

EDITORIAL: DIGITAL GENRES AND MULTIMODALITY

Guest editors

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Today's online science production and dissemination practices are far from being monolingual, monomodal or scarce in available genres (cf., e.g., Luzón & Pérez-Llantada, 2022, or the review in this issue). Quite on the contrary, the digitalization (or digitization) of science communication (Bucher, 2020; Könneker & Lugger, 2013) has brought about unprecedented access to a profusion of diverse semiotic resources which researchers need to harness for the effective diffusion and promotion of their investigative activities (Luzón, 2019; Xia & Hafner, 2021). Facing this complex panorama, the field of English for Specific Purposes (ESP) plays a crucial role in its endeavour to analyse and systematize the pedagogy of specialized discourse use in relation to the communicative practices of professional communities.

At this juncture, this Special Issue of *ESP Today* puts together a collection of state-of-the-art research touching on web-mediated emerging genres from the perspective of ESP genre studies, complemented by two instances of research into digital instructional genres (for a justification of this decision see e.g., Bondi, 2016). More specifically, the issue intends to combine aspects of rhetorical and contextual analysis together with studies investigating the discourse features of these genres as expressed in their use of digital multimodal semiotic resources.

1. A CONTEXTUALIZATION OF THE STUDY OF DIGITAL GENRES THROUGH THE LENS OF MULTIMODALITY

As suggested by the order of "digital" and "multimodal" in the title, the starting point of the present collection of studies is the notion of digital genre, whereas

multimodality is, to differing degrees, the analytical tool or framework that threads the nine articles together. Because of methodological studies such as O'Halloran (2011) or Jewitt (2013), which explored directions for advancing multimodal analysis through the use of digital technology and discussed the potential application of the field of *multimodality* for researching *digital* environments, it has become a well-established fact that the theoretical origins of multimodality reside in social semiotics, and that concepts central to multimodality normally include mode, semiotic resource, materiality, modal affordance, multimodal ensemble and meaning functions. Therefore, most articles in this issue make use of notions such as semiotic resource, modal affordance, or multimodal ensemble for some purpose or other. For example, Bernad-Mechó and Valeiras-Jurado apply the notion of multimodal ensemble to their explanation of recontextualization; Florek and Hendges carry out multimodal move analysis taking account of the fact that the individual moves in multimodal genres may be realized by multiple semiotic resources; and Maier and Engberg justify their call to investigate actual instances of knowledge communication not only from the point of view of their verbal component, but to take a multimodal perspective in the analysis, on the basis that the affordances of each semiotic mode, as well as the modes' specific interplay, create meaning. Section 2 of the article by Mestre-Segarra contains a detailed literature review of many of those central concepts.

In other words, the originality of the present publication resides more in the type and nature of the digital genres selected for scrutiny, and in the authors' specific explanatory and methodological take on them, than in theorization aims concerning the notion of *digital genre*. As regards its use as a term and concept, it is important for the reader to know that Diane Belcher (2023) has recently looked into the impact of new-media genres on how we theorize and analyze genre, engage in genre-informed teaching, and produce and interact with genre-mediated information. Therefore, this Special Issue cannot aspire, and in fact does not aspire, to replicate Belcher's goal in her article for *English for Specific Purposes*, but rather to complement her analysis from the perspective of ESP genre studies, and, consequently, does not purport, either, to elaborate on the definition of *digital genre*, nor did the editors ask the authors to work on one. Why so?

For one thing, review papers such as Poliakova and Samarina (2019) have made it very clear that a plethora of criteria have already been used in the various attempts at the definition of what a *digital genre* is, from the basic distinction between genres that are originally web-based (chats) and genres borrowed from other spheres of communication (video abstracts) to the application of specific parameters, which has yielded a particularly extensive classification; for example, type of discourse, as in advertising discourse through web banners; structure and composition of text, as in discourse-forming genres (email, chat, forum, blog, etc.); the communicative functions of Internet communication, a determinant of directive genres (web advertising, online stores) or entertainment genres (multiplayer worlds and games); "technology influence", which underlies digital or virtual genres emerging from the technical capabilities of the Internet (chats or instant messaging) as well as hybrid genres that either have changed significantly under the influence of Internet technologies (blogging) or mutated into other forms; genres of the first web (web 1.0), the content of which was created by professionals of the web community and was practically unchangeable; genres of the second web (web 2.0), the content of which can be changed by ordinary users whose number is unlimited; genres of the third web (web 3.0), implying that both ordinary users and professionals take part in creating the content.

For another, Diane Belcher herself seems to end her review paper on a somewhat sombre note against, apparently, this backdrop of an interminably long taxonomy: "Readers eager for a clear, easily memorable definition of the term *digital genre* will likely have found their notions of this construct further problematized and complicated" (Belcher, 2023: 41). This should not come up as a surprise since, according to Darvin (2023: 101), Belcher (2021), in her plenary talk at LSPPC6 (the 6th International Conference of the Asia-Pacific LSP & Professional Communication Association), had already drawn attention to the elusiveness of the digital genre and its implications for research and pedagogy. Especially relevant to this Special Issue is Belcher's (2021) invitation to answer the question of how we can capture the forms, functions, purposes and conventions of genres mediated by technologies.

All of these considerations seem to imply that, in the study of digital genres, the focus should be shifted from definition and classification onto a look at semiotic resources and semiotic modes. At an earlier stage in the study of digital genres, Villanueva Alfonso et al. (2008: Genres, ICT and language learning) already argued that it is not so important "to categorise digital genres into different types but rather to study their evolution, the relation between different genres, and related issues (e.g., intertextuality, hybridity, changes due to the capabilities of the medium)". Multimodality would be one of those various "related issues". Villanueva Alfonso et al. (2008), on the basis of work by Crowston and Williams (2000) and Shepherd and Watters (1998), underscore the idea that "[e]volution and change are outstanding features of digital genres". Yet, in line with the problem of the multiplicity of parameters later discussed by Poliakova and Samarina (2019), the "evolution and change" typical of digital genres is said to impede any watertight definition of the term, categorisation thus becoming a secondary objective in the study of digital genres, with evolution, relations, and related issues coming into sharp focus instead:

Drawing on the concept of dynamism, Shepherd and Watters (1998) divided digital genres into extant genres (i.e., those based on genres existing in other media, which are further sub-divided into replicated and variant genres) and novel genres (i.e., those which are wholly dependent on the new medium, which are further sub-divided into emergent and spontaneous genres). However, it is very difficult to establish the boundaries between variant, emergent or spontaneous genres (even spontaneous genres, defined as those that have no counterpart in other media, seem to have echoes of other existing genres). (Villanueva Alfonso et al., 2008: Genres, ICT and language learning)



Another aspect of this Special Issue that needs justification is the question of opportunity – why bring digital genres and multimodality together *again*. Readers may find this project obsolescent seeing that Askehave and Nielsen's (2005) paper on the characteristics of digital genres from a multimodal perspective dates back to almost twenty years ago, and that these authors already set out to explore the possibility of extending the functional genre analysis model to account for the genre characteristics of non-linear, multimodal, web-mediated documents. In addition, more recently, in June 2019, Tor Vergata University of Rome and the Associazione Italiana di Anglistica hosted the A-Mode international conference,¹ an academic event precisely about theories and practices pertaining to *multimodal digital* environments. However, it must be pointed out that the years between such landmark articles for the digital genre/multimodal connection as Askehave and Nielsen (2005) and Belcher (2023) have not produced a static picture of the connection, but a subtly changing panorama.

For example, it was precisely at A-Mode, in the Multimodality 2.0 colloquium, that an authoritative voice on the relationship between genre and multimodality, John Bateman (2019),² expressed words of caution about speaking of *digital media*, since "the organisation of virtual digital forms most often involves various forms of recreations of other media". Instead, he argued, "it is necessary to concentrate on the semiotic modes in the digital environment and the evolving artefacts and performances that changing materialities afford".

And then, just two years later, the Asia-Pacific Languages for Specific Purposes and Professional Communication Association could be seen launching their 6th International Conference (LSPPC6, mentioned above) on the theme of *Multimodality and beyond: Addressing complexity and emerging needs in LSP*, the wording of which ("beyond, complexity, emerging needs") was a clear indicator that A-Mode's "approaches" to multimodal digital environments" were still well worth looking at, now in connection with LSP.

The question arises, therefore, what a Special Issue on digital genres and multimodality can contribute when the combination of *digital genre* and *multimodality* (with the latter catchily labelled "2.0" sometimes, and already necessitating a look "beyond") has been on the spotlight for some time now. As we see it, part of the answer lies in the words of caution expressed at conferences on the topic. In the colloquium at the A-Mode conference in Rome (Bateman et al., 2019), the panelists were careful enough to point out that "[w]ith technologies and applications evolving swiftly, digital forms are often claimed to break new ground in the manipulation of materiality and, consequently, pose new challenges to both theoretical and empirical work in multimodality".

In a similar vein, the homepage of LSPPC6³ stated that "[t]he use of digital

¹ https://www.eumade4ll.eu/event/a-mode-approaches-to-multimodal-digital-environments-from-theories-to-practices/

² For a complete revision of John Bateman's work on genre and multimodality see Hiippala (2017).

³ https://www.en.cityu.edu.hk/LSPPC6

technologies along with theoretical and methodological developments in areas including multimodal discourse analysis, multimodal interaction, gesture studies, and embodied cognitive science have revolutionized our understanding of specialized language and communication".

Therefore, in this context of challenge and constant change, evolution or even *revolution*, there will always be space for updates on methodological developments regarding the study of new digital forms, the characteristics of which may also need to be determined first. This is how the idea of this Special Issue arose in our research group's 2022 conference on "Digital Genres and Open Science",⁴ where some of the papers in this issue originated. Even though our conference did not intend to address multimodal issues exclusively, the potential of the contributions touching on digital genres and multimodality led us to conceive a collection of articles, later expanded beyond those in the conference, to showcase a variety of analytical tools applied to a sample of emerging digital genres from today's research genre repertoire, including, e.g., video resumes, video abstracts, or dissemination videos. In this Special Issue, the authors all discuss how to resolve the *challenges* posed by "empirical work in multimodality" with analyses expected to elucidate the role of multimodal expression in the genres' furtherance of communicative aims via their rhetorical structures and their display of persuasion (e.g., Dontcheva-Navratilova) or proximity strategies, to name a few analytical issues.

2. DIGITAL MULTIMODALITY AND THE CONCEPTUAL BACKGROUND OF THIS SPECIAL ISSUE

In order to understand how this Special Issue was put together, and what can be obtained from it, the reader must be made aware that its articles not only require an amplified understanding of 'the digital', but also a multifaceted approach to 'the multimodal'. In the communicative events where 'the digital' meets 'the multimodal', the latter concept may transcend the notion of feature, component or characteristic and embrace those of term of comparison (Picciuolo) or even cause (Topalov, Knežević, and Halupka-Rešetar), while the former may open up to the idea of communicative event downplaying, for specific analytical purposes, that of *text* even if it is web-mediated text (Askehave & Nielsen, 2005).

Letting 'the digital' veer away from text, or, to be precise, from Askehave and Nielsen's (2005) two-dimensional view on genres ("digital genres not only act as text but also as medium"), would be a way of responding to Bateman's caveat at the 2019 Rome colloquium "Digital: Is that even a thing?". What we mean here is that nowadays the phrase *digital genre* can describe more than things, multimodal documents or *texts*, because virtual learning environments are increasingly important in higher education, these instructional settings making academic genres

⁴ http://genci.unizar.es/conference

more and more dependent on the development of technology-mediated communication (Querol-Julián 2020, 2021) and fostering the study of pedagogical strategies for integrating online or digital genres in the language classroom (Darvin, 2023; Elola & Oskoz, 2017). For example, Querol-Julián (2020) uses the phrase "digital academic genre" to describe her object of study, the "synchronous videoconferencing lecture" and, interestingly enough, she examines the constraints and affordances of interaction in this "digital environment" by positioning genre analysis "from a multimodal perspective". This study is a chapter in Part IV of Lin et al.'s (2020) book, which includes another example of a "multimodal digital genre", "linguistics lecture slides" (Chapter 9). Both of these studies are described by the editors as "timely responses to Bondi's (2016: 325) call for more research into instructional genres, given that "the emphasis on genre analysis in the last twenty years or so has raised greater interest in research genres, often downplaying instructional genres"". In this Special Issue, the articles by Picciuolo and by Topalov et al. respond to this need, too.

Alongside this extended view of 'the digital' from mere medium to the occurrence of technology mediation, there are also reasons for a multifaceted approach to 'the multimodal'. On the one hand, Querol-Julián's (2020) theoretical and methodological research framework, although oriented towards the characterization of interaction in live lectures, shows that those concepts that can be judged to be "central to multimodality" (see, e.g., Jewitt, 2013) actually emanate from very different perspectives and not only from social semiotics: "meaning functions (systemic functional multimodal discourse analysis), modal affordance and multimodal ensemble (social semiotics), modal density and higher-level actions (multimodal interaction analysis), and sequential and simultaneous actions (multimodal conversation analysis)" (Querol-Julián, 2020: 198). On the other hand, in a Special Issue with plenty of talk of *digital* (and polyhedric) multimodality, the reader should bear in mind, first, that multimodality is not a semiotic mode. Instances of semiotic modes include, for example, "color (when color is used in more or less conventionalized ways), spoken or written verbal language, images, or gestures" (Danielsson & Selander, 2021: 17). Multimodality is rather one way of looking into semiotic modes and categorising them; for instance, "an image where color is used as one meaning-making resource" (Danielsson & Selander, 2021: 17) would be a *multimodal* semiotic mode. What would *digital* multimodality be then?

A very illustrative description of digital multimodality would be the underlying conceptualization of Diane Belcher's workshop for LSPPC6 ("Leveraging digital multimodality in the teaching of all linguistic modalities for academic purposes") or Belova's (2021) discussion of the digital multimodality of museums discourse during the Covid-19 pandemic. According to Belcher, the teaching of academic reading, writing, listening, and speaking can be enhanced by a "digital multimodal approach", which takes place when the achievement of "learning goals" includes "successful navigation of multimodal reading, with visual images as well as verbal text, of multimodal listening in multimedia contexts, and of digital composing of written and spoken multimodal ensembles as a collaborative process".⁵ In other words, digital multimodality is part of the analysis of technology-influenced teaching/learning (e.g., Belcher, 2023: 39-41) or communication (e.g., Wong, 2019), and thus a productive way of characterizing, for instance, a certain moment in museums discourse:

Museums had to remain accessible and visible, at least in the digital domain, therefore they had to shift to virtual realm, to offer digital services, to increase their activity in social media [...] Due to implementation of digital technologies small local museums made a breakthrough to multimodal domain and received international recognition. In pre-pandemic world, museums had been working on their virtual environment, opened virtual-real museums and extended multimodality of exhibitions, making visitors impressions multisensory. During the pandemic virtual exhibitions, virtual tours, films, education material have become more multimodal and interactive. In films and virtual tours the focus was on stories not on 3D image of the exhibits and a standard 360 tour only. They experimented with modes and conquered new media, used multimodal storytelling. [...] To encourage children, museums implemented gamification and edutainment strategies, created virtual games [...] Digital multimodality might become an indispensable component of museum online landscape in the post-pandemic world. (Belova, 2021: 9)

In sum, digital multimodality happens when multimodal semiotic modes are transferred to the virtual realm by means of digital tools, services or social media activity (e.g., Villares, this issue). Implementing multisensory experiences in a museum makes the visit multimodal, but not digitally so – there is technological mediation but not through the Internet. Digital multimodality requires *digitization* (for the concept see, e.g., Danielsson & Selander, 2021: 11, and for the reasons why digitization challenges the usual ESP notion of context, Belcher, 2023: 36).

Not unlike Querol-Julián (2020), Picciulo and Topalov et al., this issue, also immerse themselves in digital multimodality when they deal with the digital environments of university teaching/learning. The former does so by noting the multimodal nature which lexical spatial deixis acquires when it co-occurs with gestures and technology-mediated actions (e.g., mouse movements). The latter incorporate digital multimodality in the analysis of the many visual and audio cues students are exposed to during online lessons and their relationship with anxietycausing factors such as gaze or the mirror effect. Being outside the field of instructional genres, the other articles in this issue are centred around more conventional digital multimodal genres (video abstracts, graphical abstracts, academic trailers, Twitter conference presentations, YouTube science videos, TED Talks, and video resumes). The digital multimodality of graphical abstracts (Florek & Hendges, this issue) may appear to be less definite, but as Elsevier, the publisher, point out themselves,⁶ the purpose and context of use of graphical abstracts are digital:

⁵ P. 2 at https://www.en.cityu.edu.hk/sites/g/files/asqsls2301/files/inline-files/Professor%20Diane%20Belcher.pdf

⁶ https://www.elsevier.com/authors/tools-and-resources/visual-abstract

The graphical abstract will be displayed in online search result lists, the online contents list and the article on ScienceDirect, but will typically not appear in the article PDF file or print. A graphical abstract should allow readers to quickly gain an understanding of the take-home message of the paper and is intended to encourage browsing.

3. ORGANIZATION OF THE ISSUE

Given the above context and conceptual background, this Special Issue of *ESP Today* explores whether digital multimodality is becoming an indispensable component, too, of the ESP digital landscape, although it also examines how we can capture the forms, functions, purposes, conventions and pedagogical implications of a number of genres which are all mediated by digital technologies. Accordingly, the issue responds to Belcher's call to continue to explore research, pedagogy, and global knowledge sharing challenges in the interest of a double objective: advancing understanding "of digital-era academic discourse and of how to help users learn to critically consume and agentively produce it" (Belcher, 2023: 41).

Consequently, the nine articles that make up the issue can be divided into three parts according to whether their ultimate focus is the characterization of a genre, sometimes in terms of a particular "related issue" (Part I), the characterization of the genre with the ultimate aim of catering to educational needs in the field of ESP/EMI (Part II), or the evaluation of the impact of digital multimodality when online learning is compared with traditional learning settings or shows varying degrees of engagement (Part III).

In the first paper of this Special Issue, **Olga Dontcheva-Navratilova** studies video abstracts published online in the *Journal of Number Theory*, specifically addressing persuasive strategies and intersemiotic relations. These video abstracts, remediated from text but keeping their promotional nature, are especially interesting as they are produced by the researchers themselves. The author manages to argue, through detailed analysis and exemplification, that while text abstracts rely on the logical reasoning presented by the researchers as experts, video abstracts combine verbal, mathematical and visual resources to emphasize the credibility of the researcher. One implication is, therefore, that digital multimodality causes an adaptation of the researcher's role as communicator and their relationship with the audience.

Another way to exploit the affordances of the digital medium by remediating abstracts is investigated by **Cristiane Salete Florek** and **Graciela Rabuske Hendges**, who analyse graphical abstracts published in high impact journals in Medicine and Chemistry. They endeavour to understand the role of visual and written resources in move realization and the use of multimodal resources that may result from processes of recontextualization of scientific discourse. Their analysis shows disciplinary variation in degrees of adhesion to the traditional move structure of abstracts in their graphical descendant as well as the extent to which

the methods and results modes are more dependent than others on multimodal expression. Their article succeeds in bringing to our understanding, despite the nonlinearity of visual textual artefacts, the rhetorical structure of an elusive digital genre.

In connection with the promotional nature of video and graphical abstracts, **Carmen Daniela Maier** and **Jan Engberg** look into the generic configuration of online academic trailers, i.e., short videos advertising GetSmarter courses by the University of Cambridge. These videos combine knowledge dissemination and promotional intentions, proving to be of great interest to look at through a multimodal lens. Thus, these authors add a convenient layer to their previous studies on levels of explanatory depth and knowledge communication by incorporating an analysis of multimodal elements into their analysis. Therefore, this article can be useful for further work on multimodal knowledge dissemination genres from this perspective, while, in its own, the analysis leads to valuable reflections on the marketization of academia and the changing role of researchers.

Ending Part I, **Rosana Villares**'s analysis of Twitter conference presentations (6-tweet threads) explores stance and engagement markers to promote the visibility of scientific knowledge and to reach diversified audiences. Her study shows that Twitter-specific digital features (e.g., hashtags) and multimodal resources (e.g., Twitter polls) are exploited by authors in innovative ways which may be typical of informal non-academic discourse. These emergent hypermodal practices regarding stance and engagement provide ways to promote research, boost interaction, and reach the underlying audience outside the disciplinary public.

Part II, with studies ultimately catering to educational needs, begins with **Edgar Bernad-Mechó** and **Julia Valeiras-Jurado**'s study of introductions to YouTube science dissemination videos from Public Broadcasting Service and SciHow. While their research first unveils the multimodal realization of engagement strategies in these videos, their core contribution is the exploration of audience uptake by presenting the clips to higher education students and eliciting their opinion in relation to the engagement potential of the videos and the reasons for their answers. The comparison of the analysts' interpretation of the salience of modes with the audience's perception presents a mismatch and invites further investigations into the impact of multimodal resources on hearers and viewers.

Silvia Masi analyses humour in TED talks on Technology, Economics and Law. Her analysis expands previous studies of the linguistic expression of humour by looking at the interaction of visuals, words and gestures. The article's examples prove that humour, a native characteristic of TED talks, functions, through multimodal ensembles. to enhance knowledge popularization and recontextualization, as humour is used as part of explanatory strategies, bringing expert knowledge closer to the audience and contributing to learning through engagement and memorability. Thus, the author can argue for the use of TED talks in the ESP or even EFL classroom by providing a deeper understanding of one of the core features of this dissemination genre.

To close Part II, **María-Ángeles Mestre-Segarra** presents the rhetorical structure of video resumes, a digital and multimodal tool gaining momentum in business settings. Her move analysis is complemented by a multimodal discourse analysis of a selection of exemplars of a move labelled "using pressure tactics". The combination of methodological procedures advances our understanding of the main communicative purposes of video resumes, providing helpful insights into this genre as an ESP teaching resource for business students' multimodal literacy and communication skills.

Part III, dealing with digital multimodality in teaching and learning, starts with **Mariangela Picciuolo**'s comparison of spatial deixis in EMI lectures. Her article presents spatial deixis as critical to student comprehension, since through it the lecturer directs students' attention. She shows that the multimodal realization of spatial deixis varies across lecture types (face to face, online, and blended), displaying differences in linguistic markers, pointing gestures and technology-mediated actions. As functions like introducing specialized vocabulary are exemplified, this article supports the introduction of ICT and spatial deictic language in EMI teacher training.

Finally, **Jagoda Topalov**, **Ljiljana Knežević**, and **Sabina Halupka-Rešetar** seek to determine, through a cross-sectional survey at four different faculties, the level of anxiety experienced by ESP students in digital contexts depending on the available multimodal configurations of synchronous online class participation: only text, audio, and video. Their findings are accompanied by a pertinent discussion of current issues related to the visual and audio cues students are exposed to, such as gaze, the mirror effect, and the dissonance of being physically present in one environment and mentally in another.

These pieces of research are followed by two reviews of publications on digital genres touching on multimodality. Rosa Lorés, in her review of Metadiscourse in digital communication: New research, approaches and methodologies edited by Larissa D'Angelo, Anna Mauranen, and Stefania Maci, captures the complexities behind the constructs both of "digital discourse" and "metadiscourse", highlighting the currency of the volume she reviews. Her chapter summaries give the reader a preview of theoretical considerations and the genres under scrutiny, specifying where to expect multimodality to play a part. In the second review, Gwendolynne **Reid** opens in retrospect considering how far we have gone from the origin of digital communication to today's complex panorama as presented in María José Luzón and Carmen Pérez-Llantada's Digital genres in academic knowledge production and communication: Perspectives and practices. Reid's text comes forth as a useful guide through the book's case studies of digital genres which respond to present-day exigencies of knowledge distribution, while simultaneously highlighting its value in terms of theoretical considerations and prospective investigations, which include pedagogical and analytical issues related to the multimodal nature of digital research communication.



4. CONCLUDING AND LOOKING FORWARD

Reviewing major developments in genre analysis in the digital era, Sichen Ada Xia (2020) discussed digital genre analysis, multimodal genre analysis and genre innovation. However, she concluded by pointing out how the three of them are closely connected:

The development of digital technologies allows the utilization of multiple semiotic resources in the construction of digital-multimodal genres. Moreover, the tendencies of digitality and multimodality contribute to the innovation of genres, mainly because the digital functions and the multiple modes of communication prepare the authors with resources to achieve unconventional communicative purposes or to achieve communicative purposes in an unconventional way. (Xia, 2020: 153)

The analyses in this Special Issue of *ESP Today* show such interconnection between digitality, multimodality, and innovation, and they provide new insights into genres that have gradually become part of established genre studies theory. Thus, they open a window to the plethora of multimodal digital genres that we find today in professional digital communication, providing both theoretical considerations and methodological tools that can be drawn upon in future investigations.

Typically, research articles which have implemented multimodal genre analysis close with remarks that a greater corpus which could provide more data would be highly convenient for a proper understanding of the issues explored. The main reasons why corpora are kept too small are related to the amount of time needed to carry out such analyses, to which any degree of automation would be highly impactful. However, since most state-of-the-art tools for computer-assisted annotation rely on machine learning, what we need in order to generalize automatic analyses is previously annotated data which we can then feed neural networks with. The advances that we are making right now in the scholarly conversation around digital genres and multimodality, and especially those reported in this Special Issue, are increasingly taking us closer to developing the necessary tools, coding schemes and data repositories needed for a revolutionary future in the multimodal analysis of digital texts.

Once, or while, we develop these tools, our field could also benefit from analyzing genres outside academia, like Mestre-Segarra does with the video resume, or Masi's study of humour in TED Talks. At the same time, we would like to encourage further studies that take account of the roles and impressions of the consumers of the texts and the participants in the communicative situations we analyse, as Bernad-Mechó and Valeiras-Jurado and Topalov et al. do.

All in all, this Special Issue of *ESP Today* contains eleven contributions (nine articles and two book reviews) that synergize to provide an updated picture of current issues related to the consequences of the digitalization of knowledge dissemination practices, the combined use of semiotic resources in genre-based

digital science communication, the variety of methodological approaches to digital genres which tackle, somehow or other, multimodality, and the effects and implications of the use of digital technologies in pedagogy. We hope that the readers will find these pieces of writing to be informative and sufficiently detailed to be useful for their own understanding and future explorations of digital genres and multimodality.

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