The dream of improved knowledge production through easily shared research is integral to the history of the Internet. As early as 1945, Director of the U.S. Office of Scientific Research and Development Vannevar Bush articulated this vision in his description of the hypothetical Memex machine. “A record,” he wrote, “if it is to be useful to science, must be continuously extended, it must be stored, and above all it must be consulted.” This same motivation drove Tim Berners-Lee’s 1989 proposal to his CERN physics colleagues in Geneva for the “linked system” that would eventually become the World Wide Web. By now, this dream has been more than realized and researchers are sharing research with each other and with diverse audiences in ways the inventors of the Internet could hardly imagine. In Digital Genres in Academic Knowledge Production and Communication, María José Luzón and Carmen Pérez-Llantada examine what have become some of the well-traveled digital paths for academic knowledge production and communication online – digital scholarly genres – as well as some of the still emerging digital paths and practices among academics, providing a valuable map of today’s global scholarly communication landscape.

Indeed, one of the most important contributions of this book is this global lens. Debate around the dominance of English in scholarly publishing is intense and ongoing, as it should be considering its important implications for justice and...
knowledge production (e.g., Hultgren, 2020; Kuteeva & McGrath, 2014; Swales, 1997; Tardy, 2004). Rarely, however, is this issue integrated into research on digital genres to the extent Luzón and Pérez-Llantada do here. One of Luzón and Pérez-Llantada’s most valuable contributions to the conversation on digital research genres is their systematic integration of the global, multilingual perspective in every dimension of their ambitious analysis.

Combining Rhetorical Genre Studies (RGS) and English for Specific Purposes (ESP) approaches, Luzón and Pérez-Llantada adopt Miller’s (1984) rhetorical view of genre, stressing the exigences genres respond to and the social actions they perform, and combine this with Swales’s (1990) emphasis on communicative purposes to shed light on why researchers are using digital genres to communicate and how they are using digital affordances and semiotic resources in these genres (Chapters 1-3). The results not only document the remarkable variety of communication today’s researchers engage in to produce and share knowledge, but also powerfully document the pressures and opportunities influencing academic work in this moment. While much scholarship in this area examines one discipline or genre at a time, often a formal genre such as the scientific research article, Luzón and Pérez-Llantada seek to account for the full range of digital genres academics are using to produce and communicate knowledge. In doing so, they provide readers with an exceptionally expansive view of the research world today — a view that points to a system changing at an incredibly rapid rate due to converging technological, cultural, and socioeconomic forces.

Luzón and Pérez-Llantada identify seven distinct rhetorical actions academic digital genres currently accomplish, many of which represent new ways of responding to shifting exigences on knowledge production, such as increasing expectations for research productivity, visibility, and outreach. To maintain this focus, Luzón and Pérez-Llantada structure their book around seven chapters corresponding to these rhetorical actions, each beginning with a brief literature review and then proceeding to a case study of a digital genre. These reviews are in fact quite valuable on their own, providing readers with useful entry points into research conversations on genres and related issues they may only have a passing familiarity with if their work has been restricted to one part of the research genre ecosystem. Even readers familiar with the literature on one or more of these will find them valuable as they draw important connections between genres, research areas, and research issues (e.g., open science, the replication crisis, English as a Lingua Franca). The corresponding seven case studies, which employ rhetorical move analysis, often in combination with content analysis, are equally useful, offering exploratory analyses of seven digital genres: research group blogs (Chapter 4), open lab notebooks (OLNs, Chapter 5), academic social networking site (ASNS) posts (Chapter 6), research group tweets (Chapter 7), science crowdfunding project proposals (Chapter 8), online science videos (Chapter 9), and science blogs (Chapter 10). Luzón and Pérez-Llantada’s analysis of these genres carefully attends to multimodal and multilingual practices, drawing on rhetorical moves as a useful resource here as well as the concept of language affordance.
Visibility and Collaboration

After establishing their genre-based theoretical framework and describing the contemporary context for knowledge production and communication, Luzón and Pérez-Llantada’s following three chapters examine rhetorical actions that, they argue, respond to exigences related to visibility and collaboration: (1) “Performing multiple identities and enhancing academic visibility” (Chapter 4); (2) “Sharing research in progress with peers: Online laboratory notebooks” (Chapter 5); and (3) “Interacting in academic social networking sites” (Chapter 6).

Chapter 4 examines academic identity work online, primarily for promotional purposes, focusing the case study on Spanish research group blogs and finding that these strategically employ English, Spanish, and Catalan to index affiliations and cultivate distinct types of identities, such as “international scholar”. Chapter 5 shifts the focus from authors to their interactions with audiences, examining how pressures for collaboration and openness have led researchers to develop digital genres that share research in progress, such as the open laboratory notebook (OLN). Luzón and Pérez-Llantada here argue that the OLN enables informal peer collaboration and occupies a unique role in the scientific ecosystem by allowing researchers to share types of knowledge not typically shared in formal scientific genres (e.g., negative and partial results) while also making them citable. Chapter 6 continues the theme of informal peer interaction by examining how researchers interact on academic social networking sites (ASNSs). Here, the authors focus on how researchers use ResearchGate Q&A threads to interact with peers across linguacultural and disciplinary backgrounds, finding that the discourse functions of posts are primarily characterized by collegial support, such as providing practical advice and emotional support for multilingual researchers.

Access for Diversified Audiences

The next two chapters focus on rhetorical actions related to increasing access to academic knowledge and its production for both peer and public audiences: (1) “Disseminating knowledge to diversified audiences” (Chapter 7); and (2) “Engaging the public in research” (Chapter 8). These chapters also contend with the Internet’s “disintermediation” of communication about expert knowledge (Trench, 2008) and its routine polycontextuality or “context collapse” (Marwick & Boyd, 2011).

After discussion of academic uses of blogs and microblogs, Chapter 7 presents a case study of Twitter use by six Spanish scientific research groups to target both peer researchers and public audiences and revealing, as in the research blog genre, strategic use of language to reach specific audiences and achieve particular purposes. Chapter 8 examines practices, like citizen science, that go beyond traditional models of science communication to engage the public directly in research. Their case study here focuses on science crowdfunding project proposals, finding that this genre repurposes features of existing scientific genres and therefore functions as a “parascientific” genre (Kelly & Miller, 2016).
Evaluating the Quality of Research

The final two analytical chapters focus on actions that respond primarily to exigences around the evaluation and quality of research: (1) “Showing’ research through audiovisual genres” (Chapter 9); and (2) “Assessing research and participating in research discussions online” (Chapter 10).

Chapter 9 examines audiovisual genres aimed at peer audiences, such as video methods articles (VMAs), and at broader audiences, such as science videos, situating the exigence for audiovisual peer communication as partly grounded in the replication crisis — presumably, showing scientific methods that could address challenges with replicating studies and thereby improve the quality of scientific knowledge. This chapter’s case study focuses on popular science videos produced by Spanish research groups, examining their use of linguistic and multimodal resources to engage non-specialist audiences, such as their use of Spanish to address local audiences. Chapter 10 focuses on digital genres that have emerged in response to criticisms of traditional peer review, such as pre- and post-publication open review, and watchdog research blogs. This chapter’s case study analyzes blog posts and comments on three scientific controversies, coding these for positive and negative relational behavior and finding more instances of antisocial than prosocial behavior. While these new models of review may offer promising features, Luzón and Pérez-Llantada caution that these have their perils and may “amplify uninformed responses” (p. 170).

Final Considerations

Luzón and Pérez-Llantada’s final chapter (“Final considerations and future directions”) addresses implications for genre pedagogy, theory, and analysis, concluding with several areas for future research on digital genres and scholarly multilingual communication practices. They stress here the changing relationships their analysis underscores — changed relationships between scholarly genres, between researchers and other audiences, and even between researchers, institutions, and private interests. Digital media here represent both opportunity and challenge as researchers (must) “adapt their communication strategies to meet new academic expectations, to achieve new purposes and to reach diverse audiences” (p. 172). They also here highlight evidence that academic communication has increased in informality and accessibility, as well as in multimodal and multilingual practices, with online scholarly communication becoming “more tolerant of non-standard linguistic forms”, particularly in English as a Lingua Franca (ELF) spaces where the emphasis is more on “maintaining communication rather than language correctness” (p. 175). Discussing why English is not being dislodged as the lingua franca, the authors conjecture that evaluation structures may play a role. On inequities beyond language, Luzón and Pérez-Llantada note that
“the question of power is highly relevant: who has the infrastructure and resources not only to get access to knowledge, but also to produce digital genres, to make their research visible and thus gain recognition, to lead international collaborations or to decide what issues are worth discussing online?” (p. 177).

Following up on this issue with reflections on the pedagogical implications of their work, the authors point to the need to attend to digital literacies, discourse styles, interpersonal features, multimodal composition, and recontextualization. The authors identify insights on genre evolution and the dynamism of genres as chief implications for genre theory and urge future genre analyses to attend to reception and uptake, to multimodality, and to the relations between genres, including comparisons between emerging genres and their antecedents, noting the generative combination of exigence (Miller, 1984) and communicative purpose (Swales, 1990) for understanding genres.

Luzón and Pérez-Llantada identify, too, several gaps for future research, including multilingual scholars’ digital communication — just as English represents a barrier for many scholars in writing for publication, English may also present a barrier for scholars in digital writing. With democratization in view, they point to a need to investigate citizens’ responses to many of these genres. Similarly, the economics of academic knowledge production and communication in the digital age needs further investigation — notably, many of the digital genres academics use towards openness and collaboration are located on commercial, for-profit sites. Finally, they ask whether digital affordances are equally useful across disciplines, noting important gaps in understanding digital genres in the humanities and social sciences.

This latter point, in fact, is one of the chief limitations of the book. While Luzón and Pérez-Llantada occasionally attend to humanities and social science genres, throughout most of the book “academic knowledge” seems to signify “scientific knowledge”. Their chapter on the contemporary context for knowledge production and communication (Chapter 3), for example, prominently features exigences around open science, but does not discuss exigences relevant to the humanities, such as the crisis in the humanities, public humanities, or digital humanities. As they point out, this is a significant gap that needs to be addressed to avoid making overly broad generalizations about academic knowledge production (p. 183).

Another limitation that the authors similarly acknowledge is that, despite their title, their work is not comprehensive but rather an exploratory sketch of the current dynamics (p. 171). Each case study is quite small, pointing to research gaps more so than providing firm answers. The book has ambitious breadth that will leave many readers desiring more depth on many questions. Yet this is also the book's strength as it synthesizes so many conversations, connects so many dots, and identifies so many areas needing further research. One of the book’s most important contributions, then, is in agenda-setting: Luzón and Pérez-Llantada have shown why we should take digital scholarly communication seriously and how to do it. I suspect their work will inspire researchers of academic writing and scholarly genres for years to come. Likewise,
teachers and practitioners of academic writing will find Luzón and Pérez-Llantada’s work useful for attending to a wider range of scholarly genres and communication practices and for better understanding our research ecosystem as a whole.

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References


