

F. R. LEAVIS, SCIENCE, AND THE ABIDING CRISIS OF MODERN CIVILIZATION

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A descent into the swirl of particular incident, particular politics, particular voices, particular traditions, and particular arguments, a movement across the grain of difference and along the lines of dispute, is indeed disorienting and spoils the prospect of abiding order. But it may prove the surer path toward understanding....

Clifford Geertz¹

INTRODUCTION

When the scientist-turned-novelist C. P. Snow and the literary critic F. R. Leavis clashed in the infamous ‘two cultures’ debate of the early 1960s, theirs was the latest instalment in a long tradition discussing the relationship between the arts and sciences.² That tradition included the exchanges between T. H. Huxley and Matthew Arnold in the 1880s, the Cambridge Union’s debate over the proposition that “the sciences are destroying the arts” in 1928, and the BBC’s series on the challenge posed by the division between scientific and humanistic thought in 1946.³ Connecting the dots between each of these episodes were additional instalments of the same conversation, frequently imbued with tones of novelty and urgency suggesting that the tradition remained obscure even to many of those participating in it.⁴ Snow’s contribution was to provide a label for this running dialogue, the ‘two cultures’ — a phrase that has come to establish not only the terms of the conflict between Snow and Leavis, but of that longer discussion about the relationship between the arts and sciences that continues to the present day.⁵

Snow’s success in defining the terms of the exchange frustrated Leavis. In the Richmond Lecture at Downing College in February 1962, the doyen of English criticism delivered a savage denunciation of Snow and *The two cultures*: “Snow’s argument proceeds with so extreme a *naïveté* of unconsciousness and irresponsibility”, he declared, “that to call it a movement of thought is to flatter it”.⁶ Much of the discussion in the ensuing controversy focused upon questions of manners, but to Leavis what followed was even more disheartening: his argument rejecting Snow’s arts-versus-sciences dichotomy was ironically interpreted as its ultimate confirmation. Aldous Huxley expressed this characterization clearly (if somewhat clumsily) when he posited a symmetry between Snow’s ‘scientism’ and Leavis’s ‘literarism’.⁷ Leavis was taken to be defending literature against science, and he accordingly found himself absorbed within the very ‘two cultures’ framework he had set out to demolish.

This article intends to problematize the ‘two cultures’ as a trans-historical category of analysis. This is not to deny that Snow and Leavis were situated within a tradition discussing the relationship between the arts and sciences, one that is undeniably recurrent and an object of study in its own right. But to analyse a particular instalment of that tradition through the lens of the ‘two cultures’ imposes categories born of a unique historical moment upon very different circumstances, and those categories then shape the interpretation of the episode at hand by situating it within an already existing narrative of disciplinary conflict. However, the adequacy of Snow’s terms for understanding such distinct instalments has recently begun to be reconsidered, as in Paul White’s argument that the differences between Huxley and Arnold arose within a shared project establishing a common high culture, Roger Smith’s insistence upon a “shared and durable world of expression and judgment” among interwar scientists and social commentators, and John Guillory’s contention that the Sokal affair of the 1990s resulted in part from the conflation of disciplinary differences with political positions.⁸

I want to extend these critiques of the ‘two cultures’ dichotomy to the episode where it might seem most apposite, the Snow–Leavis controversy itself. Although Huxley and others cast Leavis as an opponent of science in favour of literature, Leavis rejected that characterization and insisted that his argument was not directed against science. That insistence was already present in his Richmond Lecture, when he reserved judgement on Snow’s qualifications to speak on behalf of science and directed his criticism against Snow’s literary pretensions instead; and it was also present in his subsequent comments on the subject, when he restrained his strictures against Snow in an attempt to avoid being read as hostile to science. In fact, Leavis often maintained that he respected scientists and the sciences, and over the course of his career he directed most of his critical fire not against physicists or biologists, but against writers and literary critics. It is true that Leavis was sceptical of the interpretive authority, moral celebration, and material promise of science and technology, and I am not suggesting that, in his advocacy of rigour and expertise, Leavis was actually a proponent of science or a “scientific” criticism. Instead, while there can be no question that science, as a defining characteristic of modern civilization, figured prominently in Leavis’s historical vision, I want to suggest that the impulse to reduce it to something which he could be ‘for’ or ‘against’ is itself a legacy of the misleading ‘two cultures’ dichotomy.⁹

Instead of using the Richmond Lecture to interpret Leavis’s literary criticism, then, I intend to explore that criticism with an eye toward re-interpreting the Richmond Lecture. My focus will be on three issues in which his criticism intersected with his attitude toward science: the historical narrative he developed in the 1930s, the pedagogical strategies he advocated from the 1940s to the 1960s, and the philosophical interests that preoccupied him in the 1970s. The argument with Snow proved pivotal to these issues, both professionally (as the moment when Leavis increasingly turned his energies toward social criticism) and intellectually (as the moment when he began to explicate terms and issues long implicit in his writings).¹⁰ At the end I

shall conclude by reconsidering the stakes and meaning of his argument with Snow. My ultimate aim is two-fold: to displace ‘science’ as the presumed object of Leavis’s critique, and to complicate the ‘two cultures’ as the lens through which the tradition containing that critique is understood.

1. THE ‘TWO CULTURES’ DEBATE, 1959–1962

When C. P. Snow delivered the annual Rede Lecture in Cambridge on 7 May 1959, he took as his subject an issue that his career as scientist and novelist seemed to make him uniquely qualified to address: the relationship between scientific and literary intellectuals. *The two cultures and the Scientific Revolution* is often remembered as a lament about the misunderstanding between these two types of intellectuals, but that was actually just the starting point for Snow’s more ambitious argument. After identifying a dichotomy between the arts and sciences, Snow asserted that literary intellectuals had never understood the benefits of science, technology, and industry, and that they continued to remain blind to the true social history of the Industrial Revolution: “With singular unanimity, in any country where they have had the chance, the poor have walked off the land into the factories as fast as the factories could take them.”¹¹ Yet according to Snow, instead of the scientists who possessed the technical know-how of economic advance, these Luddite literary types were the ones staffing the corridors of power in the Western world. He then raised the stakes still further, casting his argument on a global scale: the secret to industrial development was out, he declared, and the poor nations of the world were not going to accept being poor any longer. They would develop their economies one way or another, and, if Britain and the West failed to act, the Soviet Union surely would. Snow’s conclusion: it was imperative that Britain reform its education system to produce — and export — more scientists and engineers.

Snow laced his argument with charged themes. Most arresting were his contrasting accounts of the characteristics and moralities of the two cultures. He had been developing these ideas for years, and in the Rede Lecture he deployed them at their most polemical. The literary culture — and by that Snow referred alternatively (and problematically) to creative writers, literary intellectuals, and political élites — had retreated in horror from industrialization in the nineteenth century, even as they skimmed its wealth to secure their own social and institutional positions. The literary intellectuals who dominated literary sensibility from 1914 — such as William Butler Yeats, Ezra Pound, and Wyndham Lewis — inherited this hostility to modern society, glorifying the alienation of the individual and thereby fostering the cultural climate that had made Auschwitz possible. The members of the traditional culture remained hostile both to the future and to science, yet they continued to manage the Western world. Their days were numbered, however, and they sensed as much — as Snow put it, the disaffection of Jim Dixon in *Lucky Jim* was in part the disaffection of the marginalized arts graduate.

Snow insisted that these literary intellectuals could learn much from their scientific counterparts. Scientific intellectuals — of whom he took physical scientists

to be representative — were optimistic both about the future and their place in it. Unlike their literary peers, scientists understood that just because the condition of the individual was tragic, the social condition did not have to be: that is, they recognized the material progress that resulted from industrialization, and knew that that progress was certain to spread throughout the world. With their innate aversion to notions of race and nation, these scientists saw themselves as the agents of liberation for millions of poor people throughout the world. Snow did not insist that scientists shared common social origins, religious beliefs, or political stances: he observed that, while a majority tended to come from poorer homes, reject religion, and vote for the Left, this did not hold for, say, chemists and engineers. The important point was not that scientists all voted Labour, then, but that even Conservative scientists were inherently progressive in their embrace of the future and their fellow human beings. Snow's was, therefore, a deeply moralistic vision of science, one that derived directly from its practice: "In the moral [life], they are by and large the soundest group of intellectuals we have", he declared. "[T]here is a moral component right in the grain of science itself."¹²

The two cultures and the Scientific Revolution was an immediate sensation.¹³ The day after the Rede Lecture, Melvin Lasky solicited from Snow the names of a half-dozen scientists and humanists who might discuss it upon publication in the next two numbers of *Encounter*.¹⁴ "The two cultures" ran in two parts in June and July, and the August issue featured a glowing discussion by seven eminent intellectuals (three of whom — Walter Allen, J. H. Plumb, and Michael Ayrton — had been handpicked by Snow).¹⁵ Allen referred to the division "which C. P. Snow so brilliantly describes" and offered his full agreement: "I accept Snow's diagnosis ... exactly." A. C. B. Lovell declared that "Snow has ... beautifully exposed the basic crisis of our existence". Even Bertrand Russell approved, writing in an open letter to Snow, "All that you say as to what ought to be done commands my assent".¹⁶ In June the *New statesman* remarked that "Snow's thesis is not likely to be easily controverted", and in August the philosopher Richard Wollheim reviewed it in the *Spectator* under the headline "Grounds for Approval".¹⁷ The next month the leading article in the *Listener* stated that there was general agreement on the existence of the gulf, declaring it "a central problem of our time".¹⁸ In October Asa Briggs chaired a discussion on the arts and sciences in schools on the BBC, and by then *The two cultures and the Scientific Revolution* had already made its way into secondary education in Britain.¹⁹

Part of the runaway success of *The two cultures* can be explained by the fact that it enabled commentators to pursue an extraordinary range of concerns, a pattern set in that initial discussion in *Encounter*. There the invited writers addressed issues Snow had raised such as the separation between the two cultures, the importance of education to Britain's future, and the industrialization of the developing world. But from those familiar touchstones the discussion came to include concerns closer to their own hearts, such as the university scientist's frustration with the resistance to science in higher education and the Master of Churchill College's call for higher

salaries for Cambridge professors. And then the discussion branched out still further, coming to include a warning of crisis in the plastic arts, a denunciation of patriarchy in modern society, and a plea to enter the space race.²⁰

The same dynamic, which saw diverse interests shoehorned into discussions ostensibly about *The two cultures*, animated critical accounts as well. While Leavis emerged in 1962 as its most memorable opponent, Snow's thesis generated criticism from the outset. Critics targeted Snow's dichotomy of the 'two cultures', his reading of history, his assessment of the morality of creative writers, his prescriptions for the developing world, and his proposals for education — in short, every part of his argument. These objections may be divided into two general (but not mutually exclusive) categories: those that objected to some premise of the argument, and those that objected to the proposals that followed from that argument. In the first category fell J. H. Plumb's contention that the two cultures would be better understood as two classes; G. H. Bantock's defence of creative writers against Snow's strictures; Michael Polanyi's objection to the view that science was marginal in modern society; and Michael Yudkin's assault upon nearly every facet of the lecture.²¹ In the second category fell Herbert Read's denunciation of the technologism that threatened sensibility and thus humanity itself, and Kathleen Nott's objection to Snow's sympathies for material advance at the expense of culture and morality.²² Corraling these arguments in this way does not convey their complexity, yet the sheer impracticality of discussing each in full itself makes the point: *The two cultures* provided an opening for critics and admirers alike to advance a staggering array of positions. In February 1962 Leavis became the most famous of Snow's critics when he intervened into this ongoing 'two cultures' debate — an intervention that struck many observers as unusual in its tone and thrust, but that can be seen to have emerged seamlessly from the issues that had long animated his career in criticism.

2. LIFE, LANGUAGE, AND THOUGHT

Although Leavis's writing can be baffling to the uninitiated, on its own terms it is largely consistent and coherent. He tended to import concepts and arguments developed from previous work with little or no explanation, introducing them to clinch a line of argument — or, in the eyes of his critics, to avoid argument altogether. The result frustrated readers in its confidence that the mere invocation of a name (Babbitt, Wells, Snow) or term (creation, standards, life) effectively functioned as a final and irrefutable argument. The point here is not to excuse Leavis for this tendency, merely to acknowledge that it was, indeed, a prominent aspect of his rhetorical practice. Leavis's criticism amounted to a coherent worldview, but understanding that worldview requires that it be approached through its own terms.

The central concept in Leavis's thought was 'life'. Like any professional shorthand, life was intended not to confuse but to clarify — and, in a discipline that has come to traffic in terms such as 'heteroclitic', 'teleopoesis', and '*Homo Sacer*', it is curious to recall that life was once derided as jargon. To Leavis, life was the creative act at the core of what it meant to be human. Although he employed the term

far more often than he defined it, late in his career — after his intervention against Snow — he did venture the occasional explanation: “To be spontaneous, and in its spontaneity creative, is of the essence of life”, he wrote in the introduction to the volume that contained his Richmond Lecture in 1972.²³ Three years earlier, introducing the publication of his Clark Lectures at Cambridge, he offered an even clearer definition: “Life is growth and change in response to changing conditions.”²⁴ A sense of what Leavis meant is apparent in a passage he often quoted to his students. It is taken from the letters of D. H. Lawrence, written to Lady Ottoline Morrell upon the death of the poet Rupert Brooke:

The death of Rupert Brooke fills me more and more with the sense of the fatuity of it all. He was slain by bright Phoebus’ shaft — it was in keeping with his general sunniness — it was the real climax of his pose. I first heard of him as a Greek god under a Japanese sunshade, reading poetry in his pyjamas, at Grantchester, — at Grantchester upon the lawns where the river goes. Bright Phoebus smote him down. It is all in the saga....

O God, O God it is all too much of a piece: it is like madness.

Leavis remarked in appreciation, “The passage really *belongs* in its epistolary context — it has been thrown off with an unstudied spontaneity; but how marvellous is the living precision with which the delicate complexity of the reaction, the wholeness of the characteristic Laurentian response, is conveyed!”²⁵ To Leavis, Lawrence’s response to the tragic death of a young artist was spontaneous and genuine. He was able to draw from the resources of the language to convey — rather than merely express — feeling, and as such this passage is evidence of a mind peculiarly in touch with life.

This complicated notion of life served as the concept through which Leavis evaluated everything from Sunday newspapers to human history. Since change was inevitable, he maintained, it was essential not to arrest it but to respond to it. The ideal response took the form of creation, and the supremely creative act of which a human being was capable was thought. From there the reasoning glided easily along the path that established literary criticism as *the* essential intellectual pursuit: thought was possible only through language, and the most advanced use of language was that of the great writers. Literature thus became the most telling index of the state of life at any time, and the critic’s expertise in assessing literary creation the surest way to diagnose the health of civilizations past as well as present.²⁶ The literary critic, therefore, played an essential role not only in the university, but in human culture more generally.

The object of the critic’s analysis was language. Language, of course, was to Leavis much more than a means of communication: it was the tissue that connected the entire culture, the textured inheritance of generations of judgements and adjustments: “[I]t is a vehicle of collective wisdom and basic assumptions, a currency of criteria and valuations collaboratively determined.”²⁷ It was language that enabled thought (what other medium was there?), amending and extending inherited assump-

tions and valuations. ‘Thought’, then, was not a matter of finding words to express independently-existing ideas, but of building upon the living language to forge new ideas. To put it another way, to Leavis thought was an act of *creation* rather than *discovery* — it was the extension of the shared human consciousness embodied in language.

Leavis’s sense of the relationship between language, thought, and reality can perhaps best be illustrated by his sense of the creation of literary meaning. Meaning was not something apart from — and thus conveyed by — language; rather, meaning was created *through* language. For example, a poem succeeded not by describing something that already existed, but by actually enacting an experience in the mind of the reader: “Words in poetry invite us, not to ‘think about’ and judge but to ‘feel into’ or ‘become’ — to realize a complex experience that is given in the words.”²⁸ The same was true of prose, as explained in this discussion of a novel by Lawrence: “I have not been offering to define any thought that is *behind* the novel-long tale. The tale itself *is* the thought.”²⁹ The critic’s task, then, was to realize (or re-create) as fully as possible the work at hand, and in the process to assess, analyse, and communicate its creative success or failure. At its core, then, Leavisian criticism was *evaluative* rather than *interpretive*, entailing arguments as to how and why a literary work succeeded or failed, rather than what it said or meant.³⁰ When Leavis set about that task as a critic of modern poetry and prose, the results were alarming for what they revealed about the fate of language — and thus of life — in the seventeenth century.

3. LEAVIS, SCIENCE, AND HISTORY

An early engagement with science in Leavis’s work came in the 1930s, as he developed the historical narrative that structured his conception of the fate of language since the seventeenth century. As we shall see, that narrative was a grim tale tracing a relentless assault upon a once-vibrant culture beginning in the seventeenth century. Leavis’s vision had not always been quite so dark: his Ph.D. thesis of 1924 — which greets the reader today with a note by the author disavowing its contents — applauded the role performed by literary journalism in maintaining lines of communication between writers and the public.³¹ But by the time of his manifesto *Mass civilisation and minority culture* (1930), Leavis’s estimation of the prospects for resistance to the forces of cultural destruction was very slim indeed — and, while his judgements about particular writers changed over time, this pessimistic reading of history would inform his criticism throughout the coming decades.³²

The 1930s were, of course, the heyday of Lord Rutherford’s Cavendish, a time when Cambridge stood at the centre of international physics; and they also witnessed a brief hiatus in long-term trends increasing university places.³³ With their respective institutional positions relatively stable, then, discussions of the relationship between science and the humanities flourished.³⁴ In this context, while certainly willing to take a swipe at what he perceived to be naïve scientific utopianism (as in a review of H. G. Wells in the debut number of *Scrutiny* in 1932), Leavis focused most of his critical attention upon developments closer to his own area of study — specifically,

the worrisome fate of language and sensibility since the seventeenth century.³⁵

Although he had switched from History to the new Tripos in English as an undergraduate in Cambridge after the war, Leavis's thinking remained deeply historical. Indeed, the historical narrative that structured Leavis's criticism makes sense not only of his views on Wells and science, but also of the innumerable other judgements that might appear eccentric on their own: from the devaluation of Milton, to the elevation of Gerard Manley Hopkins, to the dogged championing of Lawrence. Each of these judgements had a place in the unfolding drama beginning with that familiar epic trope, the Fall.

Leavis's historical narrative opened at a time brimming with life, the age of Shakespeare. Shakespeare was a genius, to be sure, but the expression of his genius was only possible through the language he inherited: "By the time Shakespeare was discovering his genius there was ready to his hand a vernacular that was marvelously receptive, adventurous and flexible."³⁶ That language was the product of a community in which work and leisure, song and dance, and custom and habit were all knitted together in a common culture — an "organic community."³⁷ In such a community Shakespeare could write plays that were at once popular entertainment and the highest creative expression, and his works were thus the product of — and remain a testament to — the vitality of life in Tudor England.³⁸

In the seventeenth century, however, disaster struck. Leavis followed T. S. Eliot in identifying that century as pivotal in the emergence of modern civilization. It was in this period that Eliot's notorious "dissociation of sensibility" set in, disrupting the unity between language and experience, and dividing thought from feeling: "It is something which had happened to the mind of England between the time of Donne or Lord Herbert of Cherbury and the time of Tennyson and Browning; it is the difference between the intellectual poet and the reflective poet."³⁹ Eliot was more concerned with the effects of that development upon poetry than with the question of why it took place, but when Leavis adopted the notion he turned his attention to the factors that caused it.⁴⁰ The seventeenth century was the age of Civil War and Commonwealth, Puritanism and Nonconformism, the rise of capitalism and the emergence of the new science. Together, Leavis explained, these developments severed the connections within the previously unified culture to usher in a new civilization. By the Restoration of the 1660s, the organic community that had made Shakespeare's works possible had been displaced by a society centred in London and the Court. "As a result of the social and economic changes speeded up by the Civil War", Leavis explained, "a metropolitan fashionable Society, compact and politically in the ascendant, found itself in charge of standards."⁴¹ That coterie differentiated itself from the wider society, adopting standards of taste, refinement, and politeness that deliberately exacerbated the breach.⁴²

The triumph of the new civilization over the course of the seventeenth century registered throughout the sensibility of the age. According to Leavis, since sensibility was manifest in language, poetry and prose provided the ideal lens through which to glimpse these wider developments. Instead of the medium through which the

shared human consciousness was created, language became conceived of as a tool to describe a reality that already existed. It was thus associated with *description* rather than *creation* — the age of Shakespeare had given way to that of Newton. As if that were not bad enough, language was even cast as a barrier between the observer and the observed. That is, language — *that which enabled thought* — was now conceived of as its impediment, something to be circumvented through abstraction, mathematics, and plain prose. When the Court returned to London, it endorsed these ideals of ‘logic’ and ‘clarity’ by patronizing the Royal Society. The Royal Society occupied an important place in Leavis’s history, because it testified to the ethos of the new civilization. Already in 1667 Bishop Sprat was writing of its endorsement of “a close, naked, natural way of speaking — positive expression, clear senses, a native easiness, bringing all things as near the mathematical plainness as they can, and preferring the language of artisans, countrymen and merchants before that of wits and scholars”.⁴³ The unity between language and thought had been displaced by a philosophy that held language to be an obstacle to thought, and to Leavis its victory was so decisive that the arid language of mathematical plainness was somehow conflated with the rich tongue of artisans, countrymen, and merchants.

Lest Leavis be read as hostile to science *as such*, however, it is crucial to recognize that his analysis of the Royal Society was paralleled by his critique of John Milton. As with the “dissociation of sensibility”, the case against Milton was pioneered by Eliot and worked out by Leavis.⁴⁴ Milton’s verse, like the plain prose advocated by the Royal Society, represented the rejection of the language of daily life. While the Royal Society advocated a transparent style, however, Milton’s language called attention to its own inventiveness and lyricism. To Leavis, then, it exhibited “a feeling *for* words rather than a capacity for thinking *through* words”.⁴⁵ The result was poetry that astonished the intellect, yet proved incapable of producing any corresponding emotion: “Milton seems ... to be focusing rather upon words than upon perceptions, sensations, or things.”⁴⁶ There was no doubt that Milton was a writer of genius, but unlike Shakespeare his genius did not draw from — and was not expressed through — a vibrant English idiom. “The ethos of his stylistic invention”, Leavis explained, “denies his verse anything like a Shakespearean relation to the living language”.⁴⁷ Indeed, that verse entailed the “consistent rejection of English idiom”, to the extent that it seemed that Milton had, famously, “forgotten the English language”.⁴⁸ By rejecting that idiom Milton cut himself off from the resources that sustained the life of the language, so his powerful verse remained “incantatory, remote from speech”.⁴⁹ While Milton was a typical product of his civilization, his undeniable literary achievement was atypical — and that achievement loomed over the poets who followed the path of his unfortunate detour.⁵⁰

The parallel critiques of Milton and the Royal Society bring Leavis’s reading of the seventeenth century into sharper focus. First, his criticism of the literary Milton and the scientific Royal Society dissolves antagonism to ‘science’ and sympathy to ‘literature’ as a primary axis of antagonism in his thought — that is, since Leavis was critical of both, for similar reasons, some interpretive framework other than the

disciplinary is required to make sense of his stance. Second, his criticism of both the revolutionary Milton and the royally-patronized new science dissolves high politics as an axis of antagonism — that is, those positions cannot at once be explained as a conservative’s hostility to radicals (hence the assault upon Milton) and a radical’s hostility to monarch and Court (hence the assault upon the Royal Society). In fact, to read Leavis as directing his critique against Milton, or against the Royal Society, is to grab the wrong end of the stick. Although the genius of Milton and the power of the new science undeniably exacerbated the situation, in Leavis’s eyes neither was the problem in and of itself — they were its products. As such they provided revealing lenses through which Leavis sought to analyse the broader transformation that was the actual object of his critique.

The object of that critique was nothing less than the civilization that emerged in the seventeenth century. That emergence was driven by developments economic, social, religious, and intellectual. Together these developments drove a wedge between language and thought in the human mind, popular culture and polite society in human relations, and the old and the new in human civilization. For Leavis, the seventeenth century inaugurated the terrible course of modern civilization — terrible not for such mundane concerns as the beheading of a King, but for the much more serious matter of the threat to the unified culture that sustained life.

4. LEAVIS, SCIENCE, AND EDUCATION

A second intersection between literary criticism and modern science came in Leavis’s writing on education. While working out these ideas on literature, language and history in the 1930s, Leavis was establishing himself as a popular and committed teacher in Cambridge. He became Director of Studies in English at Downing College in 1932, and that same year he and his wife, along with their associates, established the literary periodical *Scrutiny*. Leavis sketched out his vision for the English School in a series of articles in *Scrutiny* beginning in 1940, collected and published as *Education and the university* in 1943. The book unfolded from Leavis’s idiosyncratic epistemology, history, moralism, social criticism, and pedagogy, proposing an agenda for literary studies and the university to meet the challenges of the post-war world — and while science occupied an important place in the argument, it did not figure as central to it.

The first chapter, “The idea of a university”, identified a crisis in the emergence of the “technical complexity of civilisation” simultaneous with “social and cultural disintegration”.⁵¹ The many specializations required in modern society resulted in the loss of any general intelligence providing that society with direction. The result was uncoordinated change with no aim other than its own acceleration, and just one resource older than that civilization might provide the necessary guidance: the cultural tradition. For Leavis, the university must function as the site where that tradition was sustained and transmitted, but even the university was not immune to the fracturing and specialization characteristic of the age. Rather than a centre uniting diverse specialisms into a single consciousness, the university was on the verge of becoming

another just appendage to the machinery of modern civilization.

The second chapter, “Sketch for an English School”, positioned literary studies at the core of the redeemed university. Despite the current tendency to equate Leavis with outmoded orthodoxies, his prescriptions for the new discipline were both modernizing and progressive. English assumed its privileged position in the university not because of any disciplinary purity, but because the study of literature necessarily led outward into other fields. Working from the Cambridge model, Leavis proposed that students approach Part II of the English Tripos from other fields and disciplines — including the sciences. He went on to sketch a model of learning centred around discussions rather than lectures, evaluated through papers composed over time rather than examinations against the clock. The aim was not to foster exhaustive recall of literary history or to encourage glib literary facility, but rather to stimulate intelligence and develop sensibility — a dual mandate for which literary studies, conceived as the rigorous pursuit of true judgement, was ideally positioned. Despite these progressive characteristics, Leavis’s programme fiercely resisted any democratic tendencies: the English School was explicitly charged with the task of educating an élite, thereby preserving the intelligence civilization needed despite itself. “It is an intelligence so trained”, Leavis explained, “that is best fitted to develop into the central kind of mind, the co-ordinating consciousness, capable of performing the function assigned to the class of the educated”.⁵²

The final chapter, “Literary studies”, demonstrated Leavis’s idea of literary education in practice. The programme rejected literary history and rote memorization, and was not concerned primarily with interpretation. Rather, the training focused on attentive reading and correct judgement. This insistence upon the possibility of normative judgements of literary work — that is, upon the possibility of correctly determining a work’s success or failure — is where Leavisian criticism is most unlike academic criticism today. Leavis himself occasionally slipped on this point, stating sometimes that the student should bear in mind “the one right total meaning” (a matter of interpretation, which can be right or wrong), and other times that the student should aim for “true judgment” (a matter of evaluation, for which no standard exists).⁵³ The ease with which Leavis moved between these two senses demonstrates that, in his mind, they were not separable at all. Interpretation and evaluation were the same act, the product of an attentive reading creating an experience in the mind of the reader — not merely the understanding of an experience, but *an actual experience*. That experience is the meaning of the work, and the extent to which it is realized is the extent to which the work can be said — in normative terms — to succeed. As we have seen, Leavis believed that people once related to language this way in the idiom of their daily lives, but when that idiom was fractured in the seventeenth century this relationship to language flowed into a restricted tradition. *Education and the university* argued that the university was the only place where that threatened tradition might be sustained, and that the task of literary studies was to transmit the capacity to recognize and respond to it. Tradition, crisis, minority, centre, standards, life — to Leavis’s critics these were the overworked talismans of an obscure critical

orthodoxy, but to his allies they were an argument pointing to the urgency of the mission confronting literary studies.

Education and the university was written during the Second World War, a time Leavis perceived to be at once threatening (because of the accelerating efficiency of civilization at war) and auspicious (because of the prospect of post-era reconstruction). In Leavis's mind education was every bit as important as the war effort, so that during the war he was frustrated by the government's refusal to postpone enlistments to train more teachers.⁵⁴ Nevertheless, he correctly anticipated that education reform would follow the war, and he wrote his book with an eye towards influencing that debate. "I've become an eminently respectable figure", he remarked to his publisher in 1943, "and am in a position to count on a hearing, as I hardly was seven or eight years ago".⁵⁵ Upon publication Leavis's proposals were enthusiastically received: "*Education and the university* deserves a wide public", declared the *Times literary supplement*, "Its subject, indeed, is nothing less than the mental health of the nation".⁵⁶ The *Times educational supplement* agreed: "The present reviewer finds [Leavis's proposal] exciting to contemplate, and can see no reason why an experiment along these lines should be regarded as impracticable."⁵⁷ Leavis had secured valuable allies for the coming fight to reshape education in post-war Britain.

Such public support boosted the English School within Downing College. Following the war, Leavis privately insisted that the time had come to establish Downing as the centre he had long envisaged. He seized every opportunity to proselytize to his colleagues on the Governing Body on his favourite theme. "At one of our secret conclaves last term ... I did seize a chance of delivering a homily on the Idea of a College", he wrote to a friend, adding with satisfaction, "It made an impression".⁵⁸ Leavis aimed to translate that idea into institutional form, for instance by stocking the college library with books appropriate to an English School — an effort that required all of his wiles in the face of a college librarian who refused to stock any novels (when that librarian retired, however, he left behind a catalogue testifying to Leavis's successes: "Accessions to the Library during the years 1934–1956, bearing on English History of the Seventeenth Century").⁵⁹ In terms of admissions, Leavis exerted unusual control for a Director of Studies by maintaining a separate scholarship examination for Downing apart from the group examinations used by other colleges. Through these examinations he exerted influence in schools and sixth forms throughout the country, as headmasters and students interested in Downing English needed to incorporate the curriculum set out in *Scrutiny*, *Culture and environment*, and *Education and the university*.⁶⁰ Once they arrived at Downing, undergraduates could count on personal attention from their supervisors and a sense of camaraderie among themselves, the result of Leavis's infectious conviction that English was *the* essential university discipline.

Leavis ran Downing as his own English School in the 1940s and 1950s, and he intended for it to continue in that capacity upon his retirement in 1962 (just months after his Richmond Lecture). Following a terrible row with the Master and Governing Body over the future of English in the college in 1964, however, Leavis abruptly

resigned his Honorary Fellowship. For the sake of maintaining his library privileges he had his name put on the books at Emmanuel College, but from 1965 his focus shifted to his lectures and seminars at the new University of York. Two years later, however, the Master of Trinity College invited Leavis to deliver the Clark Lectures in Cambridge. In the context of university expansion, student unrest, and everything else that falls under that capacious heading ‘the sixties’, the Clark Lectures provided Leavis with an opportunity to articulate his vision of English literature, the university, and the relationship between them in an age when (he believed) quality was everywhere besieged by quantity.

The Clark Lectures returned to many of the themes of *Education and the university*, but were sharpened after the engagement with Snow just a few years before. Leavis himself insisted that the lectures be read as the complement to his earlier proposals for education, approached here through consideration of Lawrence and, especially, Eliot. The Clark Lectures stand as one of the most integrated expressions of the themes that preoccupied Leavis throughout his career. Indeed, he himself was particularly pleased with his performance, remarking to his publisher, “I’ve read the typescript again and found it — well, you remember God in *Genesis* ...”⁶¹

Leavis’s central concern in the Clark Lectures was for the place of the English School in the modern university. He argued, as ever, that it was essential to maintain life — defined here as the uniquely human capacity for creative response — amid inexorable social and technological change. Since that response was realized through language, and the fullest development of the language of any age was found in literature, the English School must stand at the centre of the élite university. Only that arrangement would foster the public capable of the discriminating judgements upon which further creation — and, therefore, life itself — depended. Even as Leavis spoke, however, he perceived that project to be everywhere under assault: from outside the university in the fashionable coteries that inexplicably passed for a literary public, and from inside the university in the idea that literary criticism might be collapsed into the social sciences as a humanizing complement to natural science. Leavis viewed these threats as of a piece with a civilization that valued material advance and quantifiable results as the highest of all — indeed, as the only conceivable — ends. It was therefore essential that the university stand apart from the egalitarian wave as a safe harbour for the standards upon which intelligence and creation depended, and — given the close relationship between language, literature, and life — it was no less essential that the English School stand at the centre of that university as the liaison between more specialized intellectual pursuits. The four central lectures focused on Eliot and, to a lesser extent, Lawrence, demonstrating how literary criticism might function as a discipline of rigour and intelligence, while shedding light upon the relationship between thought and expression, history and civilization — relationships of which Leavis believed contemporary planners and politicians remained dangerously unaware.

The sciences were not an organizing theme in the lectures (a fact that itself demonstrates my broad point), but Leavis did refer to them intermittently. He insisted in

the introduction to the published text, “It should be plain that my concern for ‘English literature’ implies no slighting of the sciences”, and his most frequent references to the sciences in these lectures held them out not as rivals, but as an admirable domain in which intellectual standards were maintained.⁶² The situation in science suited his conception of the university considerably more than the state of affairs closer to his own discipline: he wrote, “I would rather discuss the function of the university with a mathematician or a physicist than with an academic humanist”.⁶³ Indeed, to Leavis the sciences were both rigorous and respected, and the fact that they were housed within the university provided hope for the fate of literary studies in the face of a democratic onslaught.⁶⁴ While doling out praise to the natural sciences, however, the social sciences did come in for more rough treatment, especially when they were linked with literary studies (as in the case of linguistics).⁶⁵ Yet such policing of disciplinary borders is part of having a discipline in the first place (that is, the only way to avoid such disputes is to establish no borders, but if there are no borders there is no discipline).⁶⁶ Moreover, Leavis was no more hostile to the claims of linguists and psychologists than to those of historians, philosophers, and even — or, rather, especially — fellow literary critics.

Apart from such direct references, a conception of science figured within Leavis’s argument more abstractly as well. He explained that his conception of knowledge stood at the opposite end of the spectrum from the usual understanding of, say, mathematics — that is, knowledge did not exist ‘out there’ in nature waiting to be discovered, but rather was a creative achievement realized through language. Since nothing existed before or apart from the work that the writer strove toward, there were no abstract criteria that could be applied to its assessment. Leavis therefore persistently refused challenges to define a standard by which he assessed literature — he literally could not, not in the sense that he was intellectually incapable, but rather that no such criteria existed.

We have seen that these ideas had informed Leavis’s views of history and criticism for decades, but over the course of the 1960s — spurred by his clash with Snow — he was developing them more explicitly. The Clark Lectures illustrated his sense of the relationship between thought, language, and creation through analysis of Eliot’s poetry. He called Eliot’s use of language “exploratory”, and invoked the term ‘*nisus*’ to convey the poet’s creative drive: “[Eliot] no longer strives to strive towards such things, but there *is* a kind of striving, a profound unwilling set of the whole being — a *nisus*, I called it.”⁶⁷ Turning his attention to “Burnt Norton”, Leavis assented to the judgement of D. W. Harding: “[This poem] is no more ‘about’ anything than ‘love’ is about anything: it is a linguistic creation. And the creation of a new concept ... is perhaps his greatest of linguistic achievements.”⁶⁸ Leavis was grappling with issues of language, ontology, and epistemology, but he was doing so — as he always insisted that he should — as a reader and critic of literature. As he developed these ideas in the coming decade, however, he was to find support in the parallel ideas of

the philosopher Marjorie Grene and the scientist Michael Polanyi.

5. LEAVIS, SCIENCE, AND PHILOSOPHY

A third intersection between criticism and science came in Leavis's engagement with philosophy in his final decade — an engagement through which he most clearly identified the target of his critique. In his final book — published nine years after the Clark Lectures, just two years before his death — Leavis quoted Lawrence with approval: “The very statement that water *is* H₂O is a mental *tour de force*. With our bodies we know that water is *not* H₂O, our intuitions and instincts both know it is not so.”⁶⁹ At the dawn of his ninth decade, Leavis was following his dual interests in Lawrence and language into new territory. *The living principle* (1975) and *Thought, words and creativity* (1976) developed ideas that had preoccupied him for decades. But by the 1970s Leavis was no longer the commanding figure in literary studies he had been at mid-century, and new trends in the field were rapidly supplanting one another. The clarification and extension of his ideas on language and reality in these final two books never reached the audience they might have just twenty years before.

The subtitle of *The living principle* was ‘English’ as a discipline of thought, aptly conveying Leavis’s ambitions. In the light of both the course of modern history and the essential role of the university, he was determined to procure for literary studies the respect owed to *the* essential university discipline: to study English literature was to study human creation, and to engage in literary criticism was to engage in original thought. Leavis bristled whenever philosophers paid him the “compliment” that his preoccupations were philosophical, recognizing in such praise the implication that philosophy represented the pinnacle of intellectual engagement. He instead insisted on calling himself an “anti-philosopher”, by which he meant not that he was against philosophy, but that, in his preoccupation with particularity as opposed to abstraction, literary studies stood at the opposite end of the intellectual spectrum. English, therefore, was the discipline best suited to questions of consciousness, creation, and comprehension — an insistence that led to the mischievous (but no doubt serious) assertion that his old friend Ludwig Wittgenstein was “comparatively naïve ... about language”.⁷⁰

Leavis developed the argument of *The living principle* in a long first chapter. That argument, summarized again at the opening of *Thought, words and creativity*, entailed three parts that are by now familiar: the development of thought requires language; the most complete use of language is in literature; and the creative writer employing language is developing and refining ideas about life. In working through these three ideas, however, Leavis embarked on an extended engagement with questions of ontology and epistemology, spelling out more clearly than at any time in his career his conception of the relationship between language, reality, and the thinking subject. True to form, he developed these ideas not through abstract philosophical digressions, but through close readings of creative works — including, most importantly, Eliot’s *Four quartets*. Writing against notions of discovery and exploration

(and the implications of an already-existing object of inquiry they carried), Leavis insisted again and again that thought was creation — and that literary creation was the most advanced kind of thought. In a discussion of *Four quartets* extending to over a hundred pages of close reading, Leavis offered his ironic verdict on Eliot's accomplishment: *Four quartets* was an astonishing achievement of creative thought, but one the author himself proved unable to recognize due to his mistaken quest for a reality that transcended human creation. Leavis insisted that the apprehension of reality was itself a human achievement; or, to put the point another way, the notion that water 'was' H₂O was literally unthinkable, in the absence of a human mind doing the thinking.

Leavis's engagement with these issues led him to a new pair of allies, the philosopher of biology Marjorie Grene and the scientist/philosopher Michael Polanyi. He repeatedly referred readers to Grene's *The knower and the known*, insisting that students of literature would find her work on the history of philosophy since Descartes far more profitable than that of Bertrand Russell.⁷¹ Polanyi, meanwhile, proved useful to Leavis partly because of his background as a scientist: "It is the extra-literary nature of his approach, that of a distinguished scientist whose impelling interest was the nature of scientific discovery, that makes Polanyi so valuable an ally."⁷² Polanyi, that is, approached the very issues preoccupying Leavis from the starting point of science rather than literary studies, lending philosophical muscle for his intellectual labours while refuting in advance the implication that his position was somehow directed against science itself.

The primary significance of Grene, Polanyi, and these two late books, however, is that they provided Leavis's reading of history with the culprit it had always lacked: the 'Cartesian dualism'.⁷³ Leavis's critique of modern civilization since the seventeenth century had lacked precision, inviting commentators to brand him as hostile to capitalism, or democracy, or industry, or science. Leavis certainly believed the turn taken toward each of these things in the seventeenth century to have been disastrous, yet it was no mere accident that he persistently resisted equating that turn with any one of them in particular. In an effort to avoid anachronism I have substituted "modern civilization" as the object of Leavis's critique up to this point, but by the 1970s — with the help of Grene and Polanyi — Leavis was naming the development more precisely. The disease of modern civilization was the mental division between words and things, language and reality, communication and experience — and that disease had its moment of origin in the introduction of the dualism associated with Newton and, especially, Descartes. "The point to be stressed is that, whatever was gained by the triumph of 'clarity', logic and Descartes, the gain was paid for by an immeasurable loss", Leavis wrote. "[Y]ou can't ... subscribe to the assumptions implicit in 'clear' and 'logical' as criteria without cutting yourself off from most important capacities and potentialities of thought which of its nature is essentially heuristic and creative."⁷⁴ Like Marx conceding a begrudging admiration for the bourgeoisie, Leavis acknowledged the irreversible changes ushered in by the Cartesian duality in the seventeenth century. This perspective informed his literary

and social criticism over the course of his career — including, not least, his reading of C. P. Snow's Rede Lecture at the dawn of the 1960s.

6. RICHMOND REVISITED

Leavis waited almost three years before responding to *The two cultures*, and when he finally did address it the thrust of his argument was to deny the intellectual merit of both the thesis and its author. Ian MacKillop pointed out that in the early 1960s, however, Leavis had increasing reason to take note of Snow.⁷⁵ When he began to notice references to *The two cultures* in the essays of sixth-form students, Leavis realized that Snow's thesis had entered the curriculum of secondary education. But then, to make matters worse, critics had taken to associating Leavis's stringent criticism with the unadorned prose of Snow's novels, reading them as two parts of a single movement: S. Gorley Putt said as much to the English Association in 1961, and that same year Angus Wilson followed suit.⁷⁶ Leavis purchased a copy of *The two cultures and the Scientific Revolution* in the summer of 1961, and his students soon began noticing him referring derisively to Snow's novels — a tendency that crept into his correspondence as well.⁷⁷

In the autumn of 1961 the undergraduates of Downing selected Leavis to deliver the annual Richmond Lecture.⁷⁸ Leavis invested more time, thought, and energy into that lecture than anything else he had written before.⁷⁹ The event became hotly anticipated, with the BBC requesting permission to record it and the *Evening standard* noting that the question mark in the title — “Two cultures? The significance of C. P. Snow” — promised “one of [Leavis's] most skilful and provocative acts of critical surgery”.⁸⁰ By the time he entered Downing's hall on 28 February 1962, Leavis faced a packed audience — including Snow's friends J. H. Plumb and George Steiner. All the seats were taken, many were left standing, and some were perched in the sills of the deep-set windows waiting for the don to begin.⁸¹

Leavis's contempt for Snow was visceral and total, and he gave it full vent. He declared that Snow was “intellectually as undistinguished as it is possible to be” as well as “portentously ignorant”, an ignorance manifested in the fact that Snow “doesn't know what he means, and doesn't know he doesn't know”.⁸² The Rede Lecture displayed “an embarrassing vulgarity of style”, posing a curious problem for the critic: “The intellectual nullity is what constitutes any difficulty there may be in dealing with Snow's panoptic pseudo-cogencies, his parade of a thesis: a mind to be argued with — that is not there.”⁸³ Leavis then took aim at Snow's reputation as a novelist: “Snow is, of course, a — no, I can't say that; he isn't: Snow thinks of himself as a novelist.”⁸⁴ But, in fact, “as a novelist he doesn't exist; he doesn't begin to exist. He can't be said to know what a novel is”.⁸⁵ Leavis dismissed Snow's most recent novel, *The affair* — a bestseller in Britain, the Soviet Union, and the United States, and a hit on the London stage — as “that feeble exercise”; then he rounded again on *The two cultures* in the damning terms quoted above: “Snow's argument

proceeds with so extreme a naïveté of unconsciousness and irresponsibility that to call it a movement of thought is to flatter it.”⁸⁶ And so on continued Leavis in an merciless torrent of scorn and contempt — if anything was the target of his critique, it was not science but Snow.

Understandably, then, the Richmond Lecture has been read as little more than a personal attack upon Snow. That interpretation emerged even before Leavis finished speaking, when a contingent from Churchill College left after just five minutes; Plumb departed with a flourish shortly thereafter.⁸⁷ This was the predominant criticism of Leavis in the correspondence that flooded into the *Spectator* after it published the text on 9 March 1962, and it was certainly Snow’s reading of the matter — as he wrote to Plumb in the immediate aftermath, “The thing which irritates most is that the text ... consists almost entirely of unsupported personal abuse”⁸⁸ Even the eminent American critic Lionel Trilling, usually reluctant to criticize Leavis, chastized the “impermissible tone” of his Richmond Lecture.⁸⁹

A reading of the lecture as a mere personal attack upon Snow misinterprets Leavis’s argument, but it is a misinterpretation for which Leavis bears responsibility. It should be borne in mind that the lecture was, after all, a *lecture*, and thus a rhetorical occasion meant to engage as it instructed. The Richmond Lecture in particular was delivered at the invitation of Downing’s undergraduates, among whom Leavis’s withering strictures against canonical figures and contemporary icons were legendary. Moreover, the critique of Snow’s intellectual pretensions and public standing was central to the argument, since Leavis’s point was that it was Snow’s prominence that required explanation. That said, however, Leavis allowed his argument to be lost amid the pyrotechnic display that transfixed the audience’s gaze. Although he insisted afterward that his performance was a “classic”, he recognized that the attacks on Snow had obscured his purpose.⁹⁰ Over the course of the next decade he continued to denounce the “enlightened” orthodoxy of which he took Snow to be representative, but he took care to do so in terms that would not allow his argument to be misunderstood.⁹¹

That argument went something like this. C. P. Snow is ignorant, yet taken to be a sage; his novels are lifeless, yet hailed as great literature; *The two cultures* is hollow, yet widely influential. The significance of C. P. Snow lies not in his thought, then, but in the fact that his absence of thought is hailed and admired — he is significant as a product of the civilization that has produced him. In his easy recourse to such clichés as “social hope”, the poor walking into the factories “as fast as the factories could take them”, and the prospect of “jam tomorrow” for the developing world, Snow mindlessly expresses the assumptions of a civilization that esteems material advance, but cannot recognize its own human emptiness. That emptiness is apparent in the boredom and alcoholism that exist alongside the technological marvels of America today, the civilization being promised to Asia and Africa tomorrow. The great writers, such as Joseph Conrad and D. H. Lawrence, have been the enemies of this complacency, questioning the assumptions that drive civilization forward with no thought to the human costs entailed. Since that development is inexorable, however, it is essential that the creative response to change — life, in Leavis’s vocabulary

— be sustained. That creative response is realized through language and transmitted through literature, and the place where it may be sustained is the university. Because of the centrality of language to thought, the English School would stand at the centre of the ideal university, in close touch with other fronts of creative thought such as the sciences. In such a university the idle claptrap of the Sunday papers would not be taken to be the best that is thought and said, and in such a university it would have been unnecessary to have paid this attention to C. P. Snow.

Leavis believed *Two cultures? The significance of C. P. Snow* one of his best works. Four months after delivering it he assured his publisher that it would prove a “classic”, and six years later he remained convinced that it was “one of the *historic* things I’ve done”.⁹² He continued to insist upon the success of the lecture even in the face of criticism from sympathetic critics such as Trilling and Steiner, and despite his awareness of widespread misunderstanding of his argument.⁹³ Why did Leavis remain so stubbornly proud of a lecture that generated as much opposition and misunderstanding as anything he had ever written? This exploration of his career in criticism suggests an answer. Leavis’s argument in the Richmond Lecture represented the nexus of a lifetime of ideas on history, education, and philosophy — indeed, it was the clearest statement yet connecting the themes that had preoccupied him over the course of his career, and it inaugurated a new phase of public engagement in which he would continue to hone and develop his argument. However, in the greatest rhetorical victory Snow could have hoped for, the very issues that rendered the lecture a triumph to Leavis — its reading of history, its focus on pedagogy, its confrontation with questions of language, knowledge, and reality — were shorn of their edges and forced into the ‘two cultures’ dichotomy, emerging on the other side as merely another example of a literary intellectual’s hostility to science.

CONCLUSION

This article set out to dislodge F. R. Leavis’s contribution to the ‘two cultures’ debate from the reductive categories established by C. P. Snow. Rather than adopting Snow’s terms to understand Leavis’s criticism, I have sought to revisit Leavis’s criticism so as to complicate those terms. The emphasis fell on three moments when Leavis engaged — sometimes obliquely, sometimes directly — with science (in history), scientists (in education), and scientific epistemology (in philosophy). In each case Leavis was not arguing against science so much as confronting its consequences, and in each case it was not science but civilization that figured as the ultimate target of his critique.

The problem with modern civilization, according to Leavis, was that it inaugurated a breach between speech and experience, between thought and creation. Rather than the resource that enabled thought, language came to be understood as an obstacle to thought; the result was a diminished capacity for the creative act that Leavis insisted was *life*. Since it filled and exacerbated the breach that emerged, science occupied an important place both in modern history and in Leavis’s critique — not as the primary problem itself, but as a particularly prominent symptom of the problem.

These interests and concerns were at the front of Leavis's mind as he composed his argument against Snow and *The two cultures*, which explains both why he refrained from attacking science and insisted he was not defending literature; and why he later aligned himself with like-minded scientists, remaining content even when challenged by fellow literary critics. In short, while science and literature may have figured as the terms of the controversy, they did not represent its ultimate stakes.

Two conclusions follow from this argument. First, with regard to the 'two cultures' debate, Leavis is best understood as neither an advocate nor an adversary of modern science, but rather as a critic of the civilization of which science was one part. Put another way, Leavis's attack upon Snow and *The two cultures* derived less from disciplinary than ideological differences, which explains how an issue that had been continually discussed since the Victorians, managed to ignite such hostility at the dawn of the 1960s. And second, with regard to the tradition discussing the relationship between the arts and sciences more generally, the inadequacy of the 'two cultures' in explaining even the episode from which the term emerged suggests that that tradition is best understood not as a single conversation carrying on over time, but rather as a series of conversations sharing an inherited idiom yet animated by contemporary concerns. Freed from explanatory burdens it could never bear, then, the 'two cultures' may be seen for what it always was: as neither a moment nor a tradition, but as an argument.

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3. T. H. Huxley, "Science and culture", *Science and education: Essays* (New York, 1896), 134–59; Matthew Arnold, "Literature and science", R. H. Super (ed.), *The complete prose works of Matthew Arnold*, x (Ann Arbor, 1974), 52–73; and Grace Wyndham-Goldie *et al.*, *The challenge of our time* (London, 1948).
4. That tendency persists, as in a recent special issue of the literary journal *American literature* on "Literature and science: Cultural forms, conceptual exchanges" (December 2002). The guest editors observed the "convergence" of the two cultures, a phenomenon that "makes scientific illiteracy no longer an option" and presents "an opportunity for creative and productive responses to the emergence of new forms of knowledge". Interdisciplinarity, not surprisingly, was offered

as the answer, “born of the necessity to address the growing entanglement of culture, technology, and science”. These claims beg the question of when culture, technology, and science were not so entangled — they certainly were, for example, in the 1950s when Jacob Bronowski wrote in nearly identical terms, as well as in the 1960s when Snow’s lecture generated similar clichés. See Bronowski, *Science and human values* (New York, 1956), and the bibliography of the “two cultures” debate in Paul Boytinck, *C. P. Snow: A reference guide* (Boston, 1980).

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10. Other scholars have treated the Richmond Lecture as a moment of transition in Leavis’s career and criticism, notably Anne Samson, *F. R. Leavis* (Toronto, 1992) and MacKillop, *op. cit.* (ref. 5).
11. Snow, *The two cultures* (ref. 2), 27.
12. *Ibid.*, 14.
13. The commentary on the debate is enormous; the best place to get a handle on it (although skewed toward the American discussion) is Boytinck, *C. P. Snow: A reference guide* (ref. 4). Burnett provides a useful overview in “A view from the bridge” (ref. 5), esp. pp. 200–5.
14. Melvin Lasky to Snow, 8 May 1959, Harry Ransom Center in Austin, Texas (hereafter HRC): Snow 94.17.
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 23. F. R. Leavis, *Nor shall my sword: Discourses on pluralism, compassion and social hope* (London, 1972), 15.
 24. F. R. Leavis, *English literature in our time and the university* (London, 1969), 2.
 25. F. R. Leavis, “*Anna Karenina*” and other essays (London, 1967), 175, reprinted from “‘Lawrence scholarship’ and Lawrence”, *Sewanee review*, lxxi (1963), 25–35. Leavis’s biographer (and former student) Ian MacKillop discussed this passage in a wonderful essay posted on his website: <http://www.shef.ac.uk/english/literature/imk/leavis.html>.
 26. Terry Eagleton states the Leavisian case well: “The quality of a society’s language was the most telling index of the quality of its personal and social life: a society which had ceased to value literature was one lethally closed to the impulses which had created and sustained the best of human civilisation.” Eagleton, *Literary theory: An introduction* (Minneapolis, 1983), 32.
 27. Leavis, “The pilgrim’s progress”, in “*Anna Karenina*” and other essays (ref. 25), 33–48, p. 41, originally published as an afterword to John Bunyan, *The pilgrim’s progress* (New York, 1964).
 28. F. R. Leavis, “Literary criticism and philosophy: A reply”, *Scrutiny*, vi (1937–38), 59–70, reprinted in *The common pursuit* (London, 1952), 211–22, see esp. pp. 212–13.
 29. F. R. Leavis, *Thought, words and creativity: Art and thought in Lawrence* (New York, 1976), 121, emphasis in original.
 30. Guillory touches upon the distinction between evaluation and interpretation in literary criticism in “The Sokal affair and the history of criticism” (ref. 5).
 31. F. R. Leavis, “The relationship of journalism to literature: studied in the rise and earlier development of the press in England” (1924), Cambridge University Library, Ph.D. 66.
 32. F. R. Leavis, *Mass civilisation and minority culture* (Cambridge, 1930).
 33. See my “Two cultures, one university: The institutional origins of the ‘two cultures’ controversy”, *Albion*, xxxiv (2002), 606–24.

34. Porter, "The two cultures revisited" (ref. 5).
35. Collini discusses Leavis's dismissal of Wells in the first issue of *Scrutiny*, as well as the importance of the 1930s context to the development of Snow's argument, in his introduction to *The two cultures* (ref. 5), pp. xxiii–xxv.
36. Leavis, *Nor shall my sword* (ref. 23), 129.
37. F. R. Leavis and Denys Thompson, *Culture and environment: The training of critical awareness* (London, 1933), esp. the chapters "The organic community" and "The loss of the organic community". See also Leavis's discussion of Cecil Sharp's recovery of Appalachian culture in "Literature and society", *Scrutiny*, Winter 1943, 2–11.
38. F. R. Leavis, *Mass civilisation and minority culture* (Cambridge, 1930), 25.
39. T. S. Eliot, "The metaphysical poets", *Selected essays* (New York, 1932), 241–50, p. 247. The essay dates from 1921.
40. For Leavis on the dissociation of sensibility, "English poetry in the seventeenth century", *Scrutiny*, iv (1935–36), 236–56, reprinted as "The line of wit", *Revaluation* (London, 1936), chap. 1; and "Eliot's 'axe to grind' and the nature of great criticism", *English literature in our time and the university* (ref. 24), chap. 3.
41. F. R. Leavis, "English poetry in the eighteenth century", *Scrutiny*, v (1936–37), 13–31, reprinted as "The Augustan tradition", *Revaluation* (ref. 40), chap. (quotation from p. 96).
42. On the seventeenth century, see F. R. Leavis, *Education and the university: A sketch for an English school* (London, 1943), esp. chap. 2; *English literature in our time and the university* (ref. 24), esp. chap. 3; *Nor shall my sword* (ref. 23), esp. chap. 4; and *The living principle: 'English' as a discipline of thought* (London, 1975), esp. chap. 1.
43. Bishop Thomas Sprat, *History of the Royal Society* (London, 1667), quoted in Leavis, *English literature in our time and the university* (ref. 24), 94. Consideration of the Royal Society also appears in Leavis, *Revaluation* (ref. 40), 35, 96, and *Nor shall my sword* (ref. 23), 172.
44. For Leavis on Milton: "Milton's verse", *Scrutiny*, ii (1933–34), 123–36, reprinted in *Revaluation* (ref. 40), 42–61; "In defence of Milton", *Scrutiny*, vii (1938–39), 104–14 and "Mr. Eliot and Milton", *Sewanee review*, lvii (1949), 1–30, both reprinted in *The common pursuit* (ref. 28).
45. Leavis, *Revaluation* (ref. 40), 48, emphasis in original.
46. *Ibid.*
47. Leavis, *English literature in our time and the university* (ref. 24), 98.
48. Leavis, *Revaluation* (ref. 40), 50.
49. *Ibid.*, 53.
50. My reading of Leavis on Milton differs from that of Stanley Fish, who interprets Leavis as arguing that "Milton's language does not direct us to a referent outside itself, but, rather, traps us within its own confines, demanding that we attend to the connections it is itself forging; the reality of the *medium* privileges itself over any reality that we might think prior to it" (emphasis Fish's). Fish is correct that Leavis is critical of Milton for calling attention to the language that is his medium. However, this is not because Leavis would prefer verse to direct the reader to a reality existing outside of it, and he does not criticize Milton for privileging the medium over a prior reality. Instead, Leavis's argument is that Milton's facility with language calls attention to itself *as such* — that is, it merely communicates Milton's genius with words, rather than working through those words to create a new experience in the mind of the reader. The reason for that failure is that Milton's language is detached from the idiom of daily speech. Leavis's point is not that language properly used would direct us to that idiom, but that it would work through it to create an altogether new experience in the mind of the reader. Milton, because of his fascination with his own language, cannot create any such experience. Stanley Fish, *How Milton works* (Cambridge, Mass., 2001), 478–9.

51. Leavis, *Education and the university* (ref. 42), 22–23.
52. *Ibid.*, 55.
53. *Ibid.*, 72, 71.
54. Leavis to Harold Raymond, 5 November 1943, Chatto and Windus archive, University of Reading (hereafter Chatto and Windus): CW 94/17.
55. Leavis to Raymond, 2 June 1943, Chatto and Windus: CW 94/17.
56. “Readers and citizens”, *Times literary supplement*, 15 January 1944; the collected reviews are held at the University of Reading.
57. “The idea of a university”, *Times educational supplement*, 1 January 1944.
58. Leavis to Geoffrey Walton, 4 February 1947, Downing College, Cambridge: DCP/LEA/7 Leavis, F. R.
59. Robin Williams, “Some memories of F. R. Leavis and other Downing dons in the early 1950s”, from a memoir held in Downing College: DCHR/1/2/FRL Leavis F. R.; Governing Body Minutes, Downing College, ccxx, 6 June 1957, p. 418, minute 7.
60. Leavis to Raymond, 17 June 1943, Chatto and Windus: CW 94/17. When the separate examination was challenged in the 1950s, Leavis opposed — ultimately unsuccessfully — the effort to collapse Downing’s examination in with other colleges. “English as a group scholarship subject”, 20 January 1953, Downing College: D/M/P/1. For more on the scholarship system, see MacKillop, *F. R. Leavis* (ref. 5), 154–5.
61. Leavis to Ian Parsons, 17 July 1968, Chatto and Windus.
62. Leavis, *English literature in our time and the university* (ref. 24), 3. On his respect for the standards maintained in the sciences, see pp. 40, 64, 64–65.
63. *Ibid.*, 40.
64. *Ibid.*, 64–65.
65. *Ibid.*, 17, 87, 132.
66. See Stanley Fish, *Professional correctness: Literary studies and political change* (New York, 1995).
67. Leavis, *English literature in our time and the university* (ref. 24), 118. For consideration of what Leavis meant by the terms ‘*nisis*’ and ‘*ahnung*’, see Roger Poole’s contribution to the special issue of *The Cambridge quarterly*, xxv/4 (1996), 391–5.
68. Leavis, *English literature in our time and the university* (ref. 24), 128.
69. Leavis, *Thought, words and creativity* (ref. 29), 47–48.
70. Leavis, *The living principle* (ref. 42), 13.
71. Marjorie Grene, *The knower and the known* (London, 1966).
72. Leavis, *The living principle* (ref. 42), 39.
73. Leavis used the term in *Nor shall my sword* (ref. 23), and relied on it most extensively in *The living principle* (ref. 42).
74. Leavis, *The living principle* (ref. 42), 97.
75. MacKillop provides an excellent account of the Richmond Lecture in *F. R. Leavis* (ref. 5), chap. 9, esp. pp. 311–25.
76. S. Gorley Putt’s address to the English Association was reprinted as “Technique and culture: Three Cambridge portraits”, *Essays and studies*, xiv (1961), 34. See Angus Wilson, “If it’s new and modish, is it good?”, *New York Times book review*, 2 July 1961, 1, reprinted as “A plea against fashion in writing”, *Moderna Sprak*, lv (1961), 345–50. Wilson repeated his claim in “Fourteen points”, *Encounter*, January 1962, 10–12.
77. MacKillop, *F. R. Leavis* (ref. 5), 311. In July 1961 Leavis acidly lamented his exclusion from the “corridors of power” in the English Faculty in Cambridge; Snow, with his knack for such turns

- of phrase, had introduced that one as early as 1957, and adopted it as the title of a novel in 1964. Leavis to D. F. Pockock, 25 July 1961, Emmanuel College: 9.59.121.20; Snow, “The corridors of power”, *Listener*, 18 April 1957, 619–20.
78. Downing College: Governing Body Minutes, 27 October 1961, 106.
 79. G. Singh, *F. R. Leavis: A literary biography* (London, 1995), 288; and MacKillop, *F. R. Leavis* (ref. 5), 317.
 80. R. E. Keen to Leavis, 23 February 1962, BBC-WAC: F. R. Leavis, File I, 1940–1962; Leavis denied permission in his reply of 27 February 1962. “Stormy don’s swan song should be a fiery one”, *Evening standard*, 28 February 1962.
 81. MacKillop, *F. R. Leavis* (ref. 5), 318. I am grateful to David Holbrook for sharing his recollections of the occasion with me.
 82. Leavis, *Two cultures?* (ref. 2), 9–10. Leavis’s manuscript is held at the Houghton Library at Harvard, MS Eng 1218.
 83. *Ibid.*, 11–12.
 84. *Ibid.*, 12.
 85. *Ibid.*, 13.
 86. *Ibid.*, 14–15.
 87. Plumb to Snow, 5 March 1962, HRC: Snow 226.12. I explore the institutional connections between these figures — especially as they relate to the establishment of Churchill College — in my doctoral thesis, “The ‘Two Cultures’ controversy”, Cambridge University, **date**.
 88. *Spectator* of 16, 23, and 30 March 1962; Snow to Plumb, 7 March 1962, HRC: Snow 226.12.
 89. Trilling, “Science, literature and culture” (ref. 5), 463–4. Trilling’s reluctance to criticize Leavis was apparent in his refusal to review the reprint of *Scrutiny* for the BBC unless he found himself able to take a broadly favourable view: BBC internal memorandum, 8 April 1963, BBC-WAC: F. R. Leavis, File II, 1963–1964.
 90. The Richmond Lecture as a classic: Leavis to Parsons, 25 June 1962, Chatto and Windus; Leavis to J. Schwartz, 19 March 1964, Harvard: Houghton, autograph file; Leavis to Parsons again, 16 January 1968, Chatto and Windus.
 91. For instance, in 1965 he confided to a colleague that a forthcoming lecture entitled “Luddites? Or, there is only one culture”, referred to Snow as little as possible, so as to prevent misrepresentations of his argument as a mere personal attack. Leavis to A. I. Doyle, 9 September 1965, Downing College: DCP/LEA/2 Leavis, F. R.
 92. Leavis to Ian Parsons, 25 June 1962 and 16 January 1968, Chatto and Windus.
 93. George Steiner, “F. R. Leavis”, *Encounter*, May 1962, 37–45.