

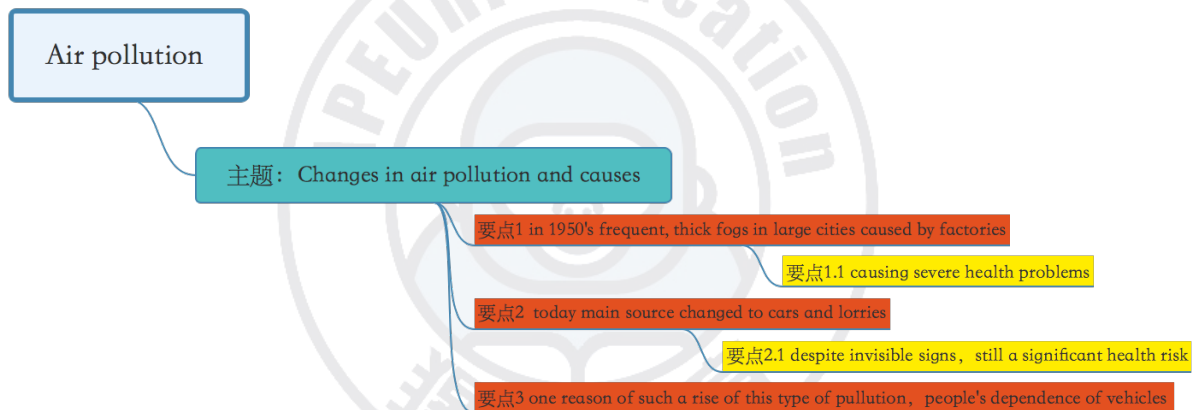
## ● Air pollution

正文：

In today's lecture I'm going to talk about changes in air pollution since the middle of the last century and what has created these changes.

So, um - by the 1950s, air pollution was very visible with frequent thick black fogs known as 'smogs' in many large cities around the world. The main source of this pollution was from factories and it caused severe health problems. For example, a particularly severe smog in London in 1952 caused over four thousand deaths. Obviously something had to be done and in 1956 a Clean Air Act was introduced in Britain. This addressed the pollution from factories and the smogs soon disappeared. However, as you know, these days air pollution is still a big issue. The main difference between now and the 1950s is that you can't see it - it's invisible. Also, the main source of pollution now is from cars and lorries, and although these don't produce visible signs, this air pollution is still a significant risk to health. And one of the key factors in the rise of this type of pollution is that we have all become much more vehicle-dependent. There are far more cars and lorries, trains and planes than in the 1950s and this is now the main source of air pollution around the world.

逻辑图：



## ● Focus group

正文：

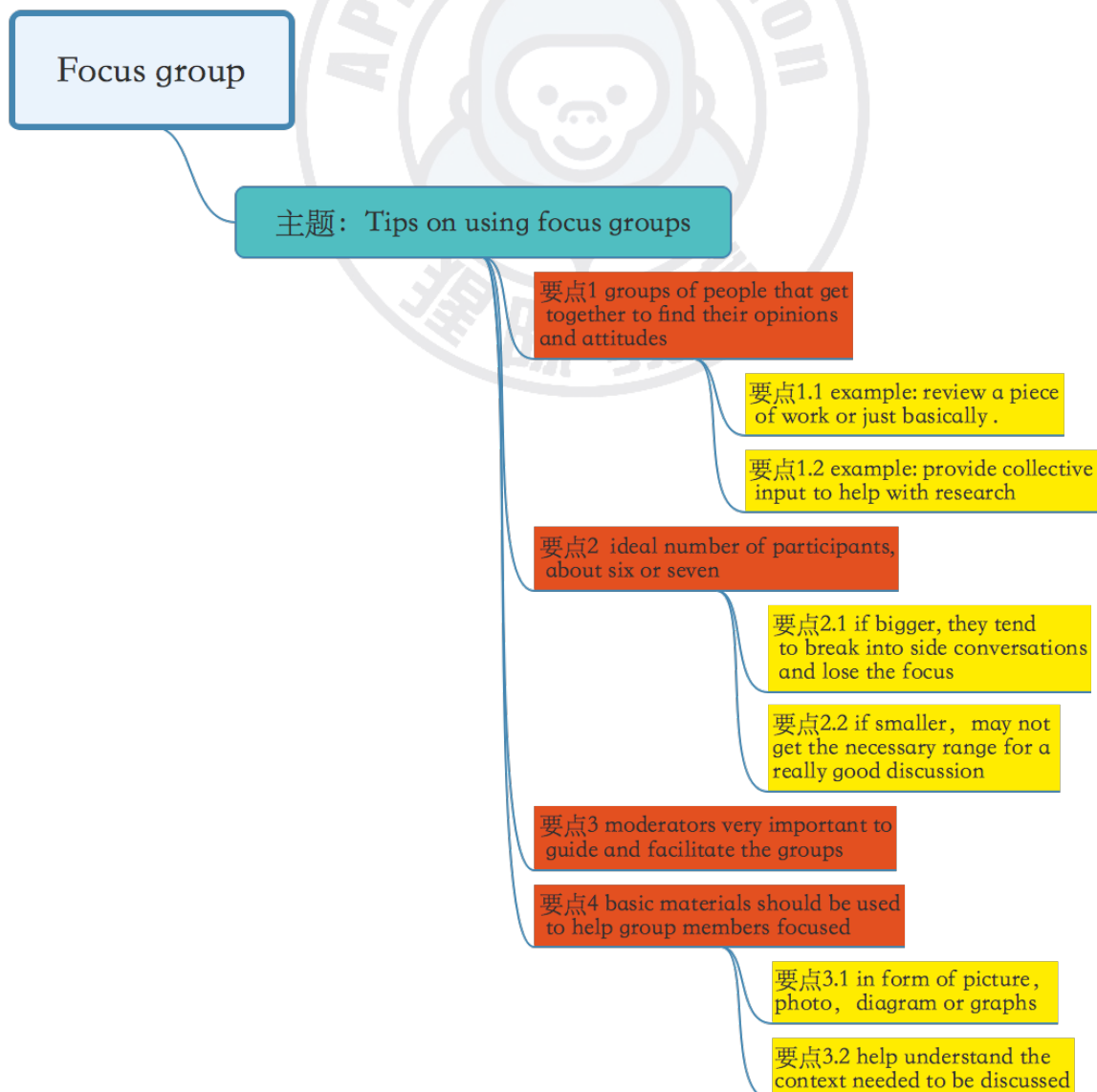
OK - to help you with your research, I just wanted to give you some tips today on using Focus Groups. These are groups of people that you get together to find out about their opinions and attitudes, for example, to review a piece of work or just basically provide some collective input to help you with whatever you're researching.

First of all, how large should a focus group be? Well, I would say that an ideal number of participants is around six or seven. If it's any bigger, what quite often happens is they break into side-conversations and the focus is lost. If it's any smaller, you may not get the range of views that you need to get a really good discussion.

Secondly, it's important that you have a moderator for the group, who's able to facilitate and guide the discussions. The moderator must ensure that everyone participates and stop anyone dominating. And also, the moderator needs to make sure that the discussions don't go off in the wrong direction.

And thirdly, in order to help the group focus on what's required, some basic materials should be used particularly to kick-start the discussions. This may be in the form of pictures, photos, diagrams, graphs, etc. And will help the group to understand the context of what needs to be discussed.

逻辑图：



## ● Setting up a website

正文：

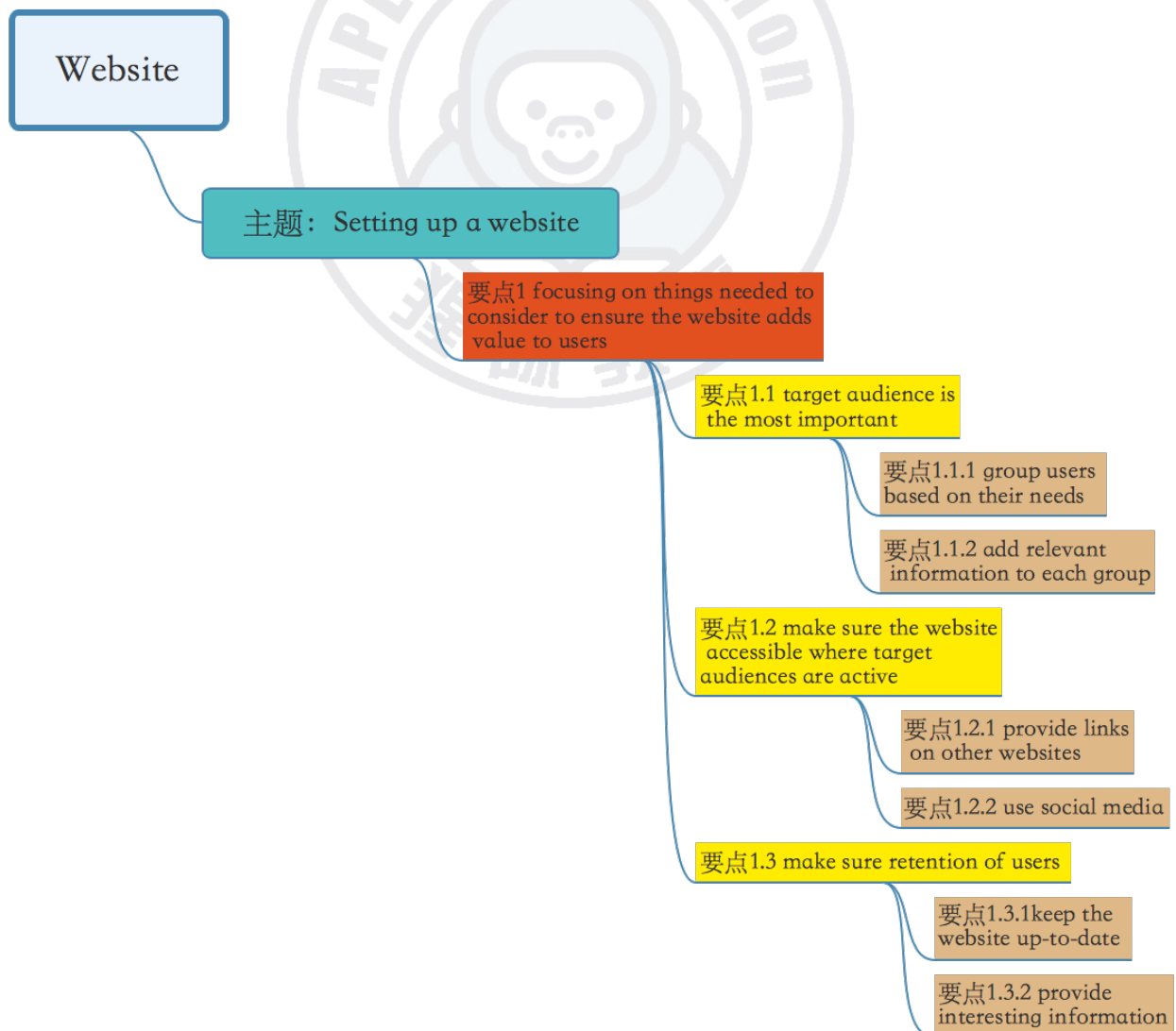
Hello everyone. Today's lecture is about setting up a website. I'm going to be focusing on things that you need to consider to ensure your website really adds value to the people using it.

So - there are three main areas you need to think about. The first and most important thing is who is your target audience? When you're creating a new website you really need to think about who the users are and what information they'll be looking for. What we do when we set up websites is to group users based on their needs. So, for a website in the academic community, for example, we may have groups such as researchers and administrators, and this helps us design the site and add information that is relevant to each group.

The second point is accessibility. The main thing here is to ensure your website can be found. And you can do this by making sure it can be reached from areas on the web where your target audience are also active. So this may mean providing links on other websites or maybe using social media.

And thirdly - retention-making sure your target audience return to your website regularly. You do this by ensuring it gives them a reason to come back. So it's important to keep the site up-to-date and make sure it provides the latest news and interesting information and so on.

逻辑图：



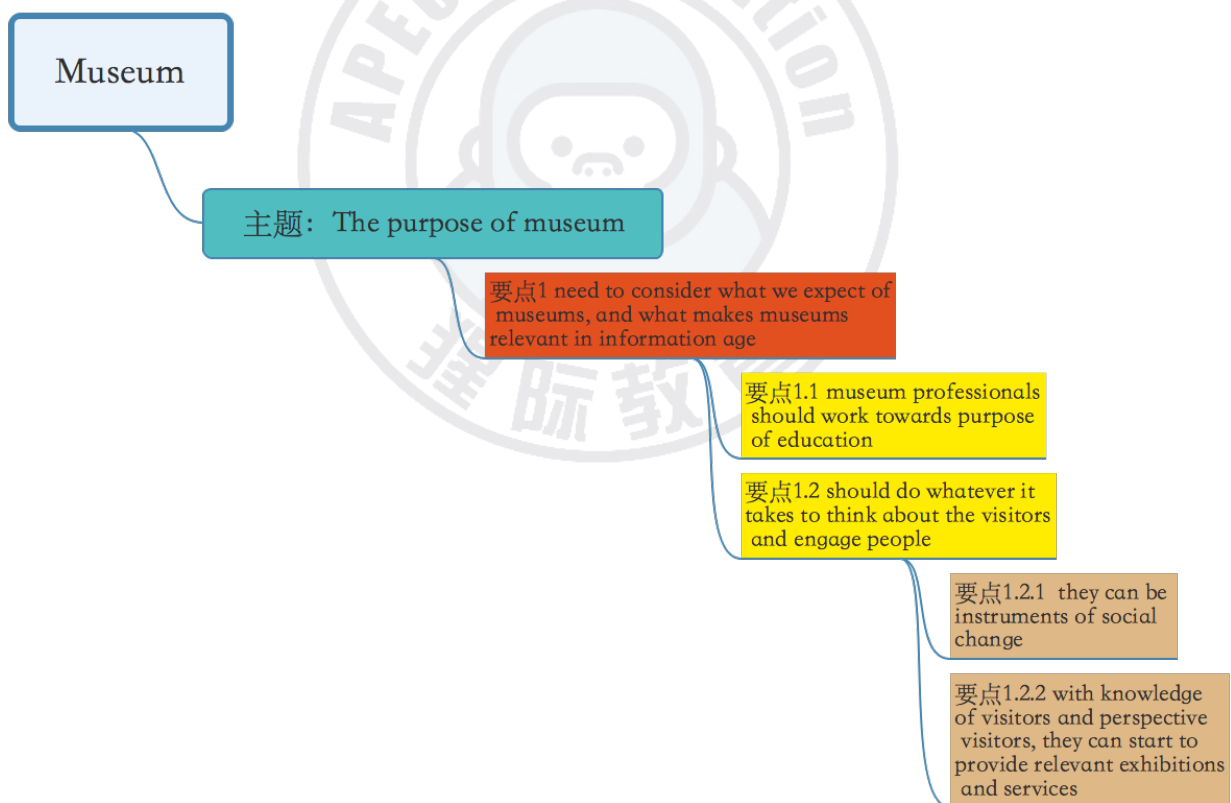
## ● Museum

正文：

I've been asked to speak today about the purpose of museums and I think that's something we often take for granted, that we have museums and we need museums. But with so much information available now online, people have access to whatever it is they want to know so I think we need to consider carefully just what it is that we expect of our museums today. What makes them relevant in the information age.

Clearly, we've got to move beyond the early twentieth century concept of a warehouse full of old, remarkable, untouchable objects. This warehouse idea does very little to inspire people. What museum professionals need to do - what they should be doing, is make their collections and programs work towards the purpose of education. So whether that means having more hands-on exhibits, becoming involved with other community organisations, they should be doing whatever it takes to think about their visitors, to engage people, to educate them. And in that way, they can be instruments of social change. If they have knowledge and understanding of the people who visit, and the people they want to come and visit, they can take this as a starting point for providing exhibitions and services that are relevant to people's lives.

逻辑图：



## ● Graffiti

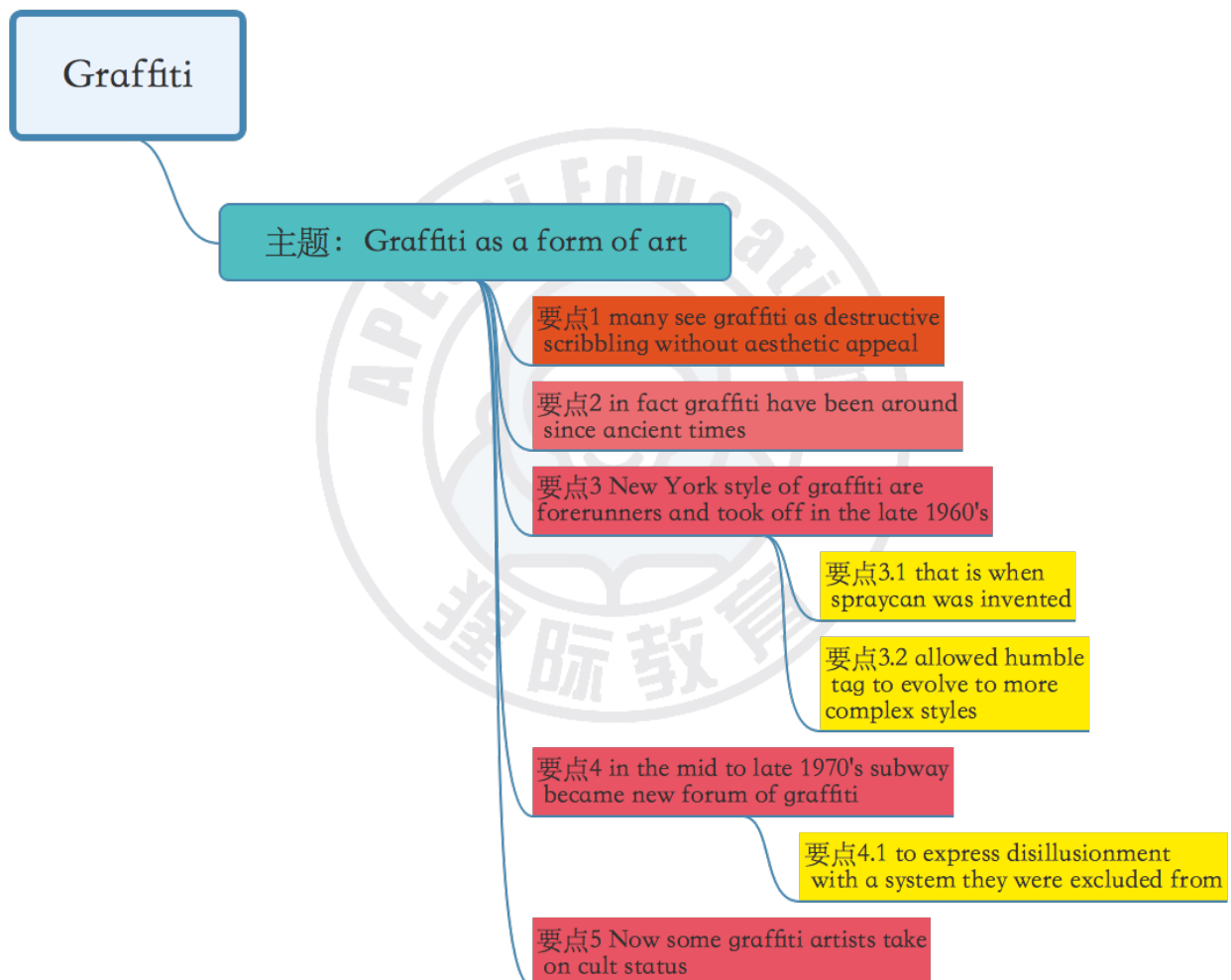
正文：

"I suppose more and more, people are starting to see graffiti as a form of art. Now there are still many who would beg to differ - and they'd point to the destructive scribblings that we see on our bus shelters and our public buildings. These often take the form of tags which are fancy, scribble-like versions of someone's name or nick-name. Tags generally have no aesthetic appeal and they are the scourge of the high street shopkeeper in many a town. I can certainly see where the

shopkeepers and property owners are coming from.

But the fact is, graffiti has been around for a very long time indeed. People left their mark on cave walls back in prehistoric times and it's been found too on ancient monuments in Egypt and Rome. But New York style graffiti - which is really the forerunner of a lot of the graffiti that's getting done now - New York graffiti took off in the late 1960s. That's when the advent of the spraycan allowed the humble tag to evolve into more complex styles. In the mid to late 70s, subway trains became the new forum for graffiti artists to display their skills. For many young people it became a medium to express their disillusionment with a system from which they felt excluded. Now of course, the art establishment embraces graffiti artists and some of these artists have actually taken on cult status.

逻辑图：



## ● Biomimicry

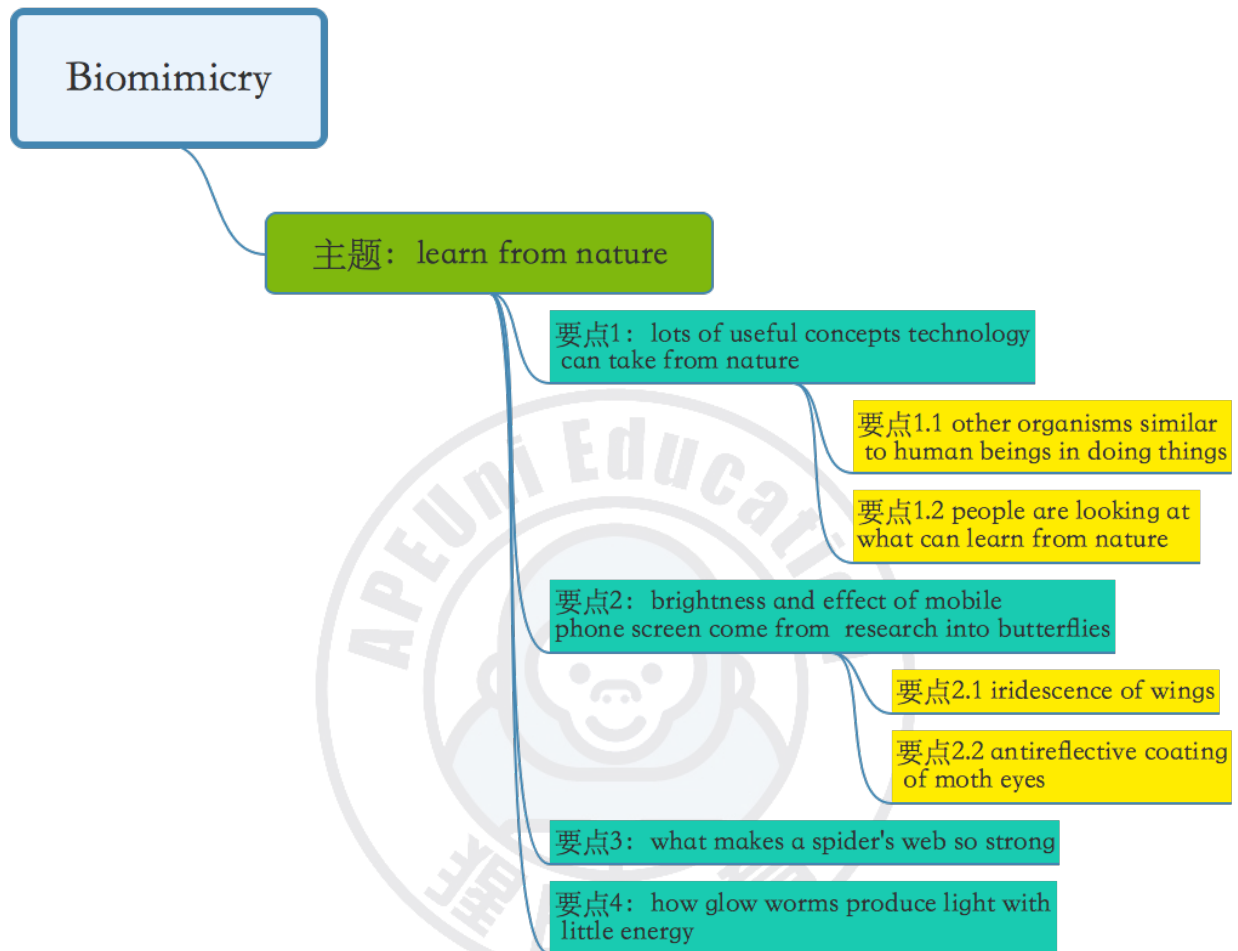
正文：

We often think of technology and invention and research as being somehow more sophisticated a proposition than nature - but actually, when we think about it, there are lots of really useful concepts that technology can take from the natural world. People are beginning to remember that other organisms on earth are doing things in a very similar way to what we need to do. And they're looking closely at what we can learn from nature.

Take the bright screens on our mobile phones - now, this brightness, this effect that they've managed to achieve there, came partly as a result of research into the iridescence of the wings of

butterflies and the antireflective coatings that moths have on their eyes. And it doesn't end there. They're looking at what makes a spider's web so strong, how glow worms produce light with almost zero energy. The list goes on. And this area of research is called biomimicry - that's 'bio', as in biology or life and 'mimicry', copying or imitating. It's a very interesting field of study.

逻辑图：



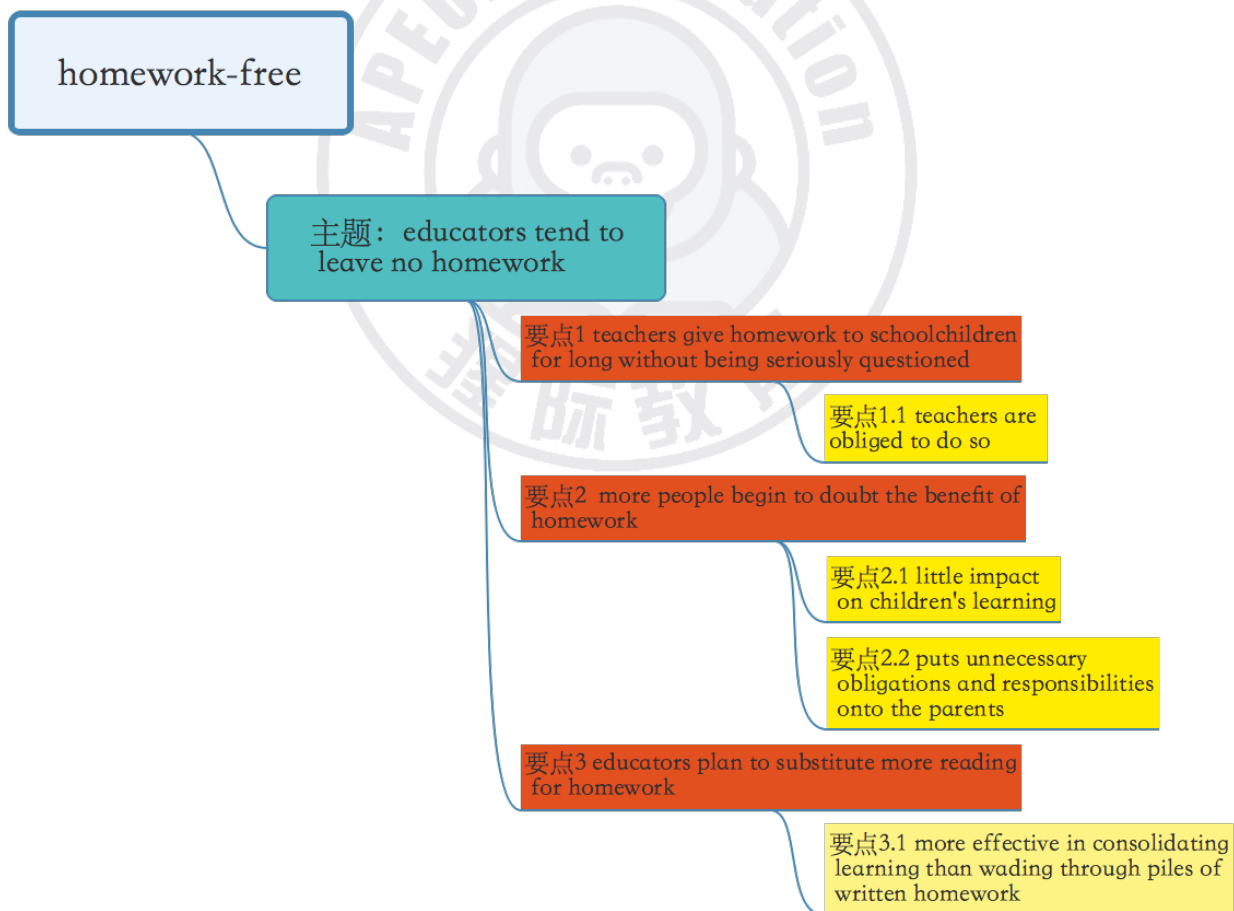
## ● Homework

正文：

Now as we all know, it has long been the habit in many countries that teachers give homework to school children of all ages. Despite the fact that a minority of educators don't agree with this practice, it has never seriously been questioned or challenged before. However, it may be that the tide is turning.

These days, more people are becoming convinced that homework is of virtually no benefit, particularly for children in the younger age group. So, why have teachers always given homework? Well, the answer seems to be because they are obliged to. Most teachers don't really believe it has any real value. And the latest research supports the teachers' feelings about this. Not only does homework have very little impact on children's learning but it also puts unnecessary obligations and responsibilities onto the parents. These days not all families have the time or the necessary knowledge to help their offspring. So it would seem that now, senior educators want to start a new initiative. Rather than giving homework, they plan to encourage reading books of any kind, just reading. and they claim that this is a far more effective method of consolidating learning than wading through piles of written homework.

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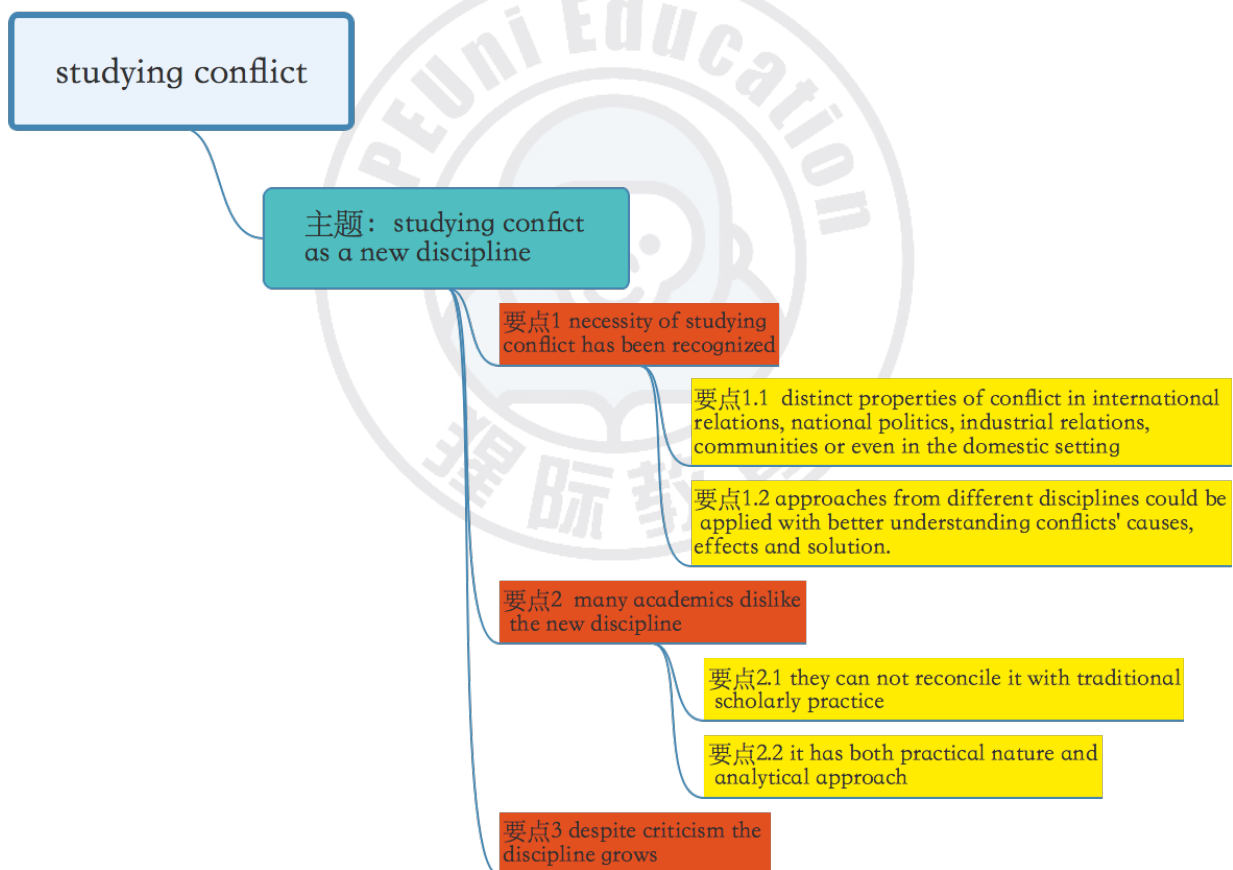
## ● New discipline

正文：

Some years ago a group of academics from different disciplines recognized the necessity of studying conflict as a phenomenon. They were interested in the distinct properties of conflict as it occurred in international relations, national politics, industrial relations, communities or even in the domestic setting. These academics believed that approaches from different disciplines could be applied to the study of conflict with a view to better understanding its causes, effects and solutions. As a result, research groups developed, and universities and academic journals began to publish papers on 'conflict theory', as it came to be called. Unfortunately many other academics didn't welcome this new discipline; they couldn't reconcile it with traditional scholarly practices because it had both a practical nature and an analytical approach.

Nevertheless, the new discipline continued to develop and the field grew and spread and conflict theory now has the same prestige as other academic areas of research and study, despite the early criticism it attracted.

逻辑图：



## ● Living space

正文：

Now as urban planners, what we really need to start considering is the amount of space allocated for residential areas within a city or town. And when I say 'space' I'm talking about space within a dwelling or home rather than the actual size of residential areas. There's growing concern that the internal space of new homes is becoming far smaller. Too small, in fact.

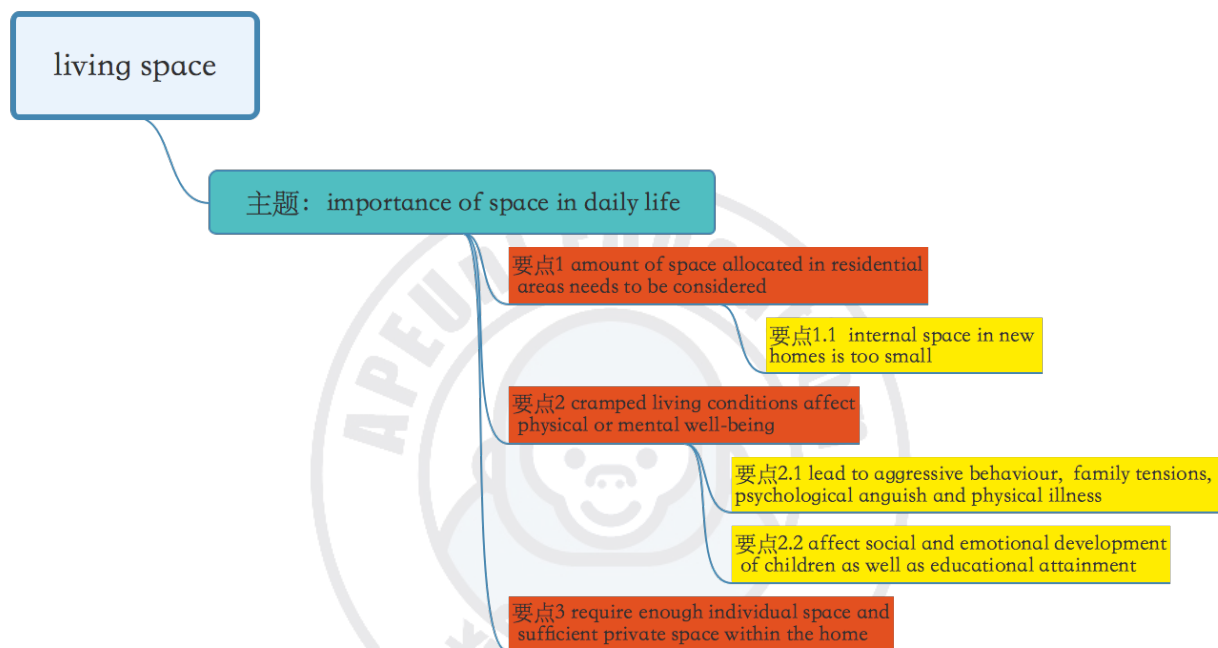
Maybe you're thinking: Is it important for residents to have sufficient space? Is it merely a preference to have more space or are there more serious implications? Is there, in fact, any



evidence to suggest cramped living conditions affect residents' physical or mental well-being or their day to day life?

Well, research from a number of sources indicates that this is an important issue which needs addressing. Cramped conditions can lead to aggressive behaviour, to family tensions, psychological anguish and, in the more extreme cases, physical illness as well. Not only this but there is a proven link between overcrowding and the social and emotional development of children as well as their educational attainment. So, the main issue here is that residents require enough individual space to be able to live and function together but with sufficient private space for personal time within the home.

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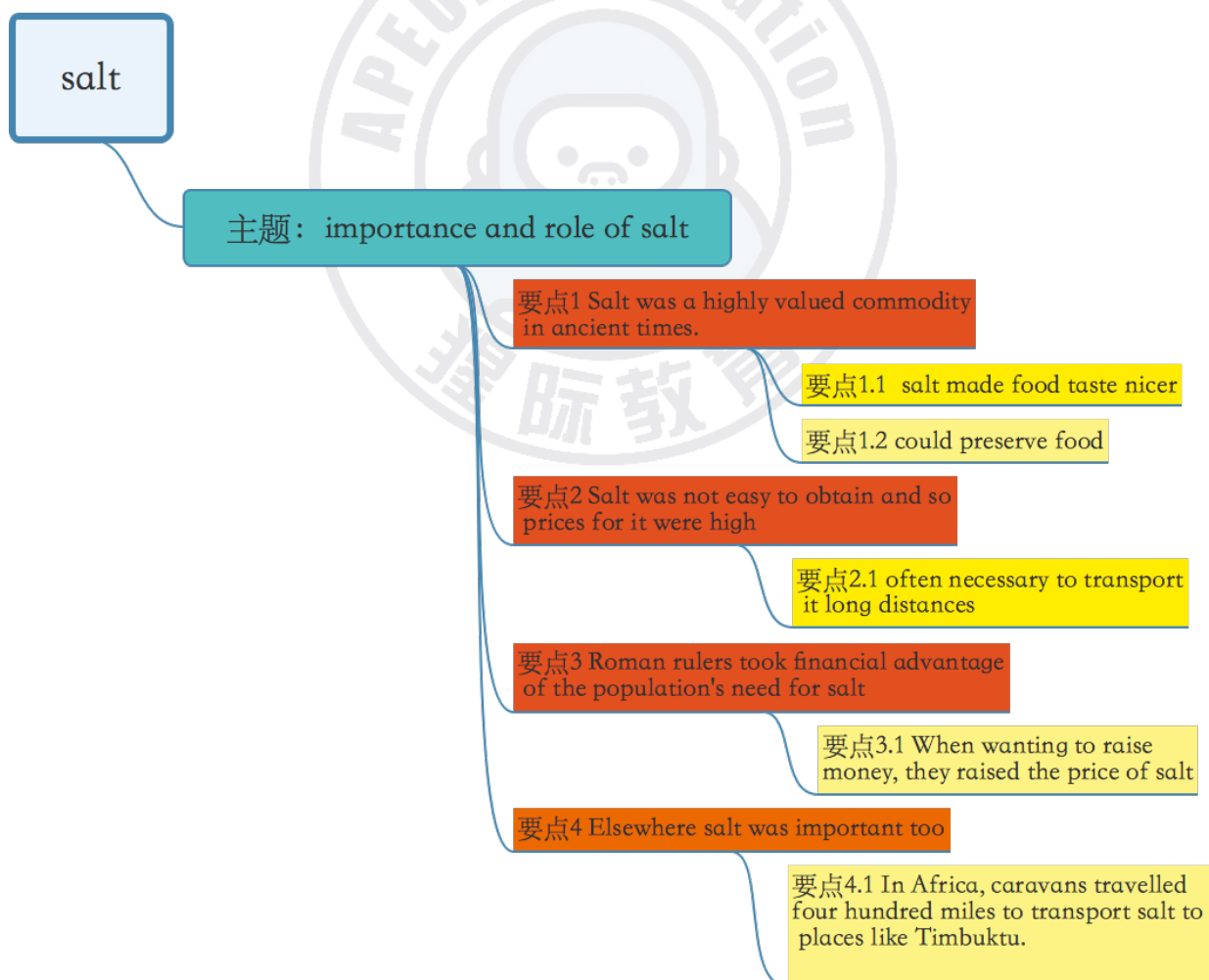
## ● Salt

### 正文：

So today we're continuing to talk about the social history of foodstuffs, and we're going on to consider next the importance of salt and the significant role it has played. Salt was a highly valued commodity in ancient times. Not because it made food taste nicer, but because of the way it could be used to preserve food. This meant that people were not so dependent on seasonal variations in what was available for them to eat - they could preserve what they produced and consume it as required. It also meant that food could be transported long distances. Salt was not easy to obtain and so prices for it were high. It was often necessary to transport it long distances and it is believed that one of the reasons for building some of the roads that led to the ancient city of Rome was to make it easier to bring salt to the city from various parts of the Roman empire. Roman rulers took financial advantage of the population's need for salt.

When they wanted to raise money for some war or another, they raised the price of salt. Elsewhere salt was important too. In Africa, for example, caravans consisting of up to forty thousand camels are said to have travelled four hundred miles across the Sahara to transport salt to the inland markets of places like Timbuktu.

### 逻辑图：



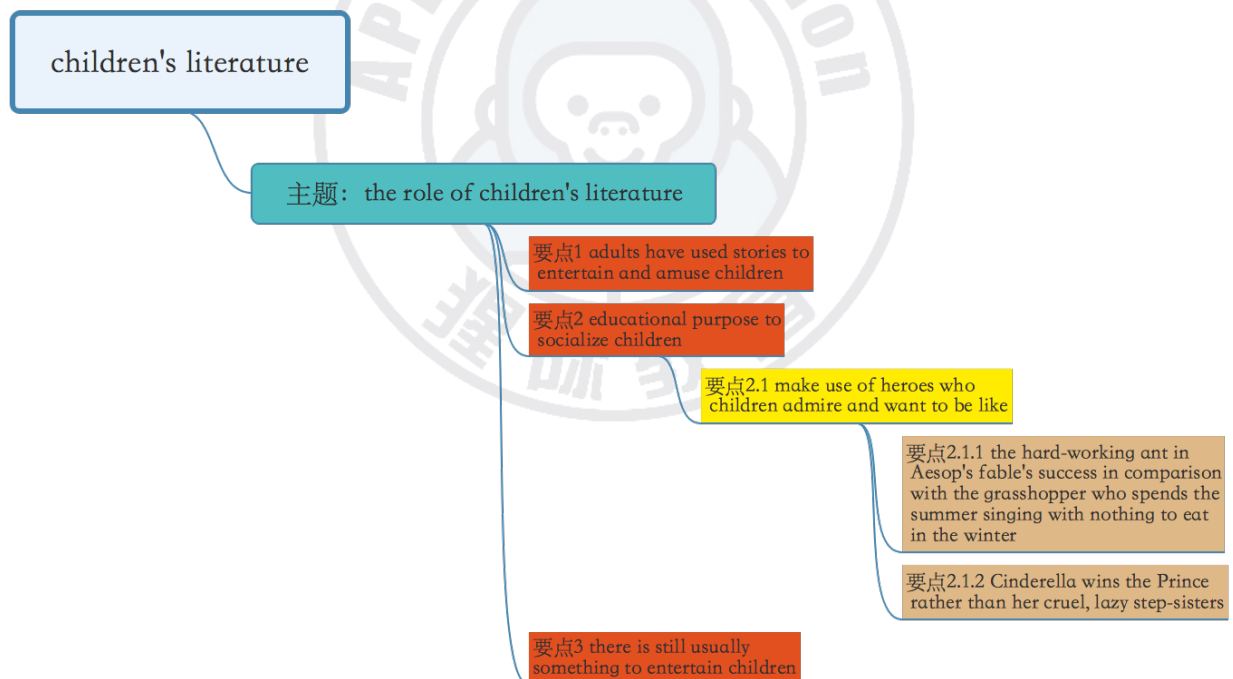
## ● Children literature

正文：

So today we're going to talk about children's literature and the role it plays in society. Throughout history adults have used the power of stories to entertain and amuse their children. But stories are not used merely to entertain youngsters, they have a significant educational purpose. They serve to teach the moral values of their society. In sociological terms, stories are one of the means by which children are socialized.

How does this work in practice? Well, it often makes use of heroes, the characters in the stories who the children will admire and want to be like. The heroes of children's stories, therefore, exemplify the qualities valued by that society - they will typically demonstrate courage in the face of difficulty, honesty, consideration for others, loyalty to their family and friends, a respect for work and so on. You can see this happening from the fables of ancient societies through fairy tales and folk tales right up to modern day children's stories. For example, the hard-working ant in Aesop's fable is shown to succeed in comparison with the grasshopper who spends the summer singing and has nothing to eat when winter comes. Similarly, it is Cinderella, the honest, hard-working sister, who wins the Prince rather than her cruel, lazy step-sisters. However, there is still usually something to entertain children, even in the most morally instructive of stories.

逻辑图：



## ● Electric vehicle

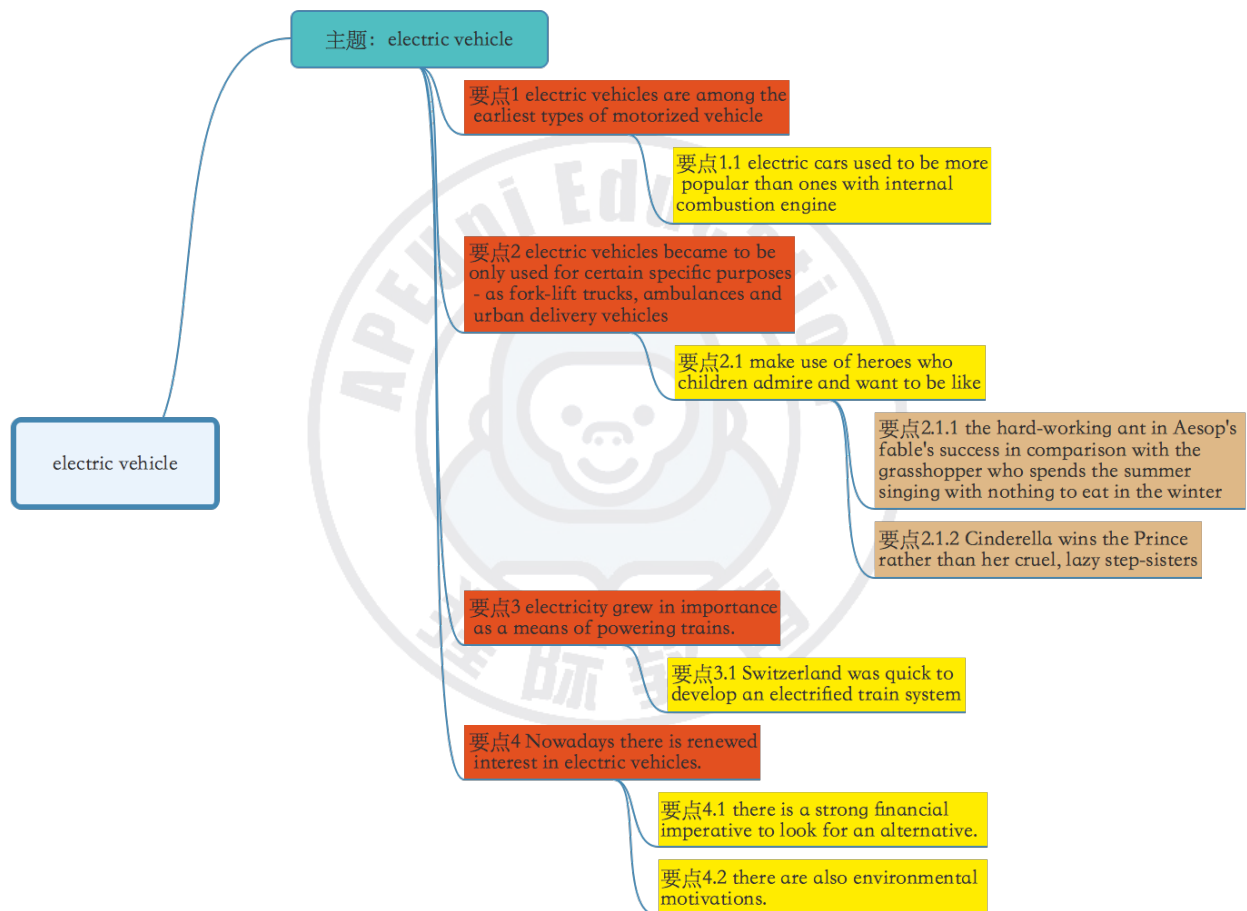
正文：

This week I'd like to start by talking a bit about electric vehicles. Although we tend to think of electric cars as being something completely modern, they were in fact some of the earliest types of motorized vehicle. At the beginning of the twentieth century electric cars were actually more popular than cars with an internal combustion engine as they were more comfortable to ride in. However, as cars fuelled by petrol increased in importance, electric cars declined. The situation became such that electric vehicles were only used for certain specific purposes - as fork-lift trucks, ambulances and urban delivery vehicles, for example.

Although electricity declined in use in road vehicles, it steadily grew in importance as a means of powering trains. Switzerland, for example, was quick to develop an electrified train system, encouraged in this no doubt by the fact that it had no coal or oil resources of its own.

Nowadays there is renewed interest in electricity as a means of powering road vehicles. Why is this the case? Well, undoubtedly economic reasons are of considerable importance. The cost of oil has risen so sharply that there is a strong financial imperative to look for an alternative. However, there are also environmental motivations. Emissions from cars are blamed in large part for - among other things - the destruction of the ozone layer and the resultant rise in temperatures in the polar regions. A desire not to let things get any worse is also encouraging research into designing effective electric transport

逻辑图：



## ● the Florida Keys

正文：

Interviewer: In an article that you wrote that I just read, you said you wished you could take everyone back to decades ago to look at the Florida Keys.

Interviewee: Fifty years ago. Think about how much change has taken place in that short period of time. We have managed to consume on the order of 90% of the big fish in the ocean: the tunas, the swordfish, the sharks. They're mostly gone. Until recently people have had the belief that there isn't much we puny human beings can do to change the nature of the ocean. But in fact, we have, not just because of what we've been taking out, and the destructive means often applied to take fish and other creatures from the sea, but also what we're putting into the sea, either directly or what we put into the atmosphere that falls back into the sea.

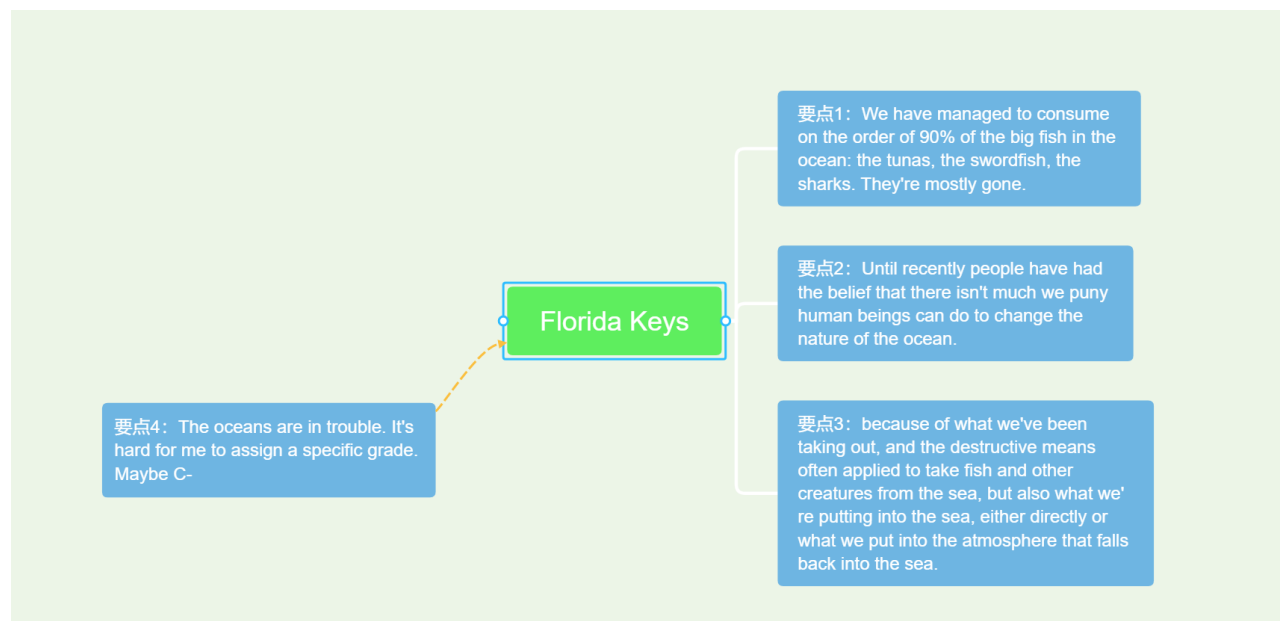
Interviewer: So if

you were going to give a grade on the health of the oceans today, what would it be?

Interviewer: So if you were going to give a grade on the health of the oceans today, what would it be?

Interviewee: Well, it depends on which aspect. Across the board. Huh. The oceans are in trouble. It's hard for me to assign a specific grade. Maybe---

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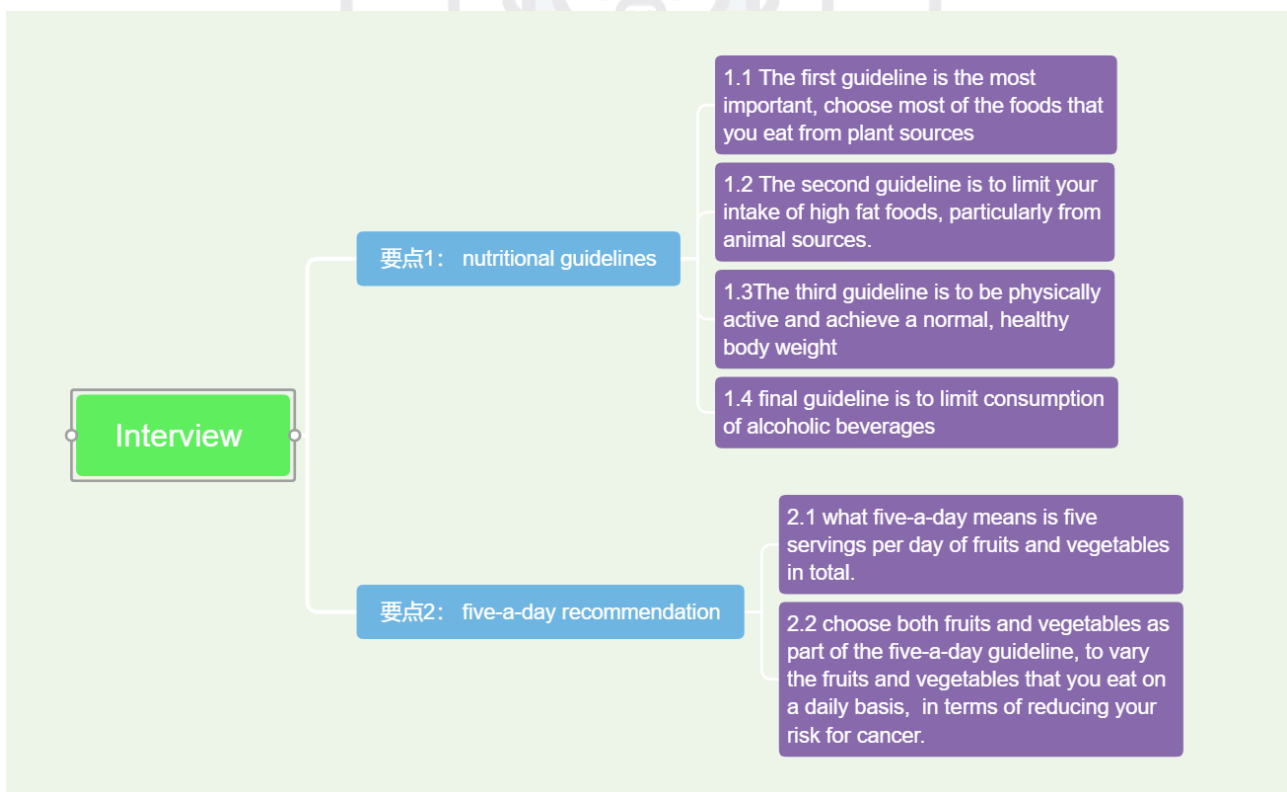
## ● Nutritional guidelines

正文：

Interviewer: What nutritional guidelines should we be following?

Interviewee: Well, probably the best sources of nutritional guidelines are those that are issued by the American Cancer Society or the National Cancer Institute. And the American Cancer Society, for example, offers four really basic, simple nutrition guidelines. The first guideline, which in my mind is the most important, is to choose most of the foods that you eat from plant sources, and we can talk in more detail about that in a moment. The second guideline is to limit your intake of high fat foods, particularly from animal sources. The third guideline is to be physically active and achieve a normal, healthy body weight. And the final guideline is to limit consumption of alcoholic beverages if you choose to drink at all. Interviewer: So Susan, one of the things we always hear about ...from the American Cancer Society is this five-a-day recommendation. Maybe if you could explain to our listening audience what that actually means. Interviewee: The five-a-day recommendation is a very simple way of communicating the message to increase consumption of these plant foods. And what five-a-day means is five servings per day of fruits and vegetables in total. And some people misunderstand this guideline, and they may think it's okay if I have five glasses of fruit juice a day, and I've met my five-a-day guideline. The goal is really to choose both fruits and vegetables as part of the five-a-day guideline, to vary the fruits and vegetables that you eat on a daily basis, and that alone is a very major step forward in terms of reducing your risk for cancer.

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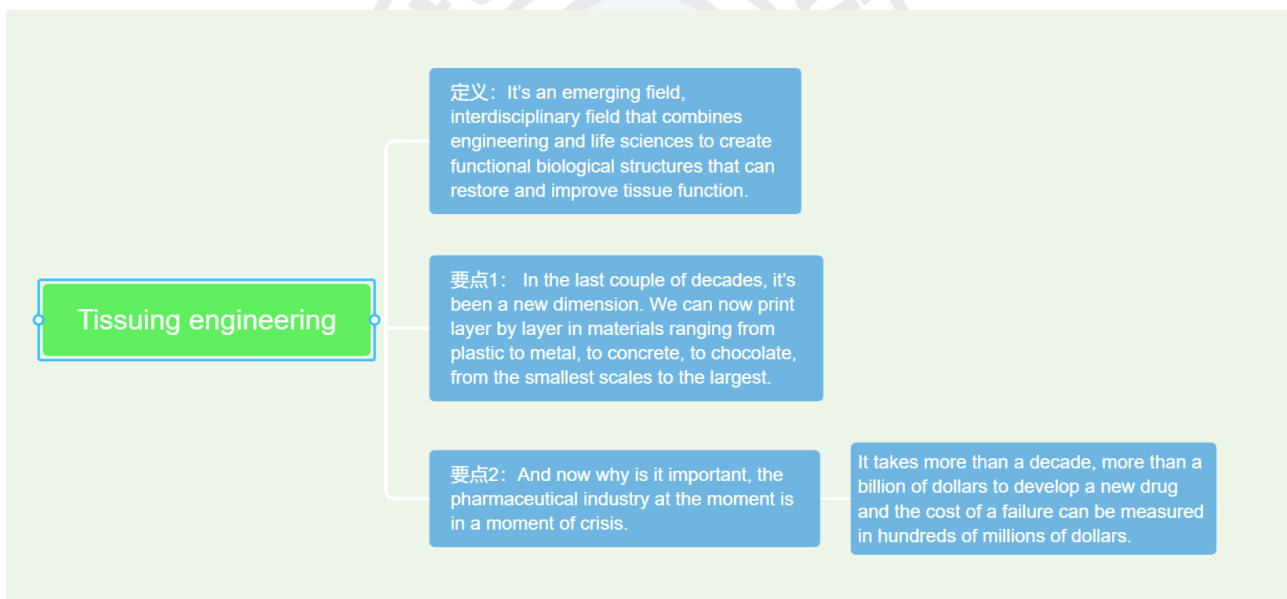


## ● Tissuing engineering

正文：

Tissuing engineering, what is it? It's an emerging field, interdisciplinary field that combines engineering and life sciences to create functional biological structures that can restore and improve tissue function. Examples include Blatter's, trachea blood vessels and if you look at it, printing as a technology has also gone through the revolution and well it's been around for hundreds of years. In the last couple of decades, it's been a new dimension. We can now print layer by layer in materials ranging from plastic to metal, to concrete, to chocolate, from the smallest scales to the largest. If you take 3D printing and we combine it with biology, we have bio-printing where the building blocks our cell aggregates where we called bio-ling particles that are composed of thousands of cells that can fuse together into different shapes, these geometries can include multi-layered sheets, such as skin, branching tubes for vasculature and the sophistication of this manufacturing technology improves daily to include different cell types and different shapes. And now why is it important, the pharmaceutical industry at the moment is in a moment of crisis. It spends more money each year on R&D, but has fewer drugs to show for it. It takes more than a decade, more than a billion of dollars to develop a new drug and the cost of a failure can be measured in hundreds of millions of dollars.

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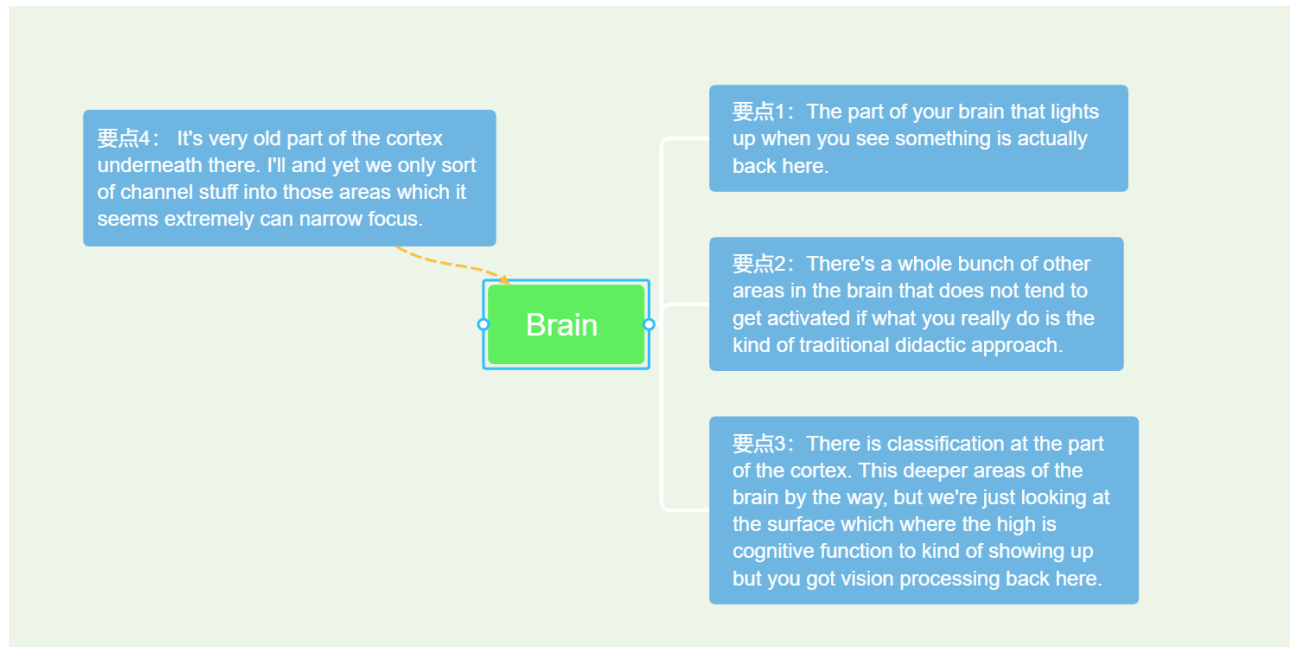
## ● Areas in brain

正文：

Alright, so for example, if now this is interesting, if your eyeballs are in the front of your face, you're seeing things. The part of your brain that lights up when you see something is actually back here. So if you actually were watching like in my class I'm sure the PowerPoints to die for and so the part of the brain that activated at that moment is way back there. If I'm giving the speech of a lifetime in my students are like more, on like this is the part of the brain that lights up, for example, I am just characterizing here interestingly enough if that's all you did. You are lecturing, you giving presentations, that's it. There's a whole bunch of other areas in the brain that does not tend to get activated if what you really do is the kind of traditional didactic approach. So now that other senses, ok, there's other kind of the senses and if you if processing was involved in the signal kind of spread out further and further. There is classification at the part of the cortex. This deeper areas of

the brain by the way, but we're just looking at the surface which where the high is cognitive function to kind of showing up but you got vision processing back here. You've got sound processing back here. There's kind of a giant swath here that will deal with the sensory perception film touch. Smells tend to be directly kind of on the surface it out of the way. It's very old part of the cortex underneath there. I'll and yet we only sort of channel stuff into those areas which it seems extremely can narrow focus.

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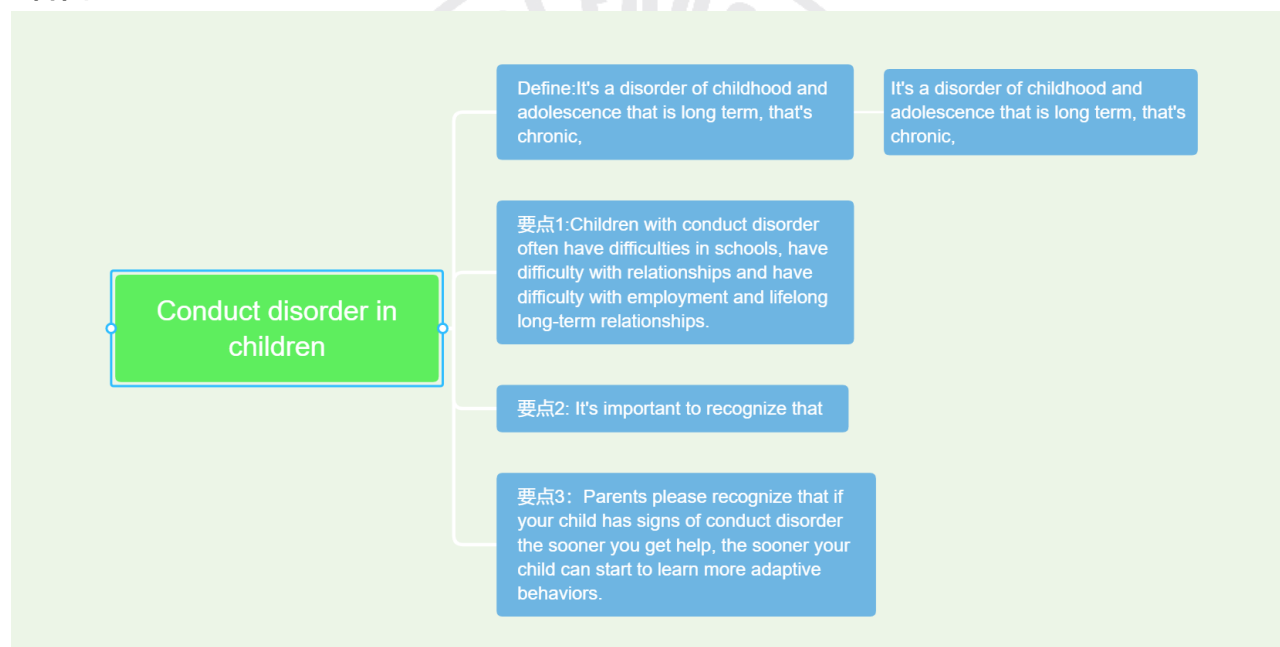


## ● Conduct disorder

正文：

Conduct disorder in children is very serious. It's a disorder of childhood and adolescence that is long term, that's chronic, where children have very aggressive impulses, where children are involved in difficulties with the law and really seem to have no regard for the rules or for authority. When children have conduct disorder they are definitely at risk of carrying these difficulties into adulthood which also brings about a myriad of different problems. Children with conduct disorder often have difficulties in schools, have difficulty with relationships and have difficulty with employment and lifelong long-term relationships. It's important to recognize that if your child is not doing well in school, if your child has had difficulty where legal action was necessary, if your child is bullying, getting into fights and this is constant and ongoing, if your child does not get help these complexities will really exacerbate into other major difficulties. Look for signs of your child's grades dropping, look for signs of repeated detentions, suspensions and brushes with the law. Parents please recognize that if your child has signs of conduct disorder the sooner you get help, the sooner your child can start to learn more adaptive behaviors.

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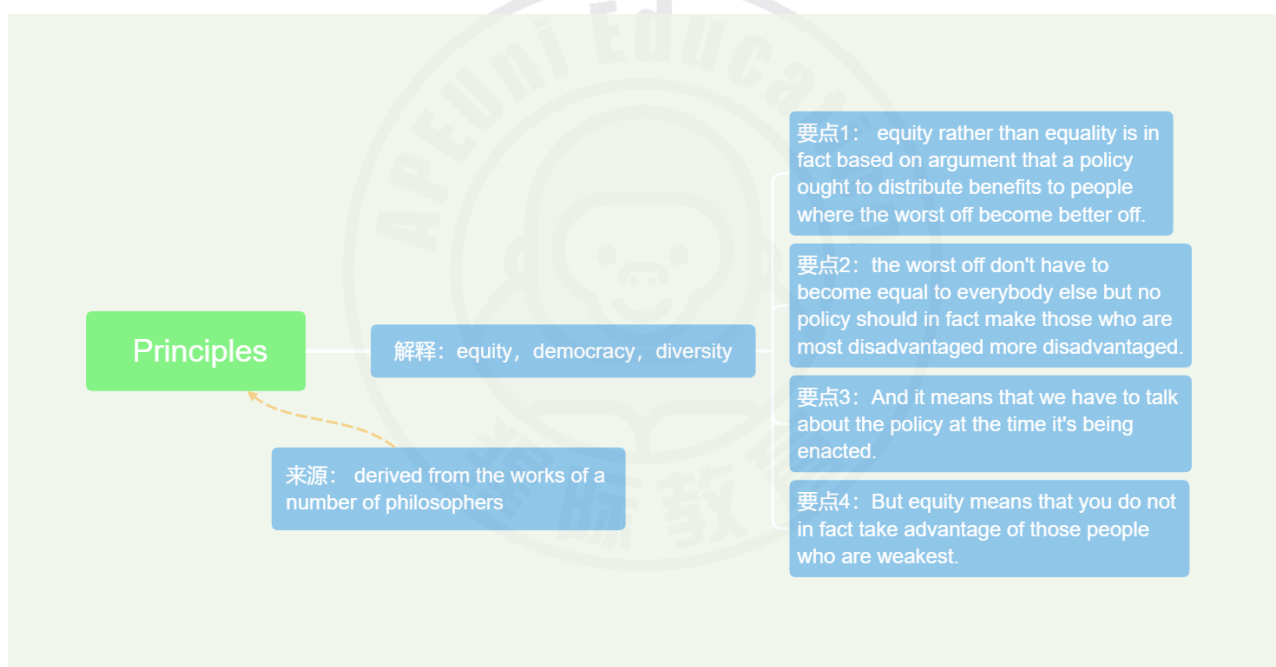


## ● guiding principles

正文：

From reading philosophy, I came up with three principles as the guiding principles for a just city, of the principles of equity, democracy and diversity. Of these were derived from the works of a number of philosophers, most preeminently I supposed on Ross. My choice of word equity rather than equality is in fact based on Ross's argument that a policy ought to distribute benefits to people where the worst off become better off. So the worst off don't have to become equal to everybody else but no policy should in fact make those who are most disadvantaged more disadvantaged. And it means that we have to talk about the policy at the time it's being enacted. To say, while we have to make our city more competitive because sometime and by and by, the benefits will trickle down to those people who were worst off doesn't justify making them worst off as that time. We have a lot of examples on the world of people whose homes were destroyed in the name of the greater good and say eventually they will benefit. But equity means that you do not in fact take advantage of those people who are weakest.

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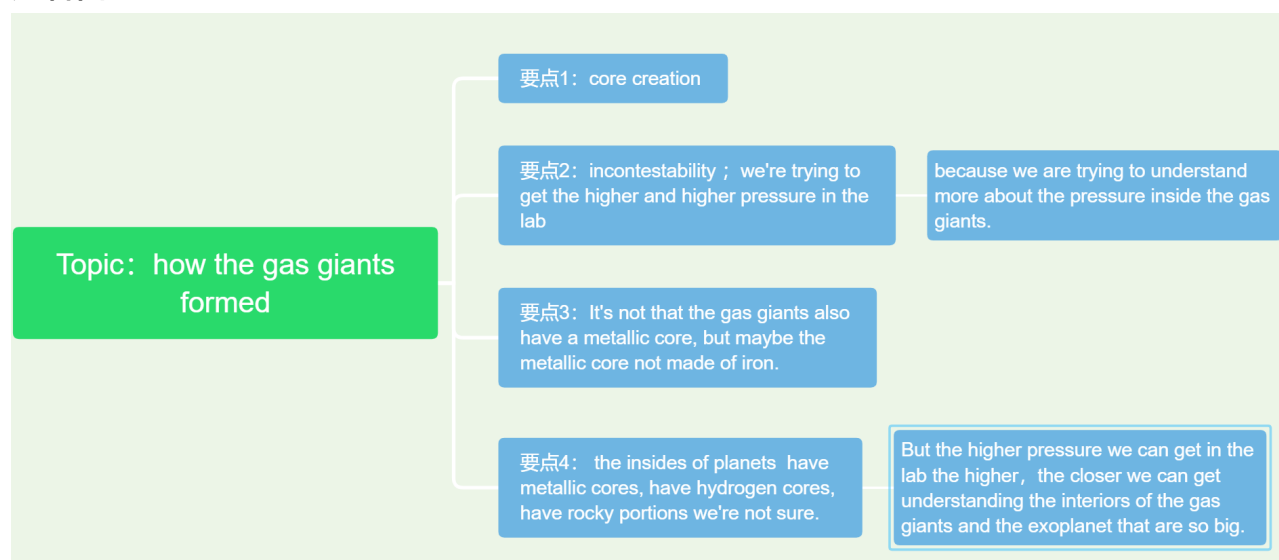


## ● Gas giants

正文：

So there are two theories for how the gas giants formed. One is the same theory I showed you just now core creation, right. And the other is called incontestability and one of our colleagues at DTM has done a lot of work on that and so it's unclear exactly how they formed but you're right what we're trying to do the reason we're trying to get the higher and higher pressure in the lab is because we are trying to understand more about the pressure inside the gas giants. It's not that the gas giants also have a metallic core, but maybe the metallic core not made of iron. Hydrogen, for example becomes metallic at a certain pressure. So it's very possible that the insides of these planets could have metallic cores, could have hydrogen cores, could have rocky portions we're not sure. But the higher pressure we can get in the lab the higher the pressure we can get in the lab, the closer we can get understanding the interiors of the gas giants and the exoplanet that are so big.

逻辑图：



## ● The Cognitive Revolution

正文：

I'm Steve Pinker and I'm Harvard college professor and Johnstone family professor, Harvard department of Psychology. The Cognitive Revolution which took place at Harvard was the start after modern scientific study of the mind. Who study something like the mind you like to think that you're a scientist, you face the immediate problem of what we do with these things called mental contents, thoughts, emotions, images, plans, rules, you can't see them, you can't taste them, then you can't feel them. If you're a scientist you are supposed to be studying things that you can see measure and manipulate, how do you even begin with a science of mind. Well, the answer is the dominated psychology in the middle part of the 20th century where it just to give up all talks of mental contents. This is the school of behaviorism and came to take over American psychology until the early 1950s when a number of scholars with ties to Harvard started to rethink that whole idea when we talk about how computers work you can't get around computing internal states to them. Computers have memories, they have goal states, they execute plans and if you could do that, about a hunk of metal and you are not being unscientific why should be on the scientific to say those things about a human being. The result was called Cognitive Science included both experimental psychology, people who study other humans in the lab with linguistics, including the famous theories of linguist Noam Chomsky who was here at Harvard as a society fellow, a computer science and artificial intelligence and later neuroscience.

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