constructing \_\_\_\_\_ our brains.

Similarly, when you think that you are a human being lying on a bed, your brain creates a three-dimensional model of your room and bed, and then \_\_\_\_\_ on the bed. If the brain \_\_\_\_\_ accidentally construct a model of a flower garden and locates you \_\_\_\_\_ the flowers, you might perhaps \_\_\_\_\_ yourself as a butterfly instead.

Zhuangzi must have \_\_\_\_\_ realized that \_\_\_\_\_ was just a \_\_\_\_\_ in his brain. He \_\_\_\_\_ that he had no way to see whether the model in his brain was actually \_\_\_\_\_ the objective reality.

You have probably heard the story “The Butterfly Dream” by Zhuangzi, a Chinese philosopher who lived around 4th century BC.

One day, Zhuangzi dreamt that he was a butterfly, a butterfly flitting and fluttering about, happy with himself and doing as he pleased. He didn't know that he was Zhuangzi. Suddenly, he woke up and there he was, solidly and unmistakably Zhuangzi. However, he could not tell if he was Zhuangzi who had dreamt that he was a butterfly, or a butterfly dreaming that he was Zhuangzi.

What does this fable tell us?

A neuroscientist may take it as exposition of how unreliable our perception is. The latest findings from neuroscience have shown that the world we think we see is not the real world, but merely a simulation of the real world in our brain. We perceive only our model of the world, and not the world itself.

For example, when you see a tree, you are not actually perceiving the “real” tree but a three-dimensional image of the object that your brain creates. The brain gets inputs from its sensors such as the eyes, processes those inputs, and then activate neurons to form a model. As such, when we comprehend the world out there, we’re not really comprehending the world out there but rather are constructing it within our brains.

Similarly, when you think that you are a human being lying on a bed, your brain creates a three-dimensional model of your room and bed, and then locates yourself on the bed. If the brain were to accidentally construct a model of a flower garden and locates you above the flowers, you might perhaps identify yourself as a butterfly instead.

Zhuangzi must have intuitively realized that his perceived reality was just a created illusion in his brain. He somehow knew that he had no way to see whether the model in his brain was actually reflecting the objective reality.

Vocabulary List: No. 62 ~ 72