Audubon "took an upriver Mississippi steamboat to the mouth of the Ohio and walked the last 130 miles home".

The heart of the story begins here, as the 32-year-old Audubon plunges from prosperous Ohio gentleman to a penniless, depressed woodsman with a growing family to feed. With understated epiphany — "nothing was left to me but my humble talents" — he soon excelled at drawing portraits of wealthy citizens, while keeping alive his obsessive passion for birds. Long before imagining how he would use them, Audubon had been creating a portfolio of masterpieces. His life-sized paintings of birds were not the stiff scientific illustrations then in fashion. A keen observer, Audubon committed himself early to capturing (often by exaggeration) each bird's species-specific personality. In 1810, Alexander Wilson, the 'father of American ornithology' but a depressed loner, encountered Audubon in Louisville. Jealous of the young artist's superior talent, Wilson refused Audubon's offer to collaborate, and died just three years later. But Wilson's big idea — to travel about America painting and writing about its birds — left a lasting impact. As he began to paint for a living, Audubon realized his calling and single-mindedly pursued Wilson's idea. By 1926 he was sailing for England to find an engraver and begin publication, and he would soon leave Wilson in the dust.

Rhodes traces the artist's meteoric rise as England embraced both the art and the man. Audubon's revolutionary paintings portrayed highly animated birds in exacting detail, reflecting frontier America in vivid, even bloody, colour. His detailed knowledge about the lives of mostly unfamiliar birds impressed England's stuffy scientific circles. Audubon's dogged pursuit of a one-man business demanded a long and punishing schedule. Rhodes gives haunting, nuanced colour to the picture of Audubon in England, struggling to gain credibility and subscribers. Steadily achieving fame, the artist is wracked with depression, self-doubt, changes of plans and sadness. We see him as a passionate, profoundly tender man who deeply misses his wife. Anyone who thinks they know the travails of a relationship at a distance should read what these two lovers endured, at a time when their frequent letters to each other either disappeared or took six months to be delivered.

I found it only mildly disappointing that Audubon's scientific relationships and contributions are treated more lightly than his personal and business affairs. We are given glimpses, for example, of his election as a fellow of the Royal Society of London (only the second American, after Benjamin Franklin), his brief association with William Swainson, his long friendship with Charles Bonaparte, his enmity with George Ord and the Philadelphia establishment, and his close partnership with naturalist John Bachman of Charleston. But we barely meet William MacGillivray of Edinburgh, with whom Audubon wrote the five-volume *Ornithological Biography*, his most important and lasting scientific achievement.

The book contains numerous errors of nomenclature, and would have benefited from proofreading by an ornithologist. Most disappointing of all to me are the illustrations, which are mostly small black-and-white pictures, many untitled. The printing quality of the 16 colour plates is abysmal — Audubon would never have approved them for public release.

Rhodes has significantly clarified both the factual record and the human understanding of this truly legendary man whose name has become synonymous with birds. Of French descent and English fame, Audubon became a consummate American who realized that his work would become immortal as his beloved frontier began disappearing. Indeed, with each passing year, Audubon's legacy continues to multiply in value, and this book will add immeasurably to the world's deep appreciation for his passion. ■

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More on Audubon

Under a Wild Sky by William Souder
North Point Press: 2004. $25.

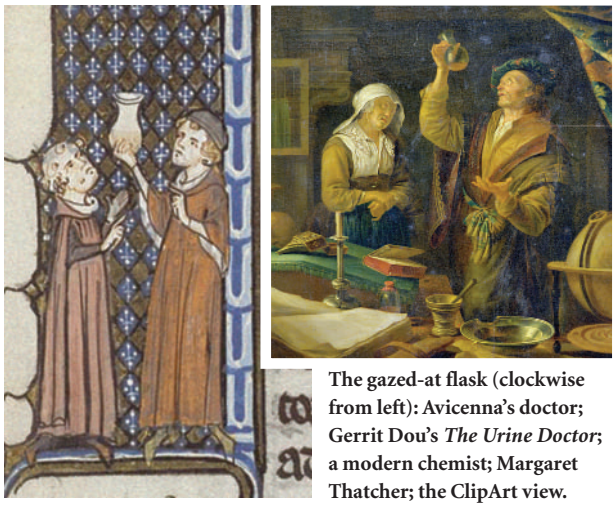
Science in culture

What's in the flask?

The origin of the archetypal image of the chemist.

Philip Ball

What are these scientists all looking at? The archetypal image of the chemist, ubiquitous in stock photographic images today, and even in clip-art databases, depicts a lab-coated figure gazing at a flask of liquid held aloft. The inclusion of the picture in the bottom right will be understood by British readers, who may recognize the features of a woman who went on to become the country's prime minister.



The gazed-at flask (clockwise from left): Avicenna's doctor; Gerrit Dou's *The Urine Doctor*; a modern chemist; Margaret Thatcher; the ClipArt view.

But this is not what real chemists spend their time doing. So where does the pose come from? As Joachim Schummer and Tami Spector pointed out at a recent conference in Paris on the public image of chemistry, the answer lies in the image in the top left. This appeared in a book dating from 1283, the Latin translation of Avicenna's *Canon of Medicine*, and shows not a chemist but a doctor. The flask contains not a solution synthesized by alchemy but a sample of a patient's urine — diagnoses were typically made by uroscopy, the practice of inspecting the urine for colour, clarity and other qualities.

When Paracelsus introduced chemistry into medicine (so-called iatrochemistry) in the early seventeenth century, this image of the gazed-at flask transferred itself from medicine to 'chymistry', and subsequently became so much a part of the subject's visual language that it is alive and well today.

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www.hyle.org/service/chmc2004/

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