

## THE ADVANCEMENT OF PROFESSIONAL LEARNING: PROFESSIONAL AND TECHNICAL WRITING AND THE LIBERAL ARTS IN THE NEW KNOWLEDGE SOCIETY



“The knowledge we now consider knowledge proves itself in action. What we now mean by knowledge is information effective in action, information focused on results. The results are seen *outside* the person—in society and economy, or in the advancement of knowledge itself.”

~~Peter Drucker, *Post-Capitalist Society* (46)

### THE THIRD WAY AND THE GLOBAL UNIVERSITY

Four centuries after Sir Francis Bacon first proposed his landmark educational reforms in *The Advancement of Learning* (1605), the liberal arts have become *practice-oriented*, more fully conscious of their concrete application in the marketplace and within public and private institutions. For teachers and scholars of professional and technical writing (PTW), this development represents not only new opportunities for program development but a new model for the humanities themselves.

As Richard M. Freeland, the president of Northeastern University, observes: “Slowly, but surely, higher education is evolving a new paradigm for undergraduate study that erodes the long-standing divide between liberal and professional education. Many liberal arts colleges now offer courses and majors in professional fields: professional disciplines, meanwhile, have become more serious about the arts and sciences. Moreover, universities are encouraging students to include both liberal arts and professional coursework in their programs of study, while internships and other kinds of off-campus experience have gained widespread acceptance in both liberal and professional disciplines” (141).

Freeland calls this paradigm the Third Way, but its premises are hardly new. PTW programs have advocated these cross-disciplinary ideas since Carolyn R. Miller’s 1979 essay “A Humanistic Rationale for Technical Writing.” Mainstream educators, however, largely ignored us, until the Association of American Colleges and University’s published its 2002 national panel report, *Greater Expectations: A New Vision for Learning as a Nation Goes to College*. Over the past four decades, the report documents, college attendance has grown so much that 75 percent of high school graduates now get some postsecondary education within two years of receiving their diplomas.

This remarkable trend, true not only in America but abroad, has resulted from the latest seismic shifts produced by the Scientific and Industrial



Revolutions Bacon foresaw in the early 17<sup>th</sup> century. According to Adrian Woodridge, a Washington D.C. correspondent for *The Economist*, four economic and technical developments have caused this international boom in higher education:

- ◆ **Democratization:** Or “massification” in the jargon of the educational profession (3). All over the world, more people than ever are attending college.
- ◆ **Globalization:** The “death of distance” is transforming education just as radically as it is transforming the economy (3).

- ◆ ***Competition:*** Traditional universities are being forced to compete for students and research grants, and private companies are trying to break into a sector which they regard as “the new health care” (3).
  
- ◆ ***The Rise of the Knowledge Economy:*** The world is in the grip of a “soft revolution” in which “knowledge is replacing physical resources as the main driver of economic growth” (3).

This last factor is most responsible for the emergence of Freeland’s Third Way, and for the growing importance of PTW programs at liberal arts colleges. As the AACU observes, students are flocking to college “because the world is complex, turbulent, and more reliant on knowledge than ever before” (1). Ironically, though, educational practices invented when higher education served only the few are increasingly disconnected from the needs of these contemporary students. If the humanities are to remain viable, dynamic, and relevant, the panel concludes, liberal arts colleges must redefine their mission:

Liberal education for the new century should look beyond the campus to the issues of society and the workplace. It should aim to produce global thinkers. Quality liberal education should prepare students for active participation in the private and public sectors, in a diverse democracy, and an even more diverse global community. It will have the strongest impact when studies reach beyond the classroom to the larger community, asking students to apply their developing analytical skills and ethical judgment to concrete problems in the world around them, and to connect theory with insights gained from practice. This approach to liberal education—already visible on many campuses—erases the artificial distinction between studies deemed liberal (interpreted to mean they are not related to job training) and those called practical (which are assumed to be). A liberal education *is* a practical education because it develops just those capacities needed by every thinking adult: analytical skills, effective communication, practical intelligence, ethical judgment, and social responsibility. (5, my emphasis)

In the past, colleges grudgingly provided such skills by offering the most basic professional and technical writing courses. But as more campuses practice what William Butcher calls "the applied humanities," more educators have become dissatisfied with these skills-based service courses (624). For the liberal arts to prepare students for "responsible action," for business, communications, health, law, and technologies to become a form of "liberal education," professional training itself must become an object



of genuine intellectual inquiry and a topic for serious writing (AACU 3). *That means developing and implementing comprehensive and interdisciplinary PTW programs, serving the professions but housed in and treated as a branch of the humanities.*

Like the science ministers in Bacon's *New Atlantis* (1625), PTW programs across the country have gathered "books, abstracts, and patterns of experiments" from across the country (MW 486). In Bensalem's College of the Six Days, such compilers are called Merchants of Light, and the term is apt. A precursor of General Electric's twin mottos "We bring good things to light" and "Progress is our most important product," Bacon's homey analogy spotlights the practical side of his visionary philosophy. Writing at a time when exploration had opened new trade routes and

invention and entrepreneurship had created new technologies, Bacon considered knowledge precious capital in a global market. The parallels to our own time are obvious.

## THE DIVISION OF KNOWLEDGE AND THE APPLIED HUMANITIES

These developments are crucial to our field, but their implications go far beyond it. They involve such larger issues as post-modernity, globalization, and mass democracy, and their impact on the liberal arts. If traditional humanism is to survive, it must come to terms with thinking and communicating within a high-tech, commercial society. Over a decade ago, Gerald Graff in *Beyond the Culture Wars* (1992) advocated "teaching the conflicts" as a way to "revitalize" higher education, but when it comes to the new corporate university, most humanists still indulge in "apocalyptic posturing" (5). We denounce the military-industrial-academic complex while conducting online research and applying for institutional grants. By denying our paid function within a post-capitalist economy, we alienate our students, who attend college primarily to become knowledge workers, and ignore a watershed cultural development: the changing nature and role of disciplinary and professional knowledge in our time.

As Nobel economist Friedrich Hayek noted seventy years ago, the division of labor, which made possible the Industrial Revolution, has become a more subtle "*division of knowledge*," which now characterizes and sustains modern business, political, and academic institutions (50). Borrowing a term from Adam Smith, Hayek called our knowledge-based civilization the Great Society: social arrangement based on widespread and decentralized economic interdependence, abstract legal codes, and impersonal

information rather than local and concentrated family ties, concrete tribal customs, and personal dialogue.

The division of knowledge, therefore, carries profound political, ethical, and rhetorical significance. As Hayek declares in “The Use of Knowledge in Society:” “We make constant use of formulas, symbols, and rules whose meaning we do not understand and through the use of which we avail ourselves of the assistance of knowledge which individually we do not possess” (88). Since no one possesses total knowledge, Hayek concludes, different disciplines and professions of knowledge must learn to understand and dialogue with each other.



In *Post-Capitalist Society* (1994), Peter Drucker shows how Hayek’s theory affects both business and the academy.

A handwritten signature in black ink, appearing to read "P. Drucker".

Underlying all three phases in the global shift to a knowledge economy—the Industrial Revolution, the Productivity Revolution, the Managerial Revolution—has been a fundamental shift in the meaning of knowledge itself: “We have moved from knowledge in the singular to knowledges in the plural,” Drucker explains (45). Traditional knowledge was holistic and general; contemporary knowledge, in contrast, is partitioned and highly specialized, focused on practice and concerned with results. “This is as great a change in intellectual history as ever recorded,” Drucker declares (46).

While the traditional university demoted specialized knowledges to the level of “crafts,” the modern university elevates them to “disciplines” and “professions” (46). Such privileging is fitting, Drucker argues, for without this necessary specialization of

disciplines and professionals, mass society and the global economy would collapse, and billions would perish.

The shift from knowledge to knowledges has given knowledge the power to create a new society. But this society has to be structured on the basis of knowledge as something specialized, and of knowledge people as specialists. This is what gives them their power. But it also raises basic questions—of values, of vision, of beliefs, of all the things that hold society together and give meaning to our lives. . . . [I]t also raises a big—and new—question: what constitutes the educated person in the society of knowledges? (46-47)

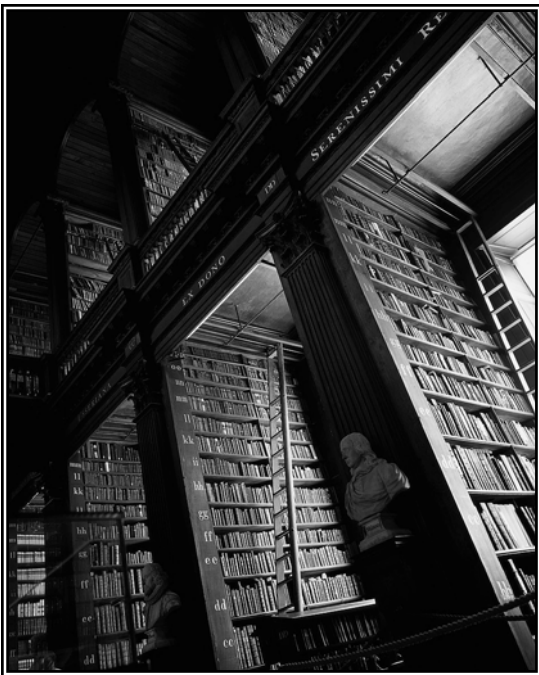
According to PTW scholar Bernadette Longo, this question originates with Sir Francis Bacon, who “coined” the concept of a practice-oriented academy and “minted” the discipline of professional and technical rhetoric (21). Surveying the progress made in the early 17<sup>th</sup> century, he compared the New Learning to a galleon returning through the Straits of Gibraltar, loaded with the bounty of invention and enterprise from foreign ports. Unfortunately, Bacon complained, such cargo was warehoused on a rotting pier. Rather than circulate knowledge, the academy of Bacon’s day hoarded it in dry dock. Bastions of power and privilege, Oxford and Cambridge had built moats to contain new currents of thought and had become fortified worlds unto themselves.

Rather than face and ponder the implications of new markets and technologies, England’s best universities idolized the past, disdained the present, and feared the future. Traditional scholars and rhetoricians were obsessed with words, not things, while skeptical philosophers and jaded historians promulgated “the doctrine of Acatalepsy,” the radical belief that all human knowledge ultimately is impossible (NO 75). In the name of Humanism, Bacon accused, both practices betrayed humanity by traducing reason. “The first subdues the understanding,” he observed, “the second unnerves it” (76).

For PTW programs, this stalemate depressingly resembles the vicious culture wars within the current humanities between traditionalists and theorists, which have done

so much to discredit the liberal arts in the eyes of students and the public. Echoing C.P. Snow, John Brockman, author of *The Third Culture: Beyond the Scientific Revolution* (1996), harshly criticizes this state of affairs:

American intellectuals are, in a sense, increasingly reactionary, and quite often proudly (and perversely) ignorant of many of the truly significant intellectual accomplishments of our time. Their culture, which dismisses science and industry, is often non-empirical. It uses its own jargon and washes its own laundry. It is chiefly characterized by comment on comments, the swelling spiral of commentary eventually reaching the point where the real world gets lost.



In contrast, the Third Culture, Brockman’s term for the scientific and technical culture of the professional knowledge society, can tolerate disagreements about which ideas to take seriously precisely because its diverse specialization recognizes no canon or accredited list of acceptable ideas. More to the point, it reaches beyond the academy. Since its members communicate effectively not only to each other but to legislators, business leaders, the media, and the public, its ideas have greater currency. Unlike past intellectual pursuits, the Third Culture’s achievements “are not the marginal disputes of a quarrelsome mandarin class: they will affect the lives of everybody on the planet.”

Bacon’s warning in *The Great Instauration* (1620), therefore, remains relevant. Puffed by the winds of pride and rocked by the storms of controversy, the traditional liberal arts veer close to shipwreck. To chart a better course, disciplines must abandon

dead reckoning and rely on compass and quadrant, if only to draw more accurate maps and to train more expert navigators. Likewise, the humanities should emphasize the practical application of knowledge, should confront science and economics and integrate technology within their curricula, and should dedicate themselves, at least partially, to professional training and institutional administration.

This program does not mean uncritical acceptance of the corporate status quo but critical scrutiny of the production of knowledge in a global commercial society. Indeed, as Adam Smith predicted in *The Wealth of the Nations* (1776), the professions themselves have become both the means and ends of profound intellectual inquiry:

In a civilized state . . . there is an almost infinite variety of occupations within the whole society. These varied occupations present an almost infinite variety of objects to the contemplation of those few, who, being attached to no particular occupation themselves, have leisure and inclination to examine the occupations of other people. The contemplation of so great a variety of [professions] necessarily exercises their minds in endless comparisons and combinations, and renders their understandings, in an extraordinary degree, both acute and comprehensive. (303)

## **BEYOND THE GLASS BEAD GAME**

**F**or the applied humanities to succeed, however, college administrators must honor and support composition and PTW programs, for practical and theoretical reasons. Since the dawn of the Scientific and Industrial Revolutions, writing has remained an essential skill in the marketplace, resulting in the mass literacy of the 19<sup>th</sup> and 20<sup>th</sup> centuries; but the dialogical nature of writing itself also teaches how knowledge emerges and circulates within Adam Smith and Friedrich Hayek's Great Society.

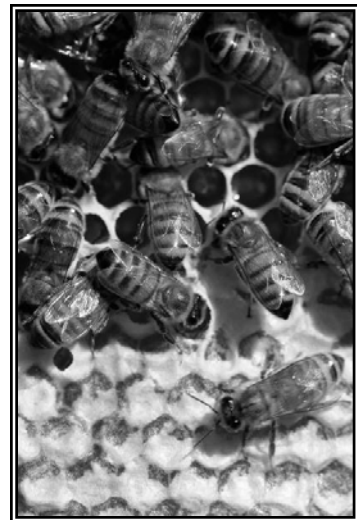
Observing the great knowledge shift in his own day, Francis Bacon remarked: "Up to now, thinking has played a greater part than writing in the business of invention, and experience has yet to become literate. But no adequate inquiry can be made without

writing, and only when that comes into use and experience learns to read and write can we hope for improvement” (109).

Accordingly, Bacon dedicated large sections of his revised edition of *The Advancement of Learning* (1623) to composition and professional and technical writing. These subjects remain crucial to the academy’s identity and survival in the new Knowledge Society. Composition teaches students how to mediate between the competing discourse communities of different academic disciplines, while professional and technical writing teaches students to mediate between the competing discourse communities of different professions. The first demonstrates how disciplines profess knowledge, the second how knowledge disciplines the professions. This dialectic, Peter Drucker insists, is crucial in a world defined and determined by the division of knowledge:

We neither need nor will get “polymaths” who are at home in many knowledges; in fact, we will become even more specialized. But what we do need—and what will define the educated person in the knowledge society—is the ability to *understand* the various knowledges. What is each one about? What is it trying to do? What are its central concerns and theories? What major new insights has it produced? What are its important areas of ignorance, its problems, its challenges? (217)

Such interdisciplinary cross-pollination allows new ideas to flower, both in the academy and the marketplace. Bacon addresses this issue in his famous fable in the *Novum Organon* (1620). Playing entomologist, Bacon divides knowledge workers into three kinds of insects. Ants blindly collect and use facts; spiders spin webs of sophistry from their butts; but bees gather material from the flowers of the garden and field, then transform and digest it by an internal process.



"And the true business of philosophy is much the same," Bacon concludes, "for it does not rely chiefly on powers of the mind, nor does it store the material supplied by natural history and practical experiments untouched by memory, but lays it up in the understanding changed and refined. (105) Distilled and circulated, the nectar of knowledge creates the honeycomb of Adam Smith's Great Society. In the resulting buzz of the marketplace, citizens "must practice oratory" their entire lives, Smith maintained, trading words and expertise as well as goods and services to promote their individual good, and the general welfare of the hive (Fleischacker 92).

Given this social reality, shouldn't the academy teach students to become effective and ethical *rhetors* in an emerging knowledge economy, particularly when globalization and technology have brought our planet to a historic turning point? Until recently, the liberal arts have ducked this question as matter of principle, supposedly because techno-capitalism is inherently dehumanizing and because humanists should dissuade students from seeking professional training. Matthew Arnold, the apostle of the Great Tradition, took a similar position in his famous debate with Thomas Huxley, who called for a "practical" liberal education at a time when science and industry had dramatically increased access to public schooling in Victorian England (244).

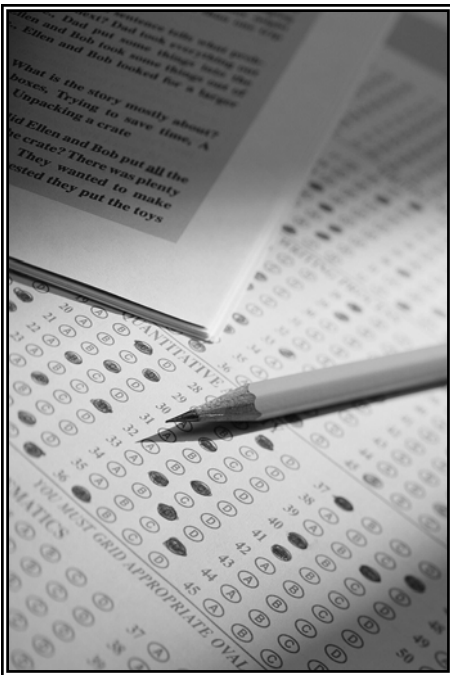
Nevertheless, Arnold conceded a major point:

[The traditional liberal arts] show the influence of a primitive and obsolete order of things, when the warrior caste and the priestly caste were alone in honor, and the humble work of the world was done by slaves. We have now changed all that; the modern majesty consists of work, as Emerson declares; and in work, we may add, principally of such plain and dusty kind as the work of cultivators of the ground, handicraftsmen, men of trade and business, men of the working professions. Above all is this true in a great industrious community such as that of the United States. (75)

Plato's Academy is not fit for our world, Arnold admitted, because Plato, who scorned handicraft and the professions, never could have foreseen a capitalist society.

“Such a community must and will shape its education to suit its own needs,” Arnold said. “If the usual education handed down to it from the past does not suit it, it will certainly before long drop this and try another” (76).

Like Dr. Arnold, contemporary advocates of the liberal arts should be gracious and perceptive enough to see consumer demand for professional training in higher education as an expression of mass democracy, and an equally valid form of humanism. As Fr. Walter Ong pointed out in his 1978 MLA President’s Address, markets and technologies increasingly attract college students, “not because they are inhuman, but because they are eminently human, the creations of human beings.” (1916). Like language itself, they are media of exchange and as such deserve scholarly respect and attention. As their very title implies, professors are professionals, too, Ong reminded his



fellow scholars, with “fiducial” responsibilities to their institutions and clientele (1911).

Richard Freeland agrees. “Claims for the moral superiority of liberal education reflect a bias against—even a disdain for—the workaday earning experiences of most adults,” he states, “as if academic learning had a monopoly on value and meaning and other forms of work were solely about material gain. This perspective is an unfortunate relic from the tradition of classical—and class-

based—education in Britain, from which the contemporary liberal arts are descended” (147). Following the counter-tradition of Bacon, Smith, and Huxley, Freeland argues that

professionalism and humanism, with the proper education and under the right conditions, can and should be synonymous:

Instead of deriding students' interest in their careers, we should help them see how the work they do can promote personal growth, intellectual adventure, social purpose, and moral development. We should show them how the values of intellectual honesty, personal integrity, and tolerance can strengthen the institutions in which they will work. And we should help them build bridges between the intellectual concerns they encounter in philosophy, literature, and history courses and the decisions they will have to make as business leaders, lawyers, and government officials. Properly conceived, practice-oriented education can provide at least as powerful a moral education as any purely academic study of ethics. (147)

Committed to practice-oriented education, professional and technical writing programs are vanguards of the Third Way, helping colleges as well as students grapple with current political and economic realities. For disaffected hardliners on the left and right, this development represents the academy's surrender to corporate values; but for the more open-minded and engaged, professional and technical writing programs provide a way to take advantage of the genuine benefits associated with the emerging global university. "There are plenty of justifications for the revolution that is sweeping through higher education," Adrian Woodridge suggests:

It is giving students more control over where they get educated. It is giving millions of youngsters a chance to study abroad. It is throwing up colleges that can teach managerial and technical skills. It is reconnecting academics with the wider knowledge economy. But the most important justification of all is that it is freeing resources for intellectual activity. It is filling libraries with books, stocking laboratories with equipment, and giving more researchers than ever before a chance to produce order out of chaos. (22)

Whether these benefits ultimately outweigh the drawbacks depends on vision, wisdom, and action. As globalization drags the liberal arts, kicking and screaming, from the cloister to the market, PTW programs can prepare the academy to face its greatest contemporary challenge. With compelling urgency, Peter Drucker describes the stakes:

The knowledge society *must* have at its core the concept of the educated person. It will have to be a universal concept, precisely because the knowledge society is a society of knowledges and because it is global—in its money, its economics, its careers, its

technology, its central issues, and above all, in its information. Post-capitalist society requires a unifying force. It requires a leadership group, which can focus local, particular, separate traditions into a common and shared commitment to values, a common concept of excellence, and on mutual respect. (212)

The interminable debates between theorists and humanists, therefore, are a dead end. Global society needs the very thing deconstructionists and other radical skeptics reject: a universally educated person. At the same time, the great Western tradition, which humanists defend, is inadequate for a postcolonial world. Humanists can offer only a bridge to the past, when students need to bring their knowledge to bear on the present with the hope of shaping the future. Without that practical application, Drucker states, humanism remains "dusty antiquarianism" (212).

Herman Hesse foresaw this educational crisis in *The Glass Bead Game* (1943). Set in an isolated utopia of artists and intellectuals, the novel follows the scholarly career of the precocious but callow Joseph Knecht. Enrolled in the Academy of Castalia, he



learns to perpetuate all human knowledge through the study, teaching, and playing of the cryptic Glass Bead Game, a cross between the Kabbalah and Trivial Pursuit. Eventually, young Knecht becomes Magister Ludi, the Master of the Game, but his administrative duties force him to deal with an outside world of carburetors and butcher bills. Initially, this contact shocks and depresses Knecht, who writes memos and reports to maintain the Academy. What do dirty politics and sordid commerce have to do with Castalia's pristine erudition?

But as his interactions with the outside world continue, Knecht becomes disillusioned with the Academy's remoteness and aridity. The Glass Bead Game seems

increasingly empty and pointless. Troubled, he feels called to bridge the two worlds, the academic and commercial, by tutoring the son of an apostate former schoolmate, Plinio Designori, who has fled Castalia to become an entrepreneur and a man of affairs. In the end, the Magister chooses “polluted, vulgar, turbulent, strife-torn, money-grubbing reality” (Drucker, 213). Ultimately, despite Knecht’s untimely death in a drowning accident, this brave decision, Hesse predicts, will make the outside world a better place.

Hesse’s allegory warns about the dangers of segregating the disciplines from the professions. Writing in exile during World War Two, he saw how Von Humboldt’s model of the pure research university was bankrupt, how the German academy’s finicky refusal to deal with the mess of markets and technologies had paved the way for disaster. Martin Heidegger’s hatred of capitalism, for instance, led him to embrace mystical fascism. But Hesse also suggests the proper function of the liberal arts in today’s knowledge society, at a time when a clash of cultures again threatens to plunge our planet into war. As Peter Drucker observes, the humanist values of Castalia are “only fool’s gold unless they have relevance to the world” (213).



Professional and technical writers have known this truth since Agricola. Real gold must be mined, smelted, and coined, and PTW programs can provide colleges with the practical and intellectual tools and techniques to forge a new humanism suitable for the perils and promises of a new century.

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