

WHAT ARE THE  
CHOICES BEHIND  
THE TITLES?  
A SYSTEMIC FUNCTIONAL  
GRAMMAR ANALYSIS  
OF TITLES FROM ARTICLES  
OF RURAL SCIENCES AND  
COMMUNICATION

QUAIS SÃO AS ESCOLHAS POR TRÁS DOS TÍTULOS? UMA ANÁLISE DE TÍTULOS DE  
ARTIGOS DAS CIÊNCIAS RURAIS E DA COMUNICAÇÃO A PARTIR DA GRAMÁTICA  
SISTÊMICO-FUNCIONAL

¿CUÁLES SON LAS OPCIONES DETRÁS DE LOS TÍTULOS? UN ANÁLISIS DE TÍTULOS DE  
ARTÍCULOS EN CIENCIAS RURALES Y COMUNICACIÓN A PARTIR DE LA GRAMÁTICA  
SISTÊMICO-FUNCIONAL

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ABSTRACT: Selecting a text to read through its title is a current habit. In the scientific context, Swales and Feak (1998) explained that interesting titles attract readers and function as a way of convincing them to go forward. Previous studies usually present a quantitative approach. This research aims at identifying similarities and differences between titles of articles from Rural Sciences and Communication and providing an interpretation guided by Halliday and Matthiessen's (2014) Systemic Functional Grammar. To do so, 246 titles were retrieved from the *European Journal of Agronomy* and the *International Journal of Communication*. Subsequently, an analysis of 30% of titles was conducted, considering the number of words, verbs, punctuation (HARTLEY, 2005), and field. The analysis suggests that titles are short, direct, and informative; choices for punctuation point to simple sentences, and

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the format *short:long*. The verbs were classified mainly as *material processes*, which may inform that concrete changes led to the article's findings.

KEYWORDS: Academic article titles. English for Academic Purposes. Genre Analysis. Systemic Functional Grammar.

RESUMO: Selecionar um texto para leitura através do título é um hábito corriqueiro. No contexto acadêmico, Swales e Feak (1998) explicam que títulos interessantes atraem leitores e funcionam como uma forma de convencê-los a prosseguir com a leitura. Estudos prévios, no geral, apresentam abordagens quantitativas. O presente estudo busca identificar semelhanças e distinções entre títulos de artigos científicos das Ciências Rurais e da Comunicação, e discutir os resultados com base na Gramática Sistêmico-Funcional de Halliday e Matthiessen (2014). Para isso, 246 títulos foram selecionados nos periódicos eletrônicos *European Journal of Agronomy* e *International Journal of Communication*. Após, a análise de 30% dos títulos foi conduzida, considerando número de palavras, verbos, pontuação (HARTLEY, 2005), e área de conhecimento. Os resultados sugerem que os títulos são curtos, diretos, e informativos; as escolhas de pontuação apontam para sentenças do tipo simples, e para o formato curto:longo. Os verbos foram classificados, em sua maioria, como processos materiais, o que pode significar que mudanças concretas conduzem aos resultados reportados nos artigos científicos.

PALAVRAS-CHAVE: Títulos de artigos acadêmicos. Inglês para Fins Acadêmicos. Análise de Gênero. Gramática Sistêmico-Funcional.

RESUMEN: Seleccionar un texto para leer mediante su título es un hábito frecuente. En el contexto científico, Swales y Feak (1998) explican que títulos interesantes atraen a los lectores y funcionan como una manera de convencerlos de que sigan leyendo. Estudios previos, en general, presentan enfoques cuantitativos. El presente estudio busca identificar similitudes y distinciones entre títulos de artículos científicos en Ciencias Rurales y Comunicación, y discutir los resultados basados en la Gramática Sistêmico-Funcional de Halliday y Matthiessen (2014). Para eso, se seleccionaron 246 títulos de las revistas electrónicas *European Journal of Agronomy* e *International Journal of Communication*. Posteriormente, se realizó un análisis del 30% de los títulos, considerando el número de palabras, verbos, puntuación (HARTLEY, 2005) y área de conocimiento. Los resultados sugieren que los títulos son cortos, directos e informativos. Las decisiones de puntuación apuntan a frases sencillas y a el formato corto:largo. Los verbos fueron clasificados principalmente como procesos materiales, lo que puede significar que cambios concretos conducen a los resultados reportados en artículos científicos.

PALABRAS CLAVE: Títulos de artículos académicos. Inglés para Fines Académicos. Análisis de Gênero. Gramática Sistêmico-Funcional.

## 1 INTRODUCTION

In the scientific context, titles are relevant features when it comes to selecting a research article to read. Indeed, scanning titles is a common daily activity within the academic community who usually search for them in online libraries, bibliographic references, proceedings, etc. So “authors know that titles are important, [...] and they know that a successful title will attract readers” (SWALES; FEAK, 1998, p. 25). To convince readers to proceed and read the text as a whole, titles need to draw their attention. Lewison and Hartley (2005, p. 341) state that titles should signal: “here is something you need to read” and also inform that “this is what this paper is about”. This way, the reader can be both attracted and informed by paper titles.

Letchford, Moat, and Preis (2015) have investigated the relation between the length of the title and the number of citations received by research articles. They discovered that journals that publish articles with shorter titles are more cited than the ones with long titles. According to the authors, this could be explained by the fact that shorter titles are easier to understand, hence the articles get more citations. Another possible reason is that some journals are more popular than others and attract more attention. The researchers also highlight that it could be that some journals restrict the length of titles. For this reason, there is a broad range of reasons to interpret the findings, which can be performed by a qualitative analysis.

Previous studies about title analysis (HUDSON, 2016; LETCHFORD; MOAT; PREIS, 2015; LEWISON; HARTLEY, 2005; so forth) usually use quantitative approaches to analyze data. Even though they focus on the extension of titles (e.g. number of words) and

some grammar aspects, a linguistic-oriented qualitative perspective is still required. We have also verified that there have not been enough studies in the field of Applied Linguistics. For example, Ravelli and Starfield (2008) examined the significance of typographic variation – font choices, salience, and layout – in titles of Humanities and Social Sciences theses. Consequently, further studies in this area are still necessary, especially in terms of English for Academic Purposes (EAP) perspective, which requires more discussion towards contextual factors – they remain ‘too textual’, as explained by Swales (2019) in a recent paper.

In this paper, Swales (2019) brings to light that the field of Applied Linguistics has been over-explored by applied linguists in current years, and there are fewer studies that focus on other fields. Concerning genre analysis, the researcher also suggests that studies about the macrostructure of genres may have reached their limits, mainly because they could be “[...] heavy on description, but light on interpretation and explanation. They show what the normal structures tend to be, but not how and why they take the shapes that they do” (SWALES, 2019, p. 77). From this perspective, we believe it could be fruitful to investigate other fields, regarding their microstructure based on a contextualized linguistic-oriented study.

Thereby, we selected two scientific fields – Rural Sciences and Communication – to analyze and compare their use of titles in published research articles. At this moment, it is relevant to highlight that these choices were connected to both our personal academic interests and practices. While the advisor works alongside the Ph.D. Program in Veterinary Medicine at UFSM, the undergraduate student has a major in Journalism at the same university. Besides that, the present research is part of a broad project whose purpose is to outline written academic practices in the English language produced by different communities in the context of UFSM, in order to provide them with teaching actions for writing and reading practices.

We believe the discussion proposed here is relevant, since Applied Linguistics (AL) deals with language in context, and this field usually concentrates its studies on language teaching contexts or even presents some pedagogical implications. Our study analyzes titles that represent written texts from the perspective of English for Academic Purposes (EAP). EAP studies focus on academic genres (written or spoken) in order to provide the scientific community with pedagogical practices. The fields were chosen due to our experiences in Rural Sciences and Communication as teachers of academic writing and reading. These experiences contribute to an oriented perspective to analyze the titles. As Swales (2019) explains, we can provide a significant contribution to our knowledge by researching other areas than Applied Linguistics. Discussing the choices behind the titles of Rural Sciences and Communication may explain to what extent such distinct areas could relate. Moreover, the findings of this study could both help us devise pedagogical materials for our EAP teaching practices and other researchers who dedicate themselves to the analysis of academic texts.

In this sense, our objective is to analyze the titles of Rural Sciences and Communication journals in order to understand the organization of the titles and the grammar choices realized by processes through notions of Systemic Functional Grammar (HALLIDAY; MATTHIESSEN, 2014). This way, we could be able to identify differences and similarities between the two scientific fields investigated.

## 2 RELEVANT LITERATURE

As previously mentioned, the habit of scanning titles is a regular activity within the scientific community. This group, in particular, is usually aware of how titles are important and a possible decisive factor when they choose a text to read. Swales and Feak (1998) have already conducted a study on the length of titles. They found that it is related to the scientific field and its singularities, that is, in areas such as life sciences, “titles are becoming longer and looking more and more like full sentences. In others, the preferred style is for short titles containing mostly nouns and prepositions” (Ibidem, p. 206). Colonic titles have also become common, and they perform in titles one of their main functions: separating ideas and combinations. In this same study, Swales and Feak (1998) analyzed titles, considering the number of words, the presence of verbs, punctuation, and the scientific field – those form the basic procedures of our analysis in this study. They have also presented three suggestions on how good titles should be designed: 1) they should indicate the topic of the study; 2) they should indicate the scope of the study, and 3) they should be clear to readers in the target field.

Likewise, Hartley (2005) analyzed sentence structure and reader comprehension in titles of journal articles and reached the conclusion that some titles were misleading. The main criticism here is that even though attractive titles may seem more appealing to the reader, they should actually be informative and straightforward. According to the researcher, “[...] in the context of information retrieval, they [witty titles] are unlikely to succeed” (HARTLEY, 2005, p. 204). By tabulating the proportion of title formats (simple titles, colonic titles, and titles in form of questions) in 54 journals in three different areas of psychology from 2002, the author found that colonic titles appear in almost 50% of the articles and that titles may be getting longer, hence, they might become more informative. Regarding titles in form of questions, Hyland (2002, p. 11) suggests that “[...] questions can help grab the reader at the outset with an arresting directness” while calling attention with compelling language to engage the reader, who may feel invited to solve a mystery proposed by the writer.

In another similar study, Lewison and Hartley (2005) stated that titles need to be attractive and straightforward to inform the reader about the content. The authors conducted research on the length of titles, their structure, the use of colons, and the number of authors. They argue that titles in the form of questions could be constrained, in the sense of making the titles longer and, thus, harder to be understood by readers. Letchford, Moat, and Preis (2015) also considered the length of titles in articles as well. Then, they explored the correlation between this factor and the number of citations. Their findings suggested that articles with short titles are more likely to be cited. This may be due to either the short titles themselves, or the popularity of the journals, or even the restriction imposed by those on the length of titles.

In his article, Hudson (2016) analyzed the characteristics of titles of academic papers submitted to the UK Research Excellence Framework<sup>1</sup> (REF) in 2014. The author’s main conclusions showed that the length of titles increased closely to the number of authors’ names in articles; the use of colons and question marks decreased in most disciplines though.

Our study proposes not only the analysis of the structure of the titles in Rural Sciences and Communication but also a linguistic-oriented perspective guided by Systemic Functional Grammar (SFG) and a semantic interpretation of the titles. In SFG studies, the clause is the most important unit in grammatical analysis. Halliday and Matthiessen (2014) explain that the clause consists of three modes of meaning in the organization of the clause: *the textual line*, *the interpersonal line*, and *the experiential line*. While *the textual line* looks at the clause as a message, *the interpersonal* understands it as an exchange. In this study, we focus on the third mode, *the experiential* one. It organizes the clause as a configuration of process, participants, and circumstance. In other words, a clause incorporates “a process unfolding through time, [...] participants being directly involved in this process [...]; and in addition, there may be circumstances of time, space, cause, manner” (Ibidem, p. 213). The system of *Transitivity* is the way to achieve this through lexicogrammatical resources. That is to say that elements in a clause are centered on a process, which is construed by a set of *process types*, typically realized by verbal group, in the transitivity system.

The primary types of processes include: *material*, *mental* and *relational* processes. *Material* clauses define events and actions, outer experiences, and processes of the outside world (e.g. ‘doing’ and ‘happening’). They construe “[...] a quantum of change in the flow of events as taking place through some input of energy” (HALLIDAY; MATTHIESSEN, 2014, p. 224), representing the outcome of the process. *Mental* clauses refer to inner experiences and processes of consciousness. They are processes of emotion, perception, or cognition, as their outcome takes place in an individual’s consciousness (e.g. ‘sensing’). Therefore, they are not defined as a material act. Lastly, *relational* clauses configure the third major type of process. They are processes of identifying and classifying, that is, they construe the experience as ‘being’ and ‘having’.

In addition to the primary types of processes, the researchers include secondary processes: *behavioral*, *verbal*, and *existential*. The *behavioral* processes represent an external manifestation of consciousness (e.g. the act of crying) and psychological states. *Verbal* processes are constructed in the consciousness and expressed in the form of language (e.g. ‘saying’ and ‘meaning’), and *existential* processes are related to existence, that is, beings are recognized as existing or happening. Among them, the most frequent types expressed in the English transitivity system are *material*, *relational* and *mental* processes according to the authors. Figure 1 presents the types of processes.

<sup>1</sup> According to its website, REF is the system of evaluation that assess the quality of research in UK higher education institutions. Available at: <https://www.ref.ac.uk/>.

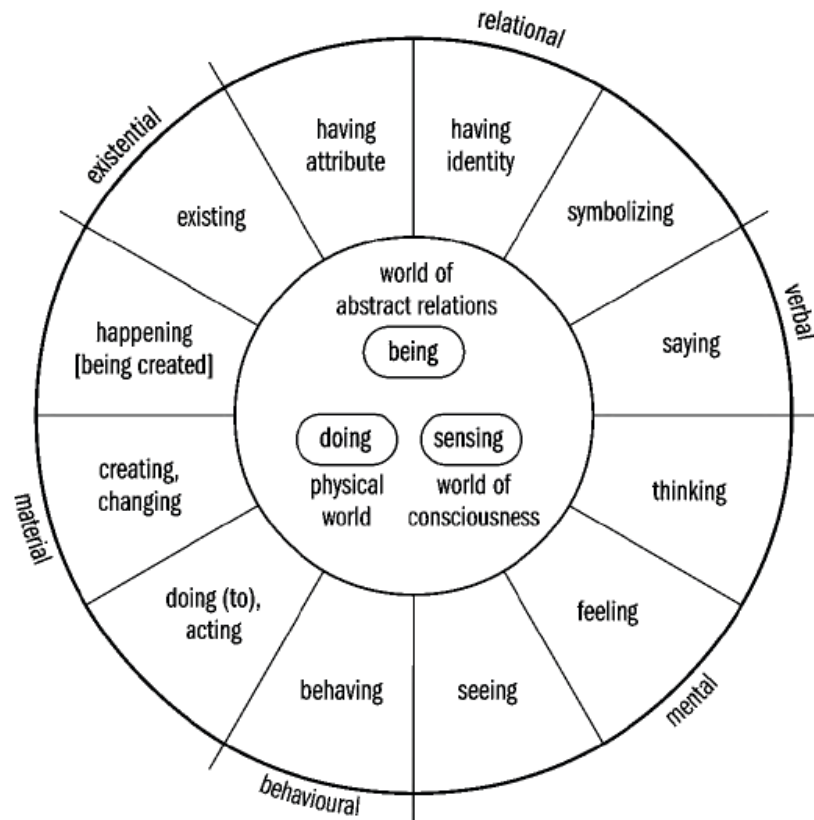


Figure 1: The grammar experience: types of process in English

Source: Halliday and Matthiessen (2014, p. 216)

Next, we describe the corpus collection and analyze the structure of the titles based on Swales (1998) and Hartley's (2005) proportion for title format. Then, we explain how Halliday and Matthiessen's (2014) SFG and the transitivity system are applied in the procedures of analysis for the interpretation of the data.

### 3 METHODOLOGY

The first step to select the corpus – the titles to be analyzed - was to access *Plataforma Sucupira*<sup>2</sup> (13/01/2020), a website created by *Coordenação de Aperfeiçoamento de Pessoal de Nível Superior* (CAPES) to achieve the necessities of its evaluative system (CAPES, c2016). *Plataforma Sucupira* was used to search for interdisciplinary<sup>3</sup> journals, which covered Rural Sciences as the first discipline, and Communication as the second one. Another criterion to select the journals was based on a high-quality standard of QUALIS A1 (FAPEMIG, s.d.), with the impact factor equal to or higher than 3,800. In this sense, two online journals were selected by their International Standard Serial Number (ISSN), considering the open access policy to the published issues of the journals.

*European Journal of Agronomy* (EJA) was selected as an interdisciplinary journal for the Rural Sciences. This journal was created in 1992 by the European Society for Agronomy (ESA) and it publishes a new volume monthly, which contains articles about experimental and theoretical studies. One of the members of its editorial board is the Brazilian agronomy researcher Carlos Alexandre Costa Crusciol from Sao Paulo State University Julio de Mesquita Filho – Botucatu Campus. The online journal *International Journal of Communication* (IJoC) was selected to represent the scientific field of Communication. It has been published annually by the University of South Carolina Annenberg Press since 2007. This journal is interdisciplinary, though

<sup>2</sup> According to the website of CAPES, *Plataforma Sucupira* is a tool created to collect information, perform analysis and evaluations in order to be the baseline of the graduation system.

<sup>3</sup> We searched for interdisciplinary journals that published articles from several subareas rather than a specific one.

centered on communication issues. Moreover, it is important to highlight here that renowned communication researchers such as Douglas Kellner and Henry Jenkins are part of the editorial board of IJoC.

The corpus was collected in 2019, and the criterion for collecting the corpus included the articles published in each journal that year. This criterion was due to a large amount of titles in the publications per year. The title of each academic article was retrieved from the published issues to construe the corpus. Following the criterion of increasing time period – monthly related –, Table 3<sup>4</sup> was designed to gather all the titles.

N°	Volume	Title

**Table 3:** Data collection  
**Source:** designed by the authors

One by one, each title was pasted to this table exactly as they were written, considering their specificities, such as Latin words in italics, for example. A total of 246 titles were collected. From those, 88 titles were retrieved from 10 different volumes of EJA; and 158 from a single volume of IJoC. Instead of conducting the full analysis of the corpus as a whole (due to limitations of time and space), the sample was calculated in a virtual calculator<sup>5</sup> based on a confidence level of 95%. A sample of 73 titles (30%) was randomly selected on the website ‘Random Lists’ (<https://www.randomlists.com>), considering all the titles. Then, the first step of analysis of this sample was conducted, following a template (see Table 4) adapted from Swales and Feak (1998).

Number*	Number of words	Any verbs	Punctuation	Field

**Table 4:** Template of primary analysis  
**Source:** adapted from Swales and Feak (1998)

\* Number of the title in relation to its position in the original table of titles.

Subsequently, this sample was analyzed in relation to the average number of words, considering both fields. Then, the verbs were retrieved from the titles and were classified according to the *types of processes* (see Table 5). The theory provided by the transitivity system of Systemic Functional Grammar “[...] provides the lexicogrammatical resources for construing a quantum of change in the flow of events as a figure - as a configuration of elements centered on a process” (HALLIDAY; MATTHIESSEN, 2014, p. 213). This may help with a further comprehension of how titles are organized in terms of lexicogrammatical choices, namely the notions of each type of process, their specificities, and any differences among them.

Types of processes	Verbs	Total
Material		
Mental		
Relational		
Behavioral		
Verbal		
Existential		

**Table 5:** Template of types of processes  
**Source:** designed by the authors

<sup>4</sup> See all the titles in Appendix A.

<sup>5</sup> The virtual calculator used to calculate the sample of this study is available at: <https://www.netquest.com/pt-br/obrigado-calculadora-tamanho-amostal>.

To conclude the analysis, we looked closely into the titles again to identify if they presented any punctuation – such as question marks (?) or colons (:). The punctuations were observed in relation to the proportions of title formats, according to Hartley's (2005) definitions of a) simple sentence; b) short:long; c) long:short<sup>6</sup>; d) balanced; and e) question. After that, we returned once more to the types of processes and conducted a semantic analysis. In the next section, we present and discuss the main results.

#### 4 RESULTS AND DISCUSSION

This study was conducted with 30% of the titles, which were randomly selected. Tables 6 and 7 show the primary results of the analysis of EJA's and IJoC's titles, respectively.

Number*	Number of words	Any verbs	Punctuation	Field
03	18	-	-	EJA
09	15	-	-	EJA
10	20	<i>renewing</i>	-	EJA
15	11	-	-	EJA
20	9	-	-	EJA
29	8	-	-	EJA
31	4	-	-	EJA
32	14	<i>was</i>	-	EJA
33	11	<i>modeling</i>	-	EJA
35	10	<i>optimizing</i>	-	EJA
37	25	<i>learning; increases</i>	colon (:)	EJA
41	14	<i>affects</i>	colon (:)	EJA
44	18	-	colon (:)	EJA
52	12	-	-	EJA
54	17	<i>drives</i>	-	EJA
62	16	-	-	EJA
63	15	<i>unravelling</i>	-	EJA
66	15	-	-	EJA
79	19	-	-	EJA
81	16	<i>explaining</i>	colon (:)	EJA

<sup>6</sup> Hartley (2005, p. 206) presents these formats for titles with colons (:). By short:long, “[...] we understand a short opening statement and a longer qualification, whereas long:short has a long opening statement and a short qualification”.

82	12	-	-	EJA
84	17	-	colon (:)	EJA
87	23	-	-	EJA

**Table 6:** Primary results of EJA's titles.

**Source:** adapted from Swales and Feak's (1998) template.

\*Number of the title in relation to its position in the original table of titles

141	20	<i>look</i>	question mark (?)	IJoC
146	17	<i>exploring</i>	colon (:)	IJoC
150	6	-	-	IJoC
152	17	-	colon (:)	IJoC
153	19	<i>(re)constructing</i>	colon (:)	IJoC
154	16	<i>unpublishing</i>	colon (:)	IJoC
156	12	-	colon (:)	IJoC
159	15	-	colon (:)	IJoC
160	6	<i>making</i>	-	IJoC
164	14	<i>examining</i>	colon (:)	IJoC
174	13	<i>using</i>	colon (:)	IJoC
176	19	<i>embedding; assess</i>	colon (:)	IJoC
179	11	-	colon (:)	IJoC
192	16	<i>mean; talk</i>	question mark (?)	IJoC
194	9	<i>delineating; assessing</i>	colon (:)	IJoC
202	11	<i>are watching</i>	colon (:)	IJoC
203	14	<i>is; am</i>	colon (:)	IJoC
210	20	-	-	IJoC
212	13	<i>dealing (with)</i>	colon (:)	IJoC
222	20	<i>study</i>	colon (:)	IJoC
225	15	-	colon (:)	IJoC
229	15	<i>examining</i>	-	IJoC
239	14	<i>constructing</i>	-	IJoC



240	14	-	question mark (?)	IJoC
242	19	<i>discussing</i>	colon (:)	IJoC

**Table 7:** Primary results of IJoC's titles.

**Source:** adapted from Swales and Feak's (1998) template.

\*Number of the title in relation to its position in the original table of titles

Results show that a title has 14,6 words on average, considering both scientific fields. In relation to EJA, a title generally has 14,7 words, while a title from IJoC has on average 14,6 words. Based on Swales (1998), the numbers suggest a pattern of slightly short titles, which may be explained by two factors: either short titles are easier to understand, hence the articles get more citations or the journals under discussion restrict the number of words, as investigated by Letchford, Moat and Preis (2015). In the section 'Guide for Authors' of EJA (EJA, 2018), we found that the journal requires that titles be 'concise and informative'. This explains the length of titles published by EJA. Yet, we could not find any instructions for title length on IJoC's website.

In relation to the structures of the titles analyzed, most of them (52,5%) typically present colon punctuation (:), while 42,3% are simple sentences and 5,2% contain question marks (?). Table 8 shows the results based on Hartley's (2005) table of analysis of title formats.

Proportion	Rural Sciences	Communication	(n)* Example
Simple sentence	18	7	(33) <i>Modeling the effects of tropospheric ozone on wheat growth and yield</i>
Short:long	4	22	(203) <i>This Is Who I Am: The Selfie as a Personal and Social Identity Marker</i>
Long:short	0	4	(194) <i>Delineating and Assessing Cultural Relations: The Case of Asialink</i>
Balanced	1	0	(81) <i>On-farm diagnosis for greenhouse tomato in south Uruguay: Explaining yield variability and ranking of determining factors</i>
Question	0	3	(240) <i>A "Hotbed" of Digital Empowerment? Media Criticism in Kenya Between Playful Engagement and Co-Option</i>

**Table 8:** Proportion of titles in Rural Sciences and Communication

**Source:** adapted from Hartley (2005)

\*Number of the title in relation to its position in the original table of titles

The data point toward a majority of titles formed by simple sentences in Rural Sciences, while the proportion 'short:long' prevails in Communication. This suggests different patterns in the structure of titles in relation to two scientific fields that differ between themselves as areas of knowledge, that is, one is oriented towards biological sciences, and the other aims at studying the relation between media and society, for example. Even though the formats 'long:short', questions, and simple sentences seem to be less common in Communication, as well as the proportions 'short:long' and balanced in Rural Sciences, they are still present. As explained by Hartley (2005, p. 207), the use of colon divides the title into *specific interests* and *general concerns*, and this topic division could lead to "more effective titles for journal articles".

What could be contrasted at this moment are the facts that: a) titles of Rural Sciences were not formed by either questions or 'long:short' proportions – those were found amongst titles of Communication; and b) titles of Communication did not present balanced proportions in colonic titles – one (1) balanced title was found in Rural Sciences. It is not clear if these distinctions are probably due to the rules imposed by the journals related to title submission, since they do not specify the use of colons. Another probable reason is related to the researchers' writing style.

Hyland (2002) suggests that titles composed of questions can be more attractive to the readers, thus gaining their attention. The author found that titles written in the form of questions are more common in the 'soft' disciplines, that is, in the social sciences. In this sense, our analysis provides evidence that coincides with the researcher's conclusions, since titles in the form of questions were found within Communication ones. Once more, it seems to be a matter of disciplinary differences. This may also affect the length of the titles.

Swales and Feak (1998, p. 206) explain that, for instance, in fields such as life sciences, "titles are becoming longer and looking more and more like full sentences", while researchers from other disciplines prefer a different style, and mostly opt for nonverbal short titles containing prepositions and nouns. In this study, 73 titles from two different fields of science were analyzed and most of them, that is, 57%, did not contain any verb. More specifically, less than half of EJA and IJoC titles – 43% and 42%, respectively, – are composed of clauses, which could be conflicting in relation to the authors' previous explanation, since the field of Rural Sciences is also considered a life science.

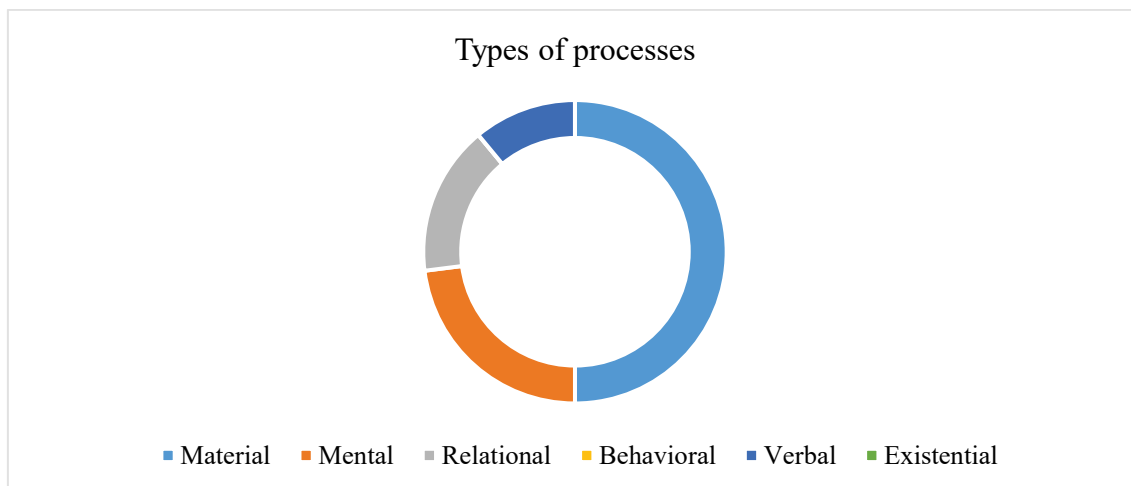
In this sense, 31 titles contained at least one verb, consisting of at least one clause – six titles presented two or more verbs. As this study intends to analyze the data according to Systemic Functional Grammar (SFG), all 38 verbs were categorized into types of processes as shown in Table 9.

Types of processes	Verbs	EJA	IJoC	Total
Material	<i>renewing, modeling, optimizing, increases, affects, drives, unravelling, came, mapping, exploring, (re)constructing, unpublishing, making, using, embedding, delineating, dealing (with), study, constructing</i>	7	12	<b>19</b>
Mental	<i>learning, see, know, examining, assess, mean, assessing, are watching, examining</i>	1	8	<b>9</b>
Relational	<i>was, be, is, look, is, am</i>	1	5	<b>6</b>
Behavioral	-	-	-	<b>0</b>
Verbal	<i>explaining, proposing, talk, discussing</i>	1	3	<b>4</b>
Existential	-	-	-	<b>0</b>

**Table 9:** Types of processes

**Source:** designed by the authors

This analysis distributed the verbs into six categories of types of processes: *material, mental, relational, behavioral, verbal* and *existential*. Results are depicted in Figure 2.



**Figure 2:** Graph of types of processes

**Source:** designed by the authors

The data indicate that the verbs are located mostly in the primary types of processes – *material*, *mental* and *relational*. This corroborates Halliday and Matthiessen’s (2014) statement that these are the most frequent types of processes expressed in the English transitivity system. They are represented here by 89% of the verbs. Furthermore, it may be that experiences of the outside world, processes of consciousness, and identifying/classifying are more present in research conducted in the fields of Rural Sciences and Communication.

As explained by Halliday and Matthiessen (2014), *material* processes may lead to concrete changes in some event, activity, or action, and even to abstract doings and happenings, through actions performed by a participant, the actor. This may be the reason why *material* processes represent the majority of verbs here (50%), and it could be explained by the fact that experimental scientific studies are usually conducted by a methodology towards their results, that is, “[...] an outcome that is different from the initial phase of the unfolding”, meaning a change of some factor – the answer to the research problem, for example (HALLIDAY; MATTHIESEN, 2014, p. 225).

Regarding the world of consciousness, *mental* processes have to do with sensing, e.g. feeling, thinking, perceiving, etc. They define changes in events that may happen as flowing in an individual’s consciousness or as influencing it. Thus, *mental* clauses project other clauses and they can provide the notion of ideas or of the content of the mind. For this reason, *mental* processes differ from *material* ones, since they are not kinds of ‘doing’. Thereby, this could explain why they do not appear as frequently as *material* processes (23%) in this study.

Subsequently, *relational* clauses represent processes of being and having, that is, their purpose is to identify and to characterize. In a way, *relational* clauses resemble ‘mental’ ones rather than ‘material’ ones. Still, what differs *relational* to *mental* process is the fact that, in the latter, there is always a participant endowed with consciousness. Halliday and Matthiessen (2014) explain that these processes model both the inner and out experience as ‘being’. In other words, the change in this process unfolds without energy usage as a static location in space, static possession, or static quality.

It is relevant to highlight that this is not ‘being’ in the sense of existence – as in *existential* clauses. In *relational* processes, “[...] there are two parts to the ‘being’: something is said to ‘be’ something else. In other words, a relationship of being is set up between two separate entities” (HALLIDAY; MATTHIESEN, 2014, p. 261). Therefore, one of the verbs that occur mostly in *relational* processes is *be*, which was elicited by the results in Chart 1. As the researchers suggest, this is actually the third major type of process, which can be also reinforced by our results (16%). Despite the low representation among *material* and *mental* clauses, *relational* processes still perform a significant share in contrast to *behavioral*, *existential*, and *verbal* processes, namely the secondary ones.

With respect to the secondary processes, only *verbal* ones were realized by four verbs, that is, the remaining 11%. Amongst the secondary processes, the *verbal* ones are pointed out by the researchers as a relevant resource for many kinds of discourse. *Verbal* clauses are often accompanied by quotes. This way, it is possible to quote/report other researchers in the academic discourse, for example, or even to convey meaning through the titles of articles. Nonetheless, there is a low presence of *verbal* clauses and this suggests that language expression is not employed in the titles as frequently as in the primary processes.

The non-appearance of *behavioral* clauses, which express typically human physiological and psychological behavior, could be explained by the fact that the titles of the articles analyzed here maybe do not reflect research focused on human behavior issues. Alongside, the non-presence of *existential* processes to represent that something 'exists' or 'happens' implies that they are not, in general, common processes in the academic discourse. This is confirmed by Halliday and Matthiessen (2014, p. 307-308), when they point out that "[...] on the order of 3 to 4 percent of all clauses are existential". Upon it, our analysis may infer that processes realized by verbs from the world of consciousness and the physical world seem to prevail in relation to those from the world of abstract relations.

This research investigated titles from two different scientific fields. The analysis suggested that even though Rural Sciences and Communication represent distinct subjects, they both recur to the academic discourse as a way of expressing their own specificities. Therefore, the findings brought to light some differences and similarities between those fields in relation to their titles. From this study, we may devise pedagogical materials for our academic teaching practices as well as provide other EAP researchers with further knowledge on academic genre analysis.

## 5 CONCLUSION

In this study, we have emphasized several times the relevance of titles, especially in the academic context of paper titles. We can say that titles are like 'signs' that point us the way to the text. If the title is informative, concise, and attractive, it will possibly convince the reader to move forward (SWALES; FEAK, 1998). Consequently, a good title is the one that leads the reader to the text.

Our analysis reinforces these aspects: titles are short, direct, and informative. The choices behind the titles in Rural Sciences and Communication are connected to their structures, as they are represented by either simple sentences or by the format short:long for colonic titles (HARTLEY, 2005), respectively. This contrasts the two scientific areas, since it points to differences in the style of the titles.

Here we have proposed a different approach from the previous studies: a linguistic-oriented analysis, aligned with Swales and Feak's (1998) genre analysis and a semantic interpretation of the microstructure of the titles guided by the transitivity system of Systemic Functional Grammar (SFG).

This way, the fields of Rural Sciences and Communication are united by SFG of Halliday and Matthiessen (2014). Verbal choices in experimental scientific studies, such as those studied here, point to the majority of *material* processes. They express that concrete changes were unfolded and that a procedure of analysis was conducted, hence, we can expect some results.

The findings presented here can help us devise some pedagogical material for our EAP teaching practices. They also represent an Applied Linguistic input that can assist other academic researchers in their analyses. On the other hand, further studies about the context of production are still required, for example, interviews with informants from the fields studied in order to gather an insider view of the results.

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## APPENDIX A – Titles collected from European Journal of Agronomy in 2019

N°	Volume	Title
01	102	Evaluation of regional estimates of winter wheat yield by assimilating three remotely sensed reflectance datasets into the coupled WOFOST–PROSAIL model
02	102	Mineral NPK and manure fertilisation affecting the yield stability of winter wheat: Results from a long-term field experiment
03	102	Phenotypic plasticity of grain and hay quality in varieties and advanced lines from the Australian oat breeding program
04	102	Grain yield responsiveness to water supply in near-isogenic reduced-tillering wheat lines – An engineered crop trait near its upper limit
05	103	Yield components of lucerne were affected by sowing dates and inoculation treatments
06	103	Frost damage on grain number in wheat at different spike developmental stages and its modelling
07	103	Energy efficiency of winter wheat in a long-term tillage experiment under Pannonian climate conditions
08	103	Effects of input data aggregation on simulated crop yields in temperate and Mediterranean climates
09	103	Integration and potential nitrogen contributions of green manure inter-row legumes in coppiced tree cropping systems
10	103	Effects of renewal time, taproot cutting, ploughing practice, false seedbed and companion crop on docks ( <i>Rumex</i> spp.) when renewing grassland
11	103	A land-based approach for the environmental assessment of Mediterranean annual and perennial energy crops
12	103	Rice exposure to cold stress in China: how has its spatial pattern changed under climate change?
13	103	Yield loss of oilseed rape ( <i>Brassica napus</i> L.) under nitrogen deficiency is associated with under-regulation of plant population density
14	103	Mixing it up – wheat cultivar mixtures can increase yield and buffer the risk of flowering too early or too late
15	103	Nitrogen management in double-annual cropping system (barley-maize) under irrigated Mediterranean environments
16	103	Downscaling rice yield simulation at sub-field scale using remotely sensed LAI data
17	103	Estimating above ground biomass of winter wheat at early growth stages using digital images and deep convolutional neural network
18	103	Assessment of Piatã palisadegrass forage mass in integrated livestock production systems using a proximal canopy reflectance sensor
19	103	Soybean-maize succession in Brazil: Impacts of sowing dates on climate variability, yields and economic profitability
20	103	Grain quality in wheat—Impact of disease management
21	103	Exploiting genotype x environment x management interactions to enhance maize productivity in Ethiopia
22	103	Erect-leaf posture promotes lodging resistance in oat plants under high plant population
23	104	Impact of grapevine age on water status and productivity of <i>Vitis vinifera</i> L. cv. Riesling

24	104	Using preceding crop effects for climate smart sugar beet ( <i>Beta vulgaris</i> L.) cultivation
25	104	Nonlinear growth models: An alternative to ANOVA in tomato trials evaluation
26	104	Value of seasonal forecasting for sugarcane farm irrigation planning
27	104	Delayed sowing increases grain number by enhancing spike competition capacity for assimilates in winter wheat
28	104	Calibration and evaluation of the <i>STICS</i> soil-crop model for faba bean to explain variability in yield and N <sub>2</sub> fixation
29	104	Deep learning for image-based weed detection in turfgrass
30	104	Nature abhors a vacuum: Deciphering the vegetative reaction of the mango tree to pruning
31	104	A SIMPLE crop model
32	105	Wheat grown under elevated CO <sub>2</sub> was more responsive to nitrogen fertilizer in Eastern India
33	105	Modeling the effects of tropospheric ozone on wheat growth and yield
34	105	Lentil enhances the productivity and stability of oilseed-cereal cropping systems across different environments
35	105	Optimizing relative seed frequency of intercropped pea and spring barley
36	105	Examining the yield potential of barley near-isogenic lines using a genotype by environment by management analysis
37	105	Learning from the soil's memory: Tailoring of fertilizer application based on past manure applications increases fertilizer use efficiency and crop productivity on Kenyan smallholder farms
38	105	An eight-year survey of wheat shows distinctive effects of cropping factors on different <i>Fusarium</i> species and associated mycotoxins
39	105	Transpiration from canopy temperature: Implications for the assessment of crop yield in almond orchards
40	105	Exploring the differences between organic and conventional breeding in early vigour traits of winter wheat
41	105	Structural memory in grapevines: Early season water availability affects late season drought stress severity
42	105	Root growth and soil carbon turnover in <i>Opuntia ficus-indica</i> as affected by soil volume availability
43	105	The impact of fungicide treatment and Integrated Pest Management on barley yields: Analysis of a long term field trials database
44	105	Bread and durum wheat: Intra- and inter-specific variation in grain yield and protein concentration of modern Italian cultivars
45	105	A simple model simulating development and growth of an olive grove
46	105	Low-cost assessment of grain yield in durum wheat using RGB images
47	105	Long-term effects of irrigation regime on fruit development pattern of the late-maturing 'Angeleno' Japanese plum

48	105	Weather forecasts to enhance an Irish grass growth model
49	105	Yield responses of arable crops to liming – An evaluation of relationships between yields and soil pH from a long-term liming experiment
50	105	Development of a nitrogen recommendation tool for corn considering static and dynamic variables
51	106	Improving productivity and increasing the efficiency of soil nutrient management on grassland farms in the UK and Ireland using precision agriculture technology
52	106	The impact of climate change on barley yield in the Mediterranean basin
53	106	New approach to determining the surface temperature without thermal band of satellites
54	106	Increasing co-limitation of water and nitrogen drives genetic yield gain in Australian wheat
55	106	Responses of <i>indica</i> rice yield and quality to extreme high and low temperatures during the reproductive period
56	106	Soil and foliar nitrogen and boron fertilization of almond trees grown under rainfed conditions
57	106	Can reproducible comparisons of cereal genotypes be generated in field experiments based on UAV imagery using RGB cameras?
58	106	Modelling biological N fixation and grass-legume dynamics with process-based biogeochemical models of varying complexity
59	107	Wheat drought-tolerance to enhance food security in Tunisia, birthplace of the Arab Spring
60	107	Does the use of cowpea in rotation with a vegetable crop improve soil quality and crop yield and quality? A field study in SE Spain
61	107	Effects of water and rice straw management practices on water savings and greenhouse gas emissions from a double-rice paddy field in the Central Plain of Thailand
62	107	Yield potential and nitrogen dynamics of no-till silage maize ( <i>Zea mays</i> L.) under maritime climate conditions
63	107	Unravelling the relationship between adaptation pattern and yield formation strategies in Mediterranean durum wheat landraces
64	107	Impact of farming systems on agricultural landscapes and biodiversity: From plot to farm and landscape scales
65	108	Prognosis and diagnosis of sulfur status in maize by plant analysis
66	108	Maize yield estimation in West Africa from crop process-induced combinations of multi-domain remote sensing indices
67	109	Is it feasible to reduce tillage and N use while improving maize yield in irrigated Mediterranean agroecosystems?
68	109	Potential of indicators to unveil the hidden side of cropping system classification: Differences and similarities in cropping practices between conventional, no-till and organic systems
69	109	Benchmarking break-crops with wheat reveals higher risk may limit on farm adoption
70	109	Effective population size ( $N_e$ ) of organically and conventionally grown composite cross winter wheat populations depending on generation
71	109	Modeling wheat nutritional quality with a modified CERES-wheat model



72	109	Foliar N application at anthesis alters grain protein composition and enhances baking quality in winter wheat only under a low N fertiliser regimen
73	109	Evaluating the potential of winter beet in northern Germany by a simulation model
74	109	Development of a rice tungro epidemiological model for seasonal disease risk management in the Philippines
75	109	Adapting irrigated and rainfed wheat to climate change in semi-arid environments: Management, breeding options and land use change
76	109	Soil compaction effects on grassland silage yields and soil structure under different levels of compaction over three years
77	109	Residual effect of synthetic nitrogen fertilizers and impact on Soil Nitrifiers
78	109	Above- and belowground dry matter partitioning of four warm-season annual crops sown on different dates in a semiarid region
79	110	Comparison of milk thistle ( <i>Silybum marianum</i> ) and cardoon ( <i>Cynara cardunculus</i> ) productivity for energy biomass under weedy and weed-free conditions
80	110	Banana leaf pruning to facilitate annual legume intercropping as an intensification strategy in the East African highlands
81	110	On-farm diagnosis for greenhouse tomato in south Uruguay: Explaining yield variability and ranking of determining factors
82	110	The critical period for yield determination in common buckwheat ( <i>Fagopyrum esculentum</i> Moench)
83	110	Double-cropping systems based on rye, maize and sorghum: Impact of variety and harvesting time on biomass and biogas yield
84	110	Wheat grain number and yield: The relative importance of physiological traits and source-sink balance in southern Australia
85	111	Combine observational data and modelling to quantify cultivar differences of soybean
86	111	Super-resolution enhancement of Sentinel-2 image for retrieving LAI and chlorophyll content of summer corn
87	111	The role of the exponential and linear phases of maize ( <i>Zea mays</i> L.) ear growth for determination of kernel number and kernel weight
88	111	Identifying the most promising agronomic adaptation strategies for the tomato growing systems in Southern Italy <i>via</i> simulation modeling

A) Titles collected from International Journal of Communication in 2019

N°	Volume	Title
89	13	Gendered Visibility on Social Media: Navigating Instagram's Authenticity Bind
90	13	The Elephant and the Bird: Republican Candidates' Use of Strategy and Issue Framing in Twitter During the 2016 Republican Presidential Primaries
91	13	Online Incivility, Cyberbalkanization, and the Dynamics of Opinion Polarization During and After a Mass Protest Event
92	13	Tweeting to (Selectively) Engage: How Government Agencies Target Stakeholders on Twitter during Hurricane Harvey
93	13	Gendered Spaces, Gendered Friendship Networks? Exploring the Organizing Patterns of LGBTQ Youth

94	13	Celebrity Political Endorsement and Young Voters in Europe: A Five-Country Comparison on Celebrity Support Effectiveness in the European Elections
95	13	Picketing the Virtual Storefront: Content Moderation and Political Criticism of Businesses on Yelp
96	13	News Media Literacy: Effects of Consumption
97	13	The Scholarship of Public Diplomacy: Analysis of a Growing Field
98	13	How Does Communication Anxiety Influence Well-Being? Examining the Mediating Roles of Preference for Online Social Interaction (POSI) and Loneliness
99	13	Surveillance in Weak States: The Problem of Population Information in Afghanistan
100	13	Whose Death Matters? A Quantitative Analysis of Media Attention to Deaths of Black Americans in Police Confrontations, 2013–2016
101	13	Promoting Support for Public Health Policies Through Mediated Contact: Can Narrator Perspective and Self-Disclosure Curb In-Group Favoritism?
102	13	Sweetgrass AR: Exploring Augmented Reality as a Resource for Indigenous–Settler Relations
103	13	“None of Us Is an Island”: Toward the Conception of Positive Populism Through the Analysis of Pope Francis’s Twitter Communication
104	13	Call if you Can, Text if You Can’t: A Dismediation of U.S. Emergency Communication Infrastructure
105	13	Peeling Back the Onion: Formative Agenda Building in Business Journalism
106	13	Measuring Gender in News Representations of Refugees and Asylum Seekers
107	13	Older Adults’ Online Information Seeking and Subjective Well-Being: The Moderating Role of Internet Skills
108	13	Comparing Discursive and Performative Contributions to Legitimation of Government: A Study of Municipal Policy Making in Chengdu
109	13	The Associations of Appearance Comparisons with Peers and Chinese and Korean Media Figures with Thin-Ideal Internalization, Body Dissatisfaction, and the Drive for Thinness Among Female Korean-Chinese College Students in China
110	13	Political Elites’ Use of Fake News Discourse Across Communications Platforms
111	13	<i>Color TV</i> : Postcolonial Concerns and “Colored” Television Audiences in South Africa
112	13	Social Capital as an Inhibitor of Online Political Incivility: An Analysis of Behavioral Patterns Among Politically Active Facebook Users
113	13	Media Effects and Marginalized Ideas: Relationships Among Media Consumption and Support for Black Lives Matter
114	13	Graphicons and Tactics in Satirical Trolling on Tumblr.com
115	13	And Then the War Came: A Content Analysis of Resilience Processes in the Narratives of Refugees from Humans of New York
116	13	From Inside the Rhizome: Mapping the Greek Alternative Mediascape
117	13	Exploring Normative Leadership: An Egocentric Network Approach to Friends’ Norm-Signaling Relevance
118	13	Detecting Textual Reuse in News Stories, At Scale

119	13	Revisiting <i>Hearing the Other Side</i> : Distinct Associations of Social Network Characteristics With Political Discussion and Participation
120	13	Reaching Muslims from the Bully Pulpit: Analyzing Modern Presidential Discourse on Islam and Muslims from FDR to Trump
121	13	“Kingston Be Wise:” Jamaica’s Reggae Revival, Musical Livity, and Troubling Temporality in the Modern Global Music Industry
122	13	Self-Censorship of the Nira Radia Tapes: A Critical Juncture in the Indian Journalistic Field
123	13	Appealing to the Heart: How Social Media Communication Characteristics Affect Users’ Liking Behavior During the Manchester Terrorist Attack
124	13	Unpacking the Influence of Informational, Organizational, and Structural Factors on the Longitudinal Change of the NPO Follower-Followee Network on Twitter
125	13	Polls Versus Commenters: Effects of Cross-Cutting Opinion Climates on Cross-Platform Opinion Expression
126	13	Welcome to Korea Day: From Diasporic to <i>Hallyu</i> “Fan-Nationalism”
127	13	What You See Is What You Know: The Influence of Involvement and Eye Movement on Online Users’ Knowledge Acquisition
128	13	Media Use, Cross-National Samples, and the Theory of Planned Behavior: Implications for Climate Change Advocacy Intentions
129	13	News Media Trust and News Consumption: Factors Related to Trust in News in 35 Countries
130	13	The Knowledge Gap Hypothesis Across Modality: Differential Acquisition of Knowledge From Television News, Newspapers, and News Websites
131	13	“Shouting Matches and Echo Chambers”: Perceived Identity Threats and Political Self-Censorship on Social Media
132	13	Inside the Voter’s Mind: The Effect of Psychometric Microtargeting on Feelings Toward and Propensity to Vote for a Candidate
133	13	Personal–Organizational Processes in Workplace Health Promotion: Understanding Wellness Program Participation in China
134	13	Visibility Through Information Sharing: The Role of Tweet Authors and Communication Styles in Retweeting Political Information on Twitter
135	13	Proposing a Practical Media Taxonomy for Complex Media Production
136	13	The Wisdom of the Crowd Versus the Wisdom in the Crowd: Testing the Effects of Aggregate User Representation, Valence, and Argument Strength on Attitude Formation in Online Reviews
137	13	The Sequential and Conditional Nature of 21st-Century Digital Skills
137	13	On the Concept of Medium: An Empirical Study
138	13	Political Campaigning Games: Digital Campaigning With Computer Games in European National Elections
139	13	The Political and Civic Potential of Popular Women’s Magazines: The Israeli Case
140	13	The Role of Structural Factors in Antibiotic Use Among European Union Citizens: A Multilevel Analysis
141	13	Do I Look All Right (or All Left)? The Interactive Effect of Facial Appearance and Political Attitudes on Social Attraction

142	13	Papi Jiang and Microcelebrity in China: A Multilevel Analysis
143	13	Building a Network to “Tell China Stories Well”: Chinese Diplomatic Communication Strategies on Twitter
144	13	Connective Action and Affective Language: Computational Text Analysis of Facebook Comments on Social Movements in South Korea
145	13	“Funnel Time” in the Heartland: Shifting Temporalities and Changing Materialities at <i>The Omaha World-Herald</i>
146	13	Popular Media in the Metropolitan Third Places: Exploring the Uses and Gratifications of the Mobile <i>Homo Economicus</i>
147	13	The Distant Sufferer: Measuring Spectatorship of Photojournalism
148	13	“Men Are Scum”: Self-Regulation, Hate Speech, and Gender-Based Censorship on Facebook
149	13	Portrayals of Unethical and Unvirtuous Workplace Behaviors on TV: Implications for Vocational Anticipatory Socialization
150	13	Toward a Performative Understanding of Politeness
151	13	Proximity and Networked News Public: Structural Topic Modeling of Global Twitter Conversations about the 2017 Quebec Mosque Shooting
152	13	Norms as Regulating Factors for Self-Disclosure in a Collapsed Context: Norm Orientation Among Referent Others on Facebook
153	13	(Re)constructing Professional Journalistic Practice in Mexico: Verificado’s Marketing of Legitimacy, Collaboration, and Pop Culture in Fact-Checking the 2018 Elections
154	13	Unpublishing the News: An Analysis of U.S. and South Korean Journalists’ Discourse About an Emerging Practice
155	13	Live Ambience and Homestead Away From Home: Social Media Use and Dependency by Visiting Chinese Students in the United States
156	13	Social Identity and Group Emotion: Media Effects and Support for Military Intervention
157	13	Identification and Comparison of the Persuasive Elements Present in “Best Answers” to STD-Related Questions on Social Q&A Sites: Yahoo! Answers (United States) Versus Knowledge-iN (South Korea)
158	13	Counter-Framing Effects of User Comments
159	13	Emoticon, Emoji, and Sticker Use in Computer-Mediated Communication: A Review of Theories and Research Findings
160	13	Making Meaning of Media Development Today
161	13	To Like is to Support? The Effects and Mechanisms of Selective Exposure to Online Populist Communication on Voting Preferences
162	13	The Syrian Regime’s Strategic Political Communication: Practices and Ideology
163	13	Stand Up, Show Respect: Athlete Activism, Nationalistic Attitudes, and Emotional Response
164	13	Circulating Mobile Apps in Greater China: Examining the Cross-Regional Degree in App Markets
165	13	“#IAmGay# What About You?”: Storytelling, Discursive Politics, and the Affective Dimension of Social Media Activism against Censorship in China

166	13	How Partisan Online Environments Shape Communication with Political Outgroups
167	13	Making Peace or Holding a Grudge? The Role of Publics' Forgiveness in Crisis Communication
168	13	"Hey, I'm Having These Experiences": Tumblr Use and Young People's Queer (Dis)connections
169	13	A Matter for the Boss? How Personalized Communication Affects Recipients' Perceptions of an Organization During a Crisis
170	13	A Meta-Analysis of the Effects of Sociodemographic Factors on Social Media Adoption
171	13	To Verify or to Disengage: Coping with "Fake News" and Ambiguity
172	13	Cancer-Prevention Messages on Chinese Social Media: A Content Analysis Grounded in the Extended Parallel Process Model and Attribution Theory Model and Attribution Theory
173	13	Social Media Influence: Performative Authenticity and the Relational Work of Audience Commodification in the Philippines
174	13	Engagement, Formality, and Visibility: Managing Paradoxes of Using Mobile Instant Messaging for Work
175	13	Intermedia Agenda-Setting in a Policy Reform Debate
176	13	Embedding a Wiki Platform Within a Traditional Survey: A Novel Approach to Assess Perceived Argument Strength in Communication Research
177	13	Jitter: Clocking as Audible Media
178	13	Studying the Live Cross-Platform Circulation of Images With Computer Vision API: An Experiment Based on a Sports Media Event
179	13	Toward Traditional or Atypical Parenting: Mediated Communication in Chinese Transnational Families
180	13	Determining Political Text Complexity: Conceptualizations, Measurements, and Application
181	13	Risk Perception and Privacy Regulation Preferences From a Cross-Cultural Perspective. A Qualitative Study Among German and U.S. Smartphone Users
182	13	Effects of Communication-Oriented Overload in Mobile Instant Messaging on Role Stressors, Burnout, and Turnover Intention in the Workplace
183	13	One Does Not Simply Create a Meme: Conditions for the Diffusion of Internet Memes
184	13	The Battle for #Baltimore: Networked Counterpublics and the Contested Framing of Urban Unrest
185	13	Who Decides What Is Personal Data? Testing the Access Principle with Telecommunication Companies and Internet Providers in Hong Kong
186	13	The Digital Divide, Social Inclusion, and Health Among Persons With Mental Illness in Poland
187	13	Sociodemographic Analysis of TV Genre Preference: The Lebanese Case
188	13	From the Studio to the Street: Cultivating Democratic Norms in Uganda
189	13	Using the Internet to Mobilize Marginalized Groups: People With Disabilities and Digital Campaign Strategies in the 2016 U.S. Presidential Election
190	13	In the Shadow of State Power: Citizenship Rights, Civil Society, and Media Representation in China, 2000–2012

191	13	Counting Queerness in Games: Trends in LGBTQ Digital Game Representation, 1985-2005
192	13	What Do We Mean When We Talk About Transparency? Toward Meaningful Transparency in Commercial Content Moderation
193	13	In the Warcraft Universe We Trust: An Analysis of Transmedia Advertising Strategies in the World of Warcraft Video Game Series (“Battle Chest 3.0,” “Cataclysm,” and “Mists of Pandaria”)
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