

What Art and Science Want:
Disciplines and Cultures in Contention

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Extracts from a Doctoral (PhD) Thesis
(UCL, Slade School of Fine Art, 2011):

Abstract, Table of Contents, List of figures, Introduction and Synopsis

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Abstract

Art and science cannot 'want' anything, but artists can be interested in disciplinary outcomes other than those authenticated within their own field, and scientists can want a greater sense of cultural agency than is allowed within a strictly-ruled discipline. The pursuit of such aspirations puts into contention the integrity of arts and sciences as disciplines (for knowing and making a world), and the effectiveness of their cultures in transmitting their selectivist disciplinary gains, or opening them to participation and scrutiny.

This inquiry uses Pierre Bourdieu's formulation of the social fields of art and science critically within a self-reflexive (artist's) discourse. It asks whether aspirations to extend art and science in the ways summarized above are mutually-enhancing, or part of a struggle for disciplinary dominance and the control of normative culture. The aim is a better understanding of what is at stake for an ambiguously-defined contemporary art when artists and scientists extend their interests to each other's fields – given that their aspirations ('wants') can be disciplinary or cultural, and either intrinsic or extrinsic, conventionally speaking, to their home fields.

Conventionally, art as a discipline modulates between the aesthetic and the intellectual, the wild and the rational, remaining ambiguous about its precise gains. Within the extended field of art, this ambiguity is resolved opportunistically, among mutually-dependent agents: artists, curators, academics, collectors (etc.). Explicitly science-engaged art is a special case within this art world, and, conversely, art-world conventions are rejected by some prominent art-science practitioners. Such selective authentications and disavowals raise the stakes around science-engaged art. On the one hand it seems, at best, to be merely indexical of the ongoing scientification of everything; on the other, it particularizes the idea of art as a vector of rational agency, inviting a new necessity and progressivity in art.

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1.0

Introduction

1.1

Introduction: Background and Approach

What do arts and sciences want, and how might the pursuit of it put their disciplines and cultures into contention? These questions are inferred in the title of my inquiry. I ask them in Britain, on the cusp of the twentieth and twenty-first centuries, where art and science seem at the very least to want attention, legitimacy, and continuance. I intend to suggest, too, that art and science can want something of each other, and that this is bound to entail difficulty around questions of intellectual authority and normative (general, public) culture.

How is my impression – that this 'art' and 'science' might 'want' things – formed? I do not assume that art and science are singular entities with agency, like a human being, nor that they concentrate their powers in single monolithic institutions. I take it that, by means of the cultures which they produce and are every day intermeshed with, the many arts and sciences crowd into public discursive space, *as though* proposing and wanting things in and of society; for instance, by demonstrating their gains, courting legitimatization, seeking resources.

In the background to my inquiry is the Snow-Leavis controversy, which played out in Britain and the United States from the time of C. P. Snow's 1959 Rede Lecture *The Two Cultures and the Scientific Revolution* in Cambridge, to the mid-1960s.¹ Because the name of Snow-Leavis still hangs over the discussion of artistic and scientific disciplines and public culture, it is useful to indicate aspects of the affair I find salient to an inquiry about science-engaged contemporary art in my own time.²

Snow's 'Two Cultures' texts, especially his lecture, are mostly unconcerned with artistic practice.³ The lecture is a call for a utilitarian and socialistic programme to apply western science and engineering to fundamental human needs, especially in post-war Africa and India. Snow claims that a mindset associated with individualistic modernism in literature is an obstacle to this kind of socio-scientific progress.⁴ His argument is passionately made, but not supported by much evidence, and his critics have found it easy to characterize his position as (in Roger Kimball's phrase) 'naïvely meliorist'.⁵ Following Collini's comparison of earlier and later versions of Snow's lecture text, it appears that in 1959 Snow could also be operating on a more parochial and opportunistic level, rebranding the project of the British political left with a scientific contemporariness.⁶ His tone and language, at least, were taken up by the British Labour Party. Harold Wilson's well-known 1963 Labour Party Conference speech states that 'in all our plans for the future, we are redefining and we are re-stating our socialism in terms

of the scientific revolution'.⁷ Following Wilson's narrow election victory, Snow was made second-in-command in the new Ministry of Technology, and received a life peerage.

Snow's premise about the 'dangerous non-communication'⁸ between arts and sciences is weakened by his not referring to many relevant artistic examples available at the time (Bauhaus, for example), and his representing the power of scientific knowledges as overwhelmingly beneficent. His lecture text is nevertheless interesting for drawing on Snow's own, very particularized involvement in the disciplines and cultures of art (literature) and science (chemistry, physics and war science). Further, his rhetorical stance recalls his literary hero H. G. Wells,⁹ and incorporates a disdain for a kind of person and a social grouping Snow associates with Britain's 'traditional culture' (his term), and with social and political power in Britain. I take Snow's discourse as the script for a performance of personal disposition mixed up with scientific, progressivist rhetoric; and a writ against scientifically ignorant or ill-informed government. As much as any overarching idea in his lecture, it is Snow's performed persona – the urbane, clubbable everyman, of inferred intellectual sophistication – which provokes his best-known detractor, literary critic F. R. Leavis.

Cambridge-based Leavis was widely reprimanded for his highly personalized 1962 response to Snow, in *Two Cultures? The Significance of C. P. Snow*, also given as a lecture at the University of Cambridge.¹⁰ The published text reveals him to be preoccupied with Snow's vaunted public status, and affronted, even, on the basis that Snow is a traitor to the ethos of the University both men have attended.¹¹ Leavis tries to make a case for the necessity of the kind of literature threatened by the new order of which Snow is 'a portent'. He argues for his preferred literary canon (with special attention to D. H. Lawrence¹²), and ends, advocating 'creative work on the contemporary-intellectual-cultural frontier' and proposing his Cambridge as 'a centre of consciousness (and conscience) for our civilization'.¹³

Leavis introduces the idea of a 'publicity-created culture' to explain how Snow's reputation is created and maintained. In the Prefatory Note to his published text Leavis turns Snow's charge of élitism around, presenting the publicity-created culture as the cultural manifestation of an ascendant liberal-left establishment, with nodes of power in the BBC, the British Council, liberal-left journals and the Sunday papers.¹⁴ This points to a much darker idea of disciplines and cultures than that presented by Snow. Specifics aside, the suggestion that the emerging and supposedly liberatory cultures of the 1960s are in fact a new, but programmatically-produced normative culture seems prescient, and is interesting in relation to the interplay of contemporary art and science, both in and as culture.

The first part of Snow's lecture title *The Two Cultures [...]* is still held up emblematically: both by those complaining of 'the marginalisation of science',¹⁵ and by rhetoricians of science going as far as to suggest, in the words of John Brockman, that 'what traditionally has been called "science" has today become "public culture."¹⁶ The phrase 'the two cultures' is also invoked by advocates of formalized art-science practice,

to axiomatize the obstacles in the way of the interdisciplinarity to which they aspire.¹⁷ The second part of Snow's title [...] *and the Scientific Revolution*, with its echoes of Marxian thinking, is often ignored when Snow is cited emblematically.

Obviously, a scientific revolution of a kind has proceeded, but not necessarily in accordance with the moral and ideological imperatives Snow attributed to science and scientists. The knowledge gains of science in general are today routinely and widely assimilated to the point of seeming banal, whilst the practice of science has become increasingly specialized, commercialized and militarized. Snow's biculturalism is no longer axiomatic of societies like Britain's, especially outside academic or professional realms. Today, cultures are manifold.¹⁸ Individuals, including artists and scientists, can partake of multiple cultures; in addition, that is, to any selectivist culture which might define them professionally, or that emerges simply from the coming together of the like-minded, as with Snow's 'two cultures'.

Brian Massumi has proposed a latter-day cultural domain as a 'field of power' agitated by 'irritations' (events or acts taking place in the world) amplified by the news media.¹⁹ Like an extended nervous system, these media 'transduce singularity', but do not transmit content. To this elegant, if abstract model I would add the more practical element of agents in many fields who can create, or stage, just the kind of singularity to which the networked news media are sensitized; agents who have access to the nerve-endings (so to speak) of those media. According to Leavis's bitterest remarks, Snow is just such an agent. His equivalent today can swiftly fill the public discursive space available for, say, contemporary art or science, via 'singularities' tailored for the kind of amplification Massumi proposes; events made to create effects in public discursive space. There is no need, here, to cite examples. One need only compare a selection of major news carriers in a given week to see how a limited number of events, from exhibitions to science announcements, are amplified again and again, as though differentiated by some natural order of importance. They may or may not be important, but it is surely clear that here is a publicity-created culture in action; a culture brought to a semblance of life via the willed and targeted acts of agents who stimulate an almost-autonomous network. Offering a kind of cultural action-at-a-distance, the system is bound to be attractive to some in the most autonomous (and, thus, potentially isolated) artistic and scientific fields. We can hope that as they seek to create effects in public discursive space their agents are motivated by a drive to share and democratize art and knowledge. Following Massumi, I suggest that the likelihood of 'content' being transmitted is dependent on the strength of such motivations.

It does seem that the more democratic and discursive the cultural realm becomes, the more it is characterized by a superfluity of fragmented information and rhetoric. It can be viewed as a realm of competing self-interest, or a public-relations free-for-all in which any given player, from individual practitioner to arts foundation or science institute, must make their bid for attention, legitimacy and resources. Today, we

experience an almost industrial throughput of micro-discourses, before which the Snow-Leavis debate stands like the craft-product of a prefiguring cottage industry. Questions of which field is doing necessary and progressive work, whose work is vouchsafed by tradition, who is obeying the imperative of the *Zeitgeist* (and whether this matters), have all become related to securing a platform in public discursive space.

In 2009 one of Britain's largest contemporary art institutions, Tate Modern, hosted a day-long symposium as part of a series of events marking the 50-year anniversary of Snow's Lecture.²⁰ Given the venue and the title of the event – *Art and Science Now: The Two Cultures in Question* – it might seem surprising that no artist, theorist, curator or critic concerned with contemporary art appeared on any of the symposium panels.²¹ This impression of disinterest invites comment.

Even if the bi-culturality proposed by Snow is based on anecdotal observations, and does not show convincingly that non-scientific culture is either traditionalist or reactionary; and even if Snow's formulation is even less representative of artistic and intellectual life today than it was in 1959, there is a still-relevant point to be pursued about the power of cultural élites; or élitist cultures. The following remark from one of the main voices informing my inquiry, Pierre Bourdieu,²² might speak to the silence of contemporary art on the occasion of the Tate symposium:

The dominant are drawn towards silence, discretion and secrecy, and their orthodox discourse, which is only ever wrung from them by the need to rectify the heresies of the newcomers, is never more than the explicit affirmation of self-evident principles which go without saying and would go better unsaid.²³

Some of the intricate ways in which this passage might pertain to the world of contemporary art are pursued in part 3.0 of this thesis. Given what I have said so far, I will note here that Bourdieu's remarks could also describe the preconditions for the Snow-Leavis argument. Leavis demonstrates just how difficult it is to publicly legitimate an artistic practice from within the social field which self-interestedly authenticates it. Difficulties with the legitimating arguments around literature are opened to scrutiny when Leavis, provoked by Snow, breaks the 'silence of the dominant'. No representative of contemporary art was so provoked at the Tate symposium.

Is contemporary art weak in the face of challenges to the insularity of its field? Is the 'two cultures' problematic long settled within the art world? Does art's settlement with subjectivism mean that the power to speak in the presence of objectivized knowledges has been ceded? Perhaps it is widely believed that contemporary art already encompasses enough of everything for it always to be indexical of what is important in society and culture in general; that art acts as a kind of aggregator of what matters. Artists and others concerned with art certainly appear open to a wide range of ideas.

However, this appetite for new ways of knowing and being in the world is also related to the co-option of knowledge, instrumentality, or representations emerging from other fields as a sign of the contemporariness that new art must demonstrate. Artists can be surprisingly confident about purloining signs (of the new, of the selectively known) from other disciplines, construing them as meaningful in and of themselves, and using them to bolster the truth claims of art. Further, such incorporations can be allowed to count towards the acquisition of what Bourdieu calls 'symbolic capital' in the field of art (3.3, and throughout this thesis). However, were the extrinsic in art to answer back (so to speak) this could provoke a critique of art's authenticatory protocols from within, in terms no longer controlled within.²⁴

The sciences, of course, are hardly free of inconsistencies and difficulties when it comes to legitimacy in society. The benefits of much scientific work are arguable, but terms required for informed debate about this are hard to assimilate, and, all along, the sciences are extremely needy of resources and public assent. However, in good times and bad (economically-speaking) agents of the sciences seem continually to enter public discursive space, seeking to alter the complexion of normative culture. The Tate symposium was dominated by such agents.

When art seems disinvested in the challenges thrown up by the most radical, insistent and totalizing views of humanity and society, then closer scrutiny is invited of claims that it does something as worthy of interest and resources as the sciences. The art world's inner coherence is well-served by the self-justifying economism of an art market; mutualities connecting academies and other institutions; and the dedication and belief of many agents. Drawing on this inscrutably-interconnected social field, art's wider legitimacy, like the integrity of a cellular underground organisation, seems impervious to both systematic critique and overwhelming attack. However, this very self-sufficiency exacerbates the danger that art in general is easily marginalized as the tokenistic instrument of a small social grouping – an élite – and that attempts to rationalize its claims will appear conceitedly self-justifying.²⁵ To wider society this may not matter much, because the grouping, especially around contemporary art, is small and politically ineffectual, and, in any case, offers entertaining diversions.

Stepping back, initially, from the highly contested realm of presentation, representation and reception sketched out above, I begin my inquiry (in 2.0) with the idea that disciplines (including the multiplicity of arts and sciences) are related to differently-nuanced affinities, and are, in effect, formalized, selectivist ways of knowing and being in the world. I propose that, as the relationship between a given discipline and wider society becomes more complex, its culture is called upon as a mediating construct, and becomes arrayed between disciplinary insiders (artists and scientists, for example) and outsiders; between selectivist knowledges and common knowledge. In this formulation, cultures are the projections of selectivist disciplines in the social world. They become the repository and the stage for proxies and representations; and, to these, the expectations and

