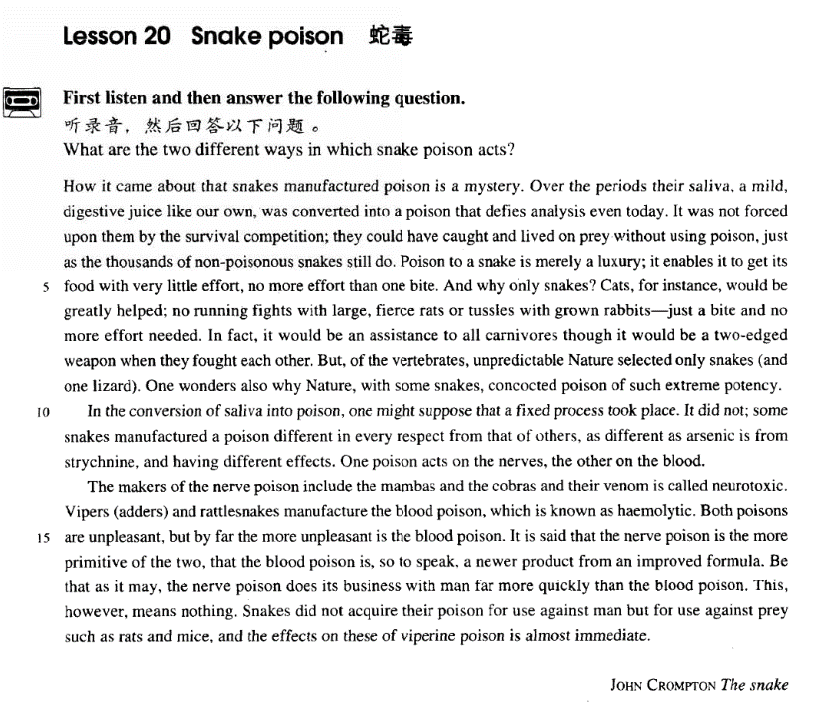
Book



课文

How in came about that snakes manufactured poison is a mystery.

蛇是怎样产生毒液的，这是一个谜。

Over the periods their saliva, a mild, digestive juice like our own, was converted into a poison that defies analysis even today.

蛇的唾液本来和我们人的消化液一样柔和，但经过漫长的时间，演变成了今天仍无法分析清楚的毒液。

It was not forced upon them by the survival competition; they could have caught and lived on prey without using poison, just as the thousands of non-poisonous snakes still do.

毒液不是生存竞争强加给它们的，它们也可以不用毒液捕捉动物而生存，就像今天成千上万的无毒蛇那样。

Poison to a snake is merely a luxury; it enables it to get its food with very little effort, no more effort than one bite.

毒液对毒蛇来说只不过是一种舒适生存的优越手段，它使蛇不用费多大力气就能捕获到食物，轻咬一口即可。

And why only snakes?

为什么只有蛇才有毒液呢？

Cats, for instance, would be greatly helped; no running fights with large, fierce rats or tussles with grown rabbits -- just a bite and no more effort needed.

譬如说，如果猫有毒液，那对猫会大有帮助，它就不必再和又大又凶的老鼠边跑边博斗了，也不必再和大兔子扭斗了，只要咬一口，就不必再费大力气。

In fact, it would be an assistance to all carnivores though it would be a two-edged weapon when they fought each other.

因此，任何食肉动物有了毒液，都能从中获益。不过，当它们相互撕打时，毒液就成了利弊参半的武器，可以杀死对方，也可以被对方的毒液杀死。

But, of the vertebrates unpredictable Nature selected only snakes (and one lizard).

然而，在脊椎动物中，大自然神秘模测地只选择了蛇（还有一种蜥蜴），

One wonders also why Nature, with some snakes concocted poison of such extreme potency.

人们弄不清楚大自然为什么在某些蛇的身上调制出如此高效的毒液来。

In the conversion of saliva into poison, one might suppose that a fixed process took place.

人们可能认为，唾液转变成毒液，其中有固定的程序。

It did not; some snakes manufactured a poison different in every respect from that of others, as different as arsenic is from strychnine, and having different effects.

其实没有，有些蛇产生的毒液也在各方面与另外一些毒蛇产生的毒液不同，就像砒霜不同于马钱子碱一样。不同毒蛇产生的毒液产生的效果不同，

One poison acts on the nerves, the other on the blood.

一种毒液作用于神经，另一种毒液作用于血液。

The makers of the nerve poison include the mambas and the cobras and their venom is called neurotoxic.

产生神经毒液的蛇有一种非洲树眼镜蛇和眼镜蛇，它们的毒液称为神经毒素。

Vipers (adders) and rattlesnakes manufacture the blood poison, which is known as haemolytic.

蝰蛇（蝮蛇）和响尾蛇产生血液毒素，称为溶血性毒液。

Both poisons are unpleasant, but by far the more unpleasant is the blood poison.

这两种毒液都很可怕，但溶血性毒液尤其厉害。

It is said that the nerve poison is the more primitive of the two, that the blood poison is, so to speak, a newer product from an improved formula.

据说，神经毒液在两种毒液中是较为原始的一种，而溶血性毒液，打个比方说，是根据改良配方生产的一种较新的产品。

Be that as it may, the nerve poison does its business with man far more quickly than the blood poison.

不过，神经毒辣液比溶血性毒液在人身上起作用快得多。

This, however, means nothing.

但是，这没有什么关系，

Snakes did not acquire their poison for use against man but for use against prey such as rats and mice, and the effects on these of viperine poison is almost immediate.

因为蛇有毒液不是用来对付人的，而是对付它的猎物，诸如鼠类，毒液对这些猎物会立刻起作用。

词汇讲解

### digestive

* **digestive** [daɪ'dʒestɪv] [dɪ'dʒestɪv] adj. 消化的；助消化的
* **digestive** system / organs / juices / problems
* Over the periods their saliva, a mild, **digestive juice** like our own, was converted into a poison that defies analysis even today.

**【同根词】**

**digest** v. **含义1：**消化

* It takes hours for a meal to **digest**.
* I find that I don't **digest** meat easily.

**digest** v. **含义2：**to think about sth. so that you fully understand it 理解，领会

* He paused, waiting for her to **digest** the information.

**digest** n. 文摘 **【辨析】**

* Reader’s **Digest**
* Overseas **Digest**

**digestion** n. 消化，消化能力；理解，领悟

**indigestion** n. 消化不良；不能理解，不懂

* … if these intimations of a something behind and beyond are not evil humour born of **indigestion**, or whimsies sent by the devil to mock and madden us …

### carnivore

* **carnivore** ['kɑ:nəvɔ:] ] ['kɑrnə7vɔr] n. 食肉动物

**【扩展】**

**carnivore** n. [动] 食肉动物；食虫植物

**herbivore** n. [动] 食草动物

**omnivore** n. [动] 杂食动物

**vegetarian** n. 素食者；食草动物

**【词根】**

“**carn**” = **flesh**

**carnal** adj. 肉体的；肉欲的；性欲的

**carnation** adj. 肉红色的

**carnival** n. 狂欢节，嘉年华会；饮宴狂欢

**incarnate** adj. 化身的；人体化的；肉色的； vt. 体现；使…具体化；使实体化

**incarnation** n. 化身；道成肉身；典型

**reincarnation** n. （灵魂的）转世化身，化身

**【词根】**

“**vor**” / “**vour**” = to eat

**carnivore**

**carnivorous**

**herbivore**

**herbivorous**

**omnivore**

**omnivorous**

**voracious**

**voracity**

**devour**

### vertebrate

* **vertebrate** ['vɜ:təbrɪt] n. 脊椎动物

**【扩展】**表达“动物种类”：

**vertebrate** n. 脊椎动物

**invertebrate** n. 无脊椎动物

**mammal** n. 哺乳动物

**primate** n. 灵长类动物

**rodent** n. 啮齿类动物

**scavenger** n. 食腐动物

**marsupial** n. 有袋类动物

**crustacean** n. 甲壳类动物

**biped** n. 两足动物

**quadruped** n. 四足动物

**prey** n. 被捕食者，猎物

**predator** n. 捕食者

### conversion

* **conversion** [kən'və:ʃən] [kən'vɚʒən] n. 改变，转变；改变信仰

**conversion** n. **含义1：** when you change sth. from one form, purpose, or system to a different one 改变，转变

**the conversion of …A into …B** 由A转换成了B

* **the conversion of** a barn **into** a house
* **the conversion of** pounds **into** dollars
* In **the conversion of** saliva **into** poison, one might suppose that a fixed process took place.

**conversion** n. **含义2：**when sb. changes from one religion or belief to a different one 改变信仰，皈依

**one’s conversion from … to …** 由…信仰转变成…

* his **conversion from** Christianity **to** Buddhism
* Newman's **conversion from** Anglicanism **to** Catholicism

**【同根词】**

**convert** v. **含义1：** 改变（形式或用途）

**convert (sth.) to / into sth.** 把…转变成

* The stocks can be easily **converted to** cash.
* They **converted** the spare bedroom **into** an office.
* Over the periods their saliva, a mild, digestive juice like our own, **was converted into** a poison that defies analysis even today.
* The pub is a **converted** warehouse.
* The shop was an old **converted** house with many large, disused fireplaces and tall, narrow chimneys.
* a sofa that **converts into** a bed

**convert** v. **含义2：**改变信仰

**convert (sb.) to sth.** 把…的信仰转变成…信仰

* European missionaries **converted** thousands **to** Christianity.
* She **converted to** Catholicism.

**convertible** adj. 可改变的

* a **convertible** sofa

**convertible** n. **含义1：**可兑换证券

* In this case, you'd probably construct a portfolio with some shares (but not high risk ones), along with gilts, cash deposits, and perhaps **convertibles** or the income shares of split capital investment trusts.

**Convertible** n. **含义2：** 敞篷汽车

### venom

* **venom** ['venəm] v. 毒液

**venom** n. **英文解释：**a liquid poison that some snakes, insects etc produce when they bite or sting you 毒液

**【扩展】【辨析】**

**venom** n.（毒蛇、蜘蛛等分泌的）毒液

**venomous** adj. 有毒的；恶毒的；分泌毒液的；怨恨的

**toxin** 毒素（尤指生物体自然产生的毒物）

**toxic** adj. 有毒的；中毒的

**poison** n.毒药；毒物；毒素；vi. 放毒，下毒

**poisonous** adj. 有毒的；恶毒的；讨厌的

**noxious** adj. 有毒的；有害的

**hazardous** 危险的；有害的

**lethal** adj. 致命的，致死的

**deadly** adj. 致命的；非常的；死一般的；adv. 非常；如死一般地

* The modern city consists of monstrous edifices and of dark, narrow streets full of petrol fumes and **toxic** gases, torn by the noise of the taxicabs, lorries and buses, and thronged ceaselessly by great crowds.

### neurotoxic

* **neurotoxic** [njuərəu'tɔksik] adj. 毒害神经的

**【词根】**

“**neur(o)**” = “**nerv**” = nerve 神经

**neural** adj. 神经的；神经系统的；背的；神经中枢的

**neurosis** n. [心理] 神经症；神经衰弱症

**neurotic** adj. 神经过敏的；神经病的；n. 神经病患者；神经过敏者

**neurology** n. 神经病学；神经学

**neurological** adj. 神经病学的，神经学上的

**neurologist** n. 神经学家；神经科专门医师

**nerve** n. 神经；勇气；[植] 叶脉; vt. 鼓起勇气

**nervous** adj. 神经的；紧张不安的；强健有力的

**enervate** vt. 使衰弱，使失去活力

课文讲解

# （第一段）

# How in came about that snakes manufactured poison is a mystery.

**语法分析：**

How it（形式主语） came about that snakes manufactured poison（that...主语从句、内层） （外层、主语从句）is a mystery.

知识点（1）

**come about** **英文解释：** to happen, especially in a way that is not planned （意外地事情）发生

* Can you tell me how the accident **came about**?
* How did it **come about** that he knew where we were?

知识点（2）

**manufacture** v. **英文解释：** (technical) if your body manufactures a particular useful substance, it produces it（身体）产生，制造，分泌

* Vitamins cannot be **manufactured** by our bodies.
* Diabetics don't **manufacture** enough insulin.
* …; some snakes **manufacture** a poison different in every respect from that of others, …
* Vipers (adders) and rattlesnakes **manufacture** the blood poison, which is known as haemolytic.

知识点（3）**【课文句型提炼】**

**How it came about that … is a mystery.** 某个事情怎么发生的，是个谜

**It has never been explained why …**谁也无法解释 Lesson03-41

* **It has never been explained why** university students seem to enjoy practical jokes more than anyone else.
* **课文写法替换：**
* **It has never been explained why** snakes manufactured poison.
* **造句**：谁也无法解释玛雅 (Maya) 文明为什么会突然从地球上消失(vanish)。
* **How it came about that** Maya civilization vanished from the earth **is a mystery**.
* **It has never been explained why** Maya civilization vanished from the earth.

# Over the periods their saliva, a mild, digestive juice like our own, was converted into a poison that defies analysis even today.

**语法分析：**

Over the periods（时间状语） their **saliva**, *a mild, digestive juice like our own**（后置定语）*（**saliva**的同位语）, was converted into a poison that defies analysis even today（that ...定语从句）.

知识点（1）

**defy** v. **英文解释：**be so difficult as to make (sth.) impossible 无法……

* **defy** **description / analysis / belief / solution / explanation / understanding / comprehension …**无法……
* Beauty sometimes **defies** description.
* The problem **defied** solution.
* a political move that **defies** explanation
* It's a devastating and barbaric act that **defies all comprehension**.

**【复习】**表达“**是…无法…**”：

**be more than … can / could...**

* When my old friend Brian urged me to accept a cigarette, it was **more than** I **could** bear.
* Dancing proved to be **more than** the dish **could** bear, for during the party it capsized and sank in seven feet of water.
* The pain is **more than** I **can** bear.
* The story is **more than** I **can** believe.
* The beauty of the West Lake is **more than** words **can** describe.
* The weather turned out to be very good, which was **more than** we **could** expect.

**be beyond sth.** 无法……；不容……

* The car **is beyond** repair.
* The rumor **is beyond** belief.
* The situation **is beyond** my control.
* The results **are beyond** dispute / controversy.
* Her beauty **is beyond** words / description.
* His conduct **is beyond** reproach / criticism.
* The pain **is beyond** human endurance.
* Working with you **is beyond** my wildest dreams.
* We might say that justice has been done when a man's innocence or guilt has been proved **beyond doubt**.

# It was not forced upon them by the survival competition; they could have caught and lived on prey without using poison, just as the thousands of non-poisonous snakes still do.

**语法分析：**

It was not forced upon them by the survival competition（方式状语）; they could have caught and lived（虚拟语气） on prey without using poison（介词短语相当于条件状语）, just *as the thousands of non-poisonous snakes still do**（方式状语从句）*.

知识点（1）

**force sth. on / upon sb.** 把… 强加给…

* It's no good trying to **force** a diet **on** someone.
* people who try to **force** their own views **on** you

**【复习】**表达“**把… 强加给…** ”：

**impose sth. on / upon sb.**

* I don't want them to **impose** their religious beliefs **on / upon** my children.

**exert sth. on / upon sb.** 对某人施加…

* Much as we may pride ourselves on our good taste, we are no longer free to choose the things we want, for advertising **exerts** a subtle influence **on** us.
* Antique shops **exert** a peculiar fascination **on** a great many people.

知识点（2）

**语法**：介词短语充当条件状语从句

* …; they *could have caught and lived* on prey without using poison, …
* …; they *could have caught and lived* on prey if they had not used poison, …
* Lesson03-56
* Without it we *could* not make a living.
* If we *didn’t* have it we *could* not make a living.
* Lesson03-60
* Without it, nothing *could* ever be brought to a conclusion; everything *would* be in a state of chaos.
* If we *didn’t* have it nothing *could* ever be brought to a conclusion; everything *would* be in state of chaos.
* There *would* be no living things without air.
* There *would* be no living things if there *were* no air.
* In his position, I *would have committed* suicide.
* If I *had been* in his position, I *would have committed* suicide.

知识点（3）

… just as the thousands of non-poisonous snakes still **do**.

**do** 代替前面出现过得动词和动词短语

* **课文补全：**
* …; they could have caught and lived on prey without using poison, just as the thousands of non-poisonous snakes still catch and live on prey without using poison.

# Poison to a snake is merely a luxury; it enables it to get its food with very little effort, no more effort than one bite.

**语法分析：**

Poison to a snake is merely a luxury; it enables it to get its food *with very little effort*, *no more effort than one bite（very little effort*,*的同位语）*. *（with... 方式状语）*

知识点（1）

**luxury** 奢侈；奢侈品

**necessity** 必须；必须品

* Limousines and perfumes are **luxuries** while food, clothing, shelter and transportation are daily **necessities**.

知识点（2）

**no more than …** 仅仅，只不过

* When one seriously studies the social orders that have had the opportunity to develop autonomously, the figure becomes **no more than** an exact and matter-of-fact observation.
* Modern cloth diapers are surprisingly easy to use, almost **no more** work **than** putting on a disposable.

# And why only snakes?

**语法分析：**

And why only snakes manufacture poison（补全）?

# Cats, for instance, would be greatly helped; no running fights with large, fierce rats or tussles with grown rabbits -- just a bite and no more effort needed.

**语法分析：**

Cats, *for instance**（插入语）*, would（虚拟语气） be greatly helped;（分号后面是解释说明） *no running fights with large, fierce rats or tussles with grown rabbits — just a bite and no more effort needed（后置定语）*. *（—后面是解释说明）*

**课文补全：**

* Cats, for instance, would（虚拟语气）be greatly helped if they manufactured poison.

知识点（1）

**running** adj. **英文解释：**lasting a long time; continuous 持久的，长时间的

* For years he had fought a **running** battle with the authorities over the land.

知识点（2）

**tussle** n. **英文解释：**a fight using a lot of energy, in which two people get hold of each other and struggle 扭打，搏斗

**tussle with …** 与…打斗

* She had a brief **tussle with** her conscience before telling the whole story.

# In fact, it would be an assistance to all carnivores though it would be a two-edged weapon when they fought each other.

**语法分析：**

In fact（状语）, it *would（虚拟语气）*be an assistance to all carnivores though it *would（虚拟语气）*be a two-edged weapon when they ***fought***each other*（when... 时间状语从句，充当条件状语从句）*. （though… 引导让步状语从句）

**课文补全：**

In fact, it *would（虚拟语气）*be an assistance to all carnivores if they manufactured poison.

知识点（1）

**two-edged weapon** 双刃剑

* As is so often pointed out, knowledge is a **two-edged weapon** which can be used equally for good or evil.

**two-edged weapon / sword** 双刃剑

**double-edged weapon / sword**

知识点（2）

**语法**：when引导从句充当条件状语从句

* though it *would* be a two-edged weapon **when they fought each other**.
* … though it *would* be a two-edged weapon **if they *fought* each other**.
* How can I explain it to you **when** you won’t listen?
* **When** I reverse the car, it makes a funny noise.

知识点（3）

**fight (with) sb.** 与…作战

* Two guys were **fighting (with)** each other in the street.

# But, of the vertebrates unpredictable Nature selected only snakes (and one lizard).

**语法分析：**

But, of the vertebrates（方面状语）, unpredictable Nature selected only snakes *(and one lizard)*.

知识点（1）

**of** prep. **英文解释：**used when comparing related things **（用于比较时）在……中**

* I'm surprised that you **of all people** think that.
* A flat tyre today **of all days** what bad luck!
* He's the best looking **of the three** brothers.

# One wonders also why Nature, with some snakes concocted poison of such extreme potency.

**语法分析：**

One wonders also why Nature, *with some snakes（插入语*）, concocted poison of such extreme potency. （why… 宾语从句）

知识点（1）

**concoct** v. **英文解释：**to produce sth. unusual by mixing things in a new way, esp. a drink or meal 调制

* The soup was **concocted** from up to a dozen different kinds of fish.

知识点（2）

**potency** n. **英文解释：**the strength of sth., esp. a drug, on your mind or body 效力

* Improper storage may decrease the **potency** of the drug.

# （第二段）

# In the conversion of saliva into poison, one might suppose that a fixed process took place.

**语法分析：**

In the conversion of saliva into poison（时间状语）, one might suppose that a fixed process took place. （that… 宾语从句）

知识点（1）

介词**in** 在…的过程中

* **In** the organization of industrial life the influence of the factory upon the physiological and mental state of the workers has been completely neglected.

知识点（2）

**take place** v. **英文解释：**sth. happens that is planned or arranged（计划之中的事情）

发生

* Where is the meeting **taking place**?
* The wedding will **take place** at St. Andrew's church.

# It did not; some snakes manufactured a poison different in every respect from that of others, as different as arsenic is from strychnine, and having different effects.

**语法分析：**

It did not; some snakes manufacture a poison different in every respect（方面状语） from that of others（后置定语1,修饰poison）, as different as arsenic is from strychnine（状语，补充说明different）, and having different effects（后置定语2,修饰poison）.

知识点（1）

**be different from …** 与…不同

知识点（2）

**in every respect / aspect / way** 在每个方面

知识点（3）

that of

* It did not; some snakes manufactured a **poison** different in every respect from **that of** others….
* His **function** is analogous to **that of** a judge,

知识点（4）

**… as different as … is from …**  就像…与…不同一样

* **造句**：中国文化在各个方面都与美国文化不同，就像大熊猫与白头鹰 (bald eagle) 不同一样。
* Chinese culture **is different** in every respect **from** that of America, **as different as** the giant panda **is from** the bald eagle.

# One poison acts on the nerves, the other on the blood.

**语法分析：**

One poison acts on the nerves, the other （acting 省略）on the blood （独立主格）.

知识点（1）

**act** v. **英文解释：**to have an effect or use 有某种效果或作用

**act on …** 对…有效

* Alcohol **acts on** the brain.
* Disinfectants **act on** bacteria in two main ways.

**act as …** 作为…（而发挥效果）

* Later it was found that there was a type of mosquito which **acted as** the carrier of this disease and passed it on to the rabbits.

知识点（2）复习

语法：独立主格

* One poison acts on the nerves, the other **(acting)** on the blood.

# （第三段）

# The makers of the nerve poison include the mambas and the cobras and their venom is called neurotoxic.

# Vipers (adders) and rattlesnakes manufacture the blood poison, which is known as haemolytic.

**语法分析：**

Vipers (adders) and rattlesnakes manufacture the blood poison, which is known as haemolytic. （which...定语从句）

知识点（1）

**【复习】**表达“**被称为是…**”：

**be called …**

**be known as …**

**be referred to as …**

**be addressed as …**

* … and their venom **is called** neurotoxic.
* The terrible secret **is called** 'a skeleton in the cupboard '.
* Because of this, they **were known as** 'prize-fighters'.
* People who work in offices **are** frequently **referred to** as 'white collar workers' for the simple reason that they usually wear a collar and tie to go to work.
* The president should **be addressed as** 'Mr. President'.

# Both poisons are unpleasant, but by far the more unpleasant is the blood poison.

知识点（1）

**by far** **英文解释：**(used with comparative or superlative adjectives or adverbs) by a great amount ……得多

* The last of these reasons is **by far** the most important.
* The second half of his voyage was **by far** the more dangerous part, during which he sailed round the treacherous Cape Horn

知识点（2）**【课文句型提炼】**

**Both … are …, but by far the more … is …** 两个东西都…，但是更…的多得是…

* **Both** books **are** interesting, **but by far the more** interesting **is** ‘*Harry Potter’*.

# It is said that the nerve poison is the more primitive of the two, that the blood poison is, so to speak, a newer product from an improved formula.

**语法分析：**

it（形式主语）is said that the nerve poison is the more primitive of the two（that...主语从句1）, that the blood poison is*, so to speak,* a newer product from an improved formula（that...主语从句2）.

知识点（1）

**so to speak** 好像，仿佛，可谓是，可以说是

* He is, **so to speak**, a walking dictionary.
* The Han nationality and the minority nationalities are all, **so to speak**, members of the same family.

= **as it were**

* He is, **as it were**, a walking dictionary.
* The Han nationality and the minority nationalities are all, **as it were**, members of the same family.
* They will be able, **as it were**, to see and hear us in action.
* They can never, **as it were**, lead independent lives, or 'rule the world' by making decisions of their own.
* He gets the solid shape, **as it were**, inside his head—he thinks of it, whatever its size, as if he were holding it completely enclosed in the hollow of his hand.
* Reading is thought to be a kind of conversation between the reader and the text. The reader puts questions, **as it were,** to the text and gets answers. In the light of these he puts further questions, and so on.

知识点（2）

**formula** n. **英文解释：** a list of the substances used to make a medicine, fuel, drink etc, showing the amounts of each substance that should be used 配方，处方

* Our products are handmade from traditional **formulas**.
* The **formulas** for the drinks are closely guarded secrets.

# Be that as it may, the nerve poison does its business with man far more quickly than the blood poison.

**语法分析：**

Be that as it may（让步状语从句）, the nerve poison does its business with man *far more quickly than the blood poison*（than... 比较状语）.（*far… 状语，修饰*does its business）

知识点（1）

**Be that as it may**  尽管如此

= **However that may be**

= **Despite that**

* **Be that as it may**, our expenditure is bound to increase. “
* I’m tired.” “**Be that as it may,** you have to do some work.”

**【扩展】**

**Come what may** 无论发生什么

= **Whatever may happen**

* **Come what may**, we'll always stand by your side.

**Come wind or rain** 无论刮风下雨

= **whether wind or rain comes**

* **Come wind or rain,** I will go.

知识点（2）

**do business with …** 做生意；（派生、比喻）发挥效力

* I was fascinated by the different people who **did business with** me.

# This, however, means nothing.

知识点（1）

**mean nothing**: **be not important** 不重要

* Time **meant nothing** to me while I was travelling.

# Snakes did not acquire their poison for use against man but for use against prey such as rats and mice, and the effects on these of viperine poison is almost immediate.

**语法分析：**

Snakes did not（不是） acquire their poison *for use against man* but（而是） *for use against prey such as rats and mice（后置定语）*, and the effects on these（前置） of viperine

poison is almost immediate.

知识点（1）

**the effect / influence / impact of … on / upon …** …对…的效果

* In the organization of industrial life **the influence of** the factory **upon** the physiological and mental state of the workers has been completely neglected.
* … and the effects **on these** *of viperine poison* is almost immediate.