

The reward, according to Cavafy, is the journey, rather than the goal. Both the young Kandel who met Grundfest and the mature, imaginative investigator of the *Aplysia* epoch seem to have valued the goal at least as much as the journey. But reading these memoirs, one senses that, over the years, Kandel's appreciation of the journey itself has increased. Is Ithaca attainable for those who study memory?

If the goal is to chart and analyse plasticity in neuronal terrain in fine detail, then the kandelian *Aplysia* paradigm is a tremendous leap forwards. If it is to understand how recollecting humans think, feel and plan, we might need more Kandels. ■

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concerns with biodiversity loss and his contributions to the development of the fledgling field of environmental ethics.

Each article is preceded by a brief essay in which Wilson explains its context and outlines more recent developments in the field. Although not as thorough and telling as those by W. D. Hamilton in *Narrow Roads of Gene Land*, vols 1–3 (Oxford University Press, 1997–2005), these brief essays are interesting and informative about some essentials of Wilson's personality. For example, Wilson explains that he revised the ant genus *Pheidole* as “a hobby, a form of relaxation” during which he “listened to classical and soft rock music... at odd hours” in his home laboratory. The outcome was *Pheidole in the New World* (Harvard University Press, 2003), an 800-page monograph with more than 5,000 drawings and a list of 624 species, of which 337 are new to science (see *Nature* 424, 727; 2003) — an achievement beyond what most scientists would ever dream of accomplishing in a lifetime.

Nature Revealed contains all 60 articles in their original form. Unfortunately, the size reduction of several articles resulted in print so small as to be reminiscent of the labels on insect museum specimens. The diversity and technical nature of some of the articles might make this book difficult to read from cover to cover, but it remains a treasure for those interested in science and history. The progression of articles highlights the path of Wilson's journey across different disciplines in an attempt to bridge gaps between them, including the gulf between the humanities and the sciences. These are important messages in this age of ultraspecialization and disciplinary compartmentalization. ■

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The ant trail

Nature Revealed: Selected Writings, 1949–2006

by Edward O. Wilson

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Edward O. Wilson is one of the most distinguished scientists and thinkers of our time. He is best known for his twenty or so books, exploring topics as diverse as sociobiology, human nature, ant taxonomy, biodiversity and the philosophy of knowledge, but he has also published a large number of scientific articles and other works. *Nature Revealed*, a compilation of 60 of these articles, illustrates how his interest has ranged between fields as diverse as entomology, ethology and philosophy.

Wilson's first publication was in 1949 in a local journal called *Alabama Conservation*. In this paper, Wilson, then a 19-year-old senior at the University of Alabama, reports the distribution of what was then called the imported fire ant. His second article was published in *Evolution*, an influential scientific journal. In this article Wilson reports that there are two phenotypic variants of the imported fire ant. By switching queens from one colour-type colony to the other, he proved a hereditary basis for the phenotypic differences observed and proposed several explanations for how one morph replaced the other. Incidentally, later studies revealed that the two colour morphs are actually two distinct species, now called the black imported fire ant (*Solenopsis richteri*) and the red imported fire ant (*Solenopsis invicta*), the latter of which has become one of the worst invasive pest species in the world.

The difference in the content of these two articles foreshadows Wilson's main gift: his ability to be hugely integrative and make bold syntheses. In the scant two years that separated the publication of these two reports, Wilson had vastly broadened his interests, allowing him to interpret his field observations within a solid framework of evolutionary biology and population genetics.

The progression of articles in *Nature Revealed* demonstrates, again and again, Wilson's endless capacity to put scientific findings into a broader context and to bridge gaps between disciplines. For example, between

1959 and 1962 he published a few specialized papers detailing the nature of communication within ant societies. By 1963 he had realized that pheromones were important, and had ventured to propose general principles in a *Scientific American* article entitled simply “Pheromones”. In this piece, Wilson also speculated for the first time on the existence of human pheromones. On the basis of data by French biologist J. LeMagnen, who showed that the odour of exaltolide can only be perceived clearly by sexually mature women at the time of ovulation, Wilson stated that although these observations “hardly represent a case for the existence of human pheromones... they do suggest that the relation of odours to human physiology can bear further examinations”. Such examinations did indeed reveal that pheromones are implicated in some human behaviours.

In the same vein, the sequence of publications reveals the steps that led Wilson from reports of patchy ant distributions in the rainforests of New Guinea to the synthesis with Robert MacArthur of the influential theory of island biogeography. Similarly, the content of several articles demonstrates Wilson's growing

