

新世纪大学英语系列教材（第二版）

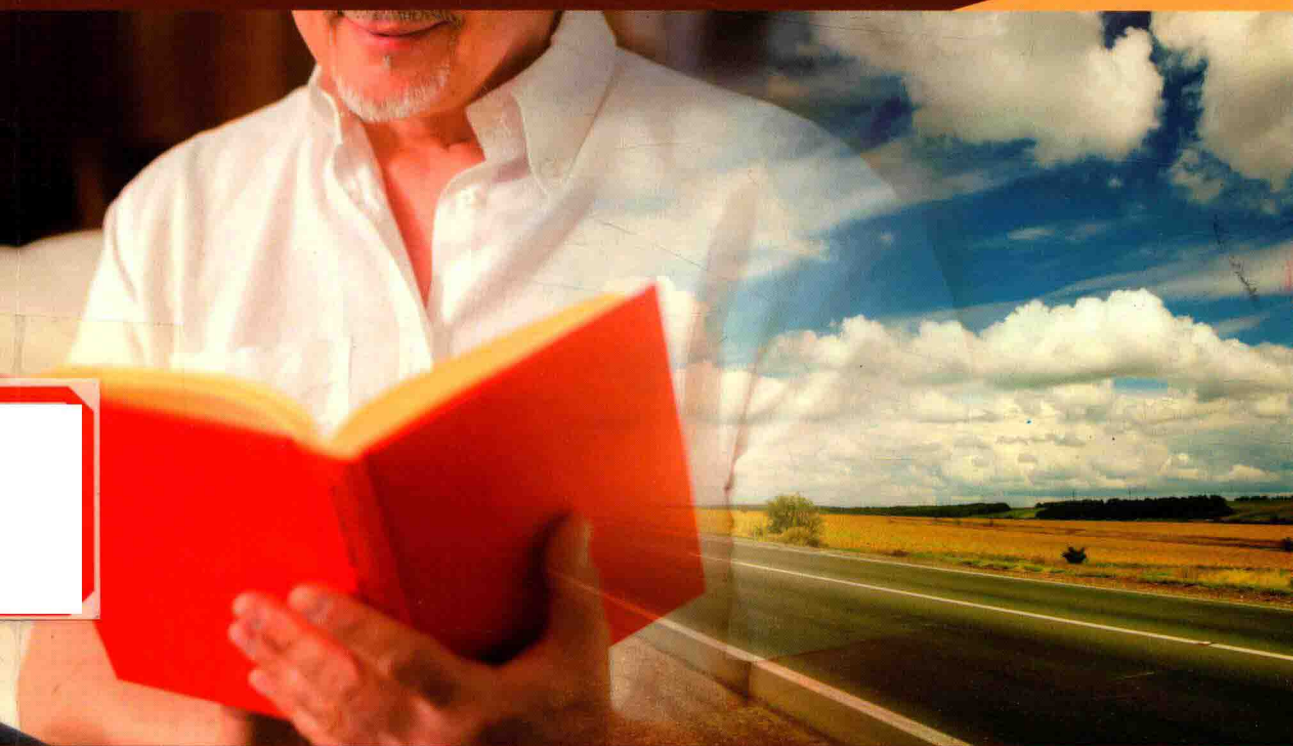
总策划 庄智象
总主编 秦秀白

英语阅读发展教程

How to Perfect
Your English Reading

主 编 黄源深
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Your English Reading

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2004年1月,教育部颁布了《大学英语课程教学要求(试行)》,提出了分层次(即“一般要求”、“较高要求”和“更高要求”)和分类指导的教学要求,进一步推动了我国高校大学英语教学全方位的改革和教学质量的全面提升。

上海外语教育出版社即于当年组织全国数十所高校启动了“新世纪大学英语系列教材”建设项目。在庄智象社长的直接领导和策划下,“新世纪大学英语系列教材”在2007年正式面世。

我们借鉴了国内外专家在教材编写上的成功经验,并充分考虑了我国大学生英语学习的需求、习惯和特点,注重编写理念的先进性、内容设计的合理性和前瞻性、质量的可靠性和竞争性;在体系设计上,系列教材集纸质图书、教辅资源、网络平台、移动学习等立体化、数字化教学资源于一体,以满足国内大学英语教学的需求。教材出版后,受到广泛欢迎,被全国近千所高校选用。教材先后被教育部认定为“普通高等教育精品教材”;入选教育部“普通高等教育‘十一五’国家级规划教材”、“‘十二五’普通高等教育本科国家级规划教材”;并获评“教育部2014年国家级教学成果二等奖”,此教学成果奖是国务院确定的国家级奖励,始于1989年,每四年评选一次,这是当年获评奖项中唯一一套英语教材。

“新世纪大学英语系列教材”的成功,与编写过程中始终秉承的理念密不可分,可归结为以下几点:

- 1) 始终把夯实语言基本功、提升学生英语综合运用能力作为教材编写的根本宗旨。教材准确把握大学英语的课程定位,突出大学英语课程丰富的人文内涵,强调实现工具性和人文性的有机统一,注重增强学生的自主学习能力,提高综合文化素养,并将提升学生的跨文化交际意识融入通用英语教学的全过程。
- 2) 教材贯彻“以教师为主导、以学生为主体”的教学理念,使教学活动实现由“教”向“学”的转变,使教学过程实现由关注“教的目的”向关注“学的需要”转变,打造以教师引导和启发、学生积极主动参与为主要特征的教学新模式。
- 3) 凸显自主学习和个性化学习理念,引导和帮助学生掌握学习策略,学会如何学习;通过开发学习者的自我潜能,引导学生学会认知、学会思索、学会交际;促使学生从“被动学习”向“主动学习”转变。
- 4) 网络课件和电子教案配套齐全,并通过网络教学平台,为学生提供丰富的自主学习资源,构建课堂教学与现代信息技术相结合的自主学习路径。
- 5) 教材参照大学英语课程综合评价体系,发挥测试对教学的正面导向作用,全面检测大学生的英语能力,重视教学过程和学习过程的评估,尤其是教学过程中的形成性测试和学生的自我评估,使之更好地为教学提供诊断和反馈信息,促进大学生英语能力的全面提高。

2014年开始,教育部组织研制并即将发布《大学英语教学指南》(下称《教学指南》)。《教学指南》重申“大学英语课程是高等学校人文教育的一部分,兼有工具性和人文性双重性质”,并根据我国现阶段基础教育、高等教育和社会发展的条件现状,将大学英语教学目标分为基础、提高、发展三个等级,将大学英语教学内容分为“通用英语”、“专门用途英语”和“跨文化交际”三大类课程。这一“三三制”的课程结构和教学目标,凸显了分层次和分类指导的教学原则,指明了我国大学英语教学今后的发展方向。

“新世纪大学英语系列教材”(第二版)中的《综合教程》、《视听说教程》、《阅读教程》、《写作教程》和《快速阅读》、《长篇阅读》等,其1-4册定位于《教学指南》中通用英语课程,满足实现《教学指南》规定的“基础级”教学目标的需求。

我国幅员辽阔,各地区、各高校之间存在很大差异。为了适应全国不同高校的办学特点,满足不同层次学生的学习需要,“新世纪大学英语系列教材”(第二版)经过重新规划、梳理、打造,于2016年推出旨在实现《教学指南》中通用英语“提高级”和“发展级”教学目标的教材,同时推出《教学指南》规划的“专门用途英语课程”的教材,供进一步提高英语技能和满足具有拔尖创新潜质的高水平学生使用。

新推出的教材包含以下四类:

1. “通用英语课程—提高阶段”教材

《综合英语提高教程》、《英语阅读提高教程》和《快速阅读提高教程》各编写2册。“提高教程”注重词汇、篇章、语用等方面的知识传授和技能训练,引导学生开展批判性阅读,拓宽语言和文化视野,培养思辨能力。通过一年左右的学习,能使达到《教学指南》中规定的大学英语教学“提高级”的相关要求。

2. “通用英语课程—发展阶段”教材

《综合英语发展教程》、《英语阅读发展教程》和《快速阅读发展教程》为高校人才培养计划的特殊需求以及部分学有余力学生的多元需求量身定制。这三种“发展教程”各编写2册,注重高层次语言应用能力的拓展训练,着力培养学生英语思维习惯和人文情怀,扩展国际视野,提升跨文化交际意识。

3. “专门用途英语课程”教材

系列教材专门为国内开设学术英语和职业英语方向课程的高校编写了相关教材,其中有着力培养高级学术英语听说能力,重点发展学术英语听力与记笔记能力,引导学生掌握各种交际策略的《学术英语视听说》;有以人文社科领域论文撰写为内容主线,指导学生就一个题目进行持续性调查研究和写作修改,帮助学生打下扎实学术写作功底的《文科英语写作》;还有凸显商务英语特色,体现学科内容与语言教学目标有机结合,帮助学生提高用英语进行专业交流、从事金融领域工作能力的《金融英语综合阅读》等等。

“专门用途英语课程”教材为开放系列,我们将根据高校英语教学的不同需求,不断完善,并开发更多品种供高校选用。

4. “培养创新创业能力”教材

为适应高校创新创业教育改革新政策、立足职场实际需求,系列教材同时编写了《职场英语写作》和《职业规划与拓展》;前者立足职场创新创业实际需要,采用“项目教学法”指导学生进行包括网页编写、产品使用说明、项目报告等不同文体的写作,后者旨在帮助大学生解决职业规划和发展中必然遇到的困难,指导学生开展多样的教学活动并悉心探索自己的未来职业规划与发展方略,培养其职场交际能力。

以上四类教材供已完成基础阶段教学的高校选用,可与系列教材中基础阶段教材相衔接,也可供部分高校高端学生单独使用。

教材建设必须以实现教学目标为己任,同时推动教学模式的改革和学习行为的转变。和外语界的众多前辈一样,我们在特定的历史条件下做了一件我们认为有意义的工作。我们深信,“新世纪大学英语系列教材”(第二版)能体现《教学指南》的精神,必将更好地服务于高校人才培养和学生个性化发展的需求。

秦秀白

2016年1月7日

《英语阅读发展教程》系《英语阅读提高教程》的延展,仍紧扣《大学英语教学指南》,旨在达到《指南》所规定的教学目标。本教程的难度和教学要求更高。

教程力求体现以下特色:

1. 培养通过阅读获取信息的能力。这主要通过阅读课文和完成练习的方式来实现。练习围绕理解中心大意、主要事实和有关细节来设计,形式与《英语阅读提高教程》相近,以体现延续性。
2. 训练以正常速度阅读的能力。按每分钟70-90词的阅读速度,主要选文中标出了每10分钟需要完成的阅读量,使学生做到心中有数,知道自己的阅读速度是否已经达标。
3. 训练阅读过程中注意力的持久性。本教程选文的长度远远超过前几册,目的在于训练学生的阅读耐心,为将来工作时阅读参考文献作好准备。

《英语阅读发展教程》延续《英语阅读提高教程》的目标,在培养学生阅读理解能力和获取信息能力的同时,狠抓学生阅读速度的提高和注意力持久性的培养。主课文及练习的长度明显增加,阅读量均在4 200-6 400词之间,阅读时限为1小时左右。这种注重提高阅读速度和培养阅读耐心的尝试,在国内尚属首次。

英国专家Tony Ward对文稿的细心审读有助于保证本书的质量。

教材编写是一项艰巨的任务,有些设想又是属于试验性的,错误和疏漏难以避免,恳请同行指正。

编者

每当谈论读书,人们常会引用英国学者弗朗西斯·培根的话来指示读书的功能和方法。

“读书足以怡情,足以傅彩,足以长才。”(Studies serve for delight, for ornament, and for ability.)这指示的是读书的功能。《英语阅读发展教程》的编写秉承培根的思想,让同学们在有限的课内外时间里尽可能多地读点东西,并进而引发自己读书的兴致,或专业,或课外,从而逐渐在读书中“怡情、傅彩、长才”。

1. 《英语阅读发展教程》的选材

“读史使人明智,读诗使人灵秀,数学使人周密,科学使人深刻,伦理使人庄重,逻辑修辞之学使人善辩。”(Histories make men wise; poets witty; the mathematics subtle; natural philosophy deep; moral grave; logic and rhetoric able to contend.)据培根对内容的宽泛思考,所读之书当可五花八门,形形色色。事实上,要通过读书怡情、傅彩、长才,唯有广泛阅读,博览群书。《英语阅读发展教程》的选材既参考培根的观点,又遵循《大学英语教学指南》对阅读教学提出的“发展目标”标准,力图培养学生用与时俱进的发展目光读懂英语文学、新闻、公文以及科学研究论文等各种题材和体裁。

因此,《英语阅读发展教程》的选文在6个单元共计24篇文章的框架中包含了社会类的民生评说、政治类的竞选辩论、新闻类的时事报道、科研类的学术论文、人物类的生平描述、文学类的短篇小说等6类体裁,内容涵盖政治、社会、经济、伦理、科学、气象、城市、环境、医疗、学校、就业、音乐、绘画、电影、心理、思维、语言、人才、妇女、儿童、科幻、神奇现象等许多话题。

2. 《英语阅读发展教程》的读法

关于读书方法,培根说:“书有可浅尝者,有可吞食者,少数则须咀嚼消化。换言之,有只须读其部分者,有只须大体涉猎者,少数则须全读,读时须全神贯注,孜孜不倦。”(Some books are to be tasted, others to be swallowed, and some few to be chewed and digested; that is, some books are to be read only in parts; others to be read, but not curiously; and some few to be read wholly, and with diligence and attention.)培根的鉴别视野宽阔,分析精深,论说细致。阅读需要针对自己的目标有所选择,有所放弃,有所为有所不为。

读《英语阅读发展教程》各篇的方法也可仿鉴于此。本教材每单元的选文分3个板块:“读取信息”(Reading for Information)、“读出乐趣”(Reading for Pleasure)和“测试你的阅读”(Test Your Reading)。粗略地看,“读取信息”和“读出乐趣”两块文字只须读其部分,大体涉猎,找出中心大意和主要事实即可,而“测试你的阅读”因为要检测你的阅读结果而你又不不知道要检测哪方面的内容,则须全读,且读时须全神贯注。假如细辨的话,“读出乐趣”部分也大可潜心品味,理由是要读出乐趣,首先取决于读懂有趣的内容,然后更讲究在字里行间鉴赏与品尝出或隐或显的韵味。只追求内容而忽视话语的内涵情趣是很难真正读出文章的乐趣的。

这就让我们不得不引用培根的另一句话来探讨读书的方法。“读书时不可存心诘难作者，不可尽信书上所言，亦不可只为寻章摘句，而应推敲细想。”(Read not to contradict and confute; nor to believe and take for granted; nor to find talk and discourse; but to weigh and consider.)诘难作者与尽信所言是两个极端，培根的想法似乎可以解释为不要事先带着敌对的眼光去读别人的文章。科学的阅读方法是敢于怀疑辨析，善于推敲细想，同时也要有宽容谦逊的态度。用寻找“真善美”的目光看待读书，读书的乐趣自在其中。

倘若说“敢于”和“善于”都不容易，那么还有一个问题可能更加困难：读书的耐心。藉读书怡情、傅彩、长才确实考验耐心，尤其在急促的社会发展中，能够静下心来读书难能可贵。《英语阅读发展教程》“读取信息”和“测试你的阅读”中，每篇4000词以上的选文不仅试图帮助你练就每分钟70-90词的阅读速度，更加重要的是在生理和心理上帮助你培养持续1小时左右动眼和动脑的承受能力。为了有效地保障这个效果，我们在选文中标出了每10分钟需要完成的阅读量，提示你注意阅读进展。选文长是《英语阅读发展教程》的标志性特点。当然，因为注意到这样的长时间阅读并不容易，“读出乐趣”板块的2篇选文各3000词左右，作为一个缓冲。另外，各板块后面的练习，无论是“读取信息”的8-10个综合信息问答题和200-300字的综合信息摘要题，“读出乐趣”的3-4个核心内容问答题，还是“测试你的阅读”的10个信息分析选择题，都可以至少被用作眼动的缓冲。顺便提示一下，“读取信息”的综合信息摘要题要求用中文撰写，你既可藉此提高自己的汉语能力，也可以此微调自己的语言环境，同时成就自己的概括能力。这样一举三得的读书着实可以使人充实。

3. 《英语阅读发展教程》的希望

对于不读书培根是这样看待的：“不常读书者须欺世有术，始能无知而显有知。”(... if he read little, he had need have much cunning, to seem to know, that he doth not.)显而易见，装点门面、欺世盗名地活着读着很累很累。不过也有人认为读书本身很累，对于这个观点培根并不全然反对，他也指出“读书费时过多易惰”。(To spend too much time in studies is sloth.)我们衷心希望你的阅读是自然欣悦的：获取信息，增添乐趣，在不知不觉中怡情、傅彩、长才。

蔡龙权

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PART I

Reading for Information

Pre-reading Questions

1. How do people usually think of smell?
2. What do you think the author means by “the mystery of smell”?

TEXT

The Mystery of Smell: The Vivid World of Odors

By Maya Pines

① After taking a mixture of mind-altering drugs one night, Stephen D., a 22-year-old medical student, dreamed that he had become a dog and was surrounded by extraordinarily rich, meaningful smells. The dream seemed to continue after he woke up — his world was suddenly filled with pungent odors.

② Walking into the hospital clinic that morning, “I sniffed like a dog. And in that sniff I recognized, before seeing them, the twenty patients who were there,” he later told neurologist Oliver Sacks.

③ “Each had his own smell-face,” he said, “far more vivid and evocative than any sight-face.” He also recognized local streets and shops by their smell. Some smells gave him pleasure and others disgusted him, but all were so compelling that he could hardly think about anything else.

④ The strange symptoms disappeared after a few weeks. Stephen D. was greatly relieved to be normal again, but he felt “a tremendous loss, too,” Sacks reported in his book *The Man Who Mistook His Wife for a Hat and Other Clinical Tales*. Years later, as a successful physician, Stephen D. still remembered “that smell-world — so

odor /'ɔ:də/ n. 气味

sniff /snɪf/ v. 嗅

evocative /ɪ'vɒkətɪv/ adj. 唤起回忆的

intricate /'ɪntrɪkət/ adj. 复杂的

whiff /hwɪf/ n. (风、气味等)
(微弱的)一阵

palate /'pælət/ n. 上颚

vivid, so real! It was like a visit to another world, a world of pure perception, rich, alive, self-sufficient, and full...I see now what we give up in being civilized and human.”

5 Being civilized and human means, for one thing, that our lives are not ruled by smells. The social behavior of most animals is controlled by smells and other chemical signals. Dogs and mice rely on odors to locate food, recognize trails and territory, identify kin, find a receptive mate. Social insects such as ants send and receive intricate chemical signals that tell them precisely where to go and how to behave at all times of day.

6 But humans “see” the world largely through eyes and ears. We neglect the sense of smell — and often suppress our awareness of what our nose tells us. Many of us have been taught that there is something shameful about odors.

7 Yet mothers can recognize their babies by smell, and newborns recognize their mothers in the same way. The smells that surround us affect our well-being throughout our lives.

8 Smells also retain an uncanny power to move us. A whiff of pipe tobacco, a particular perfume, or a long-forgotten scent can instantly conjure up scenes and emotions from the past. Many writers and artists have marveled at the haunting quality of such memories.

9 In *The Remembrance of Things Past*¹, French novelist Marcel Proust described what happened to him after drinking a spoonful of tea in which he had soaked a piece of madeleine, a type of cake: “No sooner had the warm liquid mixed with the crumbs touched my palate than a shudder ran through my whole body, and I stopped, intent upon the extraordinary thing that was happening to me,” he wrote. “An exquisite pleasure had invaded my senses...with no suggestion of its origin...”²

10 “Suddenly the memory revealed itself. The taste was of a little piece of madeleine which on Sunday mornings...my Aunt Leonie used to give me, dipping it first in her own cup of tea...Immediately the old gray house on the street, where her room was, rose up like a stage set...and the entire town, with its people and houses, gardens, church, and surroundings, taking shape and solidity, sprang into being from my cup of tea.”

11 Just seeing the madeleine had not brought back these memories, Proust noted. He needed to taste and smell it. “When nothing else subsists from the past,” he wrote, “after the people are dead, after the things are broken and scattered...the smell and taste of things

remain poised a long time, like souls...bearing resiliently, on tiny and almost impalpable drops of their essence, the immense edifice of memory.”³

12 Proust referred to both taste and smell — and rightly so, because most of the flavor of food comes from its aroma, which wafts up the nostrils to cells in the nose and also reaches these cells through a passageway in the back of the mouth.

13 Our taste buds provide only four distinct sensations: sweet, salty, sour, and bitter. Other flavors come from smell, and when the nose is blocked by a cold, most foods seem bland or tasteless.

14 Both smell and taste require us to incorporate — to breathe in or swallow — chemical substances that actually attach themselves to receptors on our sensory cells. Early in evolution, the two senses had the same precursor, a common chemical sense that enabled bacteria and other single-celled organisms to locate food or be aware of harmful substances.

15 How we perceive such chemical substances as odors is a mystery that, until recently, defeated most attempts to solve it. Anatomical studies showed that signals from the olfactory cells in the nose reach the olfactory area of the cortex after only a single relay in the olfactory bulb. The olfactory cortex, in turn, connects directly with a key structure called the hypothalamus, which controls sexual and maternal behavior.⁴ (10 min)

16 When scientists tried to explore the details of this system, however, they hit a blank wall. None of the methods that had proved fruitful in the study of vision seemed to work.

17 To make matters worse, very little was known about the substances to which the olfactory system responds. The average human being, it is said, can recognize up to 10,000 separate odors. We are surrounded by odorant molecules that emanate from trees, flowers, earth, animals, food, industrial activity, bacterial decomposition, other humans. Yet when we want to describe these myriad odors, we often resort to crude analogies: something smells like a rose, like sweat, or like ammonia.⁵

18 Our culture places such low value on olfaction that we have never developed a proper vocabulary for it. In *A Natural History of the Senses*, poet Diane Ackerman notes that it is almost impossible to explain how something smells to someone who hasn't smelled it. There are names for all the pastels in a hue, she writes — but none for the tones and tints of a smell.⁶

19 Nor can odors be measured on the kind of linear scale that

waft /wɑ:ft/ v. 飘荡

nostril /'nɒstrəl/ n. 鼻孔

precursor /'pri:kɜ:sə/ n. 前身

olfactory /ɒl'fæktəri/ a. 嗅觉的

cortex /'kɔ:teks/ n. 脑皮层

hypothalamus /'haɪpə'θæləməs/ n.

丘脑下部

olfaction /ɒl'fækʃən/ n. 嗅觉

pastel /'pæstəl/ n. 色彩

skunk /skʌŋk/ *n.* 鼬鼠

epithelium /eprɪ'ti:liəm/ *n.* 上皮组织

cilia /sɪliə/ *n.* 纤毛; 睫

protrude /prə'tru:d/ *v.* 突出

mucus /'mju:kəs/ *n.* 黏液

promiscuous /prə'mɪskjuəs/ *adj.*

不作选择的

discriminate /dɪs'krɪmɪneɪt/ *v.* 区别

scientists use to measure the wavelength of light or the frequency of sounds.

20 “It would be nice if one smell corresponded to a short wavelength and another to a long wavelength, such as rose versus skunk, and you could place every smell on this linear scale,” says Randall Reed, an HHMI⁷ investigator at the Johns Hopkins University School of Medicine who has long been interested in olfaction. “But there is no smell scale,” since odorant molecules vary widely in chemical composition and three-dimensional shape.

21 To find out how these diverse odorant molecules trigger our perception of smell, researchers needed to examine the olfactory cells and identify the receptor proteins that actually bind with the odorants.

Finding the Odorant Receptors

22 “We think that we smell with our noses, [but] this is a little like saying that we hear with our ear lobes,” writes Gordon Shepherd, professor of neuroscience at Yale University.

23 “In fact, the part of the nose we can see from the outside serves only to take in and channel the air containing odorous molecules.” The neurons that sense these molecules lie deep within the nasal cavity, in a patch of cells called the olfactory epithelium.

24 Perched behind a sort of hairpin turn at the very top of the nasal cavity, the olfactory epithelium is only a few centimeters square. It contains some 5 million olfactory neurons, plus their supporting cells and stem cells. Actually, there are two such patches — one on each side of the nose — lying in a horizontal line just below the level of the eye.

25 Each olfactory neuron in the epithelium is topped by at least 10 hair-like cilia that protrude into a thin bath of mucus at the cell surface.⁸ Somewhere on these cilia, scientists were convinced, there must be receptor proteins that recognize and bind odorant molecules, thereby stimulating the cell to send signals to the brain.

26 The receptor proteins would be the key to answering two basic questions about olfaction, explains Richard Axel, an HHMI investigator at Columbia University. First, how does the system respond to the thousands of molecules of different shapes and sizes that we call odorants — “does it use a restricted number of promiscuous receptors, or a large number of relatively specific receptors?” And second, how does the brain make use of these responses to discriminate between odors?

27 The string of discoveries that totally changed the study of olfaction resulted from a new emphasis on genetics. Instead of hunting for the receptor proteins directly, Richard Axel and Linda Buck, who was then a postdoctoral fellow in Axel's group and is now an HHMI investigator at Harvard Medical School, looked for genes that contained instructions for proteins found only in the olfactory epithelium.

28 Their efforts produced nothing at first. "Now we know why our initial schemes failed," says Axel. "It's because there are a large number of odorant receptors, and each was expressed only at a very low level."

29 Finally, Buck came up with what Axel calls "an extremely clever twist." She made three assumptions that drastically narrowed the field, allowing her to zero in on a group of genes that appear to code for the odorant receptor proteins.⁹

30 Her first assumption — based on bits of evidence from various labs — was that the odorant receptors look a lot like rhodopsin, the receptor protein in rod cells of the eye. Rhodopsin and at least 40 other receptor proteins crisscross the cell surface seven times, which gives them a characteristic, snake-like shape. They also function in similar ways, by interacting with G proteins¹⁰ to transmit signals to the cell's interior. Since many receptors of this type share certain DNA sequences, Buck designed probes that would recognize these sequences in a pool of rat DNA.

31 Next, she assumed that the odorant receptors are members of a large family of related proteins. So she looked for groups of genes that had certain similarities. Third, the genes had to be expressed only in a rat's olfactory epithelium. (20 min)

32 "Had we employed only one of these criteria, we would have had to sort through thousands more genes," says Axel. "This saved several years of drudgery."

33 Buck recalls that "I had tried so many things and had been working so hard for years, with nothing to show for it. So when I finally found the genes in 1991, I couldn't believe it! None of them had ever been seen before. They were all different but all related to each other. That was very satisfying."

34 The discovery made it possible to study the sense of smell with the techniques of modern molecular and cell biology and to explore how the brain discriminates among odors.

35 It also allowed researchers to "pull out" the genes for similar receptor proteins in other species by searching through libraries

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twist /twɪst/ *n.* 新手法

drastically /ˈdræstɪkli/ *adv.* 极大地

rhodopsin /rəʊˈdɒpsɪn/ *n.* 视网膜色素

crisscross /ˈkrɪskrɒs/ *v.* 交叉分布

drudgery /ˈdrʌdʒəri/ *n.* 苦差事