In our enthusiasm and occasional defensiveness concerning interdisciplinary studies, we sometimes fail to listen carefully to the arguments of its numerous opponents. Instead of attending to the diverse charges and criticisms, it is tempting to concentrate on the strengths and merits of interdisciplinary studies -- presumably on the assumption that well-articulated pluses will cancel the alleged minuses. After all, there is no defense like a good offense. This inattentiveness to the substance of the criticisms of interdisciplinary studies is not without its consequences. Not only do we squander opportunities to respond effectively to arguments that rest upon correctable misperceptions of interdisciplinary studies, but we also neglect potentially valuable instruction concerning our weaknesses.

In this brief paper, I shall identify five of the most popular arguments against a substantial role for interdisciplinary studies in the undergraduate curriculum. Each argument will be sketched in broad terms, with no attempt made to defend interdisciplinary studies from the respective charges. Call this, if you will, a bit of enlightened devil's advocacy. The temptation to respond to the diverse arguments has been checked, not for want of inspiration, but in keeping with the stated purpose of the paper: to focus attention on the nature of the arguments against interdisciplinary studies. It is clear that there are some important arguments against interdisciplinary studies neglected in my brief inventory. Those that I have included, however, strike me as being at or near the top of the list in popularity and forcefulness.

The first argument against interdisciplinary studies is that it rests upon serious conceptual confusion. Quite simply, the practitioners of interdisciplinary studies lack a coherent, defensible sense of their purposes. Interdisciplinary studies purports to be concerned with examining and
developing significant lines of connection between two or more disciplines. It is not at all clear, however, just what it means to connect the disciplines nor what the value of such activity might be. Most of the discussion of interdisciplinary or integrative studies assumes clarity in these matters and moves on to other concerns. Part of the difficulty here might be thought to derive from the notorious uncertainties surrounding the nature of the disciplines themselves. Seen in the worst light, integrative studies is a fool's project, propounding equations where all the terms are unknown.

Things are not quite this bad, however, and although the arbitrary hands of chance and politics have played important roles in the definition of the disciplines, their latter-day contours and boundaries turn out, on the whole, to make surprisingly good sense. Each of the disciplines offers us some general criteria for locating questions inside or outside of its boundaries. For the most part, the boundary lines among the disciplines are drawn by means of appeal either to a distinctive subject matter or to a distinctive method of inquiry. There is, of course, nothing perfectly neat or grayless in such boundary demarcations; but most of the problems are confined to marginal cases and relatively minor "turf" disputes. The lack of clarity associated with integrative studies cannot be excused, then, as derivative from the underlying vagueness of the concept of the disciplines.

If the connection among the disciplines contemplated by integrative studies is nothing more than a matter of borrowing insights or methods from one or more disciplines to illuminate problems in another, it seems fair to ask why such extra-curricular borrowing is called "integration." The concept of integration suggests a more substantial and enduring bond than that involved in the paradigms of integrative studies. Indeed, the proponents of integrative studies seem unwilling to regard the envisioned connections among the disciplines as forming a permanent bond. The disciplines are not dissolved in the transactions of integrative studies. Moreover, the kind of borrowing suggested in the proposed account of integrative studies already occurs routinely within the framework of most disciplinary activity. The physicist is lost without the tools of mathematics; the political scientist borrows insights from sociology, history and economics; the literary studies scholar makes use of the methods of linguistics and analytic philosophy. There is nothing special about this import/export business across disciplinary lines; and it hasn't occurred to anyone to call the process integrative or interdisciplinary. Clearly, the proponent of integrative studies owes us a better account of the nature of the integration he contemplates, one that is, at once, coherent and non-trivial.
In addition to demystifying the nature of disciplinary connections he seeks, the proponent of integrative studies should be prepared to articulate more fully the principle or principles that determine when these connections are to be sought. The disciplines, as we have noted, are guided by broad, internal standards of relevance, whether that of distinctive subject matter or of method. But what principles guide the integrative studies practitioner in choosing to make these connections rather than those? Is he responding to some larger teleological sense of the natural connectedness of things or is his motivation essentially pragmatic, stimulated by what he sees as theoretical or practical impasses within specific disciplines? There appears to be no agreement among integrative studies advocates in this matter. Some talk about a grand holistic scheme and the unity of knowledge, while others speak more modestly about the practical value of interdisciplinary projects in the solving of specific problems. Still others see the applications of integrative studies as primarily centered in instruction rather than research. However sharp the contrasts here, the diverse options tend to be discussed with a characteristic air of romance and all too little rigor and specificity. For all of their worried criticism concerning the dominance of the disciplinary model in higher education and their curative ambitions, the proponents of integrative studies have given surprisingly little attention to the important work of defining their goals and their methods clearly. The consequences of this neglect can be seen both in the lack of reliable traditions and literature concerning interdisciplinary studies teaching and in the widespread doubts about the intellectual foundations and value of integrative studies.

A second argument against interdisciplinary studies holds that it is a pedagogically doubtful business to spend time in interdisciplinary learning projects when the student lacks a mature base in any of the contributing disciplines. Sound educational development requires proper background and critical participation on the part of the student. Having no firm hold on any of the associated disciplinary traditions, the student in an interdisciplinary studies course or curriculum can be little more than a spectator to the marshalling of arguments, methods, and insights from the diverse contributing disciplines, with their voluminous literature and often highly technical research traditions. However exhilarating the discussion, the interdisciplinary studies course promises little in the way of long-term benefits for the student. If integrative studies are to be pursued properly and have lasting value, the student must first acquire a strong foundation in at least one of the contributing disciplines.
This suggests that substantial involvement in integrative studies should be deferred to a point relatively late in the undergraduate career. And, even at this point, given the demands associated with the acquisition of disciplinary competence, it is likely to be of doubtful value.

Undergraduate programs in interdisciplinary studies appear fated to wander between two unattractive poles -- either they assume disciplinary sophistication in the students, in which case most, if not all, of the students are left in the dark, unable to manipulate the central issues at stake or -- and this is much more frequently the case -- they assume little, and the program of study is diluted and homogenized to the point where it is almost totally devoid of a critical base. Under the guise of an invitation to wrestle with what are frequently fascinating and important issues, the student is cheated of a precious opportunity to develop the skills and background required for mounting a proper attack on the issues. As Robert Paul Wolff has noted in *The Ideal of the University*, undergraduate courses in theoretical economics and logic may well do more to prepare students for grappling with the socio-political crises of their time than interdisciplinary seminars on poverty and the philosophy of war.²

We are facing a growing crisis in the planning and politics of the undergraduate curriculum. The explosion of knowledge in the disciplines is leaving less and less time for study outside the student's major disciplinary program. On many campuses, the requirements for major programs in mathematics and the natural sciences constitute as much as 2/3's of the student's academic program. Although a backlash in favor of stronger liberal arts distribution requirements has appeared on some campuses, it is difficult to see how the tide of early and intensive specialization in a disciplinary area can be resisted. Adequate preparation for graduate and professional study and for careers in the disciplinary area requires increasing amounts of course work in the major program.

On this account, a third argument against interdisciplinary studies has acquired heightened importance. It is argued that a substantial commitment to integrative studies in the undergraduate program will impede the student's development of an essential disciplinary competence.

However attractive the ideal may be in the abstract, there simply is not enough time within the traditional four year, 120 credit framework of undergraduate education to do all of the things that our educational ideals suggest. We are being forced with increasing urgency to cut corners, to choose the lesser from among a number of curricular evils. Whatever sacrifices we make, it seems clear that
we cannot forfeit the development of sound, critically based disciplinary courses. The idea that disciplinary competence can be acquired in the midst of a substantial commitment to a program of integrative studies is so much wishful thinking -- given the time, energy, and learning abilities of most undergraduate students. Of course, a proper regard for the liberal arts ideal requires some learning experiences beyond the disciplinary concentration. Here, it seems preferable to introduce the undergraduate to the foundations, the essential concepts, methods and traditions of a range of disciplines through undiluted, introductory level courses. Rather than teasing a student with fragmentary exposure to philosophy and literary studies in an interdisciplinary course in philosophy and literature, let him take a rigorous course in the classics of Western literature and/or a challenging introductory course in philosophy.

The primary responsibility of the university, given the premium on time and study opportunities, is to equip the student with adequate foundations for future growth and development. Although a course here and there along the way in interdisciplinary studies may make sense for some students, such activity should be kept to a minimum and pushed to the margins of the college agenda. Interdisciplinary studies opportunities on a more substantial scale are best left to extracurricular agencies, e.g., community forums, topical conferences and institutes, and continuing education programs.

The cultivation of competence in a particular discipline is not just a matter of educational ideals, it is also, increasingly, a matter of practical importance. Students seeking admission to graduate school and entry to highly competitive career areas are faced with requirements and expectations that stress close identification with and substantial development in a particular disciplinary tradition. However arbitrary and unfair such standards may be, they are part of the post-graduate world to which the student must adapt. Students must be advised of these expectations and assisted in finding a sensible pattern of response. It is unconscionable for interdisciplinary studies faculty to use students as unwitting flag bearers for their dreams of educational reform. To be sure, there are student aspirations and career plans that can be adequately served by undergraduate programs concentrating in integrative studies. For most students, however, the price of concentration in integrative studies, with the attending neglect of a disciplinary base, will be the risk of disqualification from coveted graduate school and job opportunities.
Among the more popular arguments directed against interdisciplinary studies programs none is as widely subscribed as the charge that integrative studies courses are characteristically shallow, trading intellectual rigor for topical excitement. This fourth argument has special currency among academic traditionalists who are instinctively suspicious of any course that sounds remotely "relevant" or of popular interest, and among rivals in the disciplinary departments who are sensitive to what they see as naked marketing ploys in the escalating competition for student registration. Some of it, however, issues from a genuine concern for academic integrity and what might be called truth-in-teaching standards. Student enrollment response to an appealing seminar theme and even favorable student course evaluations are not necessarily the best measures of the worth of a course. The emphasis in contemporary mass media on "big picture" treatment of broad themes has stimulated a demand in the academic market for comparably wide-angled course offerings. Some integrative studies faculty play to this vogue with results that can only reinforce the hostile stereotypes of the interdisciplinary studies course. Although there are, to be sure, many demanding and intellectually rich programs and courses focusing on attractive topical issues, there are simply too many interdisciplinary studies faculty driving curricular ice cream trucks down the academic alleys.

Not only are many of the "big picture" integrative seminars ill-conceived, but there is also a disturbing tendency for such courses to be taught in a sloppy, chat-in-the-round fashion that does little to cultivate either critical skills or a systematic grasp of the issues under review. The pedagogical deficiencies in these courses are frequently compounded by a heavy reliance on splashy special events: guest speakers, films, video-cassettes, and other classroom equivalents of easy-listening radio. Instead of a carefully planned, intellectually demanding mix of lectures, sharply focused discussions, exams, and papers, the student is exposed to a semester long variety show, doubtless interesting, but of very little long term educational value. Moreover, even where there are adequate measures of order, method, and rigor in the integrative studies seminar, the theme often fails to "pan out." The anticipated synthesis fails to materialize. In such cases, some may wish to write the seminar off as a noble experiment that failed. Such failures are so common, however, as to raise serious questions about the judgment and, still worse, the integrity of many interdisciplinary studies teachers. It is irresponsible to use students as semester-long guinea pigs in the testing of what are frequently half-baked notions of curricular value. As the popular television spots for the Black
A fifth argument against interdisciplinary studies programs focuses on the relatively high cost of the typical integrative studies course. In a time of embattled budgets and overburdened academic resources, it is argued that the interdisciplinary studies programs, with their heavy reliance on team-teaching methods, special events, independent study, and relatively low faculty-student ratios are extravagant and cost ineffective. It is assumed that the interdisciplinary studies programs cannot accomplish their goals without substantial resort to such expensive practices. The integrative studies programs are not charged with profligacy, but rather with a lack of redeeming educational value, sufficient to offset their hefty price tags. Proponents of this argument also note that many interdisciplinary studies programs place further burdens on severely limited academic budgets by either borrowing adjunct teachers from the disciplinary departments, creating thereby a need for part-time replacements, or by hiring their own psychologist or sociologist or historian, etc., and thus duplicating -- albeit with dubious quality control -- the faculty resources already available in their departments.

There are additional complaints about interdisciplinary studies worth examining; e.g., there is the claim that integrative studies faculty are, for the most part, second-class scholars, exiles and refugees from the disciplinary departments, where they either failed to measure up or found themselves incapable of sustaining the kind of rigor and focus required for success in disciplinary scholarship. However painful the project, it would be a useful service to integrative studies to identify these additional arguments. It would also be helpful to examine the criticisms of interdisciplinary studies in an historical light and with a view toward the discovery of both patterns of frequency and correlations between particular arguments and the disciplinary base of their proponents.

Beyond the extension of the list of significant criticisms of interdisciplinary studies and the varieties of analysis suggested above lies the important and difficult work of responding to the arguments, both intellectually and politically. In meeting this challenge, it will not suffice simply to impart what we already know. Clearly, we need to know more. We need to think more fully and critically about the logical foundations of integrative studies. We need to develop more compelling justifications for including substantial integrative studies work in the ever more crowded undergraduate curriculum. We need to articulate more fully the connections between disciplinary work and interdisciplinary
studies in the realization of the liberal arts ideal. We must cultivate and give increased attention to post-graduate study and career opportunities for students concentrating in integrative studies. We must place a greater emphasis on rigor and learning that lasts in the design and teaching of interdisciplinary studies courses; and finally, we must give more urgent attention to program economies that will allow integrative studies work to continue, while not sacrificing the unique values and traditions that have distinguished our work.

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