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总序

习近平总书记在十九大报告中指出：“创新是引领发展的第一动力，是建设现代化经济体系的战略支撑。”因此，要“加强国家创新体系建设，强化战略科技力量”。在人才培养上，“培养造就一大批具有国际水平的战略科技人才、科技领军人才、青年科技人才和高水平创新团队”。

学术英语改革服务于国家宏观的人才培养战略，正在成为最近几年高校英语教学改革热点之一。学术英语课程的设置、开发、构建、实施和推广已成为高校外语课程改革的重要选择。

作为“中国科学院大学研究生教材系列”之一的“果壳学术英语系列教程”着力于学术英语课程的体系化建设，明确学术英语课程之间的层次感，区分基础学术英语能力和更高层次学术英语能力的培养，细化不同类型的学术英语能力，并注重不同类型学术英语能力之间的相互促进。学术英语能力本身是一个十分复杂的体系：从语言使用的角度看，包括学术英语的听、说、读、写等能力；从语言情景的角度看，包括参与学术讨论的能力、撰写学术申请的能力等；从学术思维的角度看，包括批判性思维能力、提出并解决问题的能力、创新思考能力等。学术英语教学应该是系统的、持续的、战略性的工程，唯有系统性地开展学术英语教学，才能更为有效地培养学生的学术英语能力。

“果壳学术英语系列教程”着力于培养有情怀的科学家。学术英语教学不应仅仅止于各项语言技能的传授，还应在提高学术素养、激发学术兴趣、明晰科学伦理意识、注重人文关怀、引发哲学思辨等方面培养具有一定知识广度和思想深度的科技人才。知识广度有助于激发创新性思维，思想深度有助于产生创新性成果。语言教育在充分展示工具性特征的同时，还需兼具开拓崭新视域、融合多维思考、审视固有模式的作用，从而鼓励创造性地提出问题和创造性地解决问题。新时代的新使命呼唤高水平科技人才和科技领军人才，科技人才需要具有国际视野，通晓人类共同关心的普遍问题，展现出不拘于专业领域的知识广度和思想深度，从而具备带领中国科技引领未来世界的的能力。

我们认为，学术英语教学应确立人才培养的长期目标，在最初阶段为学生播下学术英语的种子，在接下来的培养过程中持续灌溉，最终助力学生成长成根基扎实的大树，即为国家新时代的新使命做出自己贡献的创新型科技领军人才。

总主编 高原

前言

在建设世界科技强国的背景下，研究生英语教学迎来了新的机遇与挑战。这也赋予了研究生英语教学新的使命：培养学生的学术意识与素养，加强学生的思辨能力，提高学生用英语进行学术研究和学术交流的能力，从而提升我国科研人才的核心竞争力。《研究生学术英语读写教程》在这样一个时代背景下应运而生。

《研究生学术英语读写教程 教师用书》与《研究生学术英语读写教程》（学生用书）同为“果壳学术英语系列教程”，遵循“以读促写、读写并重”的教学理念，旨在培养学术英语阅读和学术英语写作能力，以期提高学生学术表达的规范性，强化学术素养和学术意识，为研究生阶段的专业学习和学术研究打好语言基础。《研究生学术英语读写教程 教师用书》旨在方便教师备课和安排教学，把握学生用书的特点，适当拓展学生的知识。

本教程以学科为基础，共包括十个单元，每个单元主题围绕一个学科或专业内容，包括心理学、地学、物理、数学、计算机科学、生物、材料学、化学、管理学和医学十大与理工科研究生专业密切相关的学科内容。每单元课文选材和练习设计既体现了本单元的学科内容，又直接与本单元的学术阅读技能或学术写作技能相关。这两项技能的讲解与练习贯穿每个单元，并且在十个单元的整体编排上循序渐进、环环相扣、前后呼应。

本教程单元结构如下：

- 一、学术阅读板块（Academic Reading）
 - 1.1 背景知识（Supplementary Information）
 - 1.2 主题阐释（Theme of Text A）
 - 1.3 结构梳理（Organisation of Text A）
 - 1.4 重点难点句子翻译（Sentence Translation）
 - 1.5 文后练习参考答案（Keys）
 - 1.6 延展阅读（Supplementary Reading）
 - 1.7 学术阅读技能拓展及练习参考答案（Academic Reading Skills）
- 二、学术写作板块（Academic Writing）
 - 2.1 背景知识（Supplementary Information）
 - 2.2 学术写作技能拓展及练习参考答案（Academic Writing Skills）

本教程希望培养学生学习的自主性、积极性和团队合作精神，建议教师在使用本教程的过程中结合“微课”“翻转课堂”“项目研究教学法”等多种教学模式，鼓励学生多思考，多交流，多合作。

本教程由中国科学院大学教材出版中心资助，提供学习和教学资源，为英语教学提供支持。

鉴于编者水平有限，教程中的不足之处在所难免，敬请广大读者批评指正。

编者

2018年11月

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Academic Reading Skills	Academic Writing Skills
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Understanding Collocation	Using Hedging Expressions Properly
Understanding Ellipsis and Substitution	Creating Cohesion

→ CBI

Unit 1

Psychology

I doubt, therefore I think; I think, therefore I am.

—— René Descartes

我疑故我思，我思故我在。

—— 勒内·笛卡尔

Academic Reading

1

Supplementary Information



Mini-class

Text A

1. Ubuntu (Para. 1)

It is a concept originated from the southern African region, literally meaning “humanness”, usually being translated as “humanity towards others”. However, it is often used in a more philosophical sense, representing “in a universal bond of sharing that connects all humanity”.

2. René Descartes (Para. 3)

René Descartes (1596–1650) is a creative mathematician, an important scientific thinker, and an original metaphysician. He is a mathematician first, a natural scientist or “natural philosopher” second, and a metaphysician third.

3. bystander effect (Para. 6)

The bystander effect describes a situation where the more people present, the less likely they are to help people in need.

4. cognitive development (Para. 10)

It is a theory proposed by Piaget which concerns the nature and development of human intelligence. The theory studies the nature of knowledge itself and how it is gradually acquired, constructed, and used.

Theme of Text A

This article analyses two contrasting philosophical systems on “selfhood”. One stems from Descartes’ view of “I think, therefore I am”, arguing that a human being is a self-sufficient creature, whose existence relies entirely upon the individual himself/herself, and is detached from the external world; the other features the Ubuntu philosophy which believes in a form of human existence that depends upon interacting with other human beings and the outside world. The author holds the view that the latter is more reasonable and persuasive.

Organisation of Text A

Text A can be divided into four sections.

Sections	Paragraphs	Main Ideas
S1	Paras. 1–2	According to the Ubuntu philosophy, people acquire “selfhood” through others.
S2	Paras. 3–4	Descartes held a disconcerting notion on “selfhood” and he believed in the self-sufficiency of human existence.
S3	Paras. 5–7	Some researchers, influenced by this Cartesian philosophy, agree that selfhood can be detached from the social context, which affects the way how they conduct their studies, for instance, how they consider the experimental design of memory study or illustrate “bystander effect”.
S4	Paras. 8–12	Questions are raised by the author – Does selfhood come from within or without? And how can these two conflicting views be reconciled? Finally, based on the “child” and “prisoner” examples, the author reiterates his view that humans acquire selfhood via others.

Sentence Translation

1. Even my most private and personal reflections are entangled with the perspectives and voices of different people, be it those who agree with me, those who criticise, or those who praise me. (Para. 2)

即使是最私密、最个人的思绪，也与不同人的观点和声音纠缠在一起，无论是那些赞同我的人，还是那些批评我的人，抑或是那些赞美我的人。

2. The 17th-century French philosopher believed that a human being was essentially self-contained and self-sufficient; an inherently rational, mind-bound subject, who ought to encounter the world outside her head with skepticism. (Para. 3)

这位17世纪的法国哲学家认为，人类本质上是自给自足的；生而理性、受其思想约束的个体，应该以怀疑的态度面对他头脑之外的世界。

3. He wanted to find a stable point of view from which to look on the world without relying on God-decreed wisdoms; a place from which he could discern the permanent structures beneath the changeable phenomena of nature. But Descartes believed that there was a trade-off between certainty and a kind of social, worldly richness. (Para. 4)

他想要找到一种稳定的观点，而非依靠上帝赐予的智慧，来观察这个世界；由此，他可以透过自然界中变幻莫测的现象分辨出永久性的结构。但笛卡尔认为，稳定性和来自社会的、世俗的多样性之间存在权衡关系。

4. But even then, the investigation often presumes that a collective of Cartesian subjects are the real focus of the enquiry, not selves that co-evolve with others over time. (Para. 6)

但即便如此，其调查也常常做出这样的假设：探究的真正焦点是笛卡尔式议题的集合，而非随时间推移与他人共同进化的自我。

5. Genovese's murder had to be seen against a backdrop in which violence against women was not taken seriously, Cherry said, and in which people were reluctant to step into what might have been a domestic dispute. (Para. 7)

谢里认为，吉诺维斯谋杀案反映了当时的社会并不关注女性遭受的暴力困扰，人们也不愿介入一桩可能是家庭纠纷的暴力袭击中。

-
6. Think of that luminous moment when a poet captures something you'd felt but had never articulated; or when you'd struggled to summarise your thoughts, but they crystallised in conversation with a friend. (Para. 8)

想一想那些醍醐灌顶的时刻：诗人捕捉到你所感受到的却从未表达出来的东西；或者在与朋友交谈时你灵光一现，信口而出你曾难以总结、难以表达的一些想法。

-
7. By contrast, "dialogical" theories, brought to life in experiments such as Lisa Freund's "doll house study" from 1990, emphasise interactions between the child and the adult who can provide "scaffolding" for how she understands the world. (Para. 10)

相比之下，从1990年开始，对话理论才在莉萨·弗罗因德的“玩偶屋研究”等一系列实验中得以呈现。该理论强调孩子和成年人之间的互动，认为成年人可以为孩子们了解世界提供“脚手架”。

-
8. Deprived of contact and interaction – the external perspective needed to consummate and sustain a coherent self-image – a person risks disappearing into non-existence. (Para. 11)

如果失去联系与交流这种完善和维持清晰自我形象的外部因素，人会面临失去自我的危险。

-
9. But for the most part, scientific psychology is only too willing to adopt individualistic Cartesian assumptions that cut away the webbing that ties the self to others. (Para. 12)

但是在大多数情况下，科学意义上的心理学非常乐意采纳个人色彩浓厚的、切断了自我与他人相互联系的笛卡尔式假说。

Keys

Task 1

- | | | | |
|------------|---------------|--------------|-------------|
| 1 purport | 2 wipe away | 3 contextual | 4 contour |
| 5 solitary | 6 scaffolding | 7 axiomatic | 8 inscribed |

Task 2

C

Task 3

Paras. 3–4 have explained that Descartes held a disconcerting notion on “selfhood” and he believed in the self-sufficiency of human existence.

Para. 3 briefly introduces Descartes’ notion on “selfhood”, and then in Para. 4, the author contrasts one’s own *cogito* and other people/things to illustrate Descartes’ philosophy in detail.

Supplementary Reading

Spoiler Alert: Most People Want to Remain in the Dark, Finds Study

Nicolaks Davis

Whether anticipating good news or bad, it turns out that most people would prefer to remain in the dark than sneak a glimpse of the future.

According to research involving more than 2,000 participants, more than 85% would not want to know if their marriage would end in divorce, while a similar proportion wanted to remain ignorant of when they would die. Even for happy events, ignorance was often prized, be it in the case of Christmas gifts, or the upshot of a football match.

Published in the journal *Psychological Review*, the research involved two face-to-face studies, one in Spain, the other in Germany.

In each, just over 1,000 participants were asked a series of hypothetical questions, five around negative events, such as whether they would want to know when they would die and whether their recent marriage would last, as well as five questions around positive events, such as whether they’d want to know the sex of an unborn baby or the outcome of a recorded football match.

The results of the German study revealed that just under 88% of participants said they did not want to know when they would die, almost 87% said they would not want to know if their marriage would fail, and almost 90% did not want to know when their partner would die.

By contrast just over 59% said they wouldn’t want to know in advance what they were getting for Christmas, 57% did not want to know if there was life after death, while almost 77% would not want someone to reveal the outcome of a football match before they had seen it.

Knowing the sex of a baby, however, was only rejected by just over 40% of participants.

Only 1% of participants wanted to catch a glimpse of the future for all issues explored.

When the same study was carried out in Spain, the authors add, the results were very similar, although Spaniards were less interested in keeping the sex of an unborn baby a surprise, and Germans less concerned about maintaining suspense over Christmas presents.

To unpick factors underpinning the desire to remain in the dark, the team asked participants a variety of questions designed to probe their attitudes towards risk. The results suggest that those who prefer to remain ignorant are more risk averse and more likely to buy insurance. Age also came into the mix, with older individuals less keen on knowing whether there was an afterlife, or the time and cause of their own or their partner's death.

The findings, the authors say, support the idea that both avoiding negative emotions and maintaining an element of surprise are rooted in the common goal of avoiding the feeling of regret. However, they note that those who attend religious services are more likely to want to know what the future holds.

“There are other values besides knowing everything in advance and they are largely emotional values – so to avoid the negative feelings that may arise from foreknowledge like Cassandra, or to maintain surprise, and joy in expectations,” said Gigerenzer, citing the Greek myth of Cassandra who was cursed by Apollo to see the future accurately but not to be able to persuade others to heed her warnings.

David Dunning, a professor of psychology at Cornell University who was not involved in the research, said the idea is interesting but further study is needed to probe the idea that anticipated regret is behind the findings.

“People are notorious for not being able to predict how they would respond in situations involving real emotion, and the scenarios people are presented in the studies are merely hypothetical, e.g. it's not a real possibility yet to know whether there is life after death,” he said. “I'd like to see more studies involving people, for example, who really are pregnant to see what percentage don't want to know their baby's sex.”

A key area to explore is whether knowledge can be harnessed for action. “Past work on willful ignorance about medical diseases focus on the issue of control,” said Dunning. “If people can control a disease, they want to know if they have it more than if they feel they cannot control the outcome of the disease, such as in Huntington's.”

But Gigerenzer says the new research should be a warning to burgeoning attempts to harness technology to predict causes and times of death. “They overlook the large proportion of the public who would not want to see these results,” he said.

Academic Reading Skills

Predicting Theme and Identifying Patterns and Structures

Apart from chronological sequence, cause and effect, comparison and contrast, classification, other patterns of organisation are also commonly featured in both general and academic writings. Here are some of them.

Spatial sequence

This is frequently employed in science writings. For instance, a geologist would introduce the structure of the earth according to its spatial arrangements – start with the crust, then move on to the mantle, and finally to the molten core. In the section of methods, many academic writers will introduce their study sites using the spatial sequence.

Order of importance

This is mostly used for listings. An order of descending importance is more frequently adopted, given that it fits more closely with the “first things first” expectation of the average readers.

Process writing

Process writing refers to writing that features a process, which could be one of an experiment, of manufacturing a product, or of setting up a software. It is especially relevant for science experiments, whose processes need to be laid out in an extremely clear, concise, and scientifically rigorous manner, sometimes in the form of rigid bullet points.

Keys

Task 1

D

Task 2

Para. 1: C

Para. 2: H

Para. 3: L

Para. 4: D

Para. 5: A

Para. 6: B

Para. 7: F

Para. 8: I

Para. 9: J

Para. 10: E

Para. 11: K

Para. 12: G

Task 3

This passage has used a combination of different patterns: problem & solution, cause & effect, exemplification, classification, as well as comparison & contrast.

讲解：通过标注文中表示逻辑关系的关联词等词汇来分析文章的结构。本文灵活运用了各种组织方式和结构，从而使得信息的呈现更加有条理、有逻辑。

Black Lies

Deception is so common that not only humans, but even animals engage in it. **For instance**, while apes often simply take food from weaker counterparts, they have also been shown to employ deception. When they can steal food by reaching through opaque instead of see-through tunnels, they often reach for the opaque tunnels so that their competitors cannot detect their actions. These cases of deception are exploitative, as the deceiving apes strategically mislead their counterparts for personal benefits (e.g. tasty food). But **what determines whether or not people (and apes) engage in such black lies?**

An obvious factor that influences whether people deceive is whether they think that they will get caught. **For example**, low chances of being detected increase deception of taxpayers. Such behaviour is rational, as being detected reduces the gain one can expect. Imagine the used car dealer who considers lying about a car's history of accidents to charge a higher price for the car (i.e. the gain). If the lie is easily detected (e.g. if the car has bumps and scratches), the likelihood to sell the car decreases. **Consequently**, the salesman will be honest.

A common assumption is that, rationally, deceiving for higher, rather than lower gains is more beneficial. Surprisingly however, this is not what psychological research finds. People seem to cheat equally often when both high and low gains are at play. Research suggests that cheating does not only depend on materialistic gains, but also on psychological costs that deception inflicts on the deceiver. **On the one hand**, deceiving for larger gains is more attractive than deceiving for smaller gains. **On the other hand**, deceiving for larger gains carries larger psychological costs. Psychological costs – the internal discomfort that people experience when doing something against their beliefs or values – depend on the magnitude of a lie. In one experiment,

participants were paid according to the outcome they secretly rolled with a die. When asked about their outcome, they were more likely to commit “smaller” deceptions (i.e. reporting 5 instead of 4) than “bigger” ones (reporting 6 instead of 1). **Thus**, it seems that the psychological costs of telling a lie increase with the magnitude of the lie.

The psychological costs of a lie are closely linked to what one thinks about oneself.

In general, people want to think that they are honest. Telling big lies and deceiving others is incompatible with this image. Telling somewhat smaller lies that are “almost true” is easier to reconcile with a positive image of oneself. **Because** generating a plausible justification for one’s lie (e.g. “I almost rolled a 6 with my die”) is often a crucial part of deception, limiting people’s ability to come up with explanations for their lying increases honesty. **Furthermore**, measures that highlight that one wants to be a good person increase subsequent honesty. **For example**, signing on top of a self-report form (e.g. tax returns) increases the attention to the moral self. **Consequently**, people cheat less when completing the form. In other words, the human desire to view oneself as a moral person can be utilised to deter deception.

Taken together, people try to exploit others with black lies. Whether people engage in black lies depends on whether something can be gained through the deception, whether they will get caught, and whether psychological costs occur.

Yet, there is another important factor: the relationship with the deceived. Research shows that cheating socially distant others is more acceptable. However, people more frequently deceive close others. **A possible explanation is that** there is often more to gain from deceiving close others, and more to lose from revealing unpleasant truths. However, we suggest that this is not the only reason. Deception is not only driven by exploitative motives but can also result from affiliative motives. **Therefore**, we next discuss cases of deception that result from the motivation to forge a positive relationship with the deceived or to please the deceived.

Task 4

- 1 C 2 A 3 B

2

Academic Writing

Text B

Supplementary Information

1. Scotland Yard (Para. 2)

Scotland Yard (officially New Scotland Yard) is a metonym for the headquarters of the Metropolitan Police Service (MPS), the territorial police force responsible for policing most of London.

2. super-recogniser (Para. 2)

A person who never forgets a face. The opposite of a “super-recogniser” is someone who’s “face blind”.

3. Notting Hill Carnival (Para. 2)

It is London’s biggest street party which fills the streets of West London with Caribbean colours, music and flavours.

选材注解：本文节选自美国心理学协会网站（www.apa.org）上的一篇文章，该论文主要分析了面孔识别能力的个体差异对于执法、刑事司法及国家安全的影响。具体而言，本文聚焦于面孔识别这一认知技能在很多重要职业中的应用及其潜在的问题，所涉及人士包括警察、海关人员、法庭上的目击证人、军人等。文章指出，人们面孔识别的能力存在非常大的个体差异，这些个体差异影响了一些重要职业的工作。针对这些应用与问题，本文还提供了一些解决方案，比如寻找类似伦敦警方“超级面孔识别者”这样的范式，从而为员工提供指导，抑或是建议雇主在招聘或分配职责时将面孔识别作为考量的因素等。