Science and the New Journalism

Walter Gratzer

"I WENT to the R: Society, where were Tryals with Sir E Newtons Burning-glasse: which did strange things as to mealting whatever was held to it in a moment: one of the most difficult was common Slate, which lasted longer than Iron, Gold, brasse, Silver, flint, brick etc which it immediately mealted, calcined and Vitrified: The Glasse was composed of 7 round burning glasses of about a foote diameter, so placed in a frame as to cause all their Sun-beams to meate in one focus onely". Thus John Evelyn in 1705, setting a respectable standard for science writers to come.

Consider now this recent passage from a great English daily. It is the Science Correspondent himself who speaks: "Experiments in transplanting genes, made both on the laboratory bench and the natural ones removed from other organisms, are running into difficulties because they are being rejected by the host on which they are imposed. . . . Since the manufacture of some new pharmaceutical or other chemical is dependent on getting the maximum number of organisms to sympathize with their respective compound, the rejection process is very serious". Clear? Good, because there is plenty more in the same vein. Who was it who said that to be intelligible is to be found out? (John Evelyn would also not have informed us, as an American newspaper did recently, that "the knee is the Achilles heel of the leg".)

Wet sand

Would reading an account of a football match, a Royal outing or a natural disaster equally make one feel as though one were being beaten about the head with a sock full of wet sand? Why did the editor permit such an abomination against the canons of his craft to remain on the page? The answer surely must be that science barely qualifies as news. As an attention-grabbing headline "W-Boson Discovered" may rank with "Small Earthquake in Peru". There is of course the counter-argument, however unfashionable, that one does not necessarily have to concern oneself with the preferences of the average reader (or writer) of English newspapers. Dylan Thomas expressed the principle like this:

Few understand the works of Cummings,
And few James Joyce's mental slummings,
And few young Auden's coded chatter;
But then it is the few that matter.

Attempts have, to be sure, been made to package science for the lower end of the market. Prototypic examples include the works of Paul de Kruif, of which *Microbe Hunters* is the best known. De Kruif had been a microbiologist — or, as he always called himself, a microbe hunter — at the Rockefeller Institute and supplied the technical background for Sinclair Lewis's great scientific novel, *Martin Arrowsmith*. De Kruif adhered to the *Gott-im-Himmel* breathed - Robert - Koch - staring - at - the - sectioned - *Leberwurst* - on - the - microscope - slide - But - these - can - only - be - the - fatal - anthrax - bacilli school of historical writing which is now all but unreadable. Yet *Microbe Hunters* appears to have inspired any number of young people of an earlier generation to take the vows and dedicate themselves to a life in the laboratory.

De Kruif's style of reportage has enjoyed a resurgence in recent years. Here, for instance, is a sample, taken at random from a book by a successful science journalist, published by an American university press: "Chromosomes, chromosomes, you could always find Elmer Lustwinkel at the table, sorting through hundreds of black-and-white enlargements of chromosomes. Long straight chromosomes; short stubby chromosomes; chromosomes that looked like bow ties, black ants, and licorice twists; and all wearing stripes known as banding patterns. Slowly, deliberately, *ploddingly*, Elmer Lustwinkel would cast his big soft eyes over each photograph studying the shapes and patterns". (I have changed only the name; the italics are the author's.) The flow of bilious prose exerts a curiously unsettling effect as the familiar terrain takes on an unearthly hue.

Scientists themselves are now of course beginning to generate their own myths. The great journalist and aphorist, Karl Kraus, opined that wars were started and history was made by politicians telling lies to journalists and then believing what they read in the newspapers. This is also the style of some of the less attractive members of the scientific profession — those with press agents, for instance — and the relation between science and journalism has in consequence become an uneasy one: the journalist seeks to exploit the eager hyperbole of the scientist and the scientist the untutored credulity of the journalist. But a new breed of science journalist is emerging, more committed and better informed, often indeed with a professional background in science.

The New Journalism is a term apparently invented by Tom Wolfe. As he defines it, it has two main components. The first is the quality of the writing; what Wolfe calls the aesthetic dimension can elevate it to a literary form, which, he holds, is now thriving at the expense of the novel. The second element is that the journalist writes as an insider, a participant, however transiently, in the events that he describes. He rides, like Hunter Thompson, with the Hell's Angels, he runs onto the field, like George Plimpton, with the Detroit Lions, or, like Tom Wolfe, he heroically nibbles canapés of Roquefort, rolled in crushed walnuts, with the Black Panthers at Leonard Bernstein's fund-raising party. In the end of course the trust and hospitality on which this *modus operandi* depends is generally betrayed, and for this a heavy price is sometimes exacted: Hunter Thompson was left on the floor of a roadhouse in California, spitting teeth and blood and pondering the *mot juste* with which to conclude his best-seller.

Candour

The New Journalism has at last advanced into science. Jim Watson's memoir, *The Double Helix*, can be seen as a precursor; it was undeniably a participant's view and its candour gave wide offence. There are now some admirable practitioners of the craft (practically all, it has to be admitted, in America). They include Nicholas Wade (*The Nobel Duel*), William Broad (*Star Warriors*) and, more recently, Stephen Hall (*Invisible Frontiers*) and Gary Taubes (*Nobel Dreams*). All know how to write compelling prose and all are formidably well briefed and pertinacious. The boundary between journalism of this calibre and serious contemporary history has become blurred. Stephen Hall's account of the expensive scramble by competing research groups to achieve the first expression of a recombinant human gene, and Taubes's chronicle of Carlo Rubbia's (and CERN's) pursuit of the mystical Nobel, illuminate the darker side of modern science, hold up the mirror to Narcissus, record stirring chapters of history in all their triumph and squalor and, I cannot doubt, ultimately do a major service to science and the community.

Not the least of the qualities that such writers must possess are endurance and fortitude. A man who has spent a year with a tape-recorder in the mephitic caverns of CERN, or in the Californian salt-mines where clones are cloned, will carry marks to compare with those of Hunter Thompson on the roadhouse floor, or George Plimpton, plastered into the mud of the stadium in Detroit. One is not after all put into this world for pleasure alone. □

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