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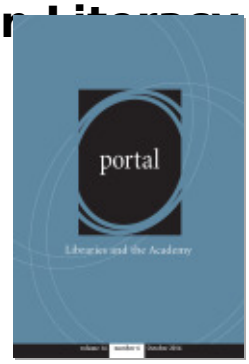

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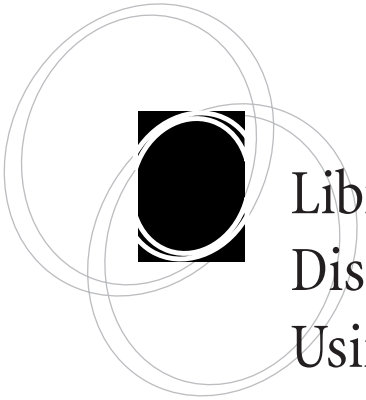

Librarians as Disciplinary Discourse Mediators: Using Genre Theory to Move Toward Critical Information Literacy

Michelle Holschuh Simmons

abstract: This article proposes that we extend our information literacy instruction programs to include tenets of genre theory as a way to move toward a more critical stance in our pedagogy. By developing an anthropologist's sensitivity to culture, academic librarians can learn the characteristics of the academic disciplines and then help students learn these characteristics as a way for them to understand the rhetorical practices in these fields. In making tacit practices visible, librarians can facilitate students' transitions into the cultures of their chosen disciplines. In this way, we can help students see that information is constructed and contested not monolithic and apolitical.

A major feat that students must accomplish in their undergraduate years is to learn the discourse of their chosen discipline. Disciplinary discourse includes the ways that members of a particular discourse community write, read, speak, and research, as well as the assumptions that they make and the epistemologies with which they craft their arguments.[1] The undergraduate academic experience is one in which students begin to learn both the domain content and the disciplinary discourse or rhetorical processes of their chosen field.[2] Most often the domain content receives the lion's share of instructional time in the typical undergraduate curriculum in the United States, even though students often struggle to learn the tacitly communicated rhetorical processes.

The assertion that educators need to teach students not just content but also the conventions of a particular discourse community is rooted in genre theory. Proponents

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of genre theory assert that making explicit the conventions of a particular discourse allows students to learn these conventions and thereby gain entry into that discourse community.[3] This school of thought has its roots in M. M. Bakhtin's work on speech genres[4] and in Michael Halliday's work on systemic functional linguistics, which proposed a "systematic relationship between the social environment . . . and the functional organization of language."[5] It is this social environment surrounding the academic discipline that is often neglected in the teaching of undergraduate students.

Frequently the domain-specific rhetorical processes are seen by the faculty members who work within the domain as the "normal" or "natural" or "correct" way of writing, reading, or researching; and they expect their undergraduate students to be able to learn and adopt these ways of communicating without explicit instruction. As scholars progress in a discipline toward and past the doctoral degree, specialization of knowledge is often the desired objective.[6] Typically, faculty members teaching undergraduates have an undergraduate degree, a master's degree, and a doctoral degree all in the same discipline. When these scholars teach undergraduate students who begin college with very limited knowledge of any one discipline, the faculty members' assumptions about what students should know and be able to do can be inaccurate. Because faculty members in a discipline are immersed in the discourse of one discipline, it can be difficult to see (and explain to students) how this discourse is different from other fields' discourses and how students can negotiate the language of their chosen discipline. While clearly faculty members' level of specialization is advantageous for depth of knowledge, this prodigious, focused knowledge can hinder the ability to make visible and to explain to undergraduate students the rhetorical practices that have become inseparable from the faculty members' own ways of communicating.

Academic instruction librarians, particularly those who have subject specialties, have great potential to make use of genre theory in helping undergraduate students acquire disciplinary discourse. Librarians are simultaneously insiders and outsiders of the classroom and of the academic disciplines in which they specialize,[7] placing them in a unique position that allows mediation between the non-academic discourse of entering undergraduates and the specialized discourse of disciplinary faculty. Academic librarians, by the nature of professional preparation, have an interdisciplinary perspective—that is, most academic librarians have an undergraduate degree in a non-library-related discipline (English literature or sociology, for example), the master of library science degree, and often a second master's degree or doctoral degree in another academic discipline. This interdisciplinarity provides librarians an opportunity to see how discourses differ across disciplines, positioning them uniquely and powerfully to help students recognize and make sense of the disciplinary differences. They have the opportunity to see the aca-

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demic culture as an anthropologist would, as an insider-outsider who observes deliberately and sensitively, noticing what might not be visible to others within the culture—in this case, faculty members and students. When collaborating in the education of undergraduate students, the specialized scholar and the interdisciplinary librarian make an unusually powerful pedagogical partnership. The potential pedagogical value for students of such a partnership is tremendous; each contributes differing and complementary expertise with a unified goal of student learning.

This role of librarian as disciplinary discourse mediator has not yet been recognized within the academic setting, even though this is a role that many academic librarians play in their daily interactions with students—particularly librarians in libraries with fully integrated information literacy programs. Further, this role for librarians has not yet been articulated in either the library or the higher education literature; and, therefore, librarians' pedagogical potential in the context of post-secondary education has not been fully tapped. Additionally, articulating this potential role for librarians in undergraduate education may develop a consciousness about disciplinary practices among academic librarians, thereby encouraging more attention and deliberate instruction about disciplinary discourses—an effort that I contend is pedagogically responsible.

Critical Information Literacy—Moving Beyond the ACRL Standards

The voluminous published literature about information literacy tends to focus narrowly on the acquisition of skills instead of more broadly on the learning of discursive practices within the context of an academic discipline. Indeed, the Association of College and Research Libraries (ACRL) defines information literacy as "a set of abilities requiring individuals to recognize when information is needed and [to] have the ability to locate, evaluate, and use effectively the needed information."[8] While this is a useful definition to guide information literacy instruction programs, it lacks a critical element in which assumptions about information are called into question. When information literacy is explained in terms of a set of skills, it can easily be reduced to "a neutral, technological skill that is seen as merely functional or performative."[9] Helping students to examine and question the social, economic, and political context for the production and consumption of information is a vital corollary to teaching the skills of information literacy. Additionally, facilitating students' understanding that they can be participants in scholarly conversations encourages them to think of research not as a task of collecting information but instead as a task of constructing meaning.

It is not that ACRL has ignored completely these social and economic issues surrounding the production and consumption of information. Of the five standards for information literacy, the last one does suggest attention to these broader philosophical issues: "The information literate student understands many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally."[10] However, the current ACRL approach to information literacy seems based on a positivist epistemology in which seekers can discover a unified "Truth," even though knowledge is dispersed and decentralized in our current postmodern information environment.

Literacy researchers Alan Luke and Cushla Kapitzke critique the assertions of well-known information literacy leader Patricia Breivik by arguing that in the model of the world of information that she purports, "knowledge is external to the knower, existing as a thing-in-itself, independent of mediation and interpretation. Seekers of 'Truth' can track it down and capture it either in the confines of the library or in a limitless cyberspace."[11] They argue that with this approach, librarians avoid the important concerns about knowledge—the social construction and cultural authority of knowledge, the political economies of knowledge ownership and control, and the development of local communities' and cultures' capacities to critique and construct knowledge.[12]

While most librarians probably would like to incorporate these larger issues addressed in standard five of the ACRL standards into information literacy instruction, in practice this standard tends to be reduced to a brief warning about plagiarism in 50-minute information literacy sessions. In order for information literacy to earn its place of respect in the higher education curriculum, this last standard should infuse all instruction instead of being an add-on. By teaching with a critical awareness of disciplinary practices, this warranted attention to standard five can be achieved.

The concept of critical information literacy is largely rooted in Paolo Freire's notion of "critical pedagogy," which defines the purpose of education as empowerment and social equality.[13] Critical information literacy is a deliberate movement to extend information literacy further than the acquisition of the research skills of finding and evaluating information. Instead, it is the "reframe[ing] [of] conventional notions of text, knowledge, and authority"[14] in order to ask more reflective questions *about* information: "Who owns and sells knowledge?" "Who has access to information?" and "What counts as information (or knowledge)?" Additional questions such as "Whose voices get published?"—or more importantly—"Whose voices do not get published?" are the types of questions that can help students begin to see scholarly communication as a dialogic, political, and contested process. These types of questions encourage students to see that information is not neutral but that it reflects social, political, and economic ideologies that are situated within an historical context. It is through attention to critical information literacy that librarians can discuss with students how disciplinary discursive practices are not static and monolithic but are constantly being reproduced by the participants of the disciplinary community. And if the students want to become participating members of a particular discourse community, they need to learn the conventions of the discipline's communication.

A handful of scholars—a few literacy researchers and a few librarians—are beginning a conversation about critical information literacy that attends to these larger philosophical, economic, and social issues surrounding information.[15] To date, only two of 13 articles in the library and information science full-text database, through WilsonWeb, use the phrase "critical information literacy" as a concept anywhere in the articles,[16] with the remaining 11 using "critical" as an adjective modifying "information literacy skills." Additionally, a handful of articles refer to the ideas of critical information literacy without using that particular phrase. For example, regarding the LIS curriculum, Christine Pawley queried, "Where are the courses on information politics? On the production and distribution of information? On the ownership of information? On the stratification of information?"[17] While not referring to information literacy instruction for

undergraduate students, Pawley is suggesting a critical stance in the education of librarians, which would probably result, in turn, in these librarians teaching information literacy with a more critical stance. In the education full-text database, through WilsonWeb, only one of the 10 articles cited uses "critical information literacy" as a concept in the full text of the article.[18] In ERIC, no records are retrieved with a phrase search of "critical information literacy."

While it is useful for our profession to be critiqued from the outside as Luke and Kaptizke have done, it is equally important—if not more so—to critique our practices from within the profession so as to push the field to more thoughtful and carefully considered positions. As practicing librarians, we understand the challenges and opportunities that teaching and learning in an academic library environment affords. However, since the ACRL Presidential Committee introduced the concept of information literacy in 1989, information literacy has received surprisingly little critical analysis from within the field.[19] I am suggesting that attention to critical information literacy issues and the application of genre theory to our interactions with students can challenge our thinking, as a profession, about teaching and learning in libraries in the twenty-first century.

Genre Theory Defined

Traditionally used to refer to a literary form, the term "genre" was adopted and redefined in the 1980s by scholars in linguistics, communication studies, and education to refer to the textual patterns that originate from "pragmatic, social, political, and cultural regularities within the enveloping contexts of the discourse."[20] This use of "genre" is rooted in M. M. Bakhtin's concept of speech genres. He defines speech genres by stating, "Each separate utterance is individual, of course, but each sphere in which language is used develops its own *relatively stable* types of these utterances. These we may call *speech genres.*"[21] Hence, an utterance is an instance of communication in any discursive context—written or oral—that combines with other similar instances to create a genre. Bakhtin sees utterances as dialogic and intertextual; and cumulatively, utterances create genres that are themselves dialogic and intertextual. For Bakhtin—and for current genre theorists—genres are rhetorical actions that develop in response to recurring situations. He states, "Each utterance is filled with echoes and reverberations of other utterances to which it is related by the communality of the sphere of speech communication. Every utterance must be regarded primarily as a response to preceding utterances of the given sphere."[22] Furthermore, every utterance anticipates forthcoming utterances. Bakhtin states, "The utterance is related not only to preceding, but also to subsequent links in the chain of speech communion."[23] Using this concept, then, a genre is not a stable and "always already" form but rather is a "flexible, plastic, and creative" form based entirely on communicative function.[24]

The application of genre theory to the venue of education in the 1980s was both a pedagogical and a political move. In explaining the move of genre theory into the educational arena, Gunther Kress asserts, "If there was [sic] a predictability and recognizability of text-forms, then . . . these were things that should be made available as explicit knowledge for all learners in school."[25] The integration of genre theory in the schools

began as the theoretical underpinning for the Writing Across the Curriculum or the Writing in the Disciplines movements.[26] These two efforts were intended not only to improve the teaching of writing by making the forms explicit but also to provide equitable education to all learners by making tacit knowledge visible and therefore accessible to all. Teaching about genre fosters in students an awareness of the social construction of discourses so that the students can use but also challenge these genre distinctions, thereby becoming critical learners. By developing a meta-awareness about genres, students will be able to denaturalize language so that they are able to see that genres are social constructions that have developed in response to a social need.[27] By highlighting the social nature of disciplinary discourse and practices, librarians can emphasize to students that disciplinary ways of communicating are not static but rather are fluid and changing and very much sites of contested power.

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Genre theory has been criticized for "stiffl[ing] creativity because it focuses on formalistic conventions and draws artificial boundaries;"[28] however, recent developments in genre theory assert that the concept of genre is about *function* not form and that, as such, the study of genres can be generative and productive.[29] In this understanding, genres "are conventional structures which have evolved as pragmatic schemes for making certain types of meaning and to achieve distinctive social goals, in specific settings, by particular linguistic means."[30] Genre pedagogy is dialogic then, as it "establishes a dialogue between the culture and the discourses of institutionalized schooling, and the cultures and discourses of students."[31] In this way, the teaching of genre is not about fixed boundaries and conventions; but, rather, it is about teaching students to see how the genre of discourse is related to the communicative need. In learning about disciplinary discourse, students may begin to see themselves as participants in a disciplinary conversation with the potential to effect change in the conventions instead of simply learning to conform to the established patterns within a particular "community of practice" or academic discipline.[32]

Recent proponents for genre approaches to teaching emphasize that with an understanding of why a genre has certain characteristics students will be able to work within the genre and also to make informed decisions about when to deviate from the genre, thereby providing an opportunity for creativity.[33] In this way, instruction in genres can provide students with the meta-awareness of various discourse communities, which will equip them simultaneously to learn as well as to resist and critique the established genres; in other words, students learn to work within the genres or to transgress the boundaries of the defined genres deliberately.[34] Indeed, Irene Clark argues that the boundaries are a necessary correlative to creativity; she says, "A work is regarded 'creative' when boundaries are transcended in an original and unusual way, so that the

work represents a unique union of both constraint and choice."[35] Clark asserts that the explicit teaching of genres creates the opportunity for creativity and does not reinforce the reification of the established structures. Instead, the explicit teaching of genres leads to a "dialogue of the dominant ways of knowing . . . and other marginal discourses such that both core and margins are transformed."[36] In critical information literacy instruction, this could mean helping students use established conventions in their academic work as well as pushing the boundaries of disciplinary practices as they construct meaning in their research and writing.

Genre Theory Applied to Writing and Critical Information Literacy Instruction

Genre theory can be applied to pedagogical initiatives within academic disciplines. In Bill Cope and Mary Kalantzis' list of five "Basic Principles of an Explicit Pedagogy for Inclusion and Access," their fourth principle is as follows: "Curriculum should be structured in explicit ways according to the fundamental structure of subjects."[37] By "subjects," Cope and Kalantzis mean "what will emerge as an academic discipline area between kindergarten and the time the children leave school."[38] The discourse practices of an academic discipline can be communicated and practiced through the implementation of a Writing Across the Curriculum program in tandem with a critical information literacy program.

Writing Across the Curriculum programs and information literacy programs have much in common, and each can benefit from collaborating and learning from the other.[39] These efforts are complementary, particularly given that both programs can aptly apply genre theory to their teaching pedagogy. In describing the connection between genre theory and student writing, James Slevin explains,

> When a political scientist, or historian, or philosopher discusses the writing she studies and teaches (e.g., the texts of Locke and Hume), and the scholarly and student writing which intends to say something convincing about those texts, what does she mean by *writing* and how are these various texts related to one another? When we talk about "writing" in philosophy, we mean not only student papers on Locke or on the epistemological issues Locke raises and addresses, but also *Locke's* writing and the writing of those who study Locke.[40]

The focus on writing in this passage could easily be expanded to include publishing patterns (in books or in journals) or research methodology practices (historical, qualitative, or quantitative) as a way to describe information literacy as well as writing practices.

Because the written word is central to academic discourse, this understanding of the assumptions, the practices, and the conventions of a particular field's writing is integral to the study of any discipline. As Kenneth Bruffee asserts:

> When we write, we play the "language games" of the communities that we . . . belong to. [The language] constitutes, defines, and maintains the knowledge community that fashions it. . . . Our goal in writing . . . is to celebrate our own current acculturation, or else to reacculturate ourselves, reacculturate others, or reacculturate both ourselves and others at the same time.[41]

Academic writing is a pronouncement of membership in a particular discourse community. However, in participating, we construct, reconstruct, and perhaps deconstruct that discourse community with our contributions. The discourse of an academic discipline is not static and unchanging; instead, it is created by the participation of the members negotiating between the established and dominant norms of the community and the newly introduced and marginal perspectives of newcomers to the discourse community.

Teaching undergraduate students, then, is largely "the process of negotiating between the knowledge community of the discipline and novices who want to join that community."[42] The challenge for established members of the discourse community is to denaturalize the discourse enough to make it visible to neophytes entering the community. Highlighting the similarities and differences between disciplinary discourses and then acculturating entering members into a particular discourse are primary tasks of teachers of undergraduate students. Helpful here, perhaps, are James Gee's terms "primary discourse" and "secondary discourse." Gee defines a primary discourse as "our first social identity" and "our initial taken-for-granted understandings of *who* we are and *who* people 'like us' are."[43] He defines secondary discourses as "those to which people are apprenticed as part of their socializations within various local, state, and national groups and institutions outside of early home and peer-group socialization."[44] For scholars who have been thoroughly ensconced in their discipline, their primary and secondary discourses may have merged such that their disciplinary discourse (which had been their secondary) has largely become their primary discourse that they use both inside and outside their academic environment.

As insiders in a community of practice, scholars in a discipline may find it difficult to see their disciplinary practices as anything but natural—the "way things are"—since this discourse has largely become primary. If the scholar does not expose students to the disciplinary discourse as constructed and dialogic and discipline-specific, the seasoned member of the community risks implying to the student that this is *the* academic discourse instead of *an* academic discourse. With limited knowledge of the diversity in disciplinary discourses, the undergraduate student will probably come to see one discourse as "natural" and established instead of dialogic and developing. Our task as educators is to teach students the secondary discourse of academia and, more specifically, the secondary discourses of their chosen disciplines. Faculty members alone cannot do this monumental task; librarians are better positioned to assist students in recognizing the differences in discourses.

The initiation of students into particular disciplines cannot stop with the examination and production of written texts within a field. Academia as we know it today is predicated on the dialogic relationship between texts. The "conversation" between scholars over time within a discipline occurs in written texts in which scholars cite foregoing scholarship and anticipate forthcoming scholarship, creating intertextuality within each text. Each discipline has its own assumptions about how knowledge is produced, its own definitions of "common knowledge," its own accepted research methodologies, and its own social conventions—including the vocabulary that members use.[45] More specifically, disciplines have epistemological differences such that research is conducted differently in each subject area. As Ann Grafstein notes,

> The ways in which knowledge is organized in different disciplines determine, among other things, the scope of the research questions that can be asked, the rules of evidence that are recognized within the discipline as valid for supporting claims, the kind of criteria that can be used to evaluate claims critically, the sources researchers consult to find information, and the nature of the statements that must be cited. . . . An understanding of the discipline, and not simply abstract critical thinking skills, is what provides students with the tools to evaluate research critically in that discipline.[46]

Instruction librarians, especially those with subject specializations, are positioned as simultaneous insiders and outsiders in a discipline; this in-between position places librarians well to facilitate students' awareness and understanding of disciplinary genres.

Instruction librarians often find themselves involved in the enterprise of teaching in an information literacy program that is integrated into the curriculum of a major field of study. Unlike traditional bibliographic instruction, information literacy instruction is "not restricted to library resources or holdings; it presupposes the acquisition of technical skills needed to access digital information, and, crucially, it extends beyond the ability to locate information simply to include the ability to understand it, evaluate it, and use it appropriately."[47] In order for undergraduate students to be able to locate, understand, evaluate, and use information, they need to recognize the disciplinary epistemological conventions that shape the knowledge. This is where an application of genre theory to information literacy instruction to yield critical information literacy can be a powerful, but as yet untapped, combination.

Instruction librarians, especially those with subject specializations, are positioned as simultaneous insiders and outsiders in a discipline; this in-between position places librarians well to facilitate students' awareness and understanding of disciplinary genres.

By articulating and making visible the epistemological differences in research in the disciplines, librarians can facilitate students' understanding and their scholarly work within a particular discipline. Additionally, by learning that there are differences between discourse communities, students will be able to move from one discipline's research practices to another—a skill that an undergraduate student taking a range of classes in different disciplines will undoubtedly need. If undergraduates learn that "knowledge is dialogic—that it is negotiated in the discussions, disputes and disagreements of specialists,"[48] they will be better equipped to enter a particular community of practice. By making explicit the assumptions and practices of a particular discourse community in relation to other discourse communities, we are providing students with a view of the landscape of scholarly work.

In order for students to see the practices of a particular discourse community as situated, dialogic, and flexible—and not natural—it is essential that students see the conventions of one discipline in relation to others. Scholars in a particular field can teach students the practices within the field; however, because the scholars are likely to be thoroughly absorbed in the discourse of the discipline, certain aspects will probably

seem natural and thereby not be visible to these immersed scholars. For this reason, librarians are aptly positioned to initiate undergraduates to scholarly discourse.

Through coursework in the library degree and through practice as a librarian—particularly from experience helping students from a range of disciplines at the reference desk—librarians gain substantial knowledge of each disciplinary discourse and research epistemology. A librarian with a divisional or a disciplinary specialty (as most academic librarians are required to have) will have this general knowledge as well as deeper knowledge in a few disciplinary areas. Once the students understand the diversity in the scholarly landscape, scholars within the students' chosen fields can initiate the students more deeply into the discipline's conventions. The librarian can teach the undergraduate student the ecology of the disciplinary environment, with the subject scholar delving more deeply into one specific discipline's practices. This cooperative approach, involving both the librarian and the scholar in the initiation of undergraduate students into a particular discourse community, provides students both a view of the breadth as well as experience with the depth of disciplinary research. Both the breadth and the depth are essential for an application of genre theory since students must be given the opportunity to see discourse within disciplinary genres not as natural but as constructed for specific communicative and dialogic reasons.

How to Begin? Draw on the Existing Related Literatures

As librarians interested in pedagogy, we can build our knowledge about disciplinary characteristics primarily through keen observation of our academic environments but also by reading the relevant published literatures of related fields. Reading the foundational texts in genre theory and in its applications to Writing Across the Curriculum initiatives can inform our efforts to apply this theory to our instruction.[49] We can also look to our own profession's published literature for the groundwork in this pursuit; subject bibliographies from the library science literature in the mid-1900s speak to disciplinary characteristics. Additionally, the information science literature in bibliometrics attends to disciplinary characteristics in research practices of varying disciplines. In each of these areas, there is a vast body of literature; I am highlighting a few representative or seminal texts in each area as a starting place for further research.

We might consider scholarship in higher education and applied linguistics that has attempted to analyze and characterize scholarly practices in the disciplines. For example, C. P. Snow's *The Two Cultures* was an early foray into this intellectual territory.[50] However, this text tended toward defining disciplines with polarized divisions. Snow himself admitted that his characterization of academia as two cultures was problematic: "Attempts to divide anything into two ought to be regarded with much suspicion;" however, he asserted that "subtlising any more would bring more disadvantages than it's worth."[51] The binary that Snow created between the sciences and the humanities was useful as an early effort in the recognition of academia as consisting of distinct cultures demarcated by disciplines; we now might expect a more textured, locally, and historically situated characterization of the disciplines such as those of the more contemporary *Academic Tribes and Territories* by Tony Becher and Paul Trowler, *Writing/Disciplinarity* by Paul Prior, or *Disciplinary Discourses* by Ken Hyland.[52]

In addition to these texts, the subject bibliography literature from library science can be useful in our understanding of disciplinary practices. Though they often included broad generalizations and overstated assertions about the differences between disciplines, we can still make use of those efforts. Bold statements such as "the humanist is no slouch when it comes to knowing the literature of his field and being able to marshal it on demand"[53] come off today as a brash and overblown generalization. However, studies of disciplinary practices in subject bibliography can inform our work today. For example, Jesse Shera and Margaret Egan introduced the concept of social epistemology as a new discipline in which the production, distribution, and use of intellectual products (information) are the objects of study.[54] Though not using the term "genre theory," their concept of social epistemology resembles the interests of genre theorists. They wrote of the relationship between established conventions within disciplines and the communication goals of the discipline: "The point is not that the study of instrumentalities and goals must be completely dissociated but rather that there must be no *a priori* unexamined assumptions as to relationships between the two."[55] Shera and Egan displayed a nuanced understanding that disciplinary characteristics are not neutral and apolitical but rather these characteristics develop as a direct result of the communicative needs and epistemological practices of the discipline. Their understanding of the dialogic relationship between disciplinary characteristics and aims of the discipline predated genre theory's development by several decades. Revisiting the writings of our professional ancestors such as Shera and Egan can be surprisingly useful, even though the information environment has changed dramatically since they were publishing.

The audience for the subject bibliography literature was academic librarians who needed to know the disciplinary practices of publication in a particular field so that they could knowledgeably maintain and augment the monograph and serial collections in each discipline at their library. Therefore, beyond the unqualified assertions, the subject bibliography scholars included descriptions of disciplinary communication so that librarians working with these fields could learn the patterns of publication and characteristics of the scholarship. It seems that this literature can be a foundation on which we can build instruction for undergraduates about characteristics of academia. The instruction about academic disciplines that I am suggesting for undergraduate students would extend considerably further than patterns of publication, the collection development librarian's concern. We need to examine how knowledge is constructed and teach students to adopt a critical stance about this construction. Therefore, a return to the bibliographic study of the mid-century combined with the critical information literacy mindset is worthwhile for teaching undergraduate students today.

Yet another corpus of literature that can inform our practices as instruction librarians about disciplinary practices is that of bibliometrics in information science, originated by Jesse Shera. The regrettable bifurcation between library science and information science can be bridged by instruction librarians through the application of the bibliometrics literature. Information scientists such as Marcia Bates, Rebecca Watson-Boone, John Cullars, and Stephen Wiberley study the information-seeking behaviors of disciplinary groups of humanities scholars through analysis of citation patterns and researching practices.[56] There are comparable literatures about the patterns and prac-

tices of scholars in other academic areas as well. These scholars' findings, coupled with the aforementioned related literatures as well as the sensitive observation of the local disciplinary characteristics, can be synthesized by instruction librarians to inform the instruction that we provide students about disciplines. Further research is warranted in each of these bodies of literature as a means to inform current instructional practices.

Praxis: How Will This Affect our Teaching of Information Literacy?

If we adopt a critical information literacy pedagogy that is guided by principles of genre theory, how might our daily interactions with students and our library instruction programs be different from how they currently are? I am suggesting that we need to shift our orientation so that we come to see—and help our students see—that knowledge is constructed and contested. Therefore, we need to communicate to students—both explicitly through explanation and implicitly through modeling—that research is not about finding information or facts, as most of the ACRL standards suggest, but instead that research is about constructing meaning through active engagement with the ideas and asking questions surrounding the information itself. Over and over, we need to ask questions with our students such as "Who benefits from having this information published and disseminated?" "Whose voices are not represented in this research?" and "What 'counts' as knowledge in this discipline?" We need to model at the reference desk, in individual research consultations, and in our instruction sessions that research is a process of discovery and of construction of meaning instead of a process of accumulation of information.[57] Reference work needs to be more about helping students ask questions about information and less about our delivering answers to questions. When we teach students information literacy, we need to shift our orientation from a process of finding and gathering (acts that imply an unambiguous body of information over which one can gain mastery) to a process of discovery and knowledge construction (acts that imply a Vygotskian process of meaning making).[58]

Because the dialogism of scholarly literature is integral to academia, students need to receive explicit instruction in the epistemological differences in approaches to research in the disciplines. Further, in order to become aware of their own discipline's research conventions, students need to see their own discipline as both similar to and different from other disciplines, thereby allowing for meta-awareness of these disciplinary conventions. Academic librarians, in our unique positions as simultaneous insiders and outsiders to the discipline, are ideally positioned to employ the principles of genre theory through critical information literacy in our work with undergraduates learning the discursive practices of a chosen discipline. If we as educators know the rhetorical patterns within a discipline, we ought to expose these patterns to our students so that they can see what had been invisible and assumed. These patterns will inevitably be locally situated and, therefore, will include broad characteristics of the discipline as well as characteristics at a particular time and in a particular place. In this way, librarians can truly be liaisons—but not in the traditional sense of a librarian being a liaison between a department and the library. Instead, this knowledge can position librarians as liaisons or mediators for disciplinary practices between students and faculty members.

By adapting our practices to reflect current postmodernist epistemologies, we will be positioning ourselves more powerfully within our institutions. As a profession, we cannot remain comfortably in a modernist paradigm of certainty and unified truth when our surroundings have shifted dramatically to a postmodern paradigm of ambiguity and multiple truths. To remain as a valued profession in academia we need to reinvent ourselves and be proactive in our transformation of our own work. Critical information literacy informed by the concepts of genre theory can help us make this needed transition.

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Notes

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16. The two articles that use the term "critical information literacy" are as follows: Swanson; Glenn Giles, "'Fair go'? Equality? The People's Movement for Reconciliation (ANTaR) and Critical Information Literacy," *Australian Library Journal* 51, 3 (August 2002): 203.
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