H2020 European Research project websites and corporate websites: patterns of evaluation and genre evolution

ABSTRACT

Websites are fundamental tools for knowledge communication and for strategic identity construction. In academic as well as professional websites, visibility and promotion are constructed via evaluative strategies instantiated through multimodal resources made possible by new affordances provided by this medium.

This study aims to investigate the strategies used for promotion and identity construction in academic websites. It also aims to shed light on the way these genres evolve due technological and socioeconomic factors. To do this, I carry out a comparative analysis of 12 European research project websites comparing them with a reference corpus of 12 corporate websites focusing on their showcasing genres. Then, I complement this analysis with qualitative data from interviews with specialist informants.

The results of the analysis show that specific contextual factors largely determine the rhetorical purposes of these websites and their use of evaluative resources. However, despite their contextual differences, the websites in the two subcorpora both seek social validation and construct strikingly similar identities to fulfil that function.

Key words: Digital genres, websites, showcasing genres, evaluation, multimodality

1. Introduction

In recent years, the way scientific work is shared among members of the scientific community and communicated to different audiences has substantially changed due to the new affordances offered by the Web and other ICT tools. Besides publishing their research in specialised journals, researchers now engage in various writing practices to conduct, discuss and share research, promote research products and make their work visible for a global community. As a result, increasing attention has been paid in the literature to the impact of technology on knowledge dissemination and the emergence and evolution of technology-mediated genres in science communication (Campagna et al. 2012; Kuteeva – Mauranen 2018; Luzón – Pérez Llantada 2019).

Research on knowledge dissemination has also explored how writers use digital genres for rhetorical and interpersonal purposes. For example, scholars use academic homepages to construct a credible online identity, enhance their reputation and gain visibility (Hyland 2011). Similarly, studies have found that research groups turn to online media such as blogs (Luzón 2018) and Twitter (Kuteeva 2016; Pascual – Mur-Dueñas 2021) to create reputable academic identities and to increase their visibility. Comparable processes of strategic identity construction have been identified in other areas of knowledge communication, such as institutional knowledge dissemination (Engberg 2020) and corporate websites (Domenec 2014).

The need to use technology mediated communication to disseminate and promote their work is perhaps more evident for members of publicly-funded research projects since they are required by funding entities to elaborate plans to communicate their results and activities so as

to account for the public funding they have received (Flecha et al. 2018; Gertrudix et al. 2021). Project websites are generally the main channel to achieve these objectives (Marín-González et al. 2017).

In the literature on professional and academic websites the importance of the homepage and other related showcasing genres (*about us*, *the project*, *objectives*, etc.) has often been underscored, insofar as they act as the official gateway to the website and they help to promote the institution represented in the website (Askehave – Nielsen 2005). The homepages of academic websites have been described as an ideal tool for strategic self-representation and identity construction (Hyland 2011). In a similar vein, corporate homepages (CHPs) have been identified as a means for projecting a company's identity so as to gain reputational or social legitimacy (Domenec 2014).

Research has shown that, in order to perform these functions, the central mode of representation in websites is no longer just text. Identity and promotion are constructed by means of evaluative strategies instantiated through multimodal resources that are made possible by new affordances provided by this medium (Shepherd – Watters 1998). As a result, it becomes necessary to adopt a multimodal perspective in order to study how different modes aggregate in webpages to create meanings and project certain values.

The main objective of this study is to investigate the (meta)textual and visual strategies used for promotion and strategic identity construction. More particularly, my study will examine the incidence of these rhetorical strategies and the preferred values across the two corpora. Second, despite their contextual differences, I aim to establish potential similarities (and differences) in the rhetorical functions of research project and corporate websites, as well as in the identities projected to help fulfil those functions. Finally, I will explore social and technological factors affecting the production and modification of websites so as to identify patterns of variation and change in the production of these digital genres motivated by these technological and social factors. The present study will be limited to the showcasing genres of research project websites and of corporate websites, since they are regarded as crucial in identity promotion (Askehave – Nielsen 2005) and are consistently found in both types of websites.

2. A theoretical framework for the study of evaluation in websites: multimodal genres and identity construction

2.1. Genre and genre evolution

Genres are "dynamic rhetorical forms" (Berkenkotter – Huckin 1993: 479) and, as such, they are constantly evolving. Several studies in the field of genre analysis have established that genres and generic practices are shaped not only by social groups and organizations but also by the medium (Askehave – Nielsen 2005; Giltrow – Stein 2009; Bawarshi – Reiff 2010; Rowley Jolivet – Campagna 2021). Studies have also explored how established print genres are imported into a new medium or how genre variants or even new genres develop and emerge in electronic environments. When digital genres are perceived as emanating from existing printed genres a process of genre *repurposing* takes place, while genre variants or new genres may appear as a result of a process of genre *re-mediation* (Heyd 2015).

To account for these processes, Crowston and Williams (2000) established three types of genre: *reproduced*, *reconfigured* (adapted) and *emergent* genres. Even if traditional written genres (e.g. the research article) are sometimes reproduced in the digital medium with few or no major changes, they may acquire added value (Luzón 2007) when adapted for online

publication, by including for example hyperlinked citations (Crownston 2010), or may be enhanced with add-on genres such as author videos or graphical abstracts (Luzón – Pérez-Llantada 2019).

In contrast, it has been found that certain digital genres display a more hybrid nature (Crownston 2010). For example, Askehave and Nielsen (2005) posited that homepages are hybrid in purpose, as they combine promotional and informational features. In addition, homepages exploit the affordances of the digital medium while displaying characteristics of newspaper discourse (2005: 124). Similarly, Alejo González (2005) claimed that pages of commercial websites such as *Home*, *About us*, *Contact us*, or *Products and services* may have originated and evolved from printed genres such as sales promotion letters, since they share the same move structure.

Due to their dynamic nature, the analysis of the impact of the digital medium on the processes of evolution and change in these genres continues to be relevant. Digital genres emerge and change to accommodate new rhetorical needs and other contextual factors. As a result, exploration of such processes needs to consider "the various social, economic, and technological factors that occasion the production, reproduction, or modification of different genres in different sociohistorical contexts" (Yates – Orlikowski 1992: 320). To account for the influence of these factors on genre evolution, the present study uses multi-perspective methods of critical genre analysis (Bhatia et al. 2008) which take into account textual and contextual aspects of the genre.

2.2 Identity and authorial evaluation

Identities (and authorial evaluation) are social positions that writers take when they interact and both are constructed at the level of discourse (Flowerdew – Wang 2015). Important aspects of identity are indexed through linguistic resources such as evaluative markers and other metadiscourse strategies. Webpage writers must be able to strategically use evaluation to construct credible and reputable identities and to promote the institutions described in these websites by assembling attributes and values that are consistent with social expectations and which are culturally approved and esteemed in their field or context (Hyland 2011).

In the last decades there has been extensive research on the interpersonal potential of evaluation in written academic genres including research articles (Giannoni 2005; Hyland 2005), research article abstracts (Martín-Martín – Burgess 2004; Stotesbury 2003), referee reports (Fortanet 2008) and book reviews (Alcaraz-Ariza 2011). More recently research has also studied evaluation in academic and professional websites (Caiazzo 2009; Lorés 2020; Suau-Jiménez 2019). Numerous different perspectives including concepts such as *attitude*, *evaluation*, *stance*, *appraisal* or *affect* have been used in the literature to define roughly similar and sometimes overlapping aspects such as the writers' personal response, attitude or value judgement of the entities they are referring to, the people they are interacting with or the material they discuss.

Following Hunston (1993, 2011) evaluation expresses an attitude towards a person, situation or entity and is both subjective and located within a societal value system. Hunston (1993) and Thompson and Hunston (2001) explain that evaluation can be performed along different parameters like value, relevance and status. Yet, in this study, evaluation of status or certainty (also known as epistemic evaluation) will be left out of the analysis since it does not directly contribute to promotion and identity construction.

As Thompson and Hunston (2001) contend, evaluation allows writers to persuade their readers to see things in a certain way. When writers use certain values to represent themselves, evaluative language functions as a promotional strategy that enables writers to construct credible and reputable identities. The consideration of what counts as positive value, however, depends on the attributes and values that are culturally approved and appreciated by the social group.

2.3 Multimodality

The study of digital genres requires discourse analysts to examine modes, multimodal configurations, and their semiotic functions in discourse. Writers construct meaning through the selection and configuration of modes and therefore text or meaning cannot be studied in isolation (Jewitt 2015). Multimodal analyses need to investigate how choices in the modes of communication affect meaning and generate social effects.

Previous research contends that the use of the visual mode has increased in professional writing. This extensive use of images is due to the limitations of the verbal mode in fulfilling the cognitive and functional goals writers set for their texts (Rowley-Jolivet 2002). The use of images in texts has great potential for meaning making and for strategically influencing the readers' attitudes and beliefs (Wekesa 2012, in De Groot et al. 2016). Not surprisingly, visual elements play an important role in constructing identities in academic websites (Hyland 2011), as well as in promoting corporate values in annual reports (David 2001) and corporate websites (Domenec 2014).

Research on multimodality has often emphasized the importance of the social context for meaning making (Kress 1997, 2010). Meaning is viewed as socially situated since modes of communication have been shaped by the social functions they have historically been used to accomplish (van Leeuwen 2005; Kress 2010). As Hyland (2011) explains, writers combine linguistic, content and design features to construct self-representations that will be recognized and valued by their intended readers and, in doing so, they strategically manage the impression they make on them.

The model of "visual metadiscourse" developed by De Groot et al. (2015) is suitable for the analysis of multimodal genres, as it allows us to identify and account for the way visual and verbal elements are used by writers to convey meaning and perform specific rhetorical functions such as evaluation and identity construction. This model draws on Hyland and Tse's (2004) textual metadiscourse framework and on Kress and Van Leeuwen's (2006) work on multimodal discourse. It focuses on writer-reader interaction and also explores the socio-cultural aspects present in pictures. As De Groot et al. explain, visual metadiscourse allows writers to create and communicate ideas about reality or to convey (subjective) attitudes and evaluative meanings to guide the readers interpretation of the text. Images derive their meaning both from their intrinsic features and the textual and cultural context they are inserted in. Using this approach to visual metadiscourse, I will study the way writers exploit the possibilities of multimodal texts to strategically construct their identities.

3. Methodology

To undertake this study, I selected a corpus of 12 websites of research projects funded by the EU H2020 programme for research and innovation. These websites were part of a database of

100 websites (EUROPROW4), collected as part of the InterGEDI research project on digital scientific discourse analysis. One criterion for inclusion in my corpus was that at least one of the participants in the project was linked to the Universidad de Zaragoza.

For the sake of comparability and coherence, all the websites dealt with the topic of sustainable energy, which is key in the EU research agenda, and were subject to the same requirements for dissemination of project results from the EU H2020 programme. A parallel corpus of 12 corporate websites from top international corporations in the field renewable energies was compiled and used as a reference corpus (Table 1).

To ensure the comparability of the two corpora, all the texts included in the corpus were examples of showcasing genres (*home, about, the project, objectives*, etc). When the name of the web page was not provided or was different to the ones commonly identified as showcasing genres, its communicative purpose was established and used as the criterion for selection.

[Table 1. H2020 and corporate websites in the corpus]

The corpus was read manually several times. Instances of evaluation in verbal and visual resources (see for example figures 1 and 2) were identified and compiled in a data base. Successive readings allowed for data reduction and a set of values was generated from the data. Results were sorted and labelled using Microsoft Excel database affordances.

[Figure 1. Extracted from https://www.aspire2050.eu/adrem (latest access May 2020)]

[Figure 2. Extracted from www.waste2fuels.eu (latest access June 2019)]

Moving from text to context I also enquired into the professional and discursive practices of the target communities using qualitative data from interviews with three informants involved in supervising, designing and drafting this type of websites.
1. A chief technical director and consultant with extensive experience in digital project management for private and public companies.
2. A senior manager for a research institution participating in over 60 H2020 projects
3. A junior communications manager for the abovementioned research institution.
       Prior to the interviews, a number of questions addressing key issues related to the functions, objectives and process of design of a website were generated by the author. These questions were then edited and revised with the help of two other scholars belonging to the InterGedi research group. The final interview schedule (see appendix 1) was used to carry out a semi-structured interview with each informant. Two of interviews were performed face to face. Due to restrictions during the Covid-19 pandemic, the third interview was held online. All interviews were recorded and transcribed. Interview transcriptions were then analysed and findings were used to triangulate the results obtained from the corpus analysis.

4. Results

Important aspects of identity can be strategically constructed by means of evaluation in texts. The manual analysis of the webpages in the H2020 and in the CWs subcorpora revealed the preferred values website writers projected in their texts through the use of evaluative markers and images.

4.1 Evaluation at verbal level

As we can see in table 2, writers in H2020 project websites prioritised presenting the project as "innovative" and "technically useful", which together represent 28% (N=57) of the evaluative markers in the texts in this subcorpus. As might be expected given the common field shared by these websites, values related to energy efficiency ("green", "sustainable", "energy efficient") were also frequently found in H2020 texts, accounting for one fourth (25%) of all the evaluative markers. In a similar vein, writers often described the project and its products as "cost-effective" and "profitable" (13% and 5% respectively). Aside from discussing its monetary perks, writers of H2020 webs also stressed the benefits these research projects entailed for the well-being of society in general (14%). In brief, evaluation in H2020 websites mainly focuses on promoting its technical and innovative edge, as well as the benefits they can provide for society and the environment.

[Table 2. Evaluative markers (raw counts) in the H2020 and the CWs corpora]

It is worth noting that the sets of values appearing in the texts in the CW subcorpus are notably akin to the values in the H2020 websites. Despite this apparent similarity between the two subcorpora, there is considerable variation in the total number of evaluative markers and the relative incidence of some of these values, i.e. the preferred values conveyed in the two subcorpora. Writers in the CW subcorpus, for example, conveyed the notion that the companies and their products were "relevant or important" some 87 times (27.8%), compared to only 13 times in the H2020 corpus. These writers also accentuated their sustainability (N=45) more often and portrayed themselves as a "pioneer" in the field (N=20) and "technically useful" (N=53). In contrast, the incidence of other values such as "beneficial for society", "cost-efficient", "profitable", "innovative" or "energy efficient" in the CW subcorpus was comparable to that in the H2020 corpus. Verbal texts in corporate websites are very brief yet highly promotional. To successfully do this, evaluative markers stressing the positive values of the company are compactly packed in these texts, as we can see in examples 1 and 2.

(1)   [The company's] technical expertise, comprehensive portfolio and long-standing experience are helping to pioneer a sustainable future across the globe.

(2)   [The company] is leading this transformation and co-creating the future of energy with our customers, providing safe, efficient, reliable, and affordable power to drive economic growth and raise living standards around the world.

We can conclude from these data that evaluative markers in CWs prioritise positioning companies as important, technically advanced and pioneering, thus helping to carve a space for them in the competitive corporate field.

4.2 Evaluation through visuals

Table 3 shows the evaluative meanings website authors conveyed through the use of visual metadiscourse in the webpages under analysis. Once again, the values projected in the text to construct their identities were surprisingly similar in both subcorpora. The most obvious difference across the two sets of texts lies in the frequency and quality of these visual elements. The choice of values projected by these visuals may also be described as rather strategic, as visuals tended to be used most frequently to stress socially sanctioned values, i.e. *people-oriented* and *socially minded*; *green* and *sustainable* (N=58), as well as to advertise their dominant status in the field (*innovative*/*technologically advanced* and *global*).

[Table 3. Evaluative meanings conveyed through visuals in the H2020 and the CWs corpora]

[Table 4. Types of visuals in the H2020 and the CWs corpora]

Corporate webpages display a much more intensive use of high-quality visuals indexing evaluation (see figure 3). Most of the pictures are large or even full screen pictures (table 4) which often constitute the central element in multimodal ensembles (figure 1), In these webpages the screen is sometimes organized by the logic of image, instead of the text.

In contrast, the use of visuals in H2020 websites is much less significant in terms of frequency, size and quality. The values which are more recurrently underlined in their visuals are more field dependent (*sustainable*, *innovative*, *green*) and are mainly aimed at constructing the identity of experts in the field of renewable energies. Moreover, in these websites authors create multimodal ensembles combining text and small images or logos where simplicity is prioritised (see figure 4).

[Figure 3. Extracted from www.siemens.com (latest access June 2019)]

[Figure 4. Extracted from www.waste2fuels.eu (latest access June 2019)]

The results presented reveal significant differences in the overall incidence of both evaluative markers and visuals across the subcorpora as well as in the type of evaluative meanings conveyed through the two modes analysed. The intensive use of evaluation allows writers to strategically create preferred identities and to steer readers to intended interpretations. Nevertheless, in order to understand the goals and motivations guiding these rhetorical uses and the processes underlying text creation we need to shift from text to context and adopt a more qualitative perspective of analysis.

4.3 Analysis of contextual factors

As discussed in section 2, genres evolve to adapt to the authors' rhetorical needs, which in turn are determined by contextual factors. To account for the evaluative strategies and the identities projected in these texts, as well as for the construction and evolution of these genres, we need to consider the social, economic and technological factors present in the context in which they are used (Yates – Orlikowski 1992). In order to do this, I will re-examine the results derived from the analysis of visual and verbal metadiscourse using the qualitative data obtained from interviews with three specialist informants.

Webpages are dynamic in nature; therefore, the processes of evolution and change are largely influenced by the digital medium and by other technological developments. One of the most obvious features of H2020 websites is that their designers prioritize simplicity and the use of static sections that tend to follow a similar structure. Simplicity is also a feature of corporate websites and it can be linked to specific economic and technological factors, as well as to the priorities and reasons motivating the design of the website. As informant 1 reported (example 3), simplicity of content and design allows a website to upload quickly, which is a characteristic valued by users. In addition, when web designers operate on a limited budget, they tend to adopt open access programs that provide templates, making web design simple and accessible. As a result of this, these websites often display a somewhat similar structure.

(3)   Today there is a tendency towards simplicity of content and of web design. The objective is for the website to upload as quickly as possible. […] The most popular programs used for designing websites (e.g. Word press) are open access and incorporate templates (Informant 1)

Web designers also try to exploit the digital affordances of websites in order to capture the readers' attention and to make it easier for them to process the information in the text. Informants 2 and 3 stress that, in H2020 websites in particular, technical affordances of webs are used not only to increase the number of visits but also its duration, so that visitors interact with the contents and these contexts have the desired impact in the target audience (examples 4 and 5).

(4)   We try to take advantage of the possibilities the web has to offer. We try to make the web dynamic using pop-ups, hyperlinks, shapes that upload as you hover over them… This way the reader, who is not an expert, is not overwhelmed and gets to see things little by little, which is more appealing. (Informant 3)
(5)   Reaching the target audience is not trivial. We analyse the data we can obtain from the web itself to find the number of visits and the time they spend on the website, because

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if people visit our websites and leave within seconds this means they are not interested in what they see. Therefore, there are different indicators we use, including social media and other channels, to measure the impact of the website and to find out if communication is being effective. (Informant 2)

Traffic to the websites is determined by technological, as well as contextual and economic factors. According to the data obtained from the informants (example 6), it is far more difficult for an H2020 website to attract traffic than for the website of a well-known corporation, as users will not look for the project name or will visit its homepage on their own initiative. Traffic to project websites is promoted through google searches of specific technical terms or through other social media (e.g. twitter) where specific events, news or products are communicated and may become viral.

   As a result of these new practices and strategies for finding and accessing websites, H2020 project homepages and other showcasing genres are losing importance in favor of more dynamic sections which will be linked to social media and which contain key terms that may come up in Google searches (example 7).

(6)   The most complicated thing is to create a website that people can reach directly, especially if the website is very technical and is not frequently updated. It is easier to get to people through the news because we send them to national online media and the project is always named. This generates visits. (Informant 3)
(7)   It is difficult to get visits through the homepage. Google usually takes users directly to the news or demos. Perhaps, if they are interested, they stay on the website and they look around. (Informant 2)

A similar process seems to be taking place in corporate websites. According to informant 1 the homepage has lost importance in recent years and has given up its role as the key internet genre because internet users no longer access websites through the homepage to find and access content. Google searchers are, in fact, programmed not to direct users to the homepage of a website (example 8).

(8)   Homepages are no longer the entrance gate to the different sections and content. The algorithms used by search engines to determine traffic are designed not to measure traffic through the homepage but direct traffic towards the pages with specific content within the website. The reason for this is that internet users use google, not homepages to find content. Another example of this is that the open source framework for web development designed by Google, which is known as AMP (Accelerated Mobile Pages), does not even include homepages among its options. (Informant 1)

The main goal in H2020 project websites is to publicize the project so as to reach and inform a non-specialized audience that may be interested in the topic. Unlike in CWs, self-promotion or establishing reputation are not priority objectives since these projects have a short life span and they assume they can reach only a relatively small number of internet users. These competitive research projects are required by their funding entities to design and implement communication plans to disseminate their research activities to the general public (Gertrudix et al. 2021) so as to inform citizens of how public research funding is being used, thus increasing accountability and transparency (examples 9 and 10).

(9)   The European Union requires us to transfer and communicate our results as the project develops. The main aims of the website are to make the results of the project known […] One key function is knowledge dissemination; so that anyone can access information that they can understand even if they are not experts. (Informant 2)

(10)   Every call for projects includes a task involving dissemination, communication or something similar. Within that task, there are several subtasks and one of them is the design of a website and, more recently, another subtask is setting up accounts in social media. (Informant 3)

The description of scientific research processes and results through a medium which can reach multiple audiences can potentially cause confusion among readers and even context collapse. A communications manager needs to be aware of the importance of considering the audiences these texts are drafted for and how this determines the complexity of the language used, the structure of the text, the amount of explicit information and the use of digital resources to facilitate text processing (example 11). Aspects related to text structure and specific language in these web-generated genres, however, fall beyond the scope of this study and will not be examined in depth here.

(11)   Our target is a non-specialized audience who wants to find out what we are doing. Specialists have other means to access more specific information on the topic. […] As a communications manager I need to ensure the information is simple enough and easy to understand. (Informant 3)

Crownston (2010) claims that some digital genres such as the digital version of RAs display a hybrid and transitional nature, as the limits of the genre (e.g. the use of citations, whether the digital text will be considered as a merit for academic advancement, etc.) are negotiated in the context of knowledge production and dissemination. According to informant 3, however, these are new emergent genres which have little or no similarities with other previously existing written genres (example 12).

(12)   I do not find any similarities between these webpages and other written genres. At least since I have been working here [in the design of websites for research projects] they are nothing like that. (Informant 3)

While the main aim of an H2020 website is two-fold – to disseminate and account for the research being done and to stress the benefits the project will bring about for citizens – corporate websites are designed to promote a company and its products, establish a niche for the company against the competition and create a reputable and socially sanctioned identity. This could explain why the use of promotional strategies through evaluative markers and visuals conveying positive values is less frequent and less strategically relevant in H2020 websites than in CWs (example 13).

(13)   We do not pay a lot of attention to images. We do not use them as much as corporate websites, where they are extremely important and they consider them carefully. You will find them mostly in the homepage. (informant 3)

Corporate websites use evaluation to strategically create specific identities in order to manage their reputation in the eyes of a more general audience. Besides using self-promotional strategies which will allow them to construct identities as *leading*, *technologically advanced* or *global* companies, they focus intensively on values such as being *green*, *sustainable* or *socially minded*, which allow them to construct socially approved identities and position the audience in favor of the company, as well as its products and activities. To achieve these promotional objectives, CWs devote many more resources to take advantage of multimodal ensembles combining different modes (text, image and video) to produce the intended unified meaning, as evidenced by the quantitative data presented in the previous section. This united orchestration of different modes allows the designer to obtain what Lemke calls a "multiplying effect" (1998).

5. Conclusions

This study set out to investigate academic writing in online environments and explore in a comparative manner the possible similarities and differences in the use of verbal and visual evaluation for promotion and identity construction in websites related to sustainable energies: by this means aiming to better understand web-based communication practices in the scientific world vis-à-vis the corporate world. The quantitative results showed notable differences across the subcorpora in the overall incidence of verbal evaluative markers and visual metadiscourse (De Groot et al. 2015), as well as in the attributes and values most frequently assembled in each subcorpus. Nevertheless, there were also notable similarities in the types of values conveyed in the two corpora.

A second objective of this analysis was to establish potential similarities and differences in the rhetorical functions these web-mediated texts fulfilled, as well as in the identities projected to perform those functions. The informants' responses confirmed that the main functions of websites in the H2020 and in the CW corpora were largely determined by their particular contexts. The main function of H2020 websites is to publicize the project so as to reach a non-specialist general audience and inform them about their research activity, thus accounting in the eyes of society for the funding they received. The success of these websites depends of their overall impact, as measured by the number of visits and the duration of those visits. In contrast, corporate websites are designed to help companies establish a reputation in the field and to help them create a niche.

The preference for certain values and identities projected in the websites in the corpus may also be traced back to the main functions intended for the websites. H2020 websites aim at dissemination of their findings and activities, as well as transparency and accountability. Hence, when drafting their websites, writers are less aware of the need to adopt promotional strategies and to establish their value against competitors. In contrast, strategic projection of identity through evaluation is far more prominent in corporate websites, as it enables them to manage their reputation and to gain social legitimacy. To project these identities, corporate websites exploited the use of visual metadiscourse extensively. As suggested by Rowley-Jolivet (2002), the increasing use of images in professional discourse may be explained because linguistic modes do not allow writers to fulfil their functional or rhetorical goals, in this case strategically manipulation the readers' attitude, as efficiently as the visual mode.

Despite their contextual differences, the websites in the two corpora also share a similar rhetorical function, i.e. gaining social acknowledgement and acceptance. As described by Engberg (2020), public institutions often need to publicize their work to reduce feelings of

strangeness and animosity from society, who may otherwise question their usefulness and may fail to see the justification for their funding. Corporations in the field of renewable energies, for their part, also use websites to position the audience and public opinion in their favor. To do this, corporate websites project values (*beneficial for society*, *socially minded/ people-oriented*, *energy efficient* or *sustainable*) which are socially approved attributes and which allow these corporations to construct a socially acceptable and valued identity. In contrast, they simultaneously use evaluation and promotion to construct powerful competitive identities to establish their primacy, relevance and technological superiority. Websites therefore constitute potent tools in order to manage and shape their reputation and, together with other marketing actions and tools, may be used to project values and identities which are in line with the values and demands of society as part of the company's purpose. Following Selzer's terminology (2004, in Afros – Shryer 2009), promotion in websites therefore relies on field specific attributes (*logos*) such as innovation and efficiency, as well as on values shared and approved by the community (*pathos*).

Together with these socio-economic factors, technological factors play an important part in shaping the way the digital affordances of research project websites are used and on the evolution of the genre. To achieve their aims, these websites need to be made appealing, simple and easy to upload. Furthermore, technical standards for web design have also led to webpages becoming more and more standard in structure.

Social and technological factors have also affected the way traffic is generated and have changed the role homepages and other showcasing genres play in internet communication. Since H2020 research projects have a short shelf-life and are not known to the general public, in order to attract users to their websites project members have to publicize their activities through their news sections or using their own social media. In addition, internet users in general no longer access websites through the homepage but rather do so through search engines and social media. As a result, the homepage and other showcasing genres are becoming less relevant and even disappearing. It could be concluded from this that, just like the affordances of websites determine the contents and metadiscourse strategies used in websites, the way users find and access contents (largely through Google) influence the way these affordances change over time.

The present study has used a quantitative and qualitative analysis to obtain a better understanding of evaluative strategies in websites by examining the context and professional practices. Nevertheless, this study has some limitations that future research should take into consideration. An important objective of this study was to throw light on use of linguistic features for expressing evaluation in the same form of communication but in two professional contexts (academic vis-à-vis corporate). One of the limitations when trying to obtain qualitative data to do this was that the specialist informants I interviewed were largely unaware of the evaluative strategies they used when writing these texts and of what makes these genres effective. In addition, the qualitative data obtained from informants revealed that static parts of a website, such as showcasing genres, are decreasing in importance, while dynamic sections of websites such as news and demos are now fundamental to direct traffic to the websites. Future studies on websites will need to investigate these dynamic sections as well the use of other social media (Twitter, LinkedIn, etc.) as a means to interact with the target audience.

REFERENCES

Afros, E. C.F. Schryer
  2009   "Promotional (Meta)discourse in Research Articles in Language and Literary
          Studies", *English for Specific Purposes* 28, 58-68.
Alcaraz Ariza, M.A.
  2011   "Evaluation in English-Medium Medical Book Reviews", *International Journal
          of English Studies* 11(1), 137-153.
Alejo Gónzalez, R.
  2005   "Textual metadiscourse in commercial websites", *Iberica* 9, 33-53.
Askehave, I. – A. E. Nielsen
  2005   "Digital genres: A challenge to traditional genre theory", *Information Technology
          and People*, 18 (2), 120-141.
Barbour, K. – D. Marshall
  2001   "The academic online: Constructing persona through the World Wide Web". *First
          Monday* 17 (9), https://firstmonday.org/article/view/3969/3292, last accessed July
          2021.
Bawarshi, A. S. – M. J. Reiff
  2010   *Genre: An Introduction to History, Theory, Research and Pedagogy*. Lafayette,
          LA: Parlor Press.
Bhatia, V.K.
  2008   "Towards critical genre analysis". In: V. K. Bhatia – J. Flowerdew – R. H. Jones,
          (eds.) *Advances in Discourse Studies*. London: Routledge, 166-177.
Caiazzo, L.
  2010   "The 'promotional' English(es) of University websites". In: R. Cagliero – J.
          Jenkins (eds.) *Discourses, Communities and Global Englishes*. Bern: Peter Lang,
          43-60.
Campagna, S. – G. Garzone – C. Ilie – E. Rowley-Jolivet
  2012   (eds.) *Evolving Genres in Web-Mediated Communication*. Bern: Peter Lang.
Crowston, K. – M. Williams
  2000   "Reproduced and emergent genres of communication on the World-Wide Web",
          The Informat. Soc. 16 (3), 201-216. https://doi.org/10.1080/01972240050133652
Crowston, K.
  2010   "Internet genres". In: M. Bates – M. Niles Maack (eds.) *Encyclopedia of Library
          and Information Science.* Boca Raton, FL: CRC Press.
          http://crowston.syr.edu/content/internet-genres, *accessed in May 2019.*
David, C.
  2001a   "Mythmaking in annual reports", *Journal of Business and Technical
          Communication* 15, 195-222.
De Groot, E. – C. Nickerson – H. Korzilius – M. Gerritsen
  2016   "Picture this. Developing a model for the analysis of visual metadiscourse",
          Journal of Business and Technical Communication 30 (2), 165-201.
Domenec, F.
  2014   "Monsanto's and Chevron's home pages in the US and the UK: Corporate
          discourse as a reflection of social trends?", *Iberica* 27, 51-76.
Engberg, J.
  2020   "Multimodal institutional knowledge dissemination and popularization". In: T.
          Girolamo – V. K. Bhatia – R. Breeze – N. Brownlees – M. Solly (eds.) *The

Context and Media of Legal Discourse. Newcastle upon Tyne: Cambridge Scholars, 55-76.

Flowerdew, J. – S. H. Wang
 2015   "Identity in academic discourse", *Annual Review of Applied Linguistics* 35, 81-99.
Fortanet, I.
 2008   "Evaluative language in peer review referee reports", *Journal of English for Academic Purposes* 7 (1), 27-37.
Flecha, R. – A. Radauer – P. Besselaar
 2018   *Monitoring the Impact of EU Framework Programmes: Expert Report*, Publications Office. https://data.europa.eu/doi/10.2777/518781, accessed June 2021.
Giannoni, D. S.
 2005   "Negative evaluation in academic discourse. A comparison of English and Italian research articles", *Linguistica e Filologia*, 71-99.
Giltrow, J. – D. Stein (eds.)
 2009   *Genres in the Internet: Issues in the Theory of Genre*. Amsterdam: John Benjamins.
Heyd, T.
 2015   "Digital Genres and Processes of Remediation". In: A. Georgakopoulou – T. Spilioti (eds.) *The Routledge Handbook of Language and Digital Communication*. London: Routledge, 87-102.
Hunston, S.
 1993   "Evaluation and ideology in scientific writing". In: M. Ghadessy (ed.) *Register Analysis: Theory and Practice*. London: Pinter Publishing, 57-73.
 2011   *Corpus Approaches to Evaluation: Phraseology and Evaluative Language*. New York: Routledge.
Hyland, K.
 2005   "Stance and engagement: A model of interaction in academic discourse", *Discourse Studies* 7 (2), 173-192. https://doi.org/10.1177/ 1461445605050365
 2011   "The presentation of self in scholarly life: Identity and marginalization in academic homepages", *English for Specific Purposes* 30(4), 286-297.
Hyland, K. – P. Tse
 2004   "Metadiscourse in Academic writing: A reappraisal", *Applied Linguistics* 25, 156-177.
Jewitt, C.
 2015   "Multimodal analysis". In: A. Georgakopoulou and T. Spilioti (eds.) *The Routledge Handbook of Language and Digital Communication*. London: Routledge. https://www.routledgehandbooks.com/doi/10.4324/9781315694344h
Kress, G.
 1997   *Before Writing: Rethinking Paths to Literacy*, London: Routledge.
 2010   *Multimodality: A Social Semiotic Approach to Communication*, London: Routledge.
Kress, G. – T. Van Leeuwen
 2006   *Reading images: The Grammar of Visual Design*. London: Routledge.
Kuteeva, M.

2016   "Research blogs, wikis and tweets". In K. Hyland – P. Shaw (eds.) *The Routledge Handbook of English for Academic Purposes*. London: Routledge, 433-445.

Kuteeva, M. – A. Mauranen
2018   "Digital academic discourse: Texts and contexts. Introduction", *Discourse, Context and Media* 24, 1–7. https://doi.org/10.1016/j.dcm.2018.06.001.

Lemke, J.L.
1998   "Multiplying Meaning: Visual and Verbal Semiotics in Scientific Text". In: J. R. Martin – R. Veel (eds.) *Reading & Science*. London: Routledge, 87-113.

Lores-Sanz, R.
2020   "Science on the web: The exploration of European research websites of energy-related projects as digital genres for the promotion of values", *Discourse, Context & Media* 35, 1-10.

Luzón, M. J.
2007   "The added value features of online scholarly journals", *Journal of Technical Writing and Communication* 37(1), 59-73.
2018   "Constructing academic identities online: Identity performance in research group blogs written by multilingual scholars", *Journal of English for Academic Purposes* 33, 24-39.

Luzón, M. J. – C. Pérez-Llantada
2019   "Connecting traditional and new genres. Trends and emerging themes". In: M. J. Luzón – C. Pérez-Llantada (eds.) *Science Communication on the Internet. Old genres meet new genres*. John Benjamins Publishing Company. Amsterdam: John Benjamins, 1-18. https://doi.org/10.1075/pbns.308.01luz

Martín-Martín, P. – S. Burgess
2004   "The rhetorical management of academic criticism in research article abstracts", *Text 24*, 171-195.

Pascual, D. – P. Mur-Dueñas
2022   "Dialogic interaction with diversified audiences in Twitter for Research Dissemination Purposes", *Círculo de Lingüística Aplicada a la Comunicación* 90. In press.

Rowley-Jolivet, E. – S. Campagna
2021   "From print to web 2.0: The changing face of discourse for special purposes", *LSP Journal* 2(2), 44-51.

Shepherd, M. – C. Watters
1998   "The evolution of cybergenres", *Proceedings of the Thirty-First Hawaii International Conference on System Sciences* 2, 97-109.

Stotesbury, H.
2003   "Evaluation in research article abstracts in the narrative and hard sciences", *Journal of English for Academic Purposes* 2 (2003): 327-341.

Suau Jiménez, F.
2019   "How can hotel websites discursively adjust to customer preferences using online criticism", *Ibérica* 38, 203-226.

Thompson, G. – S. Hunston
2001   "Evaluation: An Introduction". In: S. Hunston – G. Thomson (eds.) *Evaluation in Text: Authorial Stance and the Construction of Discourse*. Oxford: Oxford University Press, 1-27.

van Leeuwen, T.

2005   *An Introduction to Multimodality*. London: Routledge.
Yates, J. – W. J. Orlikowski
    1992   "Genres of organizational communication: A structurational approach to studying communication and media", *The Academy of Management Review* 17, 299-326.

TABLES

Table 1. H2020 and corporate websites in the corpus

H2020 projects in the field of renewable energies (UZ participants)	Corporations in the field of renewable energies
ADREM	Accciona wind power
AGROinLOG	Avangrid Renewables
BuildHEAT	Berkshire Hathaway Energy (BHE)
FLEXICIENCY	EDF Energy
GreenGain	GE Energy
Indus3es	Iberdrola
Medeas	Jinko
MIGRATE	NextEra Energy, Inc.
SCOoPE	Orsted (FKA DONG Energy)
SteamBio	Siemens
uP_Running	Suzlon
WASTE2FUELS	Vestas
TOTAL WORDS IN CORPUS: 13160	TOTAL WORDS IN CORPUS: 13911

Table 2. Evaluative markers (raw counts) in the H2020 and the CWs corpora

H2020 website corpus			Corporate websites corpus		
Relevant / Important	13	6%	Relevant/ important	87	27.8%
Accurate / Reliable / Solid	10	5%	Accurate / Reliable / Solid	5	1.6%
Problematic / Complex	6	3%	Problematic/ Complex	4	1.3%
Profitable	10	5%	Profitable	7	2.2%
Cost effective	26	13%	Cost effective	20	6.4%
Beneficial for society	29	14%	Beneficial for society	27	8.6%
Green	15	7%	Energy efficient	24	7.7%
Sustainable	8	4%	Sustainable	45	14.4%
Energy efficient	28	14%	Innovative / Modern	21	6.7%
Innovative / Modern	29	14%	Pioneer	20	6.4%
Technically useful	28	14%	Technically useful	53	16.9%
TOTAL	**202**	**100%**	**TOTAL**	**313**	**100%**

Table 3. Evaluative meanings conveyed through visuals in the H2020 and the CWs corpora

H2020 website corpus			Corporate websites corpus		
European	3	6%	Relevant/ important	5	3%
Neutral	8	17%	Neutral	9	5.4%
Green / Nature oriented	6	13%	Green/ Nature oriented	12	7.2%
Sustainable	10	21%	Sustainable	31	18.7
Team player/ collaborative	5	11%	Team player/ People Oriented	37	22.3%
Socially minded	3	6%	Socially Minded	21	12.7%
Innovative / technological	8	17%	Innovative/ Technological	29	17.5%
Energy efficient	4	9%	Efficient	5	3%
TOTAL	**47**	**100%**	Pioneer/ oriented to future	6	3.6%
			Global	11	6.6%
			TOTAL	**166**	**100%**

Table 4. Types of visuals in the H2020 and the CWs corpora

H2020 website corpus			Corporate websites corpus		
XL Images (Full screen)	4	8.2%	XL Images (Full screen)	42	20%
L / M Images	25	51%	L / M Images	83	39.7%
S / XS Images	1	2%	S / XS Images	44	21.1%
Logos / Icons	12	24.5%	Logos / Icons	34	16.3%
Videos	4	8.1%	Videos	6	2.9%
Others (Diagram, Flag, Graph)	3	6.2%			
TOTAL	**49**	**100%**	**TOTAL**	**209**	**100%**

FIGURES

Figure 1. Extracted from https://www.aspire2050.eu/adrem (latest access May 2020)

Figure 2. Extracted from www.waste2fuels.eu (latest access June 2019)

Figure 3. Extracted from www.siemens.com (latest access June 2019)

Figure 4. Extracted from www.waste2fuels.eu (latest access June 2019)

PROJECT OVERVIEW

WASTE2FUELS aims to develop next-generation biofuel technologies capable of converting agro-food waste (AFW) streams into high-quality biobutanol. Butanol is one of the most promising biofuels due to its superior fuel properties compared to current main biofuels, bioethanol and biodiesel. In addition to its ability to reduce carbon emissions, its higher energy content (almost 30% more than ethanol), its ability to blend with both gasoline and diesel, its lower risk of separation and corrosion, its resistance to water absorption, allowing it to be transported in pipes and carriers used by gasoline, it offers a very exciting advantage for adoption as engines require almost no modifications to use it.

PROJECT

OBJECTIVES

INNOVATION

APPENDIX 1

INTERVIEW PROTOCOL

<u>I. Functions, characteristics, structure</u>
1. What are the main functions of the website of a European research project? What are the main reasons for making the website?
2. Do you also use it to sell your products or contact potential buyers?
3. Do you think it successfully reaches the target audience? How do you assess this?
4. What are the characteristics of a good website for a European research project? What aspects make it effective?
5. Which sections of your website are the most relevant? Why?

<u>II. Decision-making</u>
6. How are the websites of European research projects in which you take part designed? What decisions need to be made?
7. What considerations are taken into account when designing the website, for example facing a certain sector or a certain company? When you are making decisions, what aspects do you take into account or want to prioritize?

<u>III. Writing processes</u>
8. Who is in charge of writing the texts of the web page? Is the website written in the local language and then translated to other languages?
9. You have mentioned that the news pieces are very important. What about the more static pages which present/showcase the website (Home, Project, about us). Who writes them? What are their functions?
10. How often/When is the content of the website updated? Which sections are most often updated/modified?

<u>IV. Audience</u>
11. Who do you think are the potential readers of the website?
12. Do you also use the website to inform other colleagues and project members?
13. What do you do to reach non-specialized audiences? How do you share technical information?

<u>V. Visibility and digital identity</u>
14. How do you increase traffic to the website and reach potential recipients?
15. Is the website an effective mechanism to make the project visible? Is it an efficient investment (of time/ money)?
16. What is the image or identity that you try to project? Do you emphasize any specific values?
17. How important is it to project specific identities/values?

<u>VI. Multimodal Resources</u>
18. What criteria/processes do you follow to choose the images, videos, …?
19. Why are images or videos included on certain occasions?
20. In what sections do you think videos make the most sense?