Chapter 1

FORMING HUMANITIES

This story begins in 1636. When the first institution of higher education opened in this country, humanities played a central role. Harvard College was a Puritan-based institution with a prescribed curriculum based on the Bible, the classical trivium of language-oriented arts, and the quadrivium of mathematical or scientific arts. Students learned Greek, Aramaic, Hebrew, and Syriac, along with logic and rhetoric, history and politics, astronomy and botany, ethics, and catechism. The philosophical complement to this common curriculum was the idea of unitary knowledge. Together, these structural and philosophical principles shaped the educational programs of the other colonial colleges and, more generally, influenced thinking about higher education in the United States for nearly two and a half centuries. The central mission of the American college was teaching in the European and English tradition. The students, who came primarily from the elite of colonial society, were trained to take their place in prestigious vocations. The faculty, who came primarily from the clergy, placed classical learning in a religious framework. Individuals offered recitations and lectures in specific subjects. However, they were not divided into separate schools or departments. A returning missionary might teach biology or a teacher of rhetoric do double duty in history, logic, or metaphysics (Levine and Niddifer 54, 66-67; Hutcheson 105; D. Bennett 132-33; Bogue and Aper 19–20; Kuklick, "Professionalization" 43).

Even though common principles would have a long-lasting impact, differences were already evident by the founding of the second colonial college in 1692. Modeled on the Scottish tradition of higher education, William and Mary placed greater emphasis on mathematics, history, and science. In the eighteenth century, new utilitarian curricula and chairs in the professions were introduced and, by the nineteenth century, new technical and vocational schools were being founded. Scientific investigation

was also making inroads into the curriculum, modern and pragmatic courses were proliferating, and interest in vernacular languages was increasing. These changes prompted a prominent defense of tradition by Yale College faculty. The purpose of college according to the Yale Report of 1828 was to prepare students in "the disciplines and furniture of the mind." The term "disciplines" connoted expanding the powers of mental faculties and "furniture" filling the mind with knowledge. Since the founding of the colonial colleges, exercises in grammar and mathematics had been regarded as the best means of disciplining mental and moral faculties. The most important subject was the classics. Patient study of the grammar, syntax, and etymology of classical texts was considered the key to the spiritual essence of ancient Greece and Rome. Yale faculty rebuked critics of this tradition, faulted technical or partial courses of study, and dismissed popular studies, modern languages, and professional subjects (Levine and Niddifer 67-69; Hutcheson 106; Kuklick, "Professionalization" 49; Kuklick, "Emergence" 202-05, 210; J. H. Miller, "Theory" 121).

Yet another change was on the horizon as well, one so profound that Laurence Veysey called it the first genuine academic revolution in the United States. Between 1870 and 1910, higher education was reorganized around twenty to twenty-five disciplines, each with its own department, major, and set of courses (D. Bennett 137). Even as disciplinarity was transforming American higher education, though, a group Veysey dubbed the "culture camp" of humanities upheld the values of the older American college. They extolled the Renaissance ideal of litterae humaniores, the social and moral purpose of education, spiritual idealism, and a conception of culture as process rather than research product. Some professors from social and natural sciences shared their views, but the culture camp was composed primarily of classicists and individuals from English literature and art history along with some philosophical idealists and college presidents. They preached a gospel of "civilization" and "cultivated generalism" that was also advanced by editors of literary monthlies, organizers of the fine arts in major cities, and an assortment of schoolmasters, authors, lawyers, clergy, artists, and performers (Vesey, "Plural Worlds" 53-54; Graff 85).

Gerald Graff dates the emergence of generalists as a distinct academic type to the 1870s. In adapting the old college ideal of liberal or general culture to modern times, they formed a dissenting tradition that fostered a kind of humanist myth. The divide between generalists and specialists was not absolute. They shared the same genteel social code. Specialists were

expected to fulfill responsibilities for general education, and many of them held generalist views of literature, culture, and teaching. Theoretically, professional research was even a vehicle for general humanistic culture. The disciplinary "investigators" saw themselves as heirs of Matthew Arnold, who espoused a broad humanistic view of literature and culture. Few individuals or departments, however, successfully integrated the two. The gap between traditional ideals and professional practices would continue to widen and generalization lose favor (4, 55–56, 85).

Understanding the tension between the new disciplinary model of humanities and the culture camp's traditional view of knowledge and culture is a necessary first step in this study. The opening chapter addresses a series of related questions. What were the historical precedents for the generalist model? How were evolving constructions of humanities and liberal education linked with precedents for interdisciplinarity? What were the defining tensions in the emergence of interdisciplinarity as an explicit problem of knowledge? What subjects and methods dominated in the early history of humanities? How were humanities "disciplined" in America, and what impact did the new system of knowledge production have on traditional values of unity, holism, synthesis, connectedness, and general knowledge? When the general education movement arose in the early twentieth century, what principles of humanistic knowledge and culture were prominent in the first interdisciplinary models?

The Generalist Model

Warrants for the generalist model lie in a genealogy that extends from Matthew Arnold in the nineteenth century to the tradition of the American college, the *studia humanitatis* of the Renaissance, the *humanitas* and *artes liberales* of ancient Rome, and the *paideia* of ancient Greece. In speaking of a Greek contribution to modern thinking about humanities and interdisciplinarity, it is important to remember that neither concept existed in the ancient world. Archaeological salvaging of the past to anchor claims in the present sometimes borders on historical anachronism. Greek philosophers, though, developed a view of knowledge that promoted a broad synoptic outlook, harmonious unity of divisions, a holistic approach, and the value of general knowledge. Humanists today trace precedents for interdisciplinarity to these ideas in the roots of Western philosophy and writings about

education. The Greek program of education evolved in the course of a gradual conversion of Greek culture from oral to written form. The core was epic poetry and drama, which had been the focus for ritual community activity and the formal oratory on which public debate and negotiations depended. Even after the concept of history replaced myth, Homer and Hesiod were still treated as repositories of ancient lore and moral wisdom, conferring on them the stature of precedent and a corresponding belief that knowledge resides within certain works (Grafton and Jardine 4–6).

The concept of *paideia* was central to the Greek program. Prior to Aristotle, there was only a general division between paideia, the studies forming part of a young gentleman's education, and more specialized higher studies for ages seventeen and older. The paideia included some forms of physical training; some study of music, poetry, dance, and, as Martha Nussbaum speculates, probably some form of political and social history as well. In this respect, it included part of what we now regard as humanities. The curriculum of the enkuklios paideia was neither utilitarian nor vocational. Nor did it include technical study of language or exacting varieties of historical inquiry, systematic and theoretical study of ethical and political questions, or the metaphysical, epistemological, and natural-scientific inquiries that lie at the heart of Greek philosophy. Paideia connoted human wisdom and its application for living a virtuous life, an idea that has been traced back to the fifth century B.C. Both meanings would become central to the ideas of humanities and liberal education. Humanists today also hearken back to another precedent. Founded in 387 B.C., Plato's Academy is often invoked as the first interdisciplinary school on the premise that it lacked subject boundaries. Plato did distinguish subjects when outlining a curriculum in The Republic, and his academy offered instruction in gymnastics, music, poetry, literature, mathematics, and philosophy. Yet, the experience promoted physical, moral, and social development of the "whole person." This concept became part of the legacy of integrative values in humanities, liberal education, general education, and many programs of interdisciplinary studies (Levine and Nidiffer 59; Nussbaum, "Historical Conceptions" 6-7; Hirst 30-31; Mayville 20; Mehl, "Why Define?" 4).

Even with these precedents, tension between unity and differentiation was apparent from the beginning. In the first century B.C., Dionysius of Halicarnassus complained that Greek higher education fostered premature specialization in rhetoric before students had completed the *enkuklios paideia*. In the Roman era, Cicero would also express concern about early

overemphasis on rhetoric. Aristotle is usually associated with the beginnings of specialization. Aristotle distinguished two broad groups of inquiries: studies that were not systematized (ethical and political theory) and scientific studies in the sense of being systematized in a hierarchical deductive structure starting from first principles (encompassing natural sciences, metaphysics, general philosophy of nature, and, perhaps, general study of life or the soul). Aristotle further distinguished studies with a theoretical or a practical aim and in his own school, the Lyceum, sought a broader and more empirical basis for education than Plato. He also advocated the study of nature with a search for verification through evidence and observation. As a result, the study of objects and physical evidence became part of the notion of good education (Boudreau 34; Nussbaum, "Historical Conceptions" 6–7, 21; Levine and Niddifer 59).

Roman Adaptations

The ancient Romans did not make explicit contributions to the idea of interdisciplinarity, but their influence on our conceptualization of humanities was profound. They gave us the Latin root of the word, the subject as a distinct object and body of content, and a framework of terms and distinctions in which issues related to the subject are treated to this day. During the late Republic and early Empire, Romans formulated the discussion of arts in terms of which specific arts, studies, or disciplines are best suited to expressing and serving the needs of humanitas (humanity). Humanistic inquiry became associated with exploring the meaning and purpose of human existence expressed in particular symbolic modes. In his later writings, Cicero designated poetry, geometry, music, and dialectic as the arts that pupils should study to ensure that they achieve full humanity. These subjects were the basis for artes liberales. In the second century, the grammarian Aulus Gellius further stipulated that those who used Latin correctly, especially Cicero and Marcus Varro, did not give humanitas the meaning it was commonly thought to have—the Greek notion of philanthropia, connoting a friendly spirit and good feeling. They gave it the force of the Greek paideia, connoting education and training in the good arts. The goodness of the bonas artes lies in their adaptation to serving moral and practical ends, a purpose that became a cornerstone of humanities as well as liberal education and general education (Crane 23, 156; R. McKeon 162; Mehl, "Postmodern Humanism" 5).

The version of humanities that the Romans constructed drew on the Greek tradition, but it also met their needs and interests. When Romans became interested in Greek culture during the middle of the third century B.C., they adapted a program of education recommended by the teachers they consulted. They shared the Greek notion that certain texts provided insight into the res magnae—the great issues of truth, goodness, beauty, and justice that gave human existence its meaning and significance. They believed that careful study of texts conveyed a kind of normative and wellrounded general education. However, Roman teachers changed the emphasis. They simplified and restated in Latin portions of the Greek tradition that were most suited to their aims, accentuating a rhetorical, public, practical, prescriptive, and literary education over logic and mathematics. They also introduced indigenous Latin works into schools. Greek language and literature were still endorsed as the proper foundation for general wisdom. Yet, by the time of Quintilian, the emphasis was on the art of speaking correctly and literary interpretation of poets. Romans conceived of the liberal arts as a pre-professional form of education and compendia of information, not as methods of systematizing philosophy or organizing erudition. Cicero and Quintilian's primary goal was educating the role model of the public man—the orator. A command of oral and written communication was considered essential preparation for influencing public opinion and policy and for serving the state (R. McKeon 162-64; Crane 157; Grafton and Jardine 4-7; Mehl, "Why Define?" 4).

The Roman formulation of the Greek *enkuklios paideia* was the *disciplinae liberae*, and the foundation of the Roman *artes liberales* was grammar, understood as study of literature and language. Varro listed nine liberal arts: the *trivium* of grammar, rhetoric, and dialectic; and the *quadrivium* of arithmetic, music, geometry, and astronomy; plus medicine and architecture. Arithmetic, geometry, and astronomy were not formal or theoretical disciplines in the manner of Plato and Aristotle. Romans treated them as bodies of facts that supplied the orator with useful words and matter. Comparably, music was sometimes studied as practical training for the ear and voice and as an aid to appreciating poetry, but not as a formal and theoretical science. Logic, or dialectic, provided skeletal arguments for speeches, but rhetoric was the primary art because it supplied methods of constructing persuasive arguments and eloquent discourse on any topic (Levine and Niddifer 61; Mehl, "Postmodern Humanism" 5; Crane 26, 156–57; Kimball 4–5).

The word *liberalis* had two connotations. The older meaning, dominant in Seneca's Rome, connoted "fitted for freedom" in the sense of initiating freeborn gentlemen of propertied classes into the traditions of their society. This connotation discouraged critical reflection. The second and new meaning, favored by Seneca, differed. Education would only be truly fitted for freedom if it produced citizens who could call their minds their own. This capacity was to be gained through study of the subjects and methods best suited for enlightened decision-making, whether individuals were slave or freeborn, rich or poor, male or female. The second connotation would be modified to accommodate new forms of knowledge, such as Christian doctrine and modern science. It would be redirected, in the Renaissance equation of liberal education with classical learning. It would be opposed on philosophical grounds, by Dewey and the pragmatists. Yet, it has reappeared throughout the history of humanities, liberal education, and general education (Nussbaum, *Cultivating* 293; Hirst 31–32).

Recovery and Revival

Italian humanists were the first to actually be called humanists. The word umanista was Latin slang for scholars and teachers of studia humanitatis in Italian universities of the late fifteenth century. Like the members of American culture camp, Italian humanists looked to tradition. The Italian huma*nitatis* countered the technical practice of scholasticism in the late medieval period. In the early Middle Ages, Augustine and other Christian writers adapted the Greek program of education to the ideas of Christianity in an effort to create a harmonious unity. During the twelfth and thirteenth centuries, dialecticians at the Cathedral Schools of Reims and Chartres and in the newly emerging institution of the university shifted the focus of liberal arts education toward rational analysis of texts. Rhetoric faded in importance, and grammar was transmuted into a narrow scientiae speculativae that privileged logic. They also redirected mathematics and music toward abstract number. The Summae of Thomas Aguinas exemplified the scholastic method. Questions of faith and reason were systematically addressed in summaries of theology and secular learning that were incorporated within theological treatises. The distinguishing trait of the Christian synthesis was not the broad sapientia of human wisdom. Syllogistic use of dialectical arguing in disputations, accompanied by reading sacred scriptures and biblical commentaries, became the norm (Roberts and Turner 75; Kimball 5–7; Mehl, "Liberal Arts" 38; Mehl, "Postmodern Humanism" 4; Levine and Nidiffer 64; Levin 8; Kuklick, "Professionalization" 43; Kuklick, "Emergence" 202; Kockelmans, "Science and Discipline" 32, 34).

In contrast, Italian humanists emphasized ideals of liberal culture and education, reviving the notion of humanities suggested by Cicero. When the poet Petrarch hearkened back to ancient writers and the architectural ruins of classical Rome in the mid-fourteenth century, he found personal solace and a model for cultural and political renewal that later writers would dub the "Renaissance." Italian humanists did not use the term. Familiarity with ancient Roman culture and eloquence in Latin became preferred preparation for public affairs among the elite patricians who controlled most North and Central Italian states. By the mid-fifteenth century, humanistic courses were part of the curriculum in Italian universities and spread subsequently to northern Europe, where Erasmus became humanism's most prominent representative. From the Renaissance forward, humanities were increasingly institutionalized as a subject and a discipline. Italian teachers of grammar and rhetoric shifted the focus from the ideal product of classical education to classroom aids codified in textbooks, manuals, and instructional drills. Many were also in religious orders and worked on ecclesiastical reform, theological aggiornamento, and canonical texts. Yet, they distinguished studia humanitatis from studia divinitatis. Since the Renaissance, the word "humanity" has delimited certain subjects or arts from theology or divine studies. Humanities became imbued with secular import and the idea of humanism aligned with classical antiquity in general and intellectual and artistic life in particular. Noble ideals were not necessarily matched in practice, however. The most perceptible result was the growing number of individuals fluent in ancient languages and, in the classroom, grammatical issues and textual detail (Mehl, "Postmodern Humanism" 4-6; Crane 155; Levin 8; Grafton and Jardine 62, 122-25; Kockelmans, "Science and Discipline" 32).

Like its Roman counterpart, the Renaissance humanities was a literary education. Since ancient times, literature has been a vehicle for moral education. Until the late nineteenth century, the study of literature in American colleges and elsewhere was ancillary to the study of something else—especially Greek and Latin languages and rhetoric, oratory, and forensics. The word "literature" encompassed a broad range of meanings, from polite letters and poetry to any writings. The narrower connotation of imaginative writing did not emerge until the late eighteenth century. In the fifteenth

century, the program of humaniora was a well-defined cycle of disciplines that included grammar, rhetoric, poetry, history, and moral philosophy based on careful reading in Latin of Roman and to a lesser extent Greek authors. The impulse toward interdisciplinarity in this era has been attributed in large part to an education that cultivates breadth of learning. The role model of a humanist was an uomo universale, polymath, cortegiano, bonnete homme, and scholar-gentleman adept at arms and well read in a wide range of subjects. During the medieval era, the classical model of rhetorical and literary learning was amplified with Christian ethics and a social etiquette of courtesy inherited from the tradition of knighthood. These three traditions coalesced to produce an ideal of Christian gentility that became the archetype of a liberally educated person in sixteenth- and seventeenthcentury England and in the American colonies. Interdisciplinarity has also been linked with a new institutional formation. Lectureships and chairs for eloquence and poetry were established bearing the titles literrae humanae, literrae humanitatis, studia de humanita, lectras de humanidad, and humanity. These chairs, though, were more "pre-disciplinary" than "interdisciplinary" in the modern sense (Graff 19; Kockelmans, "Science and Discipline" 32; Mehl, "Liberal Arts" 38; Kernan, Literature 13).

The Terms of Modern Relation

The emergence of interdisciplinarity as an explicit problem of knowledge is linked with the rise of modernity. The beginning of the modern era is disputed, but it is conventionally associated with the ascendancy of science and technology, secularization and urbanization, emergence of the nationstate and capitalist world market, the study of contemporary languages and works, and the growing autonomy of disciplines. The latter development had an especially powerful impact. When the unity found in the classical and humanistic tradition could no longer be assumed, Wilhelm Vosskamp explains, interdisciplinarity emerged as a modern problem of Wissenschaft. From the sixteenth century forward, a series of attempts at producing or bringing out unification appeared in the work of Comenius, Leibnitz, d'Alembert, Kant, Hegel, and Wilhelm von Humboldt. The most direct expression of the wish for unity was the early Romantic notion of Symphilosophie, which attempted to produce unity in mythos. Philosophical and mythological concepts were not phrased explicitly in terms of interdisciplinarity. Yet, their subject was put forward as a theory capable of unifying all *Wissenschafte* and *Wissenschaften* ("Scientific" 20, "Crossing" 45). In the seventeenth century, discussion of the ages of learning also promoted cultural history as a general framework of differentiated periods with defining characteristics or conditions. Periodization became a master narrative for the cultural coherence of an era and the interdisciplinary practice of interart comparison (Mitchell, *Picture Theory* 85–86).

Michael McKeon dates the origin of interdisciplinary studies to the eighteenth century. At the time, subjects were assuming increasingly distinct identities. The relationship between the divine and the human was being secularized. The subjective act of knowing was being separated from its objects. The sphere of aesthetic judgment was being delimited from contingencies of social, political, and economic interests. The material and institutional conditions that gave modern divisions of knowledge a sociopolitical foundation were being put into place, including curricular reform and professionalization. And, efforts were being made to historicize knowledge as a modern inheritance of ancient practice and to map it as a logical and genealogical system. At the same time, a synthesizing countermovement was apparent, aimed at providing a foundation for a unified scheme based on analogy, continuity, casual interconnections, and contextual relations. Even as the "aesthetic" and "free enterprise" were becoming distinct categories, artistic expression and economic behavior were embedded in a network of social, political, and ethical concerns. The satirist Jonathan Swift connected madness and the theory of sublimation to realms of empire, philosophy, religion, poetic convention, female beauty, and human pride. Alexander Pope explored a theory of ideology that situated poetry in its socioeconomic context as a coordination of aesthetic value and exchange. The force of Pope's insight into the commodity status of poetry depended on the premise that economy and poetry were divergent spheres. These discourses, McKeon cautions, were only rudimentary exercises in interdisciplinarity. Bodies of knowledge were not sufficiently detached to permit bringing the expertise of one discipline methodologically to bear on the matter of another. Nevertheless, the basic structure of interdisciplinary operation was already visible as an inseparable implication of disciplinary thought.

Two other responses to the problem of differentiation, Vosskamp adds, were at work. A pragmatic attitude developed toward reciprocal borrowing between neighboring disciplines, and interdisciplinary cooperation was increasingly institutionalized. The founding of scientific academies in the seventeenth century was a decisive event in the formation of modern

knowledge. At first, no formal internal differentiation between fields was attempted. In the second phase, differentiation was made for the sake of discussion and research in specific fields. In the third phase, groups began to form in a retraction of differentiation, although the philosophical problem of unity was usually subordinate to the progress of knowledge achieved by applying *Wissenschaft* and technology. Disintegration of the given and the philosophically grounded unity of knowledge offered opportunities for new combinations that proved productive. The search for interdisciplinarity, however, would be framed increasingly as a limited endeavor. Both theoretically and practically, the problem of unity was no longer readily solvable ("Scientific" 21).

Science and Modern Works

The changing prospects for disciplinary relations were further evident in a project that marks the contrast between the medieval and the modern eras—Diderot's Encyclopédie. The goal of this quintessential Enlightenment project was to gather all of the learning available to arts and sciences. However, the French Encyclopedists criticized the classical conception of humanities and, while unity remained an ideal, they were mindful of the pragmatic difficulties of realizing it. The "encyclopedia" was just that, a compendium that aligned varied parts of knowledge. Francis Bacon invoked the image of a common source. He even considered science and humanistic arts to be parts of an organic whole that reflected the unity of the human mind. Yet, Bacon acknowledged that individual fields were no longer nourished by a single force. The Encyclopédie also asserted a new priority. The Greek paideia encompassed virtually everything known scientifically at the time, at least to the degree thought relevant to educating citizens. From classical antiquity through the Middle Ages, everything that could be known scientifically was considered part of a harmonious unity of the kosmos that could be discovered and made explicit in systematic fashion. In the Middle Ages, art and science continued to be roughly interchangeable concepts and, even in the Renaissance, science was viewed as a means to ends that were not strictly scientific. For Diderot and Bacon, though, empirical science was the new basis of universality. The common fountain was natural philosophy and the science of nature the most basic discipline (Crane 56, 59, 67; Kockelmans, "Science and Discipline" 33; Durbin 127-28).

Scientists continued to embody the generalist model. Joseph Priestly, best known for his contributions to chemistry and electricity, also wrote on philosophy, theology, government and politics, history, linguistics, and literature. Yet, the terms of relation had undergone a seismic shift. Renaissance conceptions of humanities came increasingly into conflict with doctrines of science and learning oriented to principles and methods of natural philosophy. The study of languages and literature was pitted against "real," "solid," and "useful" knowledge acquired by direct inspection. Elegance and correctness of style, along with improved taste in poetry, were no match for principles of child rearing and the laws of health. Humanities were deemed useless, unprogressive, and, in the young United States, poorly suited to the needs of democracy. After Immanuel Kant, unity of science was largely given up. During the twentieth century, the Unity of Science movement made a truncated effort to unify the rational and empirical domains through logical positivism, and the search for unifying principles in science continues to this day. Yet, these and other efforts are framed by limits. In the seventeenth and eighteenth centuries, the realm of science was becoming broader and more complex than the classical kosmos. Even if they believed God created the cosmos as a rational unity, influential thinkers conceded they could only know what was accessible through scientific study of the way things appeared (Crane 73, 123; Kockelmans, "Why Interdisciplinarity" 152).

Wilhelm Dilthey's distinction between natural or scientific knowledge (*Naturwissenschaften*) and human or cultural knowledge (*Geisteswissenschaften*) was a benchmark of the growing divide. The latter "human studies" or "human sciences" included history, psychology, economics, anthropology, sociology, and politics. In contrast to the nomothetic purpose of natural sciences, formulated as a systematic search for general laws, cultural sciences were deemed idiographic, focused on understanding (*verstehen*) of unique and particular events, situations, and personalities. Dilthey's approach to history and humanistic studies, Marjorie Garber suggests, is vital to our modern notion of interdisciplinarity. The time had passed, Dilthey reflected in 1903, when there could be an independent philosophy of art, religion, law, or the state. Garber considers his reflection a "predisciplinary interdisciplinary moment" (Mehl, "Liberal Arts" 39–40; Garber 94–95, 166n67).

The pressing weight of modern works was an added benchmark of change. During the eighteenth and nineteenth centuries, classical studies remained the basis of liberal education in Europe and America. As late as 1850, the term "humanities" still indicated principally the study of Greek and Latin, with close attention to grammar. Yet, modern writings and vernacular languages, along with the discovery of new continents and civilizations and the development of science and technology, broadened the scope of knowledge and heightened awareness of changing historical circumstances. By 1870, a further distinction between classical study and "literary culture" or "liberal culture" was becoming apparent even in traditional colleges in the U.S. and, in turn, the notion of "humanities" in plural form became attached to the broadening idea of "liberal culture." By 1990, "humanities" meant a range of culture studies that included literature, philosophy, art history, and often general history. Greek and Latin also took on the label of "classics" in the mid-nineteenth century, along with a new literary orientation and cultivating aim (Roberts and Turner 75).

At first, modern works were admitted begrudgingly into the curriculum, with the exception of textbooks on grammar or rhetoric and handbooks in logic and philosophy. By the eighteenth century, a palpable tension was apparent. The fervor of debate was signified by the Battle of the Books, also known as the Quarrel of the Ancients and the Moderns. By the late nineteenth century, modern works were gaining status as new classics, and humanities remained by and large text-based. Since the eighteenth century, the writing of poetry has been distinguished from rhetoric and classified as a "fine art." So have music, painting, sculpture, and drama. This transformation of meaning appears in Kant's writings and systems derived from it. Kant deemed humanities "purposive," intended to persuade. The fine arts were "nonpurposive," intended to edify or entertain. As a result, rhetoric remained humanistic, while poetry became a fine art. Following Dilthy, Otto Bird also distinguished language arts (the old trivium) from subjects dealing primarily with the great concerns of human life (Cicero's res magnae), especially literature, history and philosophy (Mehl, "Why Define?" 4-5; Kockelmans, "Science and Discipline" 33; R. McKeon 160).

The practical goal of how disciplines could be utilized as guides to individual and social action did not disappear. It became subordinate, though, to the question of how the particularity of material could be illuminated. The characteristic effort, R. S. Crane explains, was a kind of organic unification of principles and methods thought common to humanities. The new unity that emerged took two main forms, depending on whether emphasis fell on materials and devices of the arts or on natural characteristics of the mind to which all arts are addressed and from which they draw materials

to produce their effects. In one form of unification, rhetoric tended to assume the role of an architectonic art with respect to other arts that borrowed its devices or assimilated its ends. In the other form, philosophers tried to infuse a generalizing and abstract philosophical spirit and universal principles into disciplines (72–89, 102–11).

The Disciplining of American Humanities

The disciplining of knowledge was not a new phenomenon. Between the mid-seventeenth and late-eighteenth centuries, physics, biology, and chemistry began assuming separate identities. By the mid-nineteenth century, social sciences were segmenting into anthropology and economics, followed by psychology, sociology, history, and political science. Ironically, though, since they include the oldest subjects, humanities were the last to assume modern disciplinary form (Easton 11). Our present conception of humanities, Veysey and Bruce Kuklick found in tracing their early history in America, did not emerge until late—according to Veysey, not until after World War I. Use of the term humanities for a particular set of disciplines came about slowly. It was not widely employed as an intellectual or academic category before 1900. It did not enjoy strong resonance as an organic division of knowledge. From the 1560s to 1860s, there is little or no evidence that students thought consciously about whether they were studying humanities per se, and between 1870 and 1940 few book titles bore the name. More often, the terms "culture" and "liberal education" were used. The disciplines that bonded together in order to defend themselves intellectually and bureaucratically against the encroaching natural and social sciences were the "least worldly leavings" in the university, with the exception of the portion located in divinity schools. Interests in personality and society once explained by myth, theology, and philosophy were relocated to social sciences. Humanities assumed responsibility for "eternal truths" and an aestheticized study of civilization legitimated by the intrinsic purity of scholarship for its own sake (Veysey, "Plural Worlds" 55-57, 94n16, 96n40; Kuklick, "Professionalization" 51-53; Kuklick, "Emergence" 209-10; Putzell 197–98; Wilson 60–61).

The breakup of moral philosophy was a major event in the formation of modern humanities. When social sciences branched off from the broad field of moral philosophy, the remaining part, known as "intellectual philosophy,"

was composed of logic, epistemology, and metaphysics. Philosophy and psychology developed out of this branch. Philosophy was not new. It was taught in some form in the early colonial colleges, but it was transformed with the introduction of Scottish moral philosophy in the late eighteenth century and its later entry into the disciplinary humanities. By the start of the twentieth century, English literature had replaced Latin and Greek as "the backbone" of humanities in the American academy. History, which played a minor belletristic role in the nineteenth-century college, grew rapidly as an independent discipline that absorbed aspects of politics and economics with a past dimension. History's ambiguous identity as a social science or a member of humanities stems from its association with moral philosophy and literary inquiry. After the Civil War, history spread quickly throughout American higher education, though with more of a utilitarian bent than the model of liberal culture. Belles lettres ("fine letters" or "literary studies") were admitted late into the academy as electives, and introduced the subject of vernacular literature into universities for the first time. They were equivalent to beaux arts ("fine arts") and, in the eighteenth century, connoted literature or even the whole of humanities. Ancient languages were still regarded as a prerequisite to any learned endeavor, but their hegemony eroded in the nineteenth century, with Greek and Latin acquiring the new label "classics." Art and music lagged behind in the transformation into separate departments, though by 1920 they were well established at most better universities and colleges. Like literature, art history took on connotations of "culture" and "humanities." Music as a member of humanities and comparative literature made appearances in the late nineteenth century but did not emerge fully into the academy of disciplines until decades later (Garber 15; Kuklick, "Professionalization" 50-51; R. McKeon 169; Veysey, "Plural Worlds" 58, 64; Roberts and Turner x-xi, 21, 76-79, 86; Guillory 20).

The disciplining of humanities was reinforced by professionalization. Early learned societies patronized a general form of civic humanism that fused Christian principles and classical ideals, including the Platonic notion of striving toward humanity in a unified view of natural, human, and divine forms of knowledge. With the exception of groups devoted to particular professions, these organizations continued to reflect a wide range of interests until the early nineteenth century. The membership of the American Philosophical Society (APS), for instance, included political and civic leaders, academicians, physicians, lawyers, clergy, artisans, merchants, and "gentlemen scientists." During the eighteenth and nineteenth centuries, a

cluster of other institutions in cities also nurtured intellectual interests, including philosophical and historical societies, libraries and museums, the Chautauqua lecture circuit, women's clubs, and publication and performance networks. The academy, though, became the sanctioned site of humanistic endeavor. As basic science gained favor over practical improvement, literary and philosophical components of organizations such as the APS diminished, and older learned societies were soon outnumbered by new organizations identified with specialized subjects. By the midtwentieth century, fewer private individuals were engaged in humanistic scholarship, amateur intellectuals lessened in number, and even creative artists were gravitating toward academic institutions. The growing bureaucracy of the academy echoed the larger division of labor in society, marked by general bureaucratic characteristics such as self-maintenance, inertia, and orientation to rules (McCorison 249, 251-55; T. Bender, "Erosion" 85-86, 88; Kuklick, "Professionalization" 48; Veysey, "Plural Worlds" 65-66; Stone 16; Swoboda 79).

Faculty, in turn, distinguished themselves increasingly from the heterogeneous world of amateurs and popularizers. Their annual meetings became the locus for presenting research in a language that differed from popular and general learned discourse (Swoboda 72). The terms "amateur" and "professional," Garber cautions, are never fully equal. They are always "in each other's pockets," producing and defining each other by mutual affinities and exclusions. The word "amateur," though, was increasingly juxtaposed to academic endeavors (5). Even in history, where the tradition of amateur scholar continues, a member of the clergy or a lawyer did not hold the same status as a graduate-school trained historian (Kuklick,"Emergence" 208). Professional distinction was reinforced by a new prototype based on the German research university. It offered advanced training in research and scholarship supported by a comprehensive system of libraries, material resources, and specialized programs. Americans studying in Germany brought back the model of a research university, although the German academic environment differed. The broad, contemplative concept of German Wissenschaft connoted a connected search for truth and all-encompassing idealism and sense of unity. Returning Americans interpreted the concept more narrowly, emphasizing "pure research" over "pure learning," scientific aims, and the production of new knowledge. Founded in 1876, Johns Hopkins University was the prototype for the American version, complete with laboratories and technical studies kept outside the historical college, plus such defining genres of scholarship as the thesis and dissertation, scholarly article, and graduate seminar (Flexner 103; Graff 57; Swoboda 59; Oleson and Voss xvii–xviii; Russell 47).

The disciplining of humanities was further reinforced by the growing scientification of knowledge. The attempt to orient humanities toward a science of things began in the early nineteenth century, initially in Germany and in linguistics. Philology was the first dominant paradigm in the newly disciplined humanities. Dating to Plato, the term was revived in 1777 by Friedrich Wolf at the University of Göttingen. Philology embodied a different rationale for studying vernacular literature than the generalist goal of cultivating gentlemen. Introduced into the American university at the same time departments of vernacular languages were being established, it became a precondition for work in the American learned tradition. Language was central to understanding the nature of human culture and reality, and philology was the most powerful approach to studying language. The prevailing practice was a form of grammatical study that differed from the normative and philosophical grammar of the eighteenth century. Scholars aimed to construct a comparative history of languages classified into families of Indo-European, Germanic, and other branches. Like the tenets of classical study, the tradition of philology implied a larger cultural vision, an Altertumwissenschaft aspiring to a total view of civilization and a method capable of integrating the "humane" disciplines. Modern language scholars, who promoted their subjects as an updated form of mental discipline, invoked the names of nineteenth-century scholars who viewed philology as "the whole study of the history of cultures" entered through the study of texts and background contexts of a period style. However, the new specialists emphasized philological science over a comprehensive and speculative view. Academic theologians also took up philology as a professional method for understanding the Bible, with mastery of Greek, Latin, and Hebrew considered the key to comprehending sacred texts (Crane 139; Graff 69, 72; J. H. Miller, "Theory" 123; Kuklick, "Professionalization" 51; Kuklick, "Emergence" 209; Roberts and Turner 97).

Adding to the sum of knowledge became the professional business of humanists and, James Stone summarizes, four characteristics of scholarship that were prominent in the late nineteenth century became canonical in the twentieth century. Discovery became the primary purpose. Scholarship underwent secularization and professionalization. A system of analytic abstraction was developed, and the presumption of neutrality

with respect to the value of humanistic objects was cultivated. The tendency toward painstaking research and minute methodology became as evident in historiography as in science. The humanist's equivalent of the laboratory was analytic abstraction, reinforced by description, classification, comparison, and compilation. Like laboratory specimens, humanistic objects could be manipulated, dissected, and embalmed; measured, counted, and calibrated; and subjected to precise methodologies. A credo, a comedy, a portrait, an idea, or a hero could be subdivided by analysis and abstraction into the propositions of philosophers, the techniques of literary and art historians, and the events of historians. The contents of teaching, especially at entry level, were not necessarily connected with products of advanced research. Nevertheless, scholars in growing numbers embraced ideals of scientific objectivity, precision, and specialization. Humanism remained a stated goal. The heightening of professional tasks, though, marginalized general knowledge. As experts developed increasingly esoteric investigations, the notion of a shared culture diminished. Decentralization and fragmentation of education hastened. Older unified fields of inquiry began decomposing under centrifugal forces of differentiation. Older unitary principles of the university eroded, and new unifying hypotheses were foreshortened (15).

A New Home for the Generalist Model

By the end of the 1880s, academic humanists were split into two camps. One advocated advanced research and specialization, while the other identified with culture (Veysey, "Plural Worlds" 53). In England, the most prominent defenders of liberal humanism and the generalist model were William Whewell, Cardinal Newman, John Stuart Mill, and Matthew Arnold. Arnold's ideas about the social function of literary studies, in particular, were widely diffused during the nineteenth century. Reasserting the organic wholeness of human nature, Arnold countered narrow sectarianism in religion, excess practicality and provincialism, the "anarchy" of individualism, and the distrust of standards among middle-class "Philistines." His canon of "the best that has been thought and said in the world" was neither systematic philosophy nor narrow grammatical or literary study. It was a general education encompassing polite literature, Greek science, mathematics, and poetry, and the writings of Copernicus, Galileo, Newton, Darwin, Shakespeare, and Goethe. Arnold located human powers of intellect and knowledge, beauty, social life, conduct, and manners in the interrelations of those powers and the generality of the species. This belief was institutionalized in the teachings and writings of distinguished Americans who advocated broad study of documents and writers (Crane 45, 141–47, 150–53).

Even so, literature and history asserted dominance in the cause of liberal education and as the core subjects of "liberal culture." In North America, classics were never rooted as deeply as they were at Oxford and Cambridge. Philosophy was not in a strong position either. To this day, in fact, departments of history and of literature make up a sizable proportion of humanities faculty. The conceptual category of humanities, W. B. Carnochan found in reviewing the period from 1884 to 1909, gave literature a kind of "protective cover" and a "halo of the sacred." The underlying premises were evident in Irving Babbitt's 1908 book Literature and the American College: Essays in the Defense of the Humanities. A teacher of French, Babbitt promoted a view that became known as new humanism, despite his personal objection to the term. Babbitt opposed Rousseau, Spencer, Darwin, and the elective system introduced by Harvard President Charles Eliot to allow students greater freedom of choice. The proper model of humanities, Babbitt contended, was Harvard's Honors in Literature course. Classical and modern literatures were combined, knowledge of one ancient and one modern language besides English required, and literature and appreciation privileged over research, philology, and history. When Babbitt and Paul Elmer promoted new humanism during the 1920s, one of their objectives in invoking the humane universal truths embodied in literature was to guard against intrusions of historical scholarship and the narrow interests of practical reform (Carnochan 55-56, 59, 63-69; Roberts and Turner 93).

The need for a broad basis of studies, Roberts and Turner also found in studying this period, became a "talisman" of humanities. Breadth alone did not provide coherence in the cause of cultivating humanistic "sympathies." The notion of continuity linked the broadly conceived "poetry" of one era to succeeding periods. This notion evolved from the idea of "universal civilization." The cultural distinctiveness and continuity of Europe, in particular, were reinforced by a pedagogical concept of civilization that reasserted the primacy of culture over nature. Together, the notions of civilization and culture filled a vacuum left by the disintegration of moral philosophy. Traceable from Greece through the present, the historical line was not static, since the principle of development inferred maturation of ideas. Yet, enduring basic human characteristics played a central role in historically based educational programs. The notion of humanities, in turn, provided a kind of

integration or at least a broad understanding that counteracted specialized studies. It was not a mere copy of precedents, however. The classical curriculum emphasized discipline of mind. The new model of "culture" valued development of imagination and broadening humanistic sympathies. It differed from moral philosophy as well. Moral philosophy acquainted students with a range of human and natural sciences in a scheme linking all knowledge. The new generalist model was vested in a "poetic" tradition constructed from literary, artistic, religious, and philosophical works. Individual programs might develop in different forms. Still, they shared the same cultural and culturing agenda of humanities by broadening sympathies, deepening understanding of the human condition, infusing ideals, and performing the role of the older course in moral philosophy. With the academic displacement of religion, humanities also became the principal bearer of the spiritual and moral meanings of higher learning (102–08).

On the heels of the growing displacement of liberal humanism from the center of American higher education, the generalist model found a new home in the general education movement that arose in the early twentieth century. The movement responded to several problems of culture and education, including a declining sense of national unity, proliferating vocational and individual interests, the negative consequences of specialization, and the eroding cohesiveness of undergraduate education (Boyer 4-5). General education, Richard McKeon recalled, promised a new effectiveness and content for liberal education. It was intended to rediscover the arts that make humans free, the arts needed to understand the problems they face, and the values they might achieve. Four aspects of generality, McKeon added, had emerged over the history of humanities. They are general in the sense of applying to all subject matters, providing an approach to any subject placed in the context of other parts of information or knowledge. They embrace all fundamental skills, providing a basis for particular skills that supplement or advance other processes of thought and action. They bear on the formation of the whole person, providing a model or ruling principle for any specific notion of excellence in the pursuit of a good life. And, they are the arts of all humans, providing guidance for individuals and their responses to cultures (159, 171-72).

The grandparent of modern general education was a required course on *Contemporary Civilization* (CC) introduced in 1919 at Columbia University for all first-year students. CC evolved from the "war-aims" course introduced in 1914 and a successor "peace-aims" course. In 1937, "Master-

pieces" of Western literature and philosophy were added and, in 1947, counterpart courses in Western art and music. CC was built on a historical spine of significant texts that inspired other institutions to build general education cores, including Dartmouth, Reed, and the University of Chicago. In the 1930s, Chicago embarked on a more radical experiment centered on a four-year required sequence, comprehensive examinations, and a prescribed canon. The concept of a canon originated among scholars in the Alexandrian library during third and second centuries B.C. The Greek word kanon means a straight rod or a ruler, connoting a standard. The word kanna refers to a reed, a measuring stick or a physical model that embodies a standard of measure. Canons, Charles Altieri explains, have two functions. One is curatorial, preserving frameworks that create a cultural grammar for interpreting experience. It is not simply a semantic function, though. Canons also involve values, making their other function normative. The collective ideals of culture were presumed to lie in texts that provided the connective synthesis of universality. This view was embodied in Erskine and Hutchins's Great Books programs, Charles Eliot's five-foot shelf of classics, and Meiklejohn's belief that books are the basis of intelligence (Altieri 51; Hutcheson 109-10; Kennedy 225; Mayville 25-26; Bogue and Aper 70–71; Flexner 110).

There is no hard etymological proof of the first use of the word "interdisciplinary" in humanities. Other terms were used more often, including "integration," "synthesis," "unity," and "holism." Furthermore, two differing conceptions of interdisciplinarity were apparent in the early general education movement: one hearkening back to the studia humanitatis and the other engaging the present in study of historically situated problems of society. Cardinal Newman and Robert Maynard Hutchins defined general education as the place where all the parts would add up to a cohesive whole (Hutcheson 109–10). For Hutchins, a common core of great books and ideas was the best hope for restoring metaphysics to the center of higher education. Placing the Great Conversation at the center of education also promised to stem the threatening forces of materialism, vocationalism, empiricism, relativism, specialism, and departmentalization (Graff 162). Hutchins's model and like-minded programs were grounded in a conception of knowledge that located the coherence and integration of all fields in an epistemological realism. In this respect, Charles Anderson maintains, one of the first motivations for interdisciplinary studies in this country was to demonstrate unity of knowledge and to teach that Truth is

one (456–57). Yet, W. B. Carnochan points out, the great books approach amounted to a "textual takeover" of history that reasserted literature and the "Great Conversation" as the foundation of Western intellectual tradition and universal truths of liberal culture (86).

Columbia's CC represented a different form of interdisciplinarity than the great books model. In the early 1900s, Columbia began shifting from the tradition of unitary knowledge to a historically situated notion of shared knowledge. The great books approach eventually made its way to Columbia. It was introduced in 1920 as an honors course. However, in contrast to Chicago's emphasis on modes of thought and inquiry, CC emphasized the process of knowing and contemporary problems. The intellectual, economic, social, and political life of the day were considered in relation to the past with a heightened problem focus and international consciousness in the postwar era. CC made an effort to involve other departments and disciplines as well, bringing economics, government, philosophy, and history into the dialogue about civilization. Other institutions followed suit, including Stanford and Dartmouth. These and similar curricula constituted a form of civics education that attempted to marry the agendas of liberal education and civic education (Hutcheson 110; Rudolph 71; Carnochan 70-72, 76, 79).

A second general education reform followed in the World War II era. It was signified most prominently by a 1945 Harvard report General Education in a Free Society. The Harvard report called for a new core curriculum based on science and texts of the European humanist tradition. Framed against the backdrop of fascism and communism, Thomas Bender recounts, the report preserved a role for history and historical disciplines in an education oriented to contemporary concerns and aligned with ideals of freedom and democracy ("Politics" 20-21). For James Conant, who sponsored the report while president, the truths of the core were not timeless. Their significance was a function of their historical role. For Hutchins, Louis Menand notes in comparison, general education upheld the permanency of classics whose truths were permanent and "timeless," making them "contemporary" in any age for anyone. General Education in a Free Society also endorsed a meritocratic vision. All citizens needed a common fund of knowledge, beliefs, and values—a cultural lingua franca capable of preventing class divisions. In this respect, Menand and Bender concur, general education was a "benign substitute" for a national ideology opposed to communism in the Cold War era. Great books were to be read not because they articulate truths that transcend historical circumstances. The writers in the canon were "touchstones" for contemporary culture and debate, supplying a "fund of allusion" that constituted a common heritage bonding all citizens to each other in an increasingly diverse world ("Re-imagining" 5–6).

This introductory history furnishes two important insights for the remainder of this book. First, the ideas of humanities and liberal arts have been marked by tension since their inception (Kimball 136). The story of humanities is an ongoing narrative of tradition pitted against change. The "timeless" and the "permanent" were neither timeless nor permanent. The aura of classical antiquity perpetuated in Greco-Roman classics was changed more than once to meet the needs of Romans, medieval scholastics, Italian humanists, and subsequent generations. The past was not lost in the process, but it was refigured. The kind of scholarship we now regard as traditionally humanistic, Graff also reminds us, was considered a subversive innovation by traditionalists of a previous era (4).

Second, even though interdisciplinarity has a philosophical grounding in ancient ideas, it arose as a response to a new and pathological condition. The challenges of the modern world and the proliferation of specialization required alternatives. Some were imported from the tradition of liberal humanism, perpetuating the generalizing and integrative principles of humanities. Those principles, though, were adapted for a changing world. New role models of the humanist arose in keeping with adaptations. The synoptic philosopher of ancient Greece was supplanted by the orator of Rome, the polymath of the Renaissance, the gentleman-scholar of the eighteenth century, the new specialists and the cultural generalists of the late nineteenth and early twentieth centuries, and, in the latter half of the twentieth century, Richard Carp's notion of a "boundary rider" skilled at walking the borders of disciplinarity and interdisciplinarity in a more complex terrain. The old college ideal did not die. It survives strongly in many small liberal arts colleges, in general education, and in generalist values in humanities disciplines. Those disciplines, though, were about to undergo tremendous change, knowledge and culture become more diverse, and new interdisciplinary approaches to studying them emerge within and across disciplines.