Caught in the Web of Words (Yale University Press: New Haven and London, 1977) is the biography of James A. H. Murray, the Victorian lexicographer who was the chief editor of the incomparable Oxford English Dictionary. Drawing upon unpublished Murray family records as well as Oxford University Press files, his granddaughter Elisabeth Murray has given us a far more detailed account of the man than was previously possible: not merely his 35-year struggle to turn an undigested mass of several million citations sent in by volunteer readers into a dictionary designed to show the historical development of each word from twelfth-century England onward, but also his effort to educate himself from boyhood through early manhood.

Indeed, these formative years are an essential part of the story, for many of the traits which helped him to rise above humble beginnings were invaluable in the arduous (and for many years, thankless) task of dictionary editor. How was it, in fact, that he was transformed in a quarter century from the son of a Scottish tailor with only seven years of formal schooling, to the logical choice as editor of the OED? He certainly did not start out with any such goal, and in fact during the early years foreign languages was only one of many interests.

One can identify several pivotal events during these twenty-five years which turned him to lexicography. (Of course, they are pivotal only in retrospect; Murray no doubt did not recognize their significance at the time.) His two moves to more urban areas -- Denholm to Hawick in 1854, Hawick to London in 1864 -- indirectly contributed much to his career, for they offered the mental stimulation of meeting people with like intelligence and interests, and set the stage for the more obvious pivots:

Move from Denholm to Hawick to take a job teaching school

- the formation of the Hawick Archaeological Society (1856), enabling Murray to develop his varied interests more systematically
- a vacation course in elocution at Edinburgh (1857), prompted by the needs of his teaching, where he met Melville Bell, inventor of a system of phonetic symbols (Visible Speech) -- this led directly to his interest in the accurate representation of spoken Scottish dialects
- the discovery (through omniverous reading) that Scottish dialects had continuously evolved from Anglo-Saxon (about 1859-60); the discovery of Old Gothic or High German in
books borrowed from Canon Greenwell whom he met at the Berwickshire Naturalists' Club (1861)

Move from Hawick to London (1864) to seek a more salubrious climate for his tubercular wife

- introduction to the philologist Alexander Ellis by Melville Bell (1868), who in turn proposed him as a member in the Philological Society

Once in the Society, he obtained almost instant recognition as a promising philologist through several lectures on Scottish dialects (these were published a couple of years later as The Dialect of the Southern Counties of Scotland). It is not clear when he started this work, but it was very likely inspired by his Anglo-Saxon and old Gothic discoveries. In any event, this book, more than any other single event, launched Murray clearly in the direction of philology as a life work.

What would have happened if one or more of these turning-points had not occurred? One can speculate, for example, that had Murray remained in Scotland he would have likely had a successful career as a teacher and headmaster with strong leanings toward local history, geology and archeology, participating in the regional scientific and antiquarian societies.

It is unfair to enumerate these turning-points without observing that they represented opportunities for Murray to seize and develop, not guarantees of a lexicographic career. Several character traits played key roles: his strong thirst for learning (even in early boyhood), his robust health and energy (he could get by on only a few hours' sleep a night), his prodigious memory, his perfectionism (he detested slipshod work), and his yen to collect and classify (shown in his botanical collections before he started collecting dialect examples). Elisabeth Murray makes much of the fact that he had a strong belief in divine guidance; he felt he was being shaped by forces beyond him for service to God and man (his favorite text was a saying by Charles Kingsley: "Have thy tools ready, God will find thee work").

After he moved to London, another character trait became evident: a feeling of inferiority because of his lack of formal education, and his belief that the English looked down on the Scotch. Although the second prejudice was real enough, the first did not matter -- at this time, philology was a new science in England, drawing its adherents from a variety of other fields, so that Murray's self-education was a sufficient entry-ticket (another self-taught philologist illustrated the old saying, perhaps truer a century ago than now, that if a man devotes all his leisure to a subject he is likely to find himself an acknowledged expert in it). In any event, Murray's sense of inferiority led to a feeling of martyrdom during the production of the OED; often he felt that he had to accomplish more than was required of others for recognition. Perhaps this desire to prove to the world that a poorly-schooled Scotsman was as good as anyone else led him to keep on with the dictionary when its drudgery would have tempted another

man to quit.

Murray's fascinating dictionary was being created under great pressure by other potential contributors who had to produce 16,000 pages of text. He probably had no choice but to consider this at first unscalable (16,000 pages would furnish a book larger than a book of Shakespeare's works). Murray's perseverance in his attempts is given in J. L. Murray's moral praise of his editor: "It was more than a book; it was a dictionary but also a moral triumph at the outset of a great enterprise..."
Murray's long struggle with the Oxford Press as editor makes fascinating reading. One is tempted to ask: would this dictionary have been created had Murray not been there? One can find flaws in all the other potential editors: Skeat was too willing to compromise quality for time and money, Nicol was in poor health, Furnivall was abrasive and had too many other linguistic irons in the fire -- so one must conclude that the OED without Murray would have looked quite different, probably being a much smaller dictionary. In fact, it is amazing to consider the discrepancies between the final size of the dictionary (16,000 pages, 50 years in preparation) with the initial estimates furnished Oxford by Henry Sweet (6,400 pages, 10 years). To make matters worse, various members of the Philological Society led Oxford to believe that the dictionary would be a money-maker rather than a book published solely for scholarly excellence. The story of Murray's gradual awareness of the unreality of these promises, and his attempts to convince Oxford to enlarge the work (and take a loss) is given in great detail. If one were not convinced of Murray's high moral principles, one might believe that his dealings with Oxford were those of a Machiavellian who had his heart set on a large dictionary but knew that only a small one would be acceptable to Oxford at the outset!

**CALENDAR DICE**

In the December 1977/January 1978 issue of Scientific American magazine, Martin Gardner observes that it is possible to inscribe letters on the faces of three cubes in such a way that the three-letter abbreviations for all twelve months can be spelled out by suitable rearrangement. At first blush, this feat appears impossible, since there are nineteen different letters; furthermore, a little reflection convinces one that either J, N or U must appear twice in order to spell JAN, JUN and AUG. W. Bol of Geldrop in the Netherlands solved this problem in 1971 by using lower-case letters, allowing n to be represented by an inverted u, and d by an inverted p:

\[(j f m p/d g o) \quad (n/u b r y s c) \quad (a e u t v)\]

It is easy to put the integers from 01 to 31 on two dice (1 2 3 4 5 6)(0 1 2 7 8 9), and also easy to put the names of the days of the week on three dice (e h i o s)(a r m u w) (d f n t), making it possible to spell out the full date with only eight cubes (as SAT 10 DEC).