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Metadiscourse Use in Spanish Academic Writing: Exploring the Interface of Nativeness and Expertise

El Uso del Metadiscurso en la Escritura Académica Española: Una Exploración de la Interfaz entre el Estatus Nativo/No Nativo y el Nivel de Experiencia

D. Gang Yao

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Tesis dirigida por Dra. María Luisa Carrió Pastor, Dr. Moisés Almela Sánchez
y Dr. Pascual Cantos Gómez

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The Road Not Taken

By Robert Frost

Two roads diverged in a yellow wood,
And sorry I could not travel both
And be one traveler, long I stood
And looked down one as far as I could
To where it bent in the undergrowth;

Then took the other, as just as fair,
And having perhaps the better claim,
Because it was grassy and wanted wear;
Though as for that the passing there
Had worn them really about the same,

And both that morning equally lay
In leaves, no step had trodden black.
Oh, I kept the first for another day!
Yet knowing how way leads on to way,
I doubted if I should ever come back.

I shall be telling this with a sigh
Somewhere ages and ages hence:
Two roads diverged in a wood, and I—
I took the one less traveled by,
And that has made all the difference.

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Abstract

Metadiscourse, which is defined as the ways in which writers/speakers use reflexive language to interact with readers/hearers, has gained increasing scholarly interest over the past few decades. In written academic discourse, metadiscourse elements are considered crucial as i) their use helps writers organize information flow to guide readers through the text (interactive dimension: e.g., *además, primero, como se ha mencionado, por tanto, es decir*); ii) they allow writers to express their stance on propositional information and engage readers in the co-construction of the text (interactional dimension: e.g., *puede que, en nuestra opinión, efectivamente, curiosamente, veamos*).

Despite the widespread popularity of this research topic, most previous metadiscourse studies have centered around English, whereas other languages such as Spanish and especially Spanish as a foreign language have been rather under-researched. Moreover, although metadiscourse use is considered a multifactorial phenomenon, most of the prior research has focused on investigating either a single factor or multiple factors but without exploring the potential interaction between the factors.

To plug the gap, the present study sets out to examine the role of nativeness and expertise in the patterns of metadiscourse use in Spanish academic writing. To this end, four written academic corpora (110 texts, totaling 1.2 million word tokens) were compiled to represent different nativeness (Spanish non-native and Spanish native) and expertise (novice and expert) of the writers. Drawing on the interpersonal model by Hyland (2005a) and other valuable research, I adopted a fine-grained taxonomy as the analytical framework for metadiscourse analysis and created a list of Spanish markers for metadiscourse search. The computer-assisted qualitative data analysis software package, MAXQDA 2020 (VERBI Software, 2019), was used to manage the corpora and code metadiscourse elements. The obtained data were analyzed both quantitatively and qualitatively.

The statistical test results showed that there were significant differences between non-native/native and novice/expert writer groups in the employment of certain metadiscoursal resources. Moreover, the key metadiscourse item analysis also indicated that some markers were highly characteristic of certain writer groups, probably due to several reasons including register awareness, genre differences, lexical competence, and culture-bound factors. Lastly, the qualitative textual analysis revealed each metadiscoursal resource's specific discoursal/rhetorical functions in Spanish texts, where most of them were shared among the writer groups while some of them were performed differently across writer groups.

Implications of the study were drawn from both teachers' and learners' perspectives. The conclusion also points out some limitations and potential research avenues of the study.

Keywords: academic discourse, academic writing, metadiscourse, Spanish

Resumen

El metadiscurso, que se define como el modo en que el emisor usa el lenguaje reflexivo para interactuar con el receptor, ha obtenido un creciente interés académico en las últimas décadas. Es un concepto importante y ampliamente discutido en la lingüística aplicada, sobre todo en el área del análisis del discurso, la pragmática y la enseñanza de idiomas.

Más concretamente, en el discurso académico escrito, se considera crucial emplear el metadiscurso por dos razones. La primera es que ayuda a los autores a organizar las diferentes partes de la información, permitiéndoles, por consiguiente, guiar a sus lectores en el texto. Al respecto, se destacan algunos marcadores metadiscursivos que forman parte de esta función: *además, primero, como se ha mencionado, por tanto y es decir*. La segunda es que permite a los autores expresar su postura sobre la información proposicional e involucrar a sus lectores en la co-construcción del texto. Entre los marcadores metadiscursivos que desempeñan esta función son: *puede que, en nuestra opinión, efectivamente, curiosamente y veamos*.

No obstante, a pesar de la popularidad e interés que goza el metadiscurso, una gran variedad de estudios se han centrado en la lengua inglesa, mientras que se ha investigado mucho menos en otros idiomas como el español. En este sentido, también sería de esperar que hubiera poca investigación del metadiscurso en el contexto del español como lengua extranjera (ELE). Por otro lado, aunque se ha documentado que muchos factores como la lengua-cultura, la disciplina, el género discursivo y el nivel de experiencia, contribuyen a la variación del uso del metadiscurso, la mayoría de los trabajos previos se han centrado en la observación de un solo factor o múltiples factores, pero sin explorar la posible interrelación entre ellos. Para llenar este vacío, el presente estudio propone examinar hasta qué grado el estatus nativo/no nativo y el nivel de experiencia (principiante y experto) afectan el uso metadiscursivo en la escritura académica española.

Esta tesis doctoral se estructura en siete capítulos. El primer capítulo sirve de

marco introductorio sobre el tema de investigación que desarrolla la tesis. Comienza con una breve presentación del fenómeno del metadiscurso y su importancia en nuestra comunicación cotidiana. A continuación, se explican el ámbito y enfoque temáticos de la tesis, concretamente, se pone de manifiesto por qué se decidió investigar el metadiscurso en la prosa académica española, partiendo particularmente de dos factores: el estatus nativo/no nativo y el nivel de experiencia. Luego, bajo este marco se especifican los objetivos, las hipótesis y las preguntas de investigación de la tesis. En la Sección 1.4 se justifica por qué el presente estudio es importante y para quién resulta útil. Las últimas dos secciones tratan, por un lado, de clarificar unos términos, y por otro, presentar de manera breve la estructura de la tesis.

Después de adentrarnos en la literatura referente a este tema, se advierte poco acuerdo sobre la conceptualización, la identificación y la clasificación del metadiscurso. Esto se debe a que la propia noción es poco clara y a que cada cual tiene sus interpretaciones partiendo de las perspectivas divergentes. Por tanto, el segundo capítulo trata de ahondar en estos aspectos teóricos del metadiscurso. El capítulo comienza con una presentación de las definiciones propuestas por varios estudiosos, que –aunque distintas– consideran la reflexividad (i.e., el uso auto-reflexivo del discurso) o la interacción (i.e., la interacción entre el autor y el lector mediante el texto) como fundamentos de la conceptualización del metadiscurso. A continuación, se revisan y se evalúan los diferentes modelos del metadiscurso, los cuales se pueden dividir en tres enfoques: el enfoque estrecho, el enfoque intermedio y el enfoque amplio. En definitiva, todos ellos constituyen un continuo para entender las categorías funcionales del metadiscurso: el enfoque estrecho, que se puede denominar como el ‘modelo basado en metatexto’, solo incluye las categorías metatextuales que sirven para organizar el texto; el enfoque intermedio, también referido como el ‘modelo reflexivo’, abarca la interacción entre autor-lector (que sirve para dirigir a los lectores directamente e involucrarlos en un diálogo simulado), además del metatexto; y el enfoque amplio, que se denomina ‘modelo interactivo’ o ‘modelo interpersonal’, comprende todas las categorías de dichos modelos e incluye además la postura, que sirve para expresar las opiniones y actitudes epistémicas y afectivas del autor. La Sección 2.2 aborda cinco

cuestiones relacionadas con la noción del metadiscurso:

- i) La demarcación sobre lo que es considerado metadiscursivo y lo que es considerado proposicional.
- ii) Los criterios de cómo identificar un marcador o un elemento como metadiscurso (en vez de proposición).
- iii) La especificación del tamaño de la unidad lingüística de un segmento metadiscursivo.
- iv) La cuestión de cómo tratar la multifuncionalidad de las expresiones metadiscursivas.
- v) La cuestión de la subjetividad durante la clasificación de los elementos metadiscursivos.

Es sabido que, en su uso, el metadiscurso muestra una gran variación y que muchos factores pueden contribuir a esta variación. Por ejemplo, los dos factores que la presente tesis analiza, es decir, el estatus nativo/no nativo y el nivel de experiencia, pueden jugar un papel en la variación del uso del metadiscurso. En vista de esto, el Capítulo 3 tiene como objetivo principal revisar los estudios contrastivos donde la variación del uso del metadiscurso es el objeto de investigación. Después de realizar la revisión en cuestión, se han identificado nueve factores variables: lengua-cultura (inglés, español, chino, nativo y no nativo), disciplina (ciencias sociales, ciencias naturales, lingüística, medicina y negocios), género discursivo (tesis, artículo de investigación, manual y reseña), registro (email personal y ensayo argumentativo), modo (escrito y oral), nivel de experiencia (principiante, experto, alumno y profesor), periodo (años 80, 90, 00) y sexo del autor (hombre y mujer).

También hay algunos estudios que examinan dos o más factores simultáneamente, por ejemplo, el factor disciplina junto con el género discursivo o el factor lengua-cultura junto con el factor nivel de experiencia. En la Sección 3.2, se ponen de manifiesto algunos posibles problemas encontrados en los estudios contrastivos, como la comparabilidad del corpus, la ausencia de datos observacionales y el método del análisis estadístico. Por otra parte, dado que la presente tesis trata del uso del metadiscurso en el ámbito del español académico particularmente, la Sección 3.3 se

dedica a una revisión de estudios en lo que respecta a la variación del uso del metadiscurso en el español académico. Generalmente, los estudios de este tipo son escasos y examinan solamente alguna categoría específica del metadiscurso (por ejemplo, atenuadores) sin considerar el fenómeno del metadiscurso en su conjunto. A este respecto, el presente estudio podría arrojar una nueva luz y llenar parcialmente ese vacío de investigación.

El cuarto capítulo proporciona una descripción detallada de los métodos, herramientas y procedimiento de la presente investigación, que se realiza en tres fases con nueve pasos, como se muestra a continuación.

Fase 1: Construcción de los corpus

Paso 1: Seleccionar y recopilar los textos de los corpus. Se construyeron cuatro corpus de textos académicos para representar los diferentes estatus nativo/no nativo y niveles de experiencia de los autores en español. El esquema es el siguiente: un corpus de principiantes no nativos, un corpus de principiantes nativos, un corpus de expertos no nativos y un corpus de expertos nativos. Además, se precisa que los textos de los corpus de no nativos (tanto principiantes como expertos) provinieron de los autores sinohablantes que usaban español para fines académicos, mientras que los textos de los corpus de nativos (tanto principiantes como expertos) procedieron de los autores hispanohablantes. Asimismo, cabe aclarar que los textos de los corpus de principiantes (tanto nativos como no nativos) se componían por trabajos de fin de máster producidos por estudiantes de máster, mientras los textos de los corpus de expertos (tanto nativos como no nativos) se constituían de artículos de investigación publicados por profesores/investigadores. En total, los cuatro corpus consisten en 110 textos, que alcanzan 1,2 millones de palabras.

Paso 2: Documentar, limpiar y formatear los textos de los corpus. Todos los textos recopilados se etiquetaron debidamente para registrar los metadatos y facilitar las comparaciones posteriores entre grupos. Se eliminaron todos los elementos irrelevantes para el análisis del metadiscurso, entre ellos: portada, título, autores, citas, tablas, figuras, bibliografías y anexos. Finalmente, se guardaron los textos procesados con el formato .rft en diferentes carpetas según el grupo al que pertenecían.

Durante la construcción de los corpus, dos cuestiones merecen una atención especial: el copyright y la comparabilidad de los corpus. Primero, los corpus de este estudio fueron compilados únicamente con fines de investigación, y los autores de cada texto fueron referenciados apropiadamente. Por tanto, se podría justificar que el proceso de compilar los corpus en la presente tesis se ajustó a la ética y no infringió la ley de copyright. En cuanto a la comparabilidad de los corpus, de acuerdo con una lista de verificación (ver Tabla 4-3), se puede advertir que los cuatro corpus son comparables en la mayoría de los aspectos, excepto en el aspecto del género discursivo entre los corpus de principiantes y los de expertos. Es decir, como los corpus de principiantes proceden de trabajos de fin de máster y los corpus de expertos resultan de artículos de investigación, no se pueden comparar en aspectos como la longitud de textos, el número de autores y el propósito de la comunicación. Este hecho puede afectar a la interpretación de la variación del uso del metadiscurso entre grupos.

Fase 2: Etiquetado del metadiscurso

Paso 3: Adoptar el esquema de etiquetado. El esquema de etiquetado consiste en una serie de etiquetas con su definición y ejemplos ilustrativos, según lo cual los analistas etiquetan los textos. El esquema de etiquetado adoptado en este estudio se basó en el modelo interpersonal de Hyland, pues este modelo se considera teóricamente sólido y analíticamente fiable, además de que ha sido ampliamente utilizado en estudios anteriores. El modelo distingue dos dimensiones del metadiscurso: la interactiva y la interaccional. Los recursos interactivos del metadiscurso se emplean para organizar información proposicional y guiar a los lectores en el texto; mientras que los recursos interaccionales del metadiscurso se usan para expresar la postura del autor y hacer al lector imaginario participar en la construcción discursiva.

En cada una de las dos dimensiones, existen cinco categorías funcionales: i) el metadiscurso interactivo incluye marcadores transicionales, marcadores discursivos, marcadores endofóricos, códigos de glosa y marcadores evidenciales; ii) el metadiscurso interaccional abarca atenuadores, intensificadores, marcadores de actitud, automenciones y marcadores de compromiso. Para precisar y matizar la descripción de los recursos metadiscursivos, el esquema de etiquetado adoptado en este estudio se

apoyó también en otros estudios y se establecieron finalmente 15 subtipos de metadiscursivo interactivo y 4 subtipos de marcadores de compromiso.

Paso 4: Crear una lista de marcadores metadiscursivos. En este estudio se combinaron varios métodos para crear la lista de marcadores metadiscursivos españoles. En primer lugar, se consultó las listas elaboradas por investigadores previos –sobre todo en el ámbito español– para predeterminar una serie de candidatos a marcadores. En segundo lugar, no se descartó la posibilidad de complementar la lista provisional con marcadores nuevos identificados manualmente durante el proceso de revisión (ver el Paso 7). La lista final se puede consultar en el Anexo II.

Paso 5: Elegir una herramienta de etiquetado. Para etiquetar los marcadores metadiscursivos, se eligió MAXQDA 2020, un software para el análisis cualitativo asistido por ordenador (del inglés Computer-assisted Qualitative Data Analysis Software - CAQDAS), en lugar de las herramientas de corpus convencionales (como AntConc, WordSmith Tools) o no convencionales (como UAM CorpusTool, METOOL), pues el primero es más conveniente y efectivo en términos del etiquetado y procedimiento.

Paso 6: Realizar la búsqueda y el etiquetado. En este paso, se utilizaron dos funciones de MAXQDA 2020: el auto-etiquetado con diccionario y el auto-etiquetado con expresiones regulares. La primera función pudo localizar y etiquetar todos los segmentos en los corpus que coincidían con la lista de marcadores predeterminada. La segunda permitió buscar y etiquetar los marcadores que no tenían una forma lingüística fija o delimitada, tal es el caso de los marcadores evidenciales y algunos marcadores interaccionales.

Paso 7: Hacer la revisión manual. Sin haber tomado en consideración el contexto o co-texto de cada segmento, se produjeron algunos errores en el etiquetado del último paso. Por tanto, hubo que hacer una revisión contextual de cada segmento etiquetado automáticamente por el software. Si un segmento etiquetado no era metadiscursivo según su contexto, se eliminaba su etiqueta (o categoría); si era más apropiado etiquetar un segmento con otra categoría, se sustituía su etiqueta por otra.

Paso 8: Calcular la fiabilidad inter-anotadores. Dado que la revisión manual en el

último paso puede conllevar cierta subjetividad proveniente de las decisiones del anotador, es necesario involucrar a un segundo anotador en el proceso de etiquetado y luego estimar hasta qué punto los dos anotadores coinciden en las decisiones de este. Con este fin, se diseñó, en primer lugar, un manual que sirviese como instrucción de etiquetado; luego, se seleccionaron de manera aleatoria el 10% de los corpus para que los dos anotadores los etiquetaran independientemente y se calculara la fiabilidad inter-anotadores; finalmente, los dos anotadores organizaron una reunión para discutir los casos cuestionados.

Fase 3: Análisis de los datos

Paso 9: Analizar los datos cuantitativa y cualitativamente. Después de haber obtenido los datos etiquetados, se llevaron a cabo los análisis cuantitativo y cualitativo. Se ejecutó, en primer lugar, una prueba de 2*2 MANOVA para determinar si el factor de estatus nativo/no nativo y nivel de experiencia afectaba la distribución de las categorías metadiscursivas entre los corpus, es decir, si los cuatro grupos de autores españoles diferían significativamente en el empleo de los recursos metadiscursivos. Sin embargo, cuando las suposiciones de MANOVA fallaron, se utilizó la prueba estadística alternativa Mann-Whitney U test. Posteriormente, se adoptó un análisis de marcadores metadiscursivos clave para destacar los marcadores que caracterizaban un grupo de escritores frente a otro grupo. Finalmente, se empleó un análisis textual cualitativo e interpretativo para identificar las funciones discursivas y/o retóricas específicas de cada recurso metadiscursivo, así como las diferencias en las realizaciones de estas funciones entre los grupos.

El quinto capítulo presenta los resultados de los análisis cuantitativo y cualitativo sobre el uso del metadiscurso interactivo. En primer lugar, la estadística inferencial indica que los autores no nativos utilizaron significativamente menos marcadores de adición y de citación no integral pero significativamente más referencias visuales, marcadores de reformulación y marcadores de ejemplificación. Con respecto al nivel de experiencia, los escritores principiantes emplearon significativamente más secuenciadores, marcadores de fase, marcadores anafóricos y marcadores catafóricos pero significativamente menos marcadores sinópticos.

En segundo lugar, el análisis de marcadores interactivos clave muestra que los escritores principiantes no nativos usaron excesivamente marcadores como *o sea*, *por eso* y *entonces*, probablemente por una carencia de la conciencia de registro; los grupos de no nativos emplearon en mayor cantidad *arriba* y *abajo*, esto tal vez por una transferencia lingüística negativa del chino o inglés; debido a un repositorio léxico limitado, los grupos de no nativos utilizaron frecuentemente *en cuanto a* y *por ejemplo*, pero utilizaron con menos frecuencia marcadores como *finalmente*, *por tanto*, *asimismo*, *con todo* y *con respecto a*; y finalmente, la alta presencia de marcadores como *en el capítulo*, *en el X capítulo* y *en este capítulo* en los corpus de principiantes y de marcadores como *en este artículo* en los corpus de expertos pueden atribuirse a las diferencias del género discursivo entre los trabajos de fin de máster y los artículos de investigación.

En tercer y último lugar, los resultados cualitativos sugieren que se compartieron la mayoría de las funciones discursivas y/o retóricas del metadiscurso interactivo entre todos los grupos de autores; no obstante, hay algunas funciones que se utilizaron más por un grupo que por otros. Por ejemplo, los escritores no nativos emplearon menos marcadores de reformulación con la función de distanciamiento que los nativos. Por otro lado, solamente los principiantes utilizaron topicalizadores con una función digresiva en sus textos. Los grupos de no nativos prefirieron usar la construcción personalizada *como hemos X* para proyectar su imagen de autor en el texto al revisar información mencionada anteriormente, y los nativos, en cambio, optaron por la construcción impersonalizada *como (ya) se ha X* para resaltar la información anterior, manteniendo así una distancia discursiva con los lectores. De nuevo, por la diferencia del género discursivo entre trabajos de fin de máster y artículos de investigación, es habitual que en los textos de los principiantes se utilice los enunciadores para anunciar los objetivos del capítulo o del trabajo, los marcadores catafóricos sirven para dar una vista previa sobre el siguiente capítulo, y los marcadores sinópticos se usan para describir lo general del trabajo de fin de máster. Estas funciones o bien estaban ausentes en los textos de expertos o bien se adaptaban al género de artículo; a manera de ejemplo, los enunciadores en un artículo, a su vez, solían desempeñar la función de anunciar los

objetivos del artículo.

Del mismo modo, el sexto capítulo presenta los resultados cuantitativos y cualitativos sobre el uso del metadiscurso interaccional. Primero, a través de la estadística inferencial se sabe que los autores no nativos emplearon significativamente más los recursos de automenciones, marcadores de compromiso y referencias a los lectores, pero significativamente menos los atenuadores en comparación con sus contrapartes nativas; en el plano del nivel de experiencia, los escritores principiantes usaron significativamente más que los expertos los marcadores de actitud y referencias a los lectores.

Segundo, el análisis de marcadores interaccionales clave revela que el sobreuso de *normalmente*, *hace falta* y *en realidad* por parte de los escritores no nativos podría obedecer a la falta de conciencia de registro; los grupos de no nativos y/o principiantes utilizaron con poca frecuencia marcadores como *precisamente*, *probablemente*, *en efecto*, *ciertamente*, *constatar (que)* y *sugerir (que)*, quizás por su baja competencia léxica; y la diferencia del género discursivo entre trabajos de fin de máster y artículos de investigación (i.e., autor único vs. autores múltiples) puede explicar la alta frecuencia del *(yo)* en los textos de los principiantes. Además de estos factores comunes, debido a una falta de familiaridad con las convenciones de la escritura académica española, los autores no nativos emplearon significativamente menos los atenuadores de tipo escudo (por ejemplo, **ría(n)* y *parecer*), y el grupo de principiantes no nativos usó mucho más *opinamos que* y *creemos que*; la cultura colectiva de China, así como las diferentes prácticas de enseñanza, podría explicar la alta frecuencia de los pronombres de primera persona del plural (i.e., *(nosotros)* **mos*, *nos*, *nuestr**) frente al uso infrecuente de pronombres de primera persona del singular (i.e., *(yo)*, *me*, *mi*, *mis*) en los textos de escritores principiantes no nativos.

Tercero, los resultados cualitativos señalan que los grupos de no nativos tendían a hacer argumentos o narraciones menos categóricos y precisos mediante el uso de aproximadores (por ejemplo, *generalmente*, *normalmente*), mientras que los autores nativos prefirieron emitir a los lectores su grado de incertidumbre o confianza sobre los argumentos usando escudos; los escritores no nativos también tendían a expresar sus

convicciones y dudas a través de atenuadores de primera persona (por ejemplo, *creemos*, *opinamos*, *creo que*) en comparación con sus contrapartes nativas; por último, ya que los nativos emplearon significativamente menos los recursos de automenciones que los no nativos, sería de esperar que se desempeñaran mucho menos las diversas funciones de automenciones en los textos de autores nativos, tales como anticipar o repasar una información y elaborar argumentos.

El séptimo y último capítulo concluye la tesis con una recapitulación de los principales hallazgos, los cuales contestan a las preguntas de investigación formuladas al principio. A continuación, en vista del carácter aplicado de la presente tesis, se ofrece una reflexión sobre las implicaciones pedagógicas sugeridas por los hallazgos, tanto desde la perspectiva del profesor como desde la perspectiva del alumno. Además, en base a toda la tesis, se evalúan los posibles impactos o contribuciones teóricos, empíricos y metodológicos de la presente investigación. Finalmente, se discuten las limitaciones del presente estudio y se hacen recomendaciones para futuras investigaciones.

Palabras clave: discurso académico, escritura académica, metadiscurso, español

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Chapter 1 Introduction

1.1. Background to metadiscourse

When people communicate, whether in writing or speaking, we sometimes only exchange propositional information (i.e., subject matter that can be either true or false) (1a-d); but more often, we additionally interact and negotiate with our readers or hearers. As Hyland (2005a: 3) put it, “[l]anguage is always a consequence of interaction”. In the course of interaction and negotiation, we convey our linguistic awareness, voice, attitude, and persona to the audience by giving explicit commentary on the ongoing discourse (see underlined elements in 1e-i). This kind of commentary-like language is *metadiscourse* (Ädel, 2006, 2012a; Hyland, 2017), the main topic of the present thesis.

- (1) a. It's 10 o'clock.
- b. Today is a sunny day.
- c. In logic and linguistics, a proposition is the meaning of a declarative sentence.
- d. In July 2021, Chinese authorities reclassified the giant panda as vulnerable rather than endangered.
- e. Jewish weddings are both religious and civil. Therefore two official applications for marriage are necessary.
- f. The consequences of this requirement are examined in the next chapter.
- g. It is important to know that success isn't about a destination but a journey.
- h. Unfortunately, the temple is no longer open to the general public.
- i. Multitasking isn't as efficient as we might believe. Imagine that your brain is a computer: If too many windows are open at once, the whole operating system slows down.

(Source: from the Internet)

Yet, it is unclear what kind of role metadiscourse plays in the text and speech and whether it is important. To address this question straightforwardly, we can remove the underlined elements in examples (1e-i) to see how this action affects these sentences.

While we can still understand their gist, some important things are missing. We probably feel confused about examples (1e-f) because the sentences lack coherence or cohesion, we might not be able to grasp the attitude that the writer/speaker wanted to express (examples 1g-h), or reader/hearer engagement and persuasion effects drop significantly while the distance between the discourse participants increases, as in example (1i). By restoring these commentaries to the discourse, the audience easily knows how different discourse units are organized logically and cohesively, what stance is adopted by the writer/speaker, and how to respond to the unfolding message. In a word, metadiscourse is the way the writer/speaker intrudes into the discourse to direct (rather than to inform) the reader/hearer to preferred interpretations of propositional information (Crismore, 1983; Flowerdew, 2015).

Metadiscourse thus plays a crucial role in achieving successful and effective communication and also presents a solid basis for recognizing communication as social engagement (Ädel, 2012a; Hyland, 2005a). However, despite its importance in our daily communication, metadiscourse received little attention until the 1980s, after the appearance of several seminal early contributions in the field, such as Williams ([1981] 1990), Crismore (1983, 1989), and Vande Kopple (1985). These publications provided fundamental insights into, among other things, how metadiscourse is construed and what are its basic types. Later, the field witnessed a research boom after the appearance of two landmark monographs by Hyland (2005a) and Ädel (2006). In their work, not only the concept of metadiscourse was elaborated on extensively and thoroughly, but also corpus techniques were employed to research metadiscourse use systematically in a large body of text. Today, metadiscourse has become one of the most widely used terms in discourse analysis and language education, and it “has been enthusiastically taken up by researchers seeking to characterize a range of genres, languages, modes and proficiencies” (Hyland, 2017: 17).

1.2. Scope and focus of the thesis

Metadiscourse is a fundamental part of both written and spoken texts. It constitutes an

indispensable means of improving communication, facilitating understanding, and establishing a relationship between writers and readers or speakers and hearers. However, previous scholars agree that metadiscourse tends to be centered on written language (Hyland, 2005a, 2017; Ädel, 2006; Flowerdew, 2015). This is probably because writing plays a significant role in our daily life, such as in professional, academic, and social contexts; and it also plays a central role in our personal experience and social identities (Hyland, 2005a). So good writing often translates well into success in all kinds of contexts. Good writing, in turn, is closely associated with, among other features, metadiscourse since it helps writers convey ideas and engage readers effectively (ibid.). Logically, metadiscourse is considered an important index of good writing for academic purposes. Hence, metadiscourse in academic writing will be the focus of the present thesis.

Further, the focus of the investigation is narrowed down to Spanish academic writing. Two reasons are behind this decision. The first and foremost reason is related to my research interest. I have learned Spanish as a foreign language for almost ten years. During this learning journey, Spanish academic writing has always been the central theme; for example, I have completed both undergraduate and master's thesis in Spanish, and I have also written numerous argumentative essays in this language. What is Spanish academic writing like is the question that I was eager to know as a Spanish learner. Finally, the idea of how metadiscourse is used in Spanish academic writing was conceived during my doctoral research under the influence of my thesis supervisors. The second reason is that previous research on metadiscourse tends to center around English, mainly English academic writing while other languages like Spanish have been researched significantly less (see the review in Hyland, 2017). On the other hand, many studies that deal with the Spanish context tend to focus on a contrastive analysis of English and Spanish metadiscourse use (Salas, 2015). Thus, evidence of the metadiscourse phenomenon from Spanish academic writing alone is insufficient.

As a common discursual/rhetorical strategy, the use of metadiscourse is generally recommended in academic writing. However, it should be noted that only using it

properly and effectively will lead to successful academic writing. The truth, nevertheless, is that due to various reasons such as different language cultures and expertise levels, many academic writers fail to gain a sufficient understanding of what the standard practices of metadiscourse use are and how to employ metadiscourse resources properly. This issue also applies to Spanish academic writers since the communicative competence of non-native and/or novice writers is primarily influenced by their native status and expertise level. Previous studies on metadiscourse use in Spanish academic writing often considered external factors such as discipline (Müller, 2007; García Negroni, 2008; Salas, 2015); meanwhile, the writers' internal factors such as nativeness and expertise have remained largely neglected. Hence, the present investigation intends to plug the gap by focusing on the role of nativeness and expertise in metadiscourse use by Spanish academics. Furthermore, due to personal interest and experience, I opted for L1 Chinese students and teachers of Spanish as non-native and/or novice writers to compare them with Spanish natives and/or novices.

1.3. Aims and research questions

The overarching aim of the present thesis is to investigate the extent to which the factors of nativeness and expertise may affect the pattern of metadiscourse use in Spanish academic writing. Specifically, the thesis will compare the use of metadiscourse by four Spanish writer groups: non-native (L1 Chinese) novice writers, non-native (L1 Chinese) expert writers, Spanish native novice writers, and Spanish native expert writers.

As noted in the preceding section, whether the use of metadiscourse in academic writing is effective and appropriate partly depends on the writer's linguacultural background and expertise level. Since the four writer groups that this study will observe represent different native status and expertise levels, I put forward the hypothesis that metadiscourse usage varies across nativeness statuses and expertise levels. Specifically, L1 Chinese writers' employment of metadiscourse could differ from that of the Spanish natives; likewise, novice Spanish writers may use metadiscourse differently from expert Spanish writers. Moreover, since each of the writer groups has different native

status and/or expertise levels, it is reasonable to assume that the factor of nativeness and the factor of expertise together might affect the use of metadiscourse by the writer groups.

In order to test these hypotheses, four corpora will be compiled to represent the four writer groups. Then, drawing on much valuable prior research (Hyland, 2005a; Ädel, 2006; S. Lee, 2009; Mur-Dueñas, 2011; J. J. Lee & Casal, 2014; F. Cao, 2014, to name a few), I aim to quantitatively and qualitatively compare metadiscourse resources produced in these four corpora, setting out to address three specific research questions as follows:

1. To what extent does nativeness affect the use of metadiscourse in Spanish academic writing?
2. To what extent does expertise affect the use of metadiscourse in Spanish academic writing?
3. Is there any interaction effect between nativeness and expertise on the use of metadiscourse?

The first two questions will be answered from both quantitative and qualitative perspectives. Quantitatively, inferential statistics will be used to determine if the frequencies of each metadiscourse resource are significantly different between the non-native and native corpora and between the novice and expert corpora. Additionally, keyword analysis from corpus linguistics will be adapted to this study to generate salient metadiscourse markers that characterize each writer group. Qualitatively, the corpora will be scrutinized to identify specific discoursal/rhetorical functions of each metadiscourse resource and find potential differences in those functions across the writer groups. As for the last question, it can only be answered quantitatively through specific statistical tests that can assess the interaction effect (see Section 4.3.1.1).

1.4. Significance of the thesis

The present thesis gains its significance from three aspects. Firstly, it will constitute one of the few contributions exploring the use of metadiscourse in Spanish academic

writing. Thus, the research could motivate more scholars to pay attention to Spanish or even other under-explored languages. Findings from the research could also provide a deeper and more complete understanding of metadiscourse in Spanish academic writing.

Secondly, to the best of my knowledge, this study is perhaps the first of its kind to measure two factors (i.e., nativeness and expertise) simultaneously and collectively. By doing so, we will be able to examine the role of the two factors in the metadiscourse use and the possible interaction effect between them. This approach may be of reference value to future metadiscourse researchers who also want to assess these two factors together and draw parallel comparisons with the findings. It may also inspire research peers to evaluate other factors such as language, discipline, register, and time or a combination of them.

Finally, since the study compares the non-native Spanish writers with their native counterparts and the novice writers with their expert counterparts, the findings will reveal particularly the differences derived from these group comparisons in terms of the occurrences of the employment of certain metadiscourse resources, the wording choices of specific metadiscourse markers, and the use of discoursal/rhetorical functions. The differences could be of particular interest to teachers or instructors who teach Spanish as a foreign language and/or Spanish for academic purposes because that might be the area in which their non-native and/or novice students can improve. In this respect, the pedagogical implications provided at the end of the thesis will contribute to both educators' and students' knowledge about beneficial classroom practices of metadiscourse usage. Note however that while the non-native writer groups in the current study only involve a sample of Chinese, I believe the findings and implications can apply to Spanish learners from other language backgrounds.

1.5. Defining terms

While the key term 'metadiscourse' will be unfolded thoroughly in the next chapter, some other terms used throughout the thesis may be open to misinterpretation or unclear for the audience. Hence, they are defined here.

For the sake of simplicity, throughout the thesis ‘writers’ and ‘the writer’ are used interchangeably to refer to producers of written texts, regardless of the actual number of writers; likewise, both ‘readers’ and ‘the reader’ refers to the receivers of written texts (cf. Hyland, 2005a; Mauranen, 1993a).

Considering that this study quantitatively compares metadiscourse produced in the non-native and native corpora and in the novice and expert corpora, it can be expected that the term pair ‘overuse’ and ‘underuse’ will be used frequently to describe frequency differences. As an illustrative example, we can say that a metadiscourse marker is significantly underused (or overused) in the non-native corpus as against the native corpus¹. Here, the terms are adopted in a purely statistical sense, which means the underused (or overused) marker is not necessarily a sign of poor or incorrect writing on the part of the non-native writers (D. Y. W. Lee & Chen, 2009; Altenberg & Tapper, 1998). In Leech’s (Leech, 1998: xix) words, these terms “should not be used in a judgmental spirit. They should be interpreted [...] not prescriptively but descriptively” (see also Gilquin & Paquot, 2008).

The term ‘L2’ generally refers to a language that is not the native language (L1). However, the term adopted in this study could lead to misunderstanding due to the specificity of the writer groups of Chinese part: Chinese students or teachers of Spanish usually learn and use both English and Spanish, although in most cases the latter language is studied after the former. Therefore, Spanish is technically their L3. Given that English is not the focus of our study, in the following text L2 will be used to refer to L2 Spanish unless specified otherwise. At the same time, L2 will be used without strictly distinguishing between a second language and a foreign language (cf. Ädel, 2006: fn. 4).

Another pair of terms that may confuse is ‘code’ and ‘category’. The former is a widely used term in qualitative data analysis (QDA) to refer to a word or short phrase

¹ The study adopts a conventional approach, in which native and expert writing is considered “as a standard of comparison, or norm” (Leech, 1998: xv), also known as the reference corpus or the target language. In other words, the terms ‘underuse’ and ‘overuse’ are defined on the basis of the reference corpus. Nevertheless, which corpus should be seen as reference corpus is open to debate, because, for example, the native and expert corpus may be incomparable to the non-native and novice corpus in various aspects such as discipline, genre, register, and communicative purpose. For more relevant discussions see Leech (1998) and Ädel (Ädel, 2006: Appendix 2).

that symbolically systematizes and assigns meaning to the language data (Saldaña, 2011; Miles, Huberman, & Saldaña, 2014). It appears in this study (mainly in the methodology chapter) because the tool (i.e., MAXQDA) that will be used during the annotation of metadiscourse markers prefers this term. Meanwhile, ‘category’, a preferred term outside the tool throughout the thesis, refers to a specific type of metadiscourse resource (e.g., ‘Hedges’, ‘Previews’, ‘Self-mentions’). For qualitative researchers such as Saldaña, the two terms are different components of data analysis as category is developed from a series of related codes; that is, category is a higher level of code. Nevertheless, they will be loosely treated as synonyms in this study as this is the way MAXQDA does (Kuckartz & Rädiker, 2019). Furthermore, a set of terms related to ‘code’ such as the verb ‘code’ and ‘coding’ roughly corresponds to ‘annotate’ and ‘annotation’, terms frequently adopted and well understood in previous metadiscourse studies where a corpus tool was used (e.g., Carrió-Pastor, 2016a; Crosthwaite, Cheung, & Jiang, 2017).

1.6. Outline of the thesis

Following this introductory chapter, the remainder of the thesis is structured as follows.

Chapter 2 deals with the theoretical aspects of metadiscourse. It focuses on three fundamental questions about the notion of metadiscourse: What are metadiscourse and its function? How to identify metadiscourse elements in the text? Moreover, how to classify metadiscourse elements? To answer the first question, I first review different definitions and functional taxonomies of metadiscourse, then address the controversial distinction between metadiscourse and propositional content. For the second question, I first discuss the criteria of metadiscourse identification and then show two approaches to identifying metadiscourse units. As for the last question, I raise the issue of multifunctionality and subjectivity in metadiscourse classification.

In Chapter 3, I attempt to provide a state-of-the-art review of empirical studies on metadiscourse use in the context of academic writing. The review is broken down into different sections according to a range of research themes emerging from the growing

body of literature, such as language, discipline, genre, register, and mode. Issues that arise from previous studies are discussed. Furthermore, a review of metadiscourse studies on academic Spanish is provided as the focus of this study concerns the Spanish context particularly.

Chapter 4 offers a detailed account of the methodology adopted in this study. First, I go into specifics of the procedure of corpus construction and highlight some considerations related to corpus building. Then, I report different aspects involved in the metadiscourse coding of the present study, including the explanation of the coding scheme, the presentation of the coding tool, the development of a predefined list of metadiscourse markers, the procedure of searching, coding and manual checking, and finally the estimation of intercoder reliability. After this, I introduce the quantitative and qualitative analyses of the data obtained from the corpus, which includes statistical analysis, key metadiscourse item analysis, and qualitative textual analysis.

Chapters 5-6 present and discuss the analysis results of metadiscourse use across different writer groups. Since the coding scheme as the analytical framework for this study is based on Hyland's (2005a) interpersonal model, divided into 'interactive' and 'interactional' dimensions, Chapter 5 deals with interactive metadiscourse while Chapter 6 deals with interactional metadiscourse. Both chapters report the frequency comparisons of each metadiscourse category across nativeness and expertise, the most salient metadiscourse markers characteristic of each writer group, and specific discoursal/rhetorical functions of each metadiscourse category.

Finally, Chapter 7 concludes the thesis by recapitulating the main findings of the study, which pertain to the three research questions formulated previously. Based on the findings, I also draw some pedagogical implications from teachers' and learners' perspectives. Moreover, I highlight my thesis's contribution to the field through the lens of theoretical, empirical, and methodological views. Lastly, the chapter ends with an acknowledgment of the study's limitations, a discussion of possible future research, and a final remark on the field's recent trend.

Chapter 2 Metadiscourse in theory

As a crucial construct and means of communication, metadiscourse has attracted much scholarly interest in applied linguistics over the past few decades, especially in current discourse analysis and language teaching. Despite the growing interest and body of literature regarding metadiscourse, there is little agreement on its conceptualization, identification, and classification. Part of the reasons behind this disagreement may come from divergent perspectives on metadiscourse as the concept itself opens to different interpretations (Hyland, 2017).

Therefore, this chapter reviews current theoretical discussions on metadiscourse, aiming to explicate its fundamental concepts and issues. First, I present several definitions of metadiscourse offered by previous scholars. I then discuss and evaluate different models (or categorization schemes) of metadiscourse, which can be broadly divided into three theoretical approaches: the broad approach, the narrow approach, the middle-ground approach. In Section 2.2, I address five issues arising from the conceptualization, identification, and classification of metadiscourse: the controversial notion pair—propositional content and metadiscourse—, the criteria for metadiscourse identification, the delimitation of metadiscourse unit, the multifunctionality of metadiscursive expressions, and the subjectivity in metadiscourse classification. The chapter ends by summing up the main theoretical aspects of metadiscourse.

2.1. Concepts of metadiscourse

As noted at the beginning of the preceding chapter, in communication writers or speakers convey their linguistic awareness, voice, attitude, and persona to the audience by giving explicit commentary on the ongoing discourse so that the audience can better understand the subject matter and writers/speaker's attitude toward the subject matter. The commentary-like language is referred to by divergent terms in the literature concerned, such as 'signaling' (Meyer, 1975; Meyer, Brandt, & Bluth, 1980), 'non-topical material' (Lautamatti, 1978), 'gambits' (Keller, 1979), 'meta-talk' (Schiffrin,

1980), ‘metatext’ (Enkvist, 1975, cited in Mauranen, 1993a). This study adopts the term ‘metadiscourse’ as it has been widely used in current discourse analysis, pragmatics, and language education (Hyland, 2017). The following text unravels the conceptual aspects of this term.

2.1.1. Defining metadiscourse

The coinage of ‘metadiscourse’ is often ascribed to the American structuralist Zellig S. Harris (1959). In his article, Harris distinguished four types of kernels for information retrieval (IR)². As one of those kernels, the metadiscourse kernel was described as the one that is often “not requested or useful in retrievals” (Harris, 1959):

There are also metadiscourse kernels which talk about the main material (e.g., discussing the problems of the investigators). These contain words entirely different from those of the main kernels, except that they often contain one word from a main kernel or a pronoun referring to a main kernel. Such kernels may be omitted from storage except in cases where they are retained as modifiers of a main kernel. In any case they need not be indexed. (pp. 944-945)

At that stage, the notion of metadiscourse was still outside the scope of discourse analysis, and its influence was somewhat limited.

Entering the 1980s, however, the term metadiscourse and its concept gained increasing scholarly attention and was further developed in some pioneering work. For example, Williams ([1981] 1990: 40) mentioned metadiscourse in his instructional book on stylistics of writing and defined it as “the language we use when, in writing about some subject matter, we incidentally refer to the act and to the context of writing about it”. Although Williams ([1981] 1990) acknowledged that metadiscourse is not the primary aspect we refer to when writing, he highlighted its pervasiveness in language and its significant role in written discourse, for example, to announce upcoming

² Kernel, a term used in early transformational-generative grammar, denotes basic unmarked linguistic strings. The simple structures that can be generated from this kernel strings without transformations are kernel structures, for example, *NV*, *NVN*, *NVPN*. For each English sentence, it can be obtained from a sequence of kernel structures, one of more base transformations, and some recursive rules for sentence combination (see Harris, 1959).

information, to list ideas, to express logical connections, and to hedge statements.

In her technical report, Crismore (1983) first called for more close studies on the metadiscourse level rather than focusing merely on the primary discourse, i.e., the propositional content of a text. She then reviewed past studies on metadiscourse and its pertinent topic. In the end, she stressed the importance of metadiscourse by saying that the proper use of metadiscourse can help writers guide readers through a text by helping them understand the textual organization and writers' beliefs. She warned, on the other hand, that the excessive and inappropriate use of metadiscourse can hinder readers' understanding of a text. In that report, Crismore (1983) also provided her definition of metadiscourse:

Metadiscourse is, simply, an author's discoursing about the discourse; it is the author's intrusion into the discourse, either explicitly or non-explicitly, to direct the reader rather than inform. Metadiscourse is the directives given to readers so they will understand what is said and meant in the primary discourse and know how to "take" the author. (p. 2)

In her later research (Crismore, 1989; Crismore, Markkanen, & Steffensen, 1993), Crismore refined the definition of metadiscourse. For example, Crismore et al. (1993) refer to metadiscourse as

[...] the linguistic material in texts, whether spoken or written, that does not add anything to the propositional content but that is intended to help the listener or reader organize, interpret, and evaluate the information given. (p. 40)

The seminal work by Vande Kopple (1985) provided a solid foundation for the conceptualization of metadiscourse. Drawing upon Williams' ([1981] 1990) idea, Vande Kopple distinguishes two levels of writing: i) the level of primary discourse; ii) the level of metadiscourse. On the first level, writers provide information about subject matter and expand propositional content; while on the other level, writers "do not add propositional material but help our readers organize, classify, interpret, evaluate, and

react to such material” (Vande Kopple, 1985: 83). Therefore, albeit vaguely, he defines metadiscourse as “discourse about discourse or communication about communication” (Vande Kopple, 1985: 83). By relating his metadiscourse theory to Halliday’s (1973) three metafunctions of language, namely ideational metafunction, interpersonal metafunction, and textual metafunction, Vande Kopple (1985) suggests that the primary discourse (or propositional content) conveys ideational meanings while metadiscourse conveys interpersonal or textual meanings. An important point made by Vande Kopple is that at the interpersonal and textual levels of meaning, there is a significant influence of metadiscourse on the interactions between writers and readers and texts.

This point, however, contrasts with how Mauranen (1993b), another influential figure in the field, understands metadiscourse. Note that while she uses the term ‘text reflexivity’, it is clear that the notion also points to metadiscourse. She focuses only on the relationship between the reader and the text, i.e., the aspects of text organization, rather than on the interaction between writers and readers. This point is illustrated in her understanding of metadiscourse (Mauranen, 1993b):

[...] text reflexivity is regarded here as the writer’s explicit commentary on his or her ongoing text. It reflects the writer’s awareness of the text as text, and therefore includes references to the text itself as text or as language. Text about text operates in relation to the propositional content of the text, and is thus separate from it. (p. 154)

In the 2000s, the metadiscourse field enjoyed a remarkable boom after the appearance of two landmark monographs: Hyland (2005a) and Ädel (2006). The major contribution of these two publications is that they explicate the notion of metadiscourse in a clear and systematic way and innovatively use corpus techniques to approach metadiscourse. At that point, while the conceptualization was able to develop further, the definition of metadiscourse did not deviate considerably from those by their precursors:

Metadiscourse is the cover term for the self-reflective expressions used to negotiate interactional meanings in a text, assisting the

writer (or speaker) to express a viewpoint and engage with readers as members of a particular community. (Hyland, 2005a: 37)

Metadiscourse is text about the evolving text, or the writer's explicit commentary on her own ongoing discourse. It displays an awareness of the current text or its language use *per se* and of the current writer and reader *qua* writer and reader. (Ädel, 2006: 20)

As can be seen, the Hylandian definition attaches more importance to the interpersonal aspects of metadiscourse, which leans more towards Vande Kopple's (1985) writer-reader interaction; meanwhile, the definition by Ädel is conceptually more associated with Mauranten's (1993b) text reflexivity as it is clearly text-centered. By Ädel's definition, nevertheless, the metadiscourse phenomenon not only refers to the current text and the writing process but also includes "two very important components of the situation of writing: the writer and the reader" (Ädel, 2006: 178), which pushes her understanding of metadiscourse away from a purely metatextual side. This theoretical standpoint also leads her to adopt a new model of metadiscourse (see Section 2.1.2.2).

Apart from the definitions listed above, some other scholars also propose their own definition for the metadiscourse phenomenon. For example, Beauvais (1989) and Ifantidou (2005) redefine metadiscourse from the perspectives of speech act theory and relevance theory. Anchored in the Hylandian tradition, both S. Lee (2009) and Qin (2018) refine the definition of metadiscourse so that it can lend itself to their research. Regardless of the definitional variation, generally they all concern the reflexive and interactive nature of metadiscourse and its pragmatic use in communication (F. Cao, 2014).

In view of the above, it can be concluded that metadiscourse is a meaningful concept but difficult to define (Dahl, 2004). It is meaningful in the sense that the concept helps us understand how communication works; on the other hand, it is hard to define what should be considered as metadiscourse. In this respect, there is a clear conceptual divergence. According to Ädel and her colleagues (Ädel, 2006, 2010, 2012a; Ädel & Mauranten, 2010), two different strands can be discerned: one adopts a narrow definition and another adopts a broad definition. The narrow definition, whose

representatives are Mauranen (1993b) and Ädel (2006), takes reflexivity in language (i.e., the self-reflexive use of discourse) as the fundamental basis of metadiscourse conceptualization. The broad definition, to which, among others, Williams ([1981] 1990), Vande Kopple (1985), Crismore et al. (1993), and Hyland (2005a) attaches, stresses the interaction between writers and readers besides the textual organization (i.e., discourse carrying social meanings). This conceptual distinction is important because it is pertinent to the choice of metadiscourse model made in a study, which will be discussed in the next section.

2.1.2. Models of metadiscourse

If metadiscourse is pervasive in communication and is at the level that contrasts with propositional content, then there should be a diverse range of linguistic resources that express and realize metadiscourse (Flowerdew, 2015). This brings us to the question of what functions metadiscourse can perform in the texts. Parallel to the divergent definitions of metadiscourse, the functional categorization of metadiscourse resources varies depending on different theoretical assumptions adopted by researchers. Starting from Vande Kopple (1985), many scholars have proposed different models of metadiscourse, i.e., taxonomies of metadiscourse resources. Based on Ädel (2006), I distinguish three approaches: the broad approach, the narrow approach, and the middle-ground approach. In the following subsections, I elaborate on the three approaches where different metadiscourse taxonomies are presented. The section ends with an evaluation of the three approaches.

2.1.2.1. The broad approach

The broad approach sees metadiscourse as “the means whereby the writer’s presence in the discourse is made explicit, whether by displaying attitude towards or commenting on the text, or by showing how the text is organized” (Ädel, 2006: 168). In this approach, metadiscourse is often divided into textual and interpersonal, flowing from the textual and interpersonal metafunctions in Halliday’s (1973) systemic functional grammar

Table 2-1 Taxonomies of metadiscourse in SFG-inspired models

Source	Textual metadiscourse	Interpersonal metadiscourse
Vande Kopple (1985)	<ol style="list-style-type: none"> 1. Text connectives (sequence indicators; logical or temporal relationship indicators; reminders; announcements; topicalizers) 2. Code glosses 	<ol style="list-style-type: none"> 1. Illocution markers 2. Validity markers (hedges; emphatics; attributors) 3. Narrators 4. Attitude markers 5. Commentaries (moods, views, or reaction; recommendation; expectation; relationship)
Crismore et al. (1993)	<ol style="list-style-type: none"> 1. Textual markers (logical connectives; sequencers; reminders; topicalizers) 2. Interpretative markers (code glosses; illocution markers; announcements) 	<ol style="list-style-type: none"> 1. Hedges 2. Certainty markers 3. Attributors 4. Attitude markers 5. commentary
Dafouz-Milne (2003)	<ol style="list-style-type: none"> 1. Logical markers (additive; adversative; consecutive; conclusive) 2. Sequencers 3. Reminders 4. Topicalizers 5. Code glosses (parentheses; punctuation devices; reformulators; exemplifiers) 6. Illocutionary markers 7. Announcements 	<ol style="list-style-type: none"> 1. Hedges (epistemic verbs; probability adverbs; epistemic expressions) 2. Certainty markers 3. Attributors 4. Attitude markers (deontic verbs; attitudinal adverbs; attitudinal adjectives; cognitive verbs) 5. Commentaries (rhetorical questions, direct address to reader; inclusive expressions; personalizations; asides)
Hyland (1998a, 2004a)	<ol style="list-style-type: none"> 1. Logical connectives 2. Frame markers 3. Endophoric markers 4. Evidentials 5. Code glosses 	<ol style="list-style-type: none"> 1. Hedges 2. Emphatics/Boosters 3. Attitude markers 4. Relational markers 5. Personal markers

(SFG). Thus, models in the broad approach are referred to as the ‘SFG-inspired models’ by Ädel (2006). As noted earlier, this model was pioneered in the 1980s by Vande Kopple (1985), who distinguished seven different kinds of metadiscourse, subsumed

under textual and interpersonal types. Table 2-1 summarizes Vande Kopple's classification system for metadiscourse as well as other SFG-inspired models of metadiscourse.

As can be seen, while researchers who adopt the broad approach (specifically SFG-inspired models) fail to reach a consensus about the category naming and classification of certain categories, they consistently draw a distinction between textual and interpersonal aspects of metadiscourse. Concretely, the interpersonal metadiscourse can help writers express their beliefs and attitudes towards the propositional content of texts and portray writers' interaction with readers about the texts. The textual metadiscourse can help writers glue different propositional contents together to "form a cohesive and coherent text" (Vande Kopple, 1985: 87) and "guide readers as smoothly as possible through the texts" (Vande Kopple, 1985: 83).

Also rooted in the broad approach, the model in Hyland (2005a) (see also Hyland & Tse, 2004), however, should not be seen as SFG-inspired because in this model the textual-interpersonal dichotomy was discarded completely. They criticize that the dichotomy is a misinterpretation of the Hallidayan tripartite model of metafunctions, where all three metafunctions should be realized simultaneously. In other words, it is challenging to treat ideational, textual, and interpersonal aspects of language as independent and separate sets in real situations. They further argue that "all metadiscourse refers to interactions between the writer and reader" (Hyland, 2005a: 45) and that "all metadiscourse is interpersonal in that it takes account of the reader's knowledge, textual experiences, and processing needs and that it provides writers with an armoury of rhetorical appeals to achieve this" (Hyland & Tse, 2004: 161). Given this consideration, Hyland borrowed the conception of "interactive" and "interactional" from G. Thompson (2001) to describe how the interpersonal dimension of language presents respective 'organizational' and 'evaluative' features of interaction (Hyland, 2001a; Hyland & Tse, 2004). This brand-new model is well known as the "interpersonal model of metadiscourse" (Hyland, 2005a: 49). Table 2-2 shows the two main categories of this model with their respective subcategories, functions of each category, and examples in English:

Table 2-2 Taxonomy of Hyland's (2005b) interpersonal model

Category	Function	Examples
Interactive	help guide readers through the text	
Transitions	express relations between main clauses	<i>and, but, thus, in addition</i>
Frame markers	refer to discourse acts, sequences or stages	<i>first, finally, to conclude, my purpose is</i>
Endophoric markers	refer to information in other parts of the text	<i>see Fig., noted above, in section 2</i>
Evidentials	refer to information from other texts	<i>according to X, Y states</i>
Code glosses	elaborate propositional meanings	<i>i.e., namely, e.g., such as</i>
Interactional	involve readers in the text	
Hedges	withhold commitment and open dialogue	<i>might, perhaps, possible</i>
Boosters	emphasize certainty or close dialogue	<i>in fact, definitely, it is clear that</i>
Attitude markers	express writer's attitude to proposition	<i>unfortunately, I agree, surprisingly</i>
Self-mentions	explicit reference to author(s)	<i>I, we, my, me, our</i>
Engagement markers	explicitly build relationship with reader	<i>consider, note, you can see that</i>

When comparing this interpersonal model with the previous SFG-inspired models, especially those in Hyland's two earlier works (1998a, 2004a), the classification system does not change considerably, except for the naming. The important difference, however, is that the misunderstanding of textual-interpersonal categorization in the early models has been revised, and that all metadiscourse resources in the new model embody writer-reader interactions. This is to say that both interactive and interactional dimensions integrate textual and interpersonal functions of metadiscourse. Specifically, for Hyland (2005a) the interactive dimension concerns

the writer's awareness of a participating audience and the ways he or she seeks to accommodate its probable knowledge, interests, rhetorical expectations and processing abilities. The writer's purpose here is to shape and constrain a text to meet the needs of particular readers, setting out arguments so that they will recover the writer's preferred interpretations and goals. (p.49)

The interactional dimension, on the other hand, concerns

the ways writers conduct interaction by intruding and commenting on their message. The writer's goal here is to make his or her views explicit and to involve readers by allowing them to respond to the unfolding text. This is the writer's expression of a textual 'voice', or community-recognized personality, and includes the ways he or she conveys judgements and overtly aligns him- or herself with readers. (ibid.)

This interpersonal model is described as a “more theoretically robust and analytically reliable model of metadiscourse” (Hyland, 2005a: 37). It has been widely adopted by numerous studies (Abdi, 2011; Mur-Dueñas, 2011; F. Cao, 2014; J. J. Lee & Casal, 2014; J. J. Lee & Subtirelu, 2015; Ho & Li, 2018, to name a few). As will be seen, this model was also adopted in the current study. The methodology chapter (Section 4.2.1) will note the rationale behind the decision and a detailed explanation of each metadiscourse category.

2.1.2.2. The narrow approach

The narrow approach, on the other hand, primarily examines aspects of text organization (Ädel, 2006). Therefore, these textual features are often termed as ‘metatext’ (see, for example, Mauranten, 1993a; Valero-Garcés, 1996; Bunton, 1999; Dahl, 2004), instead of ‘metadiscourse’ adopted in the broad approach. If we draw on Hallidayan functional model again, it will help us better understand that metatext in the narrow approach only includes textual metadiscourse while excluding interpersonal metadiscourse. For the sake of convenience, models in the narrow approach are referred to as the ‘metatext-based models’ here. Table 2-3 summarizes the main taxonomies of metadiscourse in metatext-based models.

Just as the narrow definition of metadiscourse is much simpler, categories in the narrow approach are much more reduced. They refer only to the text structure and focus

Table 2-3 Taxonomies of metadiscourse in metatext-based models

Source	Metatextual categories
Mauranen (1993a)	<ol style="list-style-type: none"> 1. Connectors 2. Reviews 3. Previews 4. Action markers
Bunton (1999)	<ol style="list-style-type: none"> 1. Text references (previews; reviews; overviews) 2. Non-linear text references 3. Inter-text references 4. Text act markers 5. Text connectors 6. Text glosses
Dahl (2004)	<ol style="list-style-type: none"> 1. Locational metatext 2. Rhetorical metatext

on the bare-bones of text-internal matter (Ädel, 2006; Hyland, 2017). As Markkanen, Steffensen, & Crismore (1993) suggest, the primary function of metatext is to describe the text in which it is located, rather than providing propositional information about the subject matter.

Later, Mauranen (1993b), the chief representative of the narrow approach, applies ‘reflexivity’ in language (i.e., the self-reflexive use of discourse) to metadiscourse and introduces a scale of explicitness. In this reflexive model of metadiscourse, reflexivity is divided into ‘highly explicit reflexivity’ and ‘reflexivity of low explicitness’. The new taxonomy is presented below.

Table 2-4 Taxonomy of Mauranen’s (1993b) reflexive model

Category	Examples
Highly explicit reflexivity	
References to the text	<i>in this article, in the following</i>
Discourse labels	<i>to illustrate, as noted earlier, stated formally</i>
Addressing the reader	<i>recall (that), the reader</i>
Reflexivity of low explicitness	
Internal connectors	<i>second, however, in addition</i>
Discourse labels	<i>it is reasonable to think, (our present data) show</i>
References to the text	<i>as a first step</i>
Addressing the reader	<i>there is reason to remember</i>

As can be seen from the table, except for ‘Internal connectors’, the remaining three categories (i.e., ‘References to the text’, ‘Discourse labels’, and ‘Addressing the reader’) are shared between the two main classes. The difference between the shared categories, of course, lies in the scale of explicitness. That is, the three categories in the first class signal the writer’s more explicit self-reflexive use of discourse while those in the second class indicate the writer’s more implicit self-reflexive use of discourse. The explicitness scale also determines how easily and clearly the metadiscourse elements can be separated from the subject matter. So, for example, references to the text in the low-explicitness class (e.g., *as a first step*) are not as clearly and easily separable from references to the content of the argument as that in the high-explicitness class (e.g., *in this article, in the following*).

Among all the categories, ‘Addressing the reader’ is worthy of note because it certainly involves the writer-reader interaction as the models in the broad approach do. In other words, Mauranen’s (1993b) text reflexivity does not entirely discard interpersonal metadiscourse, which, however, somewhat contradicts the standpoint of the narrow approach. As Ädel (2006: 176) points out, this precisely “demonstrates how difficult issues of delimitation may be”. On the other hand, it may also suggest that the distinction between the broad and narrow approaches is not always clear-cut. There could be some middle ground (see the next section), and together they may make up a continuum from a narrow end to a broad end (see Section 2.1.2.4).

2.1.2.3. The middle-ground approach

The middle-ground approach sees metadiscourse as “referring to the text and/or the writing process, which includes not only the current text, but also the current writer and reader in their roles as writer and reader” (Ädel, 2006: 178–179). The middle-ground approach, as its name suggests, does not cover metadiscoursal resources broadly as the broad approach does nor narrowly as the narrow approach does. This compromise approach is championed by Ädel (2006).

She argues that the narrow approach keeps the concept of metadiscourse too

restricted (i.e., only the text itself), leaving out the writer persona and the imagined reader of the current text (i.e., the interpersonal aspects involved in the writing process); on the other hand, the broad approach makes the concept of metadiscourse too all-inclusive. For example, she considers that expressions of stance included in the broad approach concern the writer's opinions and attitudes to phenomena in the real world rather than in the world of discourse³ (Ädel, 2006: 184), which leads research focus "too far out of the realm of explicit reflexive language" (Ädel, 2006: 179).

Therefore, taking as a starting point Jakobson's (1995) functions of language and also stressing Mauranen's (1993b) reflexivity in language, Ädel (2006) proposed her own reflexive model of metadiscourse, which comprises three components of the writing process: text/code, writer and reader. Each metadiscourse instance involves at least one of the three components. The taxonomy of this model is presented below.

Table 2-5 Taxonomy of Ädel's (2006) reflexive model

Category	Examples
Metatext (Impersonal)	to guide the reader and comment on the use of language
text/code-oriented	<i>thirdly, the above-mentioned list, in other words, the question is</i>
(Personal)	
participant-oriented	<i>as we have seen, in our discussion, if we take X as an example</i>
writer-oriented	<i>as I have shown, my conclusion is that, by X I mean</i>
reader-oriented	<i>as you have seen, you might want to read the last section</i>
Writer-reader interaction (Personal)	to interact with the imagined reader
participant-oriented	<i>I know you think that, correct me if I'm wrong</i>
reader-oriented	<i>dear reader, does this sound ... to you?</i>

In this model, metadiscourse is divided into two broad categories: 'Metatext' and 'Writer-reader interaction'. These two main types perform different functions: the first one refers to writers' intention to guide readers through the text and comment on their

³ However, Ädel (2006) acknowledges that there are some borderline cases where metadiscourse and stance markers overlap. Performative verbs that follow first-person pronouns (e.g., *I argue, I claim*) are such cases. See Section 2.6.2 of Ädel (2006) for detailed illustration and explanation.

own discourse acts; while the second type concerns expressions used by writers to “address readers directly, to engage them in a mock dialogue” (Ädel, 2006: 37). The two main types of metadiscourse can be further separated into several subcategories depending on whether the type is personal or impersonal.

Personal metadiscourse “makes direct reference to the writer and/or reader of the current text” (Ädel, 2006: 14) by using pronouns or nouns. Specifically speaking, when metadiscoursal elements explicitly refer to the writer or author of the current text, they are ‘writer-oriented metadiscourse’ (e.g., *I, the author*); when metadiscoursal elements explicitly refer to the imagined reader of the current text, they are called ‘reader-oriented metadiscourse’ (e.g., *dear reader, you*); and finally, if metadiscoursal elements make explicit reference both to the writer and to the imagined reader of the current text, they will be called ‘participant-oriented metadiscourse’ (e.g., inclusive *we*). Impersonal metadiscourse, on the other hand, does not explicitly refer to writers or readers of the current text; instead, it makes references to the current text itself (so-called ‘text-oriented metadiscourse’), through passive and impersonal constructions (e.g., *in other words, the above-mentioned list, this essay will primarily deal with*).

Since this approach was built, it has been widely taken up by many scholars for a diverse range of research practices (e.g., Pérez-Llantada, 2010; Makkonen-Craig, 2011; Zare & Tavakoli, 2017; Molino, 2018; Z. Li & Xu, 2020; Núñez-Román, 2020). Most of them did not change the taxonomy. However, there are several studies in which Ädel’s reflexive model was modified. A summary of these modified models is presented in Table 2-6.

As can be seen from the table, while the modified models vary in naming and resource, they all consider the text/code, the writer, and the reader as the key components of metadiscourse. Another interesting point that can be noticed is that the modified models tend to take a more inclusive view, fusing metadiscourse categories from other approaches. For instance, Toumi’s (2009) model can be seen as a hybrid of Ädel (2006) and Mauranten’s (1993b) models, while the model in Salas (2015) is a fusion of Ädel (2006) and Hyland’s (1998a, 2005a) models. This, on the other hand, implies that models from different approaches should not be seen as opposed positions

Table 2-6 Taxonomies of the modified version of Ädel's (2006) reflexive model

Source	Categories
Toumi (2009)	Metatext (Highly explicit reflexivity) 1. reference to the text 2. discourse labels 3. phoric markers (Reflexivity of low explicitness) 1. internal connectors 2. discourse labels 3. reference to the text 4. code glosses Writer/reader-oriented metadiscourse 1. reader-oriented metadiscourse 2. writer-oriented metadiscourse 3. participant-oriented metadiscourse
Salas (2015)	Personal metadiscourse 1. self-mentions 2. relational markers 3. references to the participants Impersonal metadiscourse 1. references to the text/code 2. impersonal self mentions through discourse verbs 3. impersonal directives 4. endophoric markers 5. code glosses
Zhang (2016)	1. referring to text participants (text; writer; reader; writer-&-reader) 2. describing text actions 3. describing text circumstances (phoric markers; code glossers; style markers)

but as contributing different aspects to the understanding of metadiscourse (Hyland, 2017).

2.1.2.4. An evaluation of the three approaches

The preceding sections have shown that each of these three approaches to metadiscourse possesses its own peculiarity in terms of metadiscourse delimitation and

classification. Different scholars may choose one of the research strands over the others on account of their specific research questions or needs. Although there is no superiority of one approach over the others, researchers, especially newcomers to metadiscourse, should always be aware that each has its strengths and weaknesses.

The narrow approach, for example, has the least categories and is thus more straightforward. It distinguishes metadiscoursal elements (or ‘metatext’) from non-metadiscoursal ones with a clear identification process, i.e., whether or not they refer to the current text. Scholars who take this approach would not encounter confusion. The narrow tradition, on the other hand, only considers the text itself. This restricted interpretation does not take into account any interpersonal elements outside the text, such as the way writers address readers. However, both Hyland (2017) and Ädel (2006) argue that metadiscourse is not all about structuring the current text, but it is also concerned with the invisible communication between the writer and the (imagined) reader. Even when writers use the purely textual metadiscourse, they actually take care of imagined readers by guiding them through the text and helping them interpret the text correctly. This is something that the narrow approach has neglected.

In this sense, the middle-ground approach adopted by Ädel has done a better job by including two crucial components during the writing process: the writer persona and the imagined reader. With this approach, researchers can still focus on text reflexivity that the narrow approach pursues, but at the same time they can “[avoid] abstracting the notion of reflexivity away from its use by actual writers and readers” (Ädel, 2006: 179). Including references to the writer and reader of the current text (i.e., personal metadiscourse) makes this approach closer to the interpersonal aspects of metadiscourse. However, this kind of interpersonality differs from the one in the broad approach in that the former further distinguishes writer-oriented and reader-oriented materials but excludes stance markers. The fine-grained classification makes the characterization of metadiscourse more specific and explicit, but the exclusion of stance category is arguable and largely depends on the researcher’s needs.

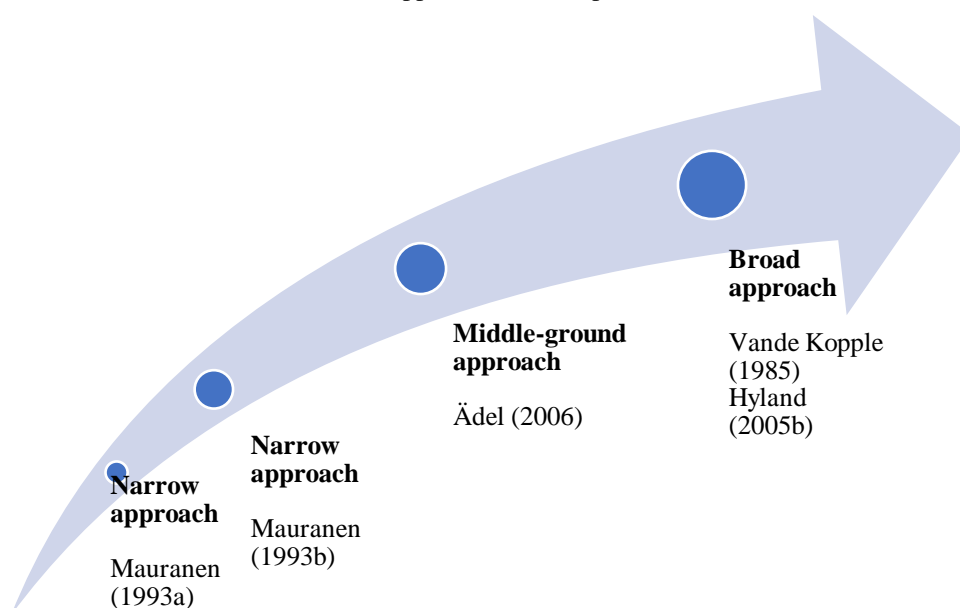
When it comes to the broad approach, researchers should notice its two variants: the one represented by William Vande Kopple and the other championed by Ken Hyland.

As I already discussed, the only difference between them is how they see Halliday's tripartite model of metafunctions. Overall, this broad strand is clearly more popular and even becomes "the dominant paradigm given what is published on metadiscourse" (Ädel, 2018: 78). It is characterized by its inclusiveness, clarity, and dynamicity (Abdi, Rizi, & Tavakoli, 2010; Hyland, 2017). On the other hand, Ädel (2006: 171) complains that the broad approach "tends to become too all-inclusive". Her main argument is that from a broad view, expressions of stance like hedges, emphatics, and attitude markers are considered as metadiscourse, but these elements lack the nature of reflexivity; that is, they refer to the real world (or text-external) instead of the world of discourse (or text-internal). If they are dealing with the real world, they should not be treated as metadiscourse, according to the features established by Ädel for identifying metadiscourse (see Section 2.2.2). Her viewpoint, of course, is developed from the perspective of text reflexivity. Hyland (2017: 20), however, from an interpersonal perspective, argues that metadiscourse should be "understood as a coherent set of interpersonal resources used to organize a discourse or the *writer's stance* towards either its content or the reader" (my emphasis). After all, metadiscourse is more than the exchange of information within the world of discourse; but it is also about social relationships where the writer's personalities, attitudes, and commitments are involved.

Taken together, we can clearly see the disparity among the three approaches, but as Ädel & Mauranten (2010: 9) rightly point out, "[d]isparity can be characterised both negatively as 'division' and positively as 'diversity'". From a divisive perspective, we have already seen that these approaches are divided regarding conceptual delimitation and scope of metadiscourse. On the other side of the coin, we can also depict the diversity among the three approaches. For example, Hyland (2017) prefers to regard them not as opposing ideas but as a cline or a continuum from a narrow end to a broad end, along which individual metadiscourse studies can be situated, as illustrated in the mnemonic figure (Figure 2-1).

It is also appropriate to point out that not only the models introduced above can be positioned along the cline, but also other models from different research perspectives can be inserted here, such as the one proposed by Beauvais (1989) based on speech act

Figure 2-1 The continuum of metadiscourse approaches with representative studies



theory, those proposed by Ifantidou (2005) and Aguilar (2008) based on the relevance theory, or Abdi et al.'s (2010) reformulation based on the cooperative principle. All these individual studies help deepen our understanding of different aspects of discourse.

From my viewpoint, I am in favor of Hyland's idea of continuum or the "diversity" reading by Ädel & Mauranen (2010), as it suggests the interconnection between those approaches, as if in the same line or path towards metadiscourse, on the one hand; it does not overshadow the difference amongst them, on the other hand. In a word, we should see those different approaches from a continuous rather than categorical perspective; and most importantly, we should know their strengths and weaknesses to choose the most appropriate one for our specific research.

2.2. Issues of metadiscourse

Metadiscourse is fuzzy, a characteristic in which almost all researchers are unanimous (e.g., Crismore, 1989; Crismore et al., 1993; Hyland, 1998a, 2005a, 2017; Ädel, 2006; Aguilar, 2008).

However, what do they mean by fuzziness? And what aspect or aspects of metadiscourse are fuzzy? The answer itself is fuzzy as it varies among different scholars.

For Ädel (2006), fuzziness simply means it is difficult to draw a dichotomous distinction between what is metadiscourse and what is not metadiscourse. In other words, where is the boundary between metadiscourse and propositional content?

For Hyland (2017), on the other hand, the fuzziness of metadiscourse has four aspects:

1. Hazy distinction between metadiscourse and non-metadiscourse, like Ädel's (2006) interpretation.
2. Varied linguistic unit in metadiscourse analysis. The fuzziness lies in how large a metadiscourse unit should be chosen as a unit of analysis. A metadiscourse unit is "an utterance or a chunk of words which express(es) a metadiscursive function" (Z. Li & Xu, 2020: 49). The size of metadiscourse units may range from single words to clauses or even entire sentences, which makes them difficult to identify (see Markkanen et al., 1993; Mauranen, 1993b).
3. Non-pairwise relation between linguistic forms and metadiscourse functions. It means that due to the functional nature of metadiscourse, one metadiscourse category can be realized in a variety of linguistic forms (see also Beauvais, 1989), and conversely, one linguistic form can perform multiple functions.
4. Different viewpoints on the functional scope of metadiscourse, i.e., how functions achieved by metadiscourse in a text are understood. This aspect of fuzziness has already been addressed in Section 2.1.2, where different metadiscourse approaches and models were presented.

Based on Hyland's reflection above, I argue that the fuzziness of metadiscourse can come down to five issues: one conceptual issue of metadiscourse, two identification issues of metadiscourse, and another two classification issues of metadiscourse. These issues are pertinent to three fundamental questions about metadiscourse theory: What is metadiscourse? How to identify metadiscourse elements in the text? And how to classify them? While the previous sections partly answer some of the questions, there are some remaining issues that are not fully addressed. Thus, they are discussed in turn in the following subsections.

2.2.1. Conceptual issue: metadiscourse vs. primary discourse

From the conceptual descriptions of metadiscourse in Section 2.1, we can see that many scholars often make a distinction between metadiscourse and propositional content. The former is sometimes referred to as “non-propositional material” (Hyland, 1999, 2005, 2004; see also Hyland & Tse, 2004), and the latter sometimes is under the name of “primary discourse” (Vande Kopple, 1985; Crismore, 1983).

The history of the distinction between them is quite long. The first division between primary discourse and metadiscourse can be traced back to Jakobson’s (1967) *Linguistics and Poetics*, where the author made a distinction on two levels of language: ‘object language’ that concerns objects external to language and ‘metalanguage’ concerns language or verbal code itself (see also Jakobson, 1980). The latter refers to a high-level language that describes the former—in this case object language is realized, for example, language samples and intuitions. Under this view, we can see a hierarchy of discourse, where object language deals with the ‘discourse-external’ world and metalanguage deals with the ‘discourse-internal’ world (see Ädel, 2006).

Acknowledging the hierarchical property of discourse, Vande Kopple (1985) also distinguished two levels of writing—the level of primary discourse and the level of metadiscourse—as noted earlier. As the scholar explains, the level where metadiscourse operates is different from the primary discourse level in that metadiscourse neither “expand[s] the propositional information of a text” nor “make[s] claims about states of affairs in the world that can be either true or false” (Vande Kopple, 1985: 85). In this respect, metadiscourse is deemed a ‘non-propositional’ aspect of language.

In a similar vein, Crismore et al. (1993) and Beke (2005) clearly state that metadiscourse does not add anything to the propositional content. In addition, Williams ([1981] 1990: 40) also mentions that metadiscourse does not “refer to what we are primarily saying about our subject” but the act or context of writing about the subject matter. Although Lautamatti (1978) does not talk directly about metadiscourse, she differentiates the topical linguistic material from the non-topical one, which roughly corresponds to the distinction between the propositional material and metadiscourse.

The reason why many scholars are keen to distinguish these two dimensions is that, according to Hyland (2005a), this division is one of the three key principles of metadiscourse and “is an essential starting point for both theory building and analysis” (p. 38). But what is metadiscourse, and what is propositional content? For the first question, Section 2.1.1 has already provided a number of definitions for metadiscourse. As for the concept ‘proposition’, it is often attributed to contemporary philosophy and is often used in the field of logic. A proposition refers to a statement that can be judged as true or false. When talking about proposition in linguistics, it always has a close association with Hallidayan internationally influential theory—systemic functional linguistics (SFL). In his model of language, information exchanges in the form of propositions. Halliday (1994: 70) describes propositional material as “something that can be argued about—something that can be affirmed or denied, and also doubted, contradicted, insisted on, accepted with reservation, qualified, tempered, regretted and so on”. Fundamentally, primary discourse represents the real world outside the text, “which concerns thoughts, actors or states of affairs” (Hyland, 2005a: 19) and can be stated truly or falsely; while metadiscourse, the world of discourse or language inside the text, which concerns textual organization and content evaluation and does not bear truth-value (Vande Kopple, 1985; Vande Kopple & Shoemaker, 1988).

Nevertheless, not all linguists agree on the rigid dichotomy between propositional content and metadiscourse, especially when the latter is referred to as ‘non-propositional material’ or ‘secondary discourse’ (see Mao, 1993; Ifantidou, 2005; Ädel, 2006). Firstly, according to Ädel (2006), one of the reasons that metadiscourse is defined as ‘non-propositional material’ is due to the historical influence of semantic criteria on the description of metalinguistic phenomena. From the perspective of formal semantics, ‘non-propositional’ means that metadiscourse is non-truth-conditional, an opinion shared widely in the earlier literature (e.g., Vande Kopple, 1985; Vande Kopple & Shoemaker, 1988; Crismore et al., 1993; Hyland, 1998a). This kind of characterization of metadiscourse has been criticized by Mao (1993), who argues that like the primary discourse, the test of falsifiability can also apply to metadiscourse (see also Ifantidou, 2005). To put it another way: both propositional content and

metadiscourse can be judged as true or false. He took *I hypothesize* as an example to illustrate this point: as a metadiscourse marker, *I hypothesize* does not supply additional information to what is being hypothesized (i.e., the part of propositional material); however, if what is being hypothesized is a simple fact (e.g., *I hypothesize that words in French are stressed on one of the last two syllables*), then the act of hypothesizing will be “untrue” or “misfire” (Mao, 1993: 266), hence a proposition. Ädel (2006) also provides an example in her monograph supporting the point that it is unwise to distinguish metadiscourse from propositional material by simply applying the truth-conditional criterion. An expression like *I have discussed X and Y in Chapter 4* can be considered propositional since it can be verified by simply checking the discussion in Chapter 4. However, from a functional point of view, this statement is a review or explicit commentary on the ongoing text, which should be categorized as metadiscourse. In the end, both Mao (1993) and Ädel (2006) conclude that the characterization of metadiscourse as ‘non-propositional’ is untenable. Ädel (2006: 212) further suggests that researchers should “relax the criterion and say that metadiscourse is most often distinct from the subject matter”.

Secondly, there is another controversy over the terminological pair—primary discourse and secondary discourse. Early scholarship (e.g., Crismore, 1983, 1989; Vande Kopple, 1985; Intaraprawat, 1988) often highlights the primacy of propositional content, so-called ‘primary discourse’, which presumably suggests that the companion term ‘metadiscourse’ is secondary or less important than non-metadiscourse (see Mao, 1993; Ädel, 2006). Many later researchers, on the other hand, reject this kind of conceptual separation between propositional content and metadiscourse, arguing that this would relegate metadiscourse to an inferior position (e.g., Mao, 1993; Ädel, 2006; Hyland, 2005; Ifantidou, 2005). The truth is that metadiscourse is an essential element for propositional content and thus for the text. Apart from its semantic and pragmatic contribution towards propositions (Ifantidou, 2005), metadiscourse is “the means by which propositional content is made coherent, intelligible and persuasive to a particular audience” (Hyland & Tse, 2004: 161). What is more, both Mauranen (1993b) and Mao (1993) claim that when metadiscourse elements are informative and expressive, they

can become as “primary” and “specialized” as the subject matter (see also Hyland, 2005a: 39). Therefore, to soften the unwanted separation between ‘primary discourse’ and ‘secondary discourse’, Mao (1993: 269) recommends calling primary discourse “primarily ideational discourse”, which was borrowed the term ‘ideational’ from Halliday and added a qualifier *primarily* to make this specific type of discourse fulfill both (primarily) ideational and (consequently) interpersonal purposes. Meanwhile, Hyland & Tse (2004: 161) try to “recover the link between the ways writers intrude into their texts to organize and comment on it so that it is appropriate for a particular rhetorical context”.

To conclude, the relationship between proposition and metadiscourse is complex. On the one hand, it is necessary to make a distinction between propositional content and metadiscourse because it is “a useful starting point in identifying metadiscoursal features” (F. Cao, 2014: 32), as we shall see in the next section. On the other hand, however, researchers should not “push the distinction too far” (Hyland & Tse, 2004: 160), because from the pragmatic or functional point of view especially, such a rigid dichotomy between metadiscourse and propositional content becomes “irrelevant” (F. Cao, 2014: 31) and “unhelpful” (F. Cao, 2014: 32). In this thesis, I follow the naming tradition of previous metadiscourse studies, keeping the term ‘metadiscourse’ and ‘propositional content/material’ while avoiding using the notion of ‘non-propositional content/material’ and ‘primary discourse’. By doing so, we acknowledge that the meaning of the discourse comes from the integration of these two different elements (Hyland, 2017). That is, it is the interdependency or companionship between them that is foregrounded, rather than the hierarchy or truth-conditional semantics. More importantly, I follow Ädel’s (2006) suggestion that we should conceptualize metadiscourse in terms of its linguistic functions instead of the metadiscourse-proposition distinction. Therefore, the focus of this study will be the exploration of linguistic forms of metadiscourse phenomenon and linguistic functions associated with metadiscursive elements in actual texts.

2.2.2. Identification issue I: identification criteria

Although the concepts of metadiscourse and proposition have been clarified, the issue of identification is still pending. Metadiscourse elements and propositional materials tend to be inextricably interwoven in actual texts. Sometimes, the boundary between them is clear, as shown in examples (1e-i) in the Introduction. Some other times, the delimitation is not straightforward: a linguistic form can be metadiscourse or propositional content depending on the context or co-text, as we shall see below and in Section 2.2.4. To facilitate the metadiscourse analysis procedure in the later stage, analysts must separate metadiscursive elements from propositional elements in the text.

To tackle this issue, quite a few scholars have tried to propose their criteria for metadiscourse identification throughout the last decades. For example, both Markkanen et al. (1993) and Mauranen (1993b) mentioned Enkvist's (1975) early work on metatext, in which 'explicitness', as an important criterion for determining what counts as metatext, was introduced. Markkanen and her colleagues applied this criterion to identify metadiscourse, i.e., "those elements belong to metadiscourse whose function in the first place is to allow writer intrusion between the propositional content and the reader" (Markkanen et al., 1993: 142). So, for instance, sentential adverbial *really* as in *Really, it was an intelligent answer* is a metadiscourse marker as it involves writer/speaker's intrusion by providing an evaluative frame for the whole proposition; in contrast, adverbial modifier *really* as in *It was a really intelligent answer* should not be considered as a metadiscourse marker because it serves to intensify the following adjective.

Ädel also includes the explicitness criterion, which is referred to as "explicitness in wording" (Ädel, 2006: 28) in her reflexive model. In other words, the linguistic forms of metadiscourse should be explicitly or overtly stated in the text. Apart from this criterion, Ädel (2006) adds two additional features for distinguishing metadiscourse from propositional material: 'world of discourse' and 'current discourse'. A textual element that is identified as metadiscourse should be in the 'world of discourse', where the ongoing discourse (or discourse-internal phenomenon) is in focus (2a), rather than

the real world or imaginary world (or discourse-external phenomenon) (2b)⁴. The third criterion—‘current text’ (i.e., reference to the current text)—is added to exclude those textual elements that make references within a text to other texts, e.g., report the speech of others or quote from other sources (2c), which is known as “intertextuality” (Ädel, 2006: 28). Ädel (2006: 183) deems these three criteria “obligatory” and “fairly unambiguous”.

- (2) a. In this essay I *intend* to give a few examples of why...
 b. I ~~*intend*~~ all my years to be good.
 c. Here they ~~*intend*~~ to show the reader that the pain...

(Ädel, 2006: 29)

It should be noted, however, that Ädel adopts a different analytical framework of metadiscourse (as we discussed in Section 2.1.2.3), where stance category (hedges, boosters, and attitude markers) is excluded from the model as it concerns the writer’s opinions or attitudes toward phenomena in the real world, thereby not fulfilling the second criterion. So her criteria for identifying metadiscourse may not be entirely suitable for those who adopt other analytical frameworks, such as those in the broad approach.

However, despite the divergence, Ädel’s criteria do have some resonance in Hyland (2005a), where the criteria of explicitness and discourse-internal/external distinction were also adopted to identify metadiscourse. Nevertheless, Hyland applied the explicitness criterion on a more concrete but more ambitious level: he directly listed 300 explicit textual devices that can be potentially identified as metadiscourse (see Hyland, 2005a, Appendix). This kind of explicitness, for him, “represents the writer’s conscious choice to indicate a presence in the discourse” (Hyland, 2005a: 58). Of course, any of these explicit linguistic items can be either metadiscoursal or propositional. Therefore, Hyland warns that every listed instance should be examined in its sentential co-text (see also Section 2.2.4).

Hyland also draws the distinction between internal and external relations to the

⁴ In the present thesis, elements that should not be seen as metadiscursive are crossed out.

discourse to separate metadiscourse from propositions (see Hyland, 2005a; Hyland & Tse, 2004). What makes this criterion in Hyland (2005a) different from that in Ädel (2006) is that the former does not exclude stance as a metadiscourse resource. In addition, he summarizes three specific aspects of this criterion. First of all, connective items constitute an excellent example to illustrate the distinction of internal and external reference, i.e., items that serve to connect steps in argumentation and organize the discourse are internal and are thus metadiscourse markers; while those that function to connect activities in the real world rather than inside the discourse are external, hence propositional materials. Secondly, the division between internal and external relations also maps onto Bunton's (1999) distinction between 'writer acts' or 'research acts'. While the first type is regarded as metadiscoursal since the researcher performs the acts as a writer in the text, the second type is regarded as propositional since the researcher performs the acts as a researcher irrespective of the text. Finally, the internal/external distinction is similar to 'de re' and 'de dicto' modality in modal logic, i.e., whether the modals refer to the reality represented by propositions or the propositions themselves. The "objectivity of the event" (Hyland, 2005a: 48) plays an important role here in judging a modal metadiscoursal or propositional: if the outcome concerns the writer's estimation of possibility about the ongoing event, then it is metadiscourse; if the outcome concerns real-world circumstances which may make it possible, then it is proposition. Illustrative examples of each aspect can be found in Hyland (2005a: 46–48) or Hyland and Tse (2004: 165–167).

Not exactly a criterion, Hyland (2005a) formulates a rule that evaluative lexis (i.e., lexis that conveys the writer's evaluative feeling), as opposed to stance markers, should be excluded as metadiscourse because it "qualify individual items" rather than "provid[ing] an attitudinal or evaluative frame for an entire proposition" (Hyland, 2005a: 31). While the rule is quite straightforward, it is not unproblematic to put it into practice. So, by this rule, evaluative adjectives such as *extraordinary* in (3a), *important* and *significant* in (3b) should not be seen as metadiscourse because they only qualify the following nouns instead of functioning in relation to the entire proposition. However, they were treated as metadiscourse (specifically 'Attitude markers') in Hyland (2005a:

150).

- (3) a. The first clue of this emerged when we noticed a quite *extraordinary* result.
- b. This period has also seen many other *important* changes such as: falling birth-rates, an increasing number of working women, and changing retail formats, all of which have had *significant* impacts on consumer behaviour.

Therefore, what counts as evaluative lexis and stance markers is not as clear-cut as it seems. To face this challenge, Khabbazi-Oskouei (2013) and F. Cao (2014) add one syntactic criterion to delimit further the boundary: “the degree of ‘separation’ from the main content” (Khabbazi-Oskouei, 2013: 99). So, for instance, “only adjectival expressions that could be separated from the main message or proposition in clauses by using punctuation markers or impersonal structures, such as *it is (adjective) that*, are counted as metadiscourse” (F. Cao, 2014: 41). By the same token, qualifying adverbs (or submodifiers) such as *surprisingly* in *the profit margin in advertising is surprisingly low* is not a metadiscourse because the sentence cannot be transformed into *surprisingly, the profit margin in advertising is low* or *it is surprising that the profit margin in advertising is low*. Further, F. Cao (2014) used this syntactic criterion to supplement other well-known criteria (e.g., discourse-internal/external distinction) for identifying metadiscourse. He took *thus far* as an example: in *areas that thus far have received little attention from language socialization researcher*, it is not a metadiscourse marker as it is inside the proposition and encodes an external relationship with the ongoing discourse; meanwhile, in *Thus far, we have used broad strokes to paint a picture of parental involvement*, it is placed separately from the proposition with punctuation and also refers to the internal discourse world, hence a metadiscourse marker (‘Frame marker’ in this case).

Hyland (2005a: 35), on the one hand, warns that “although it is reasonable to try and establish boundaries for metadiscourse as lying outside of propositional matter, using syntactic criteria to do this simply muddies the waters”. Ädel (2006: 22), on the other hand, contends that “metadiscourse cannot be neatly restricted to non-

propositional material without making syntactic restrictions”. I am inclined to agree with F. Cao (2014: 41) that it can be helpful to “supplement a purely functional approach to metadiscourse with some syntactic references” because syntactic criteria “will not only facilitate the analytical process but contribute to the analytical coherence of the model of metadiscourse” (F. Cao, 2014: 49). In this study, as we shall see in the methodology chapter, syntactic references such as syntactic position, punctuation separation, and impersonal structures will be implemented to help metadiscourse identification.

Before this section ends, there is one thing that merits more attention: punctuation. Although punctuation mark is a common phenomenon but peculiar to the written discourse, whether they should be treated as metadiscourse items is rarely discussed in the literature except for Crismore et al. (1993), Markkanen et al. (1993), Hyland (2005a), and Mur-Dueñas (2011). They argue that certain types of punctuation (e.g., exclamation marks, dashes, colons, parentheses) which, unlike commas and periods, does not have a grammatical influence on the sentences, are metadiscourse items as they are intentionally chosen by writers “for a particular purpose or effect” (Markkanen et al., 1993: 143), such as to “signal text glosses and clarifications as well as uncertainty, certainty, and attitude” (Crismore et al., 1993: 48) or to indicate “explanations, conclusions or examples” (Mur-Dueñas, 2011: 3070). Crismore et al. (1993), in addition, include some other typographical devices (such as underlining, capitalization, circled words, arrows, and numbers) as metadiscourse markers. They firmly believe that beyond the verbal items, both punctuations and other typographical marks can convey metadiscursive meanings. Ädel (2006, 2021) also mentions typographical marking. However, since her studies focus solely on verbal realization, non-verbal items that are not very explicit are excluded.

To sum up, metadiscourse identification is a complex issue as the boundary between metadiscourse from propositional content is fuzzy. At the same time, separating them is fundamental because only after the identification of metadiscourse in a text is completed can we start analyzing it. Previous researchers have proposed several criteria for doing this job. Explicitness can be seen as a prerequisite criterion

because only overtly stated textual devices can be worked on practically. Discourse-internal/external distinction is a crucial criterion because as one of the three key principles of metadiscourse, this distinction makes metadiscourse as a means of understanding the ways writers express meanings and make claims in academic texts more coherent (Hyland & Tse, 2004). Ädel's (2006) criterion of current discourse is also important in the sense that only texts that comment on ongoing texts themselves rather than other texts are of interest to analysts. Lastly, it is useful to incorporate some syntactic criteria to supplement the functional approach to metadiscourse. Nevertheless, no simple linguistic criteria can be applied to unambiguously identify metadiscourse in a text as many textual devices can either be metadiscoursal or propositional depending on their context or co-text (Hyland, 2005a). Therefore, once again, we should bear in mind that linguistic forms only qualify as metadiscourse given their sentential context or co-text.

2.2.3. Identification issue II: metadiscourse unit

After addressing the first identification issue of metadiscourse, we immediately encounter the second one: the size of metadiscourse units. As previous academics (e.g., Flowerdew, 2015; Hyland, 2017; Ädel, 2006; Mauranten, 1993b; Markkanen et al., 1993) recognize, it is precisely because of its functional and fuzzy nature that metadiscourse is rarely realized by simple formal or syntactic units, but instead by units of varied length, ranging from single words (e.g., *firstly*, *namely*) to whole clauses or sentences (e.g., *It is important to know...*, *Let us now consider the implications of the above experiment*). Therefore, identifying metadiscourse becomes tricky and hinges on the analyst's preference over the size of linguistic units. The size of the unit of analysis, however, is rather important as it has direct relevance to frequency counting and further interpretation of its function.

Concerning the solution to this issue, previous scholars adopted two different approaches, as identified by Ädel and Mauranten (2010): the 'thin' approach and the 'thick' approach. They are different in various aspects, such as the analytical step and

analytical concept.

In the first approach, the metadiscourse item is predefined; that is, the unit of linguistic devices and their corresponding category of metadiscourse have no variety once they are determined by the analyst. Thus, metadiscourse units are considered decontextually. Additionally, the linguistic unit of analysis is usually small, such as words or phrases, often based on the researcher's intuition or serendipitous discoveries during the corpus sweep (Ädel & Mauranen, 2010; Hyland, 2017). So, for instance, *in addition* is a connective and *perhaps* is a hedge. In this sense, the thin approach is more corpus-based (Akbas & Hatipoğlu, 2018; Hyland, 2017). Most SFG-inspired models, along with the interpersonal model, are inclined to go for this approach. Ken Hyland is arguably the most prominent representative of the thin approach, as demonstrated by his predefined inventory of 300 candidate items (Hyland, 2005a).

Following the thick approach, analysts usually start by searching small units too (e.g., *I, possible*), but then they typically take into account the syntagmatic sequences and discourse functions of these small units in order to extend them to larger units (e.g., *I would suggest, it is possible that*) until the final units of metadiscursive meaning can be properly determined in the context. Therefore, metadiscourse units in the thick approach are considered contextually. At the same time, the thick type can be seen as a more corpus-driven approach (Ädel & Mauranen, 2010; Akbas & Hatipoğlu, 2018). Studies that adopt the reflexive model tend to go with the thick approach. Ädel (2006), for example, is well qualified to represent this second strand.

However, we should be aware that both the thin and thick approaches to identifying metadiscourse units have advantages and disadvantages. Given that metadiscourse units in the thin approach are preestablished, a greater number of possible items can be searched and the identification procedure can be highly automatized, as Ädel & Mauranen (2010) and Flowerdew (2015) acknowledge. High automation is especially helpful when it comes to a large body of data; such is the case with corpus-based studies. With efficient retrieval, analysts can easily and quickly depict the frequency distribution of metadiscourse in any given corpus and then across corpora. Therefore, it is easy to quantify and generalize the findings.

The thin approach, however, has been criticized by Ädel and Mauranen (2010: 3) for its “superficial’ and “static” operationalization during the identification process, and its “heavy reliance on linguistic form coupled with the assumption that the overall function of each form searched for will not vary”. As a result, the precision and recall of the search/identification of metadiscourse are unknown because potential items not on the list would not be retrieved or retrieved items could be non-metadiscursive in their actual context. Another potentially thorny issue of the thin approach, alluded to by Flowerdew (2015), is how to balance the number of candidate items under each metadiscourse category. In a predetermined list, the number of search items subsumed under each category may be varied depending on the analyst’s personal selection. This becomes problematic if the researcher wants to compare the frequencies of metadiscourse across categories (either broad ones or subcategories). Adding more items to a particular category will directly change its frequency distribution. To what extent this change may affect the findings of frequency comparisons across categories is unknown. Therefore, statements like “writers used slightly more interactive than interactional forms, and that hedges and transitions were the most frequent devices followed by engagement markers and evidentials” (Hyland & Tse, 2004: 170), “the interactive metadiscourse was employed about two times more than the interactional metadiscourse” (Abdi, 2011: 7), or “Boosting is more frequent than hedging” (McGrath & Kuteeva, 2012: 165), may not be so conclusive.

Hyland (2017) rebutted Ädel and Mauranen’s (2010) criticism, maintaining that in metadiscourse identification, small units of analysis do not necessarily exclude longer units “as long as analysts are transparent in their judgements and consistent in their coding” (p. 18). Hyland further argues that the preestablished list of metadiscourse items is nothing more than a starting point for further analysis, from where more and more potential items can be included while trawling through the corpus. Moreover, the identification process is not as superficial as it seems. The thin approach actually gives priority to functional analysis besides formal realizations of metadiscourse. That is, each candidate item will be studied in its sentential context to make sure it is metadiscursive and conveys metadiscursive function. This step can be readily done by

manually examining concordance lines in corpus-assisted studies, which is the case for most metadiscourse research. In fact, Hyland (2017: 18) stresses that contextual checking “is more important than recording frequency counts”. Concerning the second issue, to the best of my knowledge, no solution has been proposed in the literature.

As for the thick approach, Ädel and Mauranen (2010: 4) claim that the identification procedure of the approach is “highly context-dependent” and “dynamic” so that analysts can perform a more meticulous qualitative analysis. Moreover, this cautious searching and identification allow analysts to gain more insights into nuanced metadiscourse functions that would largely go unnoticed otherwise (Akbas & Hatipoğlu, 2018). However, it is precisely because of the meticulous work that it is difficult to search for and analyze a significant number of metadiscourse items, let alone large size corpora. Consequently, findings derived from this type of research are often difficult to quantify and generalize. Moreover, a larger size of the unit of analysis may lead to another issue: a large unit sometimes contains several small units that fulfill different metadiscourse functions at once. Naturally, the multifunctionality of a metadiscourse unit complicates its classification, to which we will return in the next section.

To summarize, when it comes to the issue of metadiscourse unit, there are two different approaches: the thin approach and the thick approach. From a methodological point of view, the thin approach is more quantitative-oriented and corpus-based since it takes predefined metadiscourse units as the point of departure, aiming to retrieve all matched items, get a good overview of frequency distribution, and compare the metadiscourse use across corpora. Meanwhile, the thick approach is more qualitative-oriented or corpus-driven as it starts with a limited number of small metadiscourse units and then extends to larger units of metadiscursive meaning in order to uncover nuanced metadiscourse functions. As regards the analytical concept, the thin type usually draws on a predetermined list which consists of “decontextualised units”, whereas in the thick one the final metadiscourse units are “contextualised” (Ädel & Mauranen, 2010: 3). Both approaches have strengths and weaknesses that researchers should keep in mind. All in all, the two approaches are not as incompatible as fire and water. In fact, there are some studies combining both approaches (Ädel & Mauranen, 2010; Akbas &

Hatipoğlu, 2018), such as Bax, Nakatsuhara, & Waller (2019). By doing so, researchers can take full advantage of the strong points of each approach while counterbalancing the weak points of each. As we shall see, the present study also constitutes an example of such a blend of approaches.

2.2.4. Classification issue I: multifunctionality

After metadiscourse markers are identified in the text, the next step is to classify them according to their function. As already seen in Section 2.1.2, most researchers classify metadiscourse resources by proposing their taxonomy of metadiscourse, in which metadiscourse categories are defined to represent different discourse functions and their respective metadiscourse items are also listed. This superficial assumption of form-function correspondence, however, is problematic due to the multifunctional nature of the metadiscourse phenomenon. In other words, a metadiscursive expression may convey different functions in the text. Many previous scholars have acknowledged and proven the multifunctionality of metadiscourse. However, their interpretations of this characteristic vary. They can be split up into three:

1. One metadiscursive expression can convey two or more functions simultaneously in the same context. For instance, in the taxonomy of SFG-based models, segments like *X hypothesize that...* can function both as an ‘Illocution marker’ and a ‘Validity marker’. In the reflexive model, expressions like *in my essay* could be both a ‘Text-oriented metadiscourse’ and a ‘Writer-oriented metadiscourse’. Scholars who are inclined to adopt this reading include, among others, Vande Kopple (1985), Skulstad (2005), Hyland (2017), Flowerdew (2015), T. Li & Wharton (2012), Kuhl & Behnam (2011), Abdollahzadeh (2011).
2. One metadiscursive expression that has one particular function in a given context may have another function in another context. Under this reading, there are two variants:
 - 1) One item that conveys a single metadiscourse function in a given sentential context may fulfill another metadiscourse function elsewhere.

For example, according to the taxonomy of interpersonal model, the word *should* acts as a ‘Hedge’ in *there should be some other explanations for this finding* while serves as an ‘Engagement marker’ in *it should be noted that...* Another trickier case is the negation in a metadiscourse item. For example, if *not* appears in a booster, say, *it is clear*, then it becomes a hedge. Researchers who follow this reading include, among others, Abdi (2002), J. J. Lee & Casal (2014), J. J. Lee & Deakin (2016), Pujol Dahme & Selfa Sastre (2015), F. Cao (2014), Hu & Cao (2015), Qin & Uccelli (2019).

- 2) One item seen as a metadiscourse marker in one context may function as propositional content in another. This variant overlaps the first issue of metadiscourse identification discussed in Section 2.2.2. Here we take another example to illustrate this: the adjective *important* may function as an ‘Attitude marker’ by showing the writer’s affective values towards the statement in *It is important to know that the effect of...* while may serve as a qualifying word in *Two annotators were familiar with the important guideline of coding*. Hyland (2005a) seems to go with this reading.

3. Multifunctionality could mean both the first and the second reading. That is, one metadiscursive expression can perform not only different functions in different contexts but also more than one function at a time. Scholars who take this stand are Crismore et al. (1993), Markkanen et al. (1993), Ädel (2006), Aguilar (2008), S. Lee (2009), and Moya Muñoz (2016).

These three readings of multifunctionality have not been fully addressed in the literature, as a consequence of which some confusion may emerge. For example, the multifunctional nature for Hyland seems to be the first reading as he clearly says, “individual items may perform more than one function simultaneously” (Hyland, 2017: 18). However, the examples provided by him afterward actually point to the second reading (ibid):

[...], so that *quite* can be a hedge (*quite good*) or a booster (*quite extraordinary*), for example, or the word *possible* may function as metadiscourse by hedging a statement or drawing an inference expressing the speaker's attitude (*it's possible that he was drunk*) or as referring to a likelihood in the real world (*it's possible to catch a bus here*).

From my point of view, all these different interpretations, in the end, come down to one question: Are metadiscourse categories mutually exclusive? A more practical question derived from it is whether one-and-only-one category or multiple categories should be assigned to each individual metadiscursive element when classifying it.

For the first reading, the question arises when the same metadiscursive segment simultaneously conveys two or more categories. It becomes difficult to count and compare frequencies across corpora in this case. So analysts need to decide whether to consider only one primary function or count as many functions as possible (Ädel, 2006). What most scholars did was tease apart the multifunctionality and focus only on one function of a metadiscourse marker. For example, Vande Kopple (1985), Crismore et al. (1993), Markkanen et al. (1993), Aguilar (2008), S. Lee (2009), Kuhl & Behnam (2011), and Abdollahzadeh (2011), based on contextual checking and their judgment, chose to assign a single category whose function is primary and more dominant to a given multifunctional metadiscourse marker. T. Li & Wharton (2012) and Moya Muñoz (2016), on the other hand, chose to assign more than one category to the particular marker that fulfills multiple functions simultaneously. However, Ädel (2006: 24) reminds that “[i]t is debatable whether the analyst should decide which function is primary and count only that, or whether both or several subcategories should be counted”.

The raised issue that one metadiscourse item simultaneously functions as more than one category sometimes comes from the large size of the unit of analysis. As mentioned in the previous section, a large linguistic unit may encompass multiple smaller metadiscourse items (Flowerdew, 2015; Hyland, 2017). For example, *I will bring this topic in Section 3* as a whole is a metadiscourse chunk, but inside the chunk, *I* and *Section 3* as individual items can be treated as separate metadiscourse units. This

kind of overlap makes later quantification of metadiscourse analysis problematic, i.e., to count only one function or as many functions per unit as possible? What Flowerdew (2015) seems to suggest is to judge one of the possible functions as primary and classify the item accordingly. Hence the example above could be treated altogether as an ‘Endophoric marker’. On the other hand, Ädel (2006) and her followers (Toumi, 2009; Salas, 2015; Zhang, Sun, Peng, Gan, & Yu, 2017; Z. Li & Xu, 2020) prefer to adopt a more fine-grained analysis, counting smaller linguistic units rather than larger ones for reliable and accurate comparisons across texts. Therefore, two metadiscourse markers will be counted in the previous case: *I* as a ‘Writer-oriented’ category and *Section 3* as a ‘Text/Code-oriented’ category.

Under the second reading, how many categories should be assigned to each individual metadiscourse segment is no longer a problem because there is a one-and-only-one category. The real problem is which category should be chosen for the segment under scrutiny, given the fact that the very segment varies in metadiscursive function depending on its sentential context. To tackle this problem, almost all scholars unanimously decide to examine items manually in the context to determine their category. This solution does not sound efficient, but it is in fact a natural and logical move since the functional nature of metadiscourse does not allow any shortcuts. Specifically, analysts have to inspect each metadiscourse instance and its context manually and then choose an appropriate category for it. Before the popularization of computer-assisted tools, analysts (e.g., Crismore et al., 1993) achieved this step by reading line by line, which is certainly time-consuming. But by taking full advantage of computer-assisted tools such as corpus tools, later analysts (e.g., Hu & Cao, 2015; J. J. Lee & Casal, 2014; J. J. Lee & Deakin, 2016) were able to pinpoint the co-text of target items directly through the concordance lines, which saved them checking sentences of little interest.

In fact, checking the context of each metadiscourse instance is not only useful for classifying metadiscourse; it is basically a panacea for different kinds of metadiscourse issues. For example, as noted in Section 2.2.2, besides the application of different criteria, the contextual examination is recommended during the metadiscourse

identification. Hyland (1998a) acknowledges that due to the highly contextual nature of metadiscourse, manual checking is always needed to identify whether an item is metadiscursive or not. Ädel (2012: 4) concurs with Hyland's view by pointing out that metadiscourse "is highly context-dependent", so context should always be taken into account to decide what is metadiscursive and what is not. In a word, contextual checking is and should be applied to the entire process of metadiscourse analysis, ranging from identification to classification.

To conclude, although it has been interpreted differently among researchers, multifunctionality is considered a common feature of metadiscourse since writers sometimes need to pursue several rhetorical purposes simultaneously in the discourse. As an essential means of facilitating communication, a metadiscourse instance that expresses multiple functions at once seems more efficient. On the other hand, it also means that the issue of metadiscourse classification is inevitable. Manual contextual checking of potential metadiscourse items is always needed to tackle this issue. However, it should be noted that the multifunctionality per se is not the cause of the classification issue. The issue, instead, arises when analysts try to impose discrete and well-delimited categories and 'all-or-nothing' classification on each metadiscourse instance, which "inevitably conceals its multifunctionality" (Hyland & Tse, 2004: 175). Although a metadiscourse taxonomy can do nothing but "partially represent a fuzzy reality" or merely approximate to the complexity of language use, it nevertheless plays a meaningful role in metadiscourse studies, as it not only "help[s] reveal the functions that writers perform, but it also provides a means of comparing generic practices and exploring the rhetorical preferences of different discourse communities" (ibid).

2.2.5. Classification issue II: subjectivity

The second issue of metadiscourse classification actually comes from the first one: the multifunctional nature of metadiscourse will inevitably lead to a subjective decision made by analysts on which category or categories should be assigned to each metadiscourse marker. For example, Vande Kopple (1985) labels *for example*

‘Illocution marker’ while Mauranen (1993a) calls it ‘Connector’. As another example, expressions like *in summary*, *to conclude*, *finally* for Hyland (2005a) and F. Cao (2014) are ‘Frame markers’, but for Mur-Dueñas (2011) they are ‘Code glosses’, even given the fact that they adopted the same analytical framework, i.e., Hyland’s interpersonal model. I am inclined to believe that this kind of subjectivity is unavoidable because many potential factors may influence the analyst’s individual decision, such as their native status, target language, cultural background, and disciplinary knowledge. Since the margin of error can hardly be avoided in the decision-making process, what researchers can do is narrow it down as much as possible.

To make the personal analysis and classification more reliable, many metadiscourse scholars (e.g., Crismore et al., 1993; Abdollahzadeh, 2011; Akbas & Hardman, 2018) are aware of the importance of coding (or categorization) consistency and adopt a relatively uniform method: they first determine a clearly defined coding scheme for metadiscourse (sometimes known as ‘analytical framework’) and then make at least two raters (or coders) involved in the coding process. The coding scheme in the first step is the equivalent to metadiscourse taxonomy, which has been discussed in Section 2.1.2. We know that different analysts may decide on different coding schemes depending on the research purpose they intend to achieve. But no matter what coding scheme they choose, they always try to clearly define it by providing easily distinguishable categories followed by precise definition/explanation and examples.

In the second step, most studies involve at least two raters participating and independently coding target metadiscourse items, so-called ‘double coding’. Coders are supposed to be well trained and familiar with the codebook and procedure before they start to code (Akbas & Hardman, 2018). Moreover, in some studies (e.g., Khedri, Chan, & Ebrahimi, 2013; Qin & Uccelli, 2019) they are blind to the research purposes while in most studies (e.g., Crismore et al., 1993; F. Cao & Hu, 2014; Hu & Cao, 2015) researchers themselves serve as coders. Ideally, each coder should code all metadiscourse items independently, as Hong & Cao (2014) did in their study. Nevertheless, given the large size of the dataset and other practical reasons, in many studies (e.g., F. Cao & Hu, 2014; Khedri, Chan, & Ebrahimi, 2013; Abdollahzadeh,

2019; Qiu & Ma, 2019; Yoon & Römer, 2020) only small portion of the data are coded independently by different coders, and the rest is coded either by one rater or by automatized software. After the independent coding is finished, analysts usually apply some statistical measures, ranging from raw agreement statistics like percentage agreement to sophisticated inter-rater agreement statistics like Cohen's Kappa or Gwet's AC₁, to assess how reliable and consistent the coding across raters is or, in other words, how much subjectivity is involved in the coding (see Brezina, 2018a: chap. 3, 2018b). Of course, there will be some discrepancies between the coders in deciding on a category for certain metadiscourse instances. The common practice is that the coders thoroughly discuss disputed cases afterward until they reach a final consensus (see Abdollahzadeh, 2011; Pujol Dahme & Selfa Sastre, 2015; Ho & Li, 2018).

To sum up, when it comes to data that relies on the analyst's judgment, interpretation, or categorization, which is the case for metadiscourse analysis, it is likely to bring the issue of subjectivity into the study. Under this circumstance, it is vital to ensure that at least two independent analysts double code either a random sample taken from the dataset or the whole dataset, and then calculate an inter-coder agreement statistic to assess the reliability and consistency of coding. Finally, if it is possible, discrepancies should be resolved through a follow-up discussion between the coders. Only in this way can analysts minimize the subjectivity in metadiscourse classification.

2.3. Summary

This chapter has focused on some of the theoretical underpinnings and issues that each metadiscourse study should consider since they serve as the starting point for understanding the notion of metadiscourse.

Despite its popularity in the field, metadiscourse has been construed differently by different scholars. Some define it vaguely while others define it more precisely. Some use a broad definition while others prefer a narrow definition. This definitional division is directly related to how researchers understand the category of metadiscourse, hence which model to adopt. The broad approach sees the interaction between writers

and readers as fundamental to the category whereas the narrow approach is mainly concerned with the metatextual category, and the middle-ground approach considers text reflexivity as the basis for the category. However, diverse conceptions of metadiscourse, or individual studies that adopt different conceptual delimitation and functional scope, should not be seen as opposed positions but as a continuum of metadiscourse approaches where they all contribute to the understanding of discourse.

The fuzzy nature of metadiscourse causes several issues regarding its delimitation, identification, and classification. First, there is a certain amount of confusion as to what is and what is not metadiscursive. Earlier research tends to be overly concerned about a rigid distinction between metadiscourse and propositional matter in terms of their hierarchy and truth-conditional semantics; meanwhile, recent analysts seem to loosen this dichotomous view and turn to the exploration of linguistic forms and functions associated with metadiscourse elements in actual texts. Pertinent to this, the second issue concerns which criteria should be applied to separate metadiscursive material from propositional material in the text. Explicitness and discourse-internal/external distinction are crucial criteria for identifying an element as metadiscourse. Other criteria such as current discourse and some syntactic restrictions can be useful to locate metadiscursive elements more precisely. Third, metadiscourse can be realized by linguistic units of varied length. There are two approaches to units functioning as metadiscourse: the thin approach and the thick approach. The differences between them lie in the analytical step and analytical concept. Moreover, each of them also has its strengths and weaknesses. A combination of both approaches seems more promising. A fourth issue—multifunctionality—arises from the fact that a metadiscursive expression may convey more than one function, either in the same context or in different contexts. This characteristic requires that analysts conduct manual contextual checking of each metadiscourse instance. Finally, the issue of subjectivity stems from analysts' personal judgment about the functional categorization of metadiscourse items. It is considered good practice to double code the data (partially or wholly), estimate inter-coder agreement statistics, and discuss disputed cases together.

All these theoretical issues reveal how complex the notion of metadiscourse is.

Discussing them thoroughly is important not only because they are important themselves but also because they serve as a basis for practicing metadiscourse in the current research. As we will see in Chapter 4, the discussed issues will be reflected in the identification and classification of the metadiscursive phenomenon in Spanish academic writing.

Chapter 3 Metadiscourse in practice

Having discussed the theoretical aspects of metadiscourse, I shall now turn to the primary research applications of metadiscourse and review how this notion has been put to practice in the field.

It is known that metadiscourse shows a great variation in use. Prior studies have demonstrated that many factors contribute to the variation. Therefore, in the first main section I review empirical studies to determine what factors affect the use of metadiscourse in communication. Then some issues that emerge from these studies are raised and addressed in the second section. Given that the present study's focus concerns metadiscourse use in the Spanish context particularly, the third section is dedicated to reviewing studies on metadiscourse in academic Spanish. The chapter concludes by revisiting the research gaps noted in the Introduction.

3.1. Researching metadiscourse through different variables

Over the past four decades of the development in metadiscourse theory and methodology, there has been a growing and widespread scholarly interest in the topic of metadiscourse (Hyland, 2017; Flowerdew, 2015). The burgeoning field has witnessed a boom and diversification of research themes in the literature on metadiscourse. Several researchers (Ädel, 2012a, 2018; Hyland, 2017; Wei, Li, Zhou, & Gong, 2016; F. Cao, 2014; Khedri, Chan, & Tan, 2013) did a systematic review of those recurring themes in metadiscourse studies, such as language, discipline, and genre. Based on their work, an interesting finding is that a contrastive view prevails among the metadiscourse themes; that is, metadiscourse is commonly studied across languages, disciplines, genres, and so on. These are research variables in contrastive studies (Moreno, 2008; Ädel, 2012a, 2018), which the researcher can manipulate to see the extent to which the change of these variables can affect the use of metadiscourse. For example, suppose a researcher chooses to examine the different use of metadiscourse between English and Spanish. In that case, language is the variable (or 'independent

variable’ in statistical terms), which carries two manipulatable values (or levels), English and Spanish, while metadiscourse use is the outcome variable (or ‘dependent variable’ in statistical terms). It is noteworthy that except for the variable under analysis, all other possible extraneous variables should be controlled in order to draw valid comparisons⁵ (Moreno, 2008). Nevertheless, this process is not simple, as we will discuss further shortly.

In what follows, I present metadiscourse studies through a contrastive lens, covering nine single variables, distributed in eight subsections, as well as one subsection for crossed variables. Of course, it is impractical to review all the relevant studies given the sheer number of existing articles and the still-growing body of research. Therefore, I opt to provide only some of the key studies for each variable and crossed variables. Besides, I focus only on metadiscourse studies related to academic discourse as the research focus of the present thesis only concerns academic discourse (see Chapter 1). So, non-academic metadiscourse studies will not be reviewed here. However, readers who are interested in metadiscourse use in the non-academic realm are encouraged to read relevant studies on, for instance, newspaper (Dafouz-Milne, 2008; Kuhl & Mojdood, 2014), magazine and opinion column (Fu & Hyland, 2014), news commentary (Moya Muñoz, 2016; Moya Muñoz & Carrió-Pastor, 2018a, 2018b), business communication (Hyland, 1998b; Fuertes-Olivera, Velasco-Sacristán, Arribas-Baño, & Samaniego-Fernández, 2001; Ivorra-Pérez, 2014; Ho, 2018; Carrió-Pastor, 2019a).

3.1.1. Cross-linguacultural studies

The first variable—cross languages/cultures—is one of the most studied themes (if not the most) in the writing research on metadiscourse, probably because earlier researchers (such as Crismore et al., 1993; Markkanen et al., 1993; Mauranen, 1993a, 1993b; Ädel, 2006) played a pioneering role in investigating metadiscourse use between languages

⁵ In statistics, extraneous variables, sometimes called ‘confounding variables’, are variables that are not intended to be examined in the study (see Field, Miles, & Field, 2012).

and cultures. One might wonder this should be two variables. Indeed, language and culture are two different concepts⁶, but they are also closely interwoven (Kramsch, 1998; Malcolm, 1999), especially when metadiscourse is studied (see Hyland, 2005a; Khedri, Chan, & Tan, 2013; Wei et al., 2016). For example, when two writers from two different language backgrounds use metadiscoursal resources, they tend to follow the norms associated with their native culture, which naturally falls into the intercultural or cross-cultural scope. This can explain why a number of metadiscourse studies (Vassileva, 1998; Abdi, 2009; Mur-Dueñas, 2007, 2010, 2011; Pérez-Llantada, 2010; Akbas, 2012; Carrió-Pastor, 2019a) that compare the use of metadiscourse between two or more languages also map onto the cultural and intercultural aspects. Hence, I will count cross-linguistic and cross-cultural as the same theme, labeled ‘cross-linguacultural studies’.

There are at least three types of cross-linguacultural studies in metadiscourse literature, although all concern writing research. The first type of study seeks to compare metadiscourse use between two or more languages, with English being one of the often-studied languages (Hyland, 2017). Apart from the above-mentioned pioneering works by Crismore et al. (1993) and Markkanen et al. (1993), who compared Finnish and English, there is some research comparing English with other languages, such as Spanish (Mur-Dueñas, 2007, 2010, 2011; Carrió-Pastor, 2016a; J. J. Lee & Casal, 2014), Chinese (Loi & Lim, 2013; Mu, Zhang, Ehrich, & Hong, 2015), Persian (Abdi, 2009; Shokouhi & Talati Baghsiahi, 2009), Turkish (Akbas, 2012; Akbas & Hardman, 2018), Slovene (Peterlin, 2005), Czech (Dontcheva-Navratilova, 2020), Bulgarian (Vassileva, 2001), Arabic (Alghazo, Al Salem, & Alrashdan, in press), and a multilingual setting (English, German, French, Russian, Bulgarian) in Vassileva (1998). A variant form that branches off from this first type consists of studies focusing on metadiscourse use in texts written in different languages but by the same writers (e.g., one in English and the other in their first language). For example, Gong, Liu, & Cao (in

⁶ Note that the notion of ‘culture’, according to Atkinson (2004), can be construed as big as national culture, or as small as disciplinary culture or even classroom culture (see also Lafuente-Millán, Mur-Dueñas, Lorés-Sanz, & Vázquez-Orta, 2010). In this subsection, the first reading is more appropriate because when different languages are concerned, what happens tends to be geographically across nations and associated to its national culture. Disciplinary culture will be discussed separately in the next subsection (see also F. Cao, 2014; Dahl, 2004).

press) conducted a cross-linguistic study of interactional metadiscourse in English and Chinese research articles produced by the same group of Chinese scholars.

The second type of cross-linguacultural study compares metadiscourse used in texts written in English by native speakers of English and speakers of other languages. In other words, studies of this kind aim to explore the role of nativeness on the use of metadiscourse between certain writer groups. Done as early as the 1990s, the work by Mauranen (1993a, 1993b) and Valero-Garcés (1996) focuses on the intercultural variation of metatextual use in English texts written by Anglo-American academics and Finnish and Spanish academics. Ädel's (2006) book-length study is probably the most well-known research of this second type. She compared the use of metadiscourse by advanced Swedish learners of English and native American and British writers in their argumentative essays. In addition to Ädel, Blagojevic (2004) also did a contrastive study, where metadiscourse used by English native writers in their research articles was compared with that used by Norwegian-speaking academics in their English research articles. In Abdollahzadeh's (2011) comparative study between Anglo-American and Iranian writers, he narrowed down the scope of comparison, focusing only on the use of hedges, emphatics, and attitude markers.

Some researchers even combine the second type with the first type. For instance, Çandarlı et al. (2015) not only compared metadiscourse use (boosters, self-mentions, and attitude markers) in English essays written by Turkish students and American students but also included Turkish essays written by the same Turkish students for the purpose of cross-linguistic and cross-cultural comparisons. Similarly, Lafuente-Millán (2014) explored reader engagement strategies employed in business research articles published by Anglophone, international Spanish, and local Spanish writers, although the latter two groups were not the same groups of Spanish writers.

The last type—cross-linguistic translation of metadiscourse—is a less mainstream type of metadiscourse study, but translation is undoubtedly a cross-linguistic and cross-cultural activity as two different languages are concerned. A few researchers are interested in examining to what extent metadiscourse varies during the translation process. For instance, Peterlin (2008) investigated what and how the

translation strategies of textual metadiscourse were employed when Slovene research articles were translated into English. Meanwhile, in Herriman's (2014) translation study, both textual and interpersonal metadiscourse were compared bidirectionally between English and Swedish non-fiction texts. Granger (2018) examined the over- and underuse of metadiscursive markers in translated English texts (French as the source language) compared with original English texts.

3.1.2. Cross-disciplinary studies

If the popularity of the first variable (i.e., language and culture) in metadiscourse literature is primarily influenced by the early works of Mauranen, as well as Crismore and her colleagues, then the popularity of the second variable—discipline—can be mainly attributed to the work done by Ken Hyland. He first points out that “[a]cademic communication is a social activity which functions in disciplinary cultures to facilitate the production of knowledge” (Hyland, 1998a: 439). Writing, as an important form of scholarly communication, is socially situated as well (Hyland, 1999b, 2001a). Each disciplinary community has its own conventional discursive and rhetorical practices, which influence the way writers organize the texts, show their persona, and engage readers; metadiscourse is an important means of accomplishing these practices (Hyland, 1998a). In addition, he argues that if metadiscourse is only relevant to a particular disciplinary community, then “it is likely to vary between such communities” (Hyland, 1998a: 439).

In fact, Hyland (1998a, 1998c, 1999b, 1999a, 2001b, 2001a, 2004a, 2005a, 2005b, 2010) and many of his followers (e.g., Abdi, 2002; Peacock, 2006; Lafuente-Millán, 2010; Khedri, Chan, & Ebrahimi, 2013; Khedri, 2016; Salas, 2015; Yoon & Römer, 2020; Carrió-Pastor, 2020) have started to study metadiscourse from a cross-disciplinary perspective since the 1990s. Their findings largely support the claim that discipline has a major effect on variations in metadiscourse use. For example, Hyland's (1998a) study is based on the textual analysis of 28 research articles from four academic disciplines: Microbiology, Marketing, Astrophysics, and Applied Linguistics. A year

later, in Hyland (1999b) he doubled the number of research articles and academic disciplines; that is, 56 research articles from eight disciplines (adding Philosophy, Sociology, Mechanical engineering, and Electrical engineering). Apart from the genre of research articles from different disciplines, Hyland also paid attention to other genres such as textbooks. For instance, in Hyland (2004a: chap. 6) he compared the use of metadiscourse of 56 textbook chapters from 8 disciplines.

Aiming to draw a broad contrast, Abdi (2002) examined to what extent the use of hedges, emphatics, and attitude markers in research articles from the social sciences is different from the same resources employed in research articles from the natural sciences. While he found significant and non-significant differences between the two broad disciplines, it is not clear which statistical techniques he adopted to reach that conclusion. Yoon & Römer (2020) also investigated hedges, boosters, and attitude markers, with directives added. The corpus they used, which came from the Michigan Corpus of Upper-level Student Papers (MICUSP), covers four broad academic divisions (humanities and arts, social sciences, biological and health sciences, and physical sciences) and 16 subsumed disciplines. Some other cross-disciplinary studies point to a strong interest in one specific metadiscourse category. For example, Peacock (2006) focused only on the cross-disciplinary variation of boosting use; Carrió-Pastor (2020), on the other hand, was interested in the cross-disciplinary variation of self-mentions.

3.1.3. Cross-generic studies

Another important variable of metadiscourse that has gained much scholarly attention is genre. In applied linguistics, especially in the field of EAP and ESP, a genre is defined by Swales (1990: 58) as “a class of communicative events, the members of which share some set of communicative purposes”. These shared communicative purposes shape genre, giving it an internal structure and constraining its choice of content and style (Swales, 1990; Bhatia, 1993). A genre is usually “a highly structured and conventionalized communicative event with constraints on allowable contributions in

terms of their intent, positioning, form and functional value” (Bhatia, 1993: 13). That is to say, within a given genre, language should be used by members of a particular discourse community in socially recognized ways (Hyland, 2002a; F. Cao, 2014) and should not break away from the constraints, although a certain degree of freedom is allowable. Only by conforming to that rule can we academics easily distinguish, for example, research articles from book reviews, argumentative essays from theses, or textbooks from handbooks.

Metadiscourse has already been researched in a wide range of genres, either academic or non-academic. Only focusing on the former, we have seen that many cross-linguacultural and cross-disciplinary metadiscourse studies chose one particular genre as a point of departure, such as research articles (Hyland, 1998a, 1999b; Peacock, 2006; Mur-Dueñas, 2011; Khedri, Chan, & Ebrahimi, 2013; Carrió-Pastor, 2020), textbooks (Hyland, 1999a, 2004a), student’s argumentative essays (Ädel, 2006; Hong & Cao, 2014; Çandarlı et al., 2015; J. J. Lee & Deakin, 2016; Ho & Li, 2018; Yoon & Römer, 2020), academic book reviews (Tse & Hyland, 2006, 2008; Birhan, 2021). In this subsection, I only review cross-genre studies where the use of metadiscourse was compared between at least two different genres.

Cross-generic research on metadiscourse can be further broken down into two kinds, depending on whether the scope of genre is understood broadly or narrowly. Under the first reading, genre can be described as groups of texts that are usually collected and compiled for corpora; those groups “are associated with typical configurations of power, ideology, and social purposes, which are dynamic/negotiated aspects of situated language use” (D. Y. W. Lee, 2001: 47). In metadiscourse studies, researchers usually compile, for example, a series of journal articles or student essays as a whole corpus or as a subcorpus. These groups of texts constitute the most common type of genres in metadiscourse studies, as can be seen above. The second type is closely related to Swales’ (1990) well-known Creating a Research Space (CARS) model, mainly based upon the organizational patterns that writers typically use in the introductory section of the research article genre. Introduction, along with other sections such as abstract (Gillaerts & Van de Velde, 2010; Khedri, Chan, & Ebrahimi,

2013), methods, results, and discussions (so-called “IMRaD” structure in scientific writing), forms the larger whole; they are thus referred to as “part-genres” (Dudley-Evans, 2000: 5; see also Ädel, 2012a; Samraj, 2005). As a result, in this case, cross-genre means comparing different research article sections. For the sake of clarity and convenience, I will refer separately to this type as the ‘cross-section study’.

Clearly, the more conventional cross-generic study is more popular than the cross-section study. Three studies focus on the use of engagement markers across genres. Of them, Hyland (2002b) and Ädel (2018) were in particular interested in directives (e.g., *see*, *must*, *should*, *remember*) and reader pronoun *you*, respectively. Hyland compared the use of directives among three different genres, namely research articles, textbooks, and L2 student essays. Meanwhile, Ädel looked at the variation of *you* between research articles and teacher feedback. The final study by Jiang & Ma (2018), on the other hand, focused on engagement as a whole and compared the engagement strategy employed by PhD candidates in their confirmation reports with journal articles in the same field.

Both Bondi (2010) and Kawase (2015) investigated metadiscourse use in the introductory part but did not compare introductions with other sections. Instead, Bondi aimed to examine how a particular set of metadiscursive expressions were used differently between economics article introductions and economics textbook introductory chapters. Meanwhile, Kawase compared metadiscourse use in the introductions of PhD theses and research articles produced by the same writers. Kuhl & Behnam (2011) examined the use of metadiscourse across four academic genres in applied linguistics: research articles, handbook chapters, scholarly textbook chapters, and introductory textbook chapters.

On the other hand, only a few studies looked at the variations in metadiscourse use across part-genres. For example, Abdi (2011) compared metadiscursive distribution among the IMRaD (i.e., introduction, methods, results, and discussion) sections of research articles. In the study by Gillaerts & Van de Velde (2010), however, IMRaD sections as a whole were compared with abstracts to see to what extent interactional metadiscourse was used differently between these two part-genres, foregrounding the

particularity of abstracts.

3.1.4. Cross-register studies

Closely related to the concept of genre, register is the variable I will address in this subsection. In fact, because of the closeness of these two concepts, they are confusing (D. Y. W. Lee, 2001) and often used interchangeably (see, for example, Ädel, 2012b). The reason is that genre and register tend to overlap in terms of scope. For example, the broad genre types such as research articles and textbooks and the narrow part-genres such as introduction and methods sections can be construed as registers. So, the next question is how to distinguish them.

According to Biber & Conrad (2009), a register, generally speaking, is “a variety associated with a particular situation of use (including particular communicative purpose)” (p. 6) and with “pervasive linguistic features that serve important functions within that situation of use” (p. 31). From the definition, we can see three main components involved in the concept of register: the situational context, the linguistic features, and functions that connect the first two components. Now, the major difference between genre and register lies in whether or not the second component is taken into account. While register focuses on lexico-grammatical features of a text, genre focuses on “conventional structures used to construct a complete text within a variety” (Biber & Conrad, 2009: 2). By way of illustration, research articles and research article sections are explained here respectively. If linguistic features such as the heavy use of complex noun phrases and passives are under analysis, then research article here is considered as a register; if alternatively, conventional organization of a research article (for instance, almost any empirical research article starts with an abstract, followed by IMRaD sections) is the focus of analysis, then research article under this circumstance falls into the scope of genre. If we are talking about the preponderance of present tense in the introduction section and past tense in the methods section, then we are talking about the register of article sections. If the rhetorical organization of the introduction section is concerned, for instance, writers often take some rhetorical moves (see Swales,

1990; Samraj, 2005) to develop the introductory structure of a research article, then we are dealing with part-genre. Therefore, Biber & Conrad (2009) argue that the same texts (from a broader research article to a narrow introduction section) can be approached by both genre and register perspectives.

Unfortunately, however, the distinction between register and genre does not help us decide which study falls within the cross-genre scope and which falls within the cross-register scope because when dealing with differences across genres, we are also dealing with register variation (D. Y. W. Lee, 2001). Assuming we compare research articles and textbooks, we are actually making comparisons across genres and registers at the same time. But for convenience, I will only consider those studies where comparison across registers is explicitly stated by the author(s). By this criterion, only four studies were founded.

Drawing on a modified reflexive model of metadiscourse, Zhang (2016) and Zhang et al. (2017) compared metadiscourse across written and spoken registers. The first study compared informational and abstract written registers like academic prose, general prose, and editorials with narrative and concrete written registers such as fiction, press, and reportage. In the second study, the comparison of metadiscourse was based on six spoken registers: non-discussion broadcasts, discussion broadcasts, scripted speeches, unscripted speeches, public conversations, and casual conversations. In a more comprehensive study by Zhang (2019), both written and spoken registers are put together to locate variations in metadiscourse use. A total of 10 written and spoken registers were further clustered into five broader register groups: discussion broadcasts, conversations, speeches, non-discussion broadcasts, and writing.

The final study by Qin & Uccelli (2019) compared the use of metadiscourse in colloquial (personal emails) and academic writing (argumentative essays) on the same topic produced by the same students. Metadiscourse markers derived from Hyland's (2005a) study became the points of comparison across these two registers. The results show that code glosses were significantly employed more in academic writing while boosters and engagement markers were significantly more frequent in colloquial writing.

3.1.5. Cross-modal studies

Another variable that has sparked some interest is mode. The four main modes in our daily language are written, spoken (verbal), non-verbal (e.g., gestures, facial expressions), and visual (e.g., charts, graphs, photos). Communication sometimes is monomodal like a purely textual article or a clip of audio, but most of the time it is multimodal such as articles with tables and graphs or person-to-person conversations.

The vast majority of previous studies on metadiscourse have been centered around (monomodal) written discourse (Ädel, 2012a; Hyland, 2017), so-called “scripto-centric” (Ädel, 2018: 779), probably because written data is much easier to collect than other types of data. Most of the studies reviewed above can corroborate this claim. Interestingly, although multimodality is quite common in academic writing, for instance, tables and figures are inserted into the text, most studies (e.g., Carrió-Pastor, 2016a; Kuhl & Behnam, 2011; J. J. Lee & Casal, 2014; Pujol Dahme & Selfa Sastre, 2015; Abdollahzadeh, 2019) opt to remove those visuals, focusing only on the written part. However, the textual trace of those visuals has always been retained in endophoric markers (e.g., *table X*, *figure X*). Metadiscourse based on the spoken (verbal) mode, on the other hand, has gained increasing interest in recent years (Ädel, 2012a; Hyland, 2017), such as conference presentations (Amouzadeh & Zareifard, 2019), course presentations (Godó Ágnes, 2012), classroom lessons (J. J. Lee & Subtirelu, 2015; Molino, 2018). Only a small number of metadiscourse research focuses on the visual mode (Kumpf, 2000; Carrió-Pastor, 2019b; Sancho-Guinda, 2021) and the non-verbal mode (Bernad-Mechó, 2017). In the following paragraphs, I will review some of the cross-modal studies of metadiscourse.

Ädel (2010) qualitatively compared the use of personal metadiscourse (i.e., metadiscursive units containing personal pronouns *I*, *we*, and *you*) in spoken university lectures and essays written by graduate students. The findings show that although most discourse functions of metadiscourse occurred in both modes, some of them were indeed mode-dependent. In an extended and more quantitative study, Ädel (2012b) added published academic texts from different subject areas as a third corpus to

compare audience orientation in these three monologic academic discourses. However, this time she only investigated metadiscursive units containing the personal pronoun *you*. The findings largely support her previous study, although different functions were generally less frequent or even absent. An additional finding is that the overall frequency of metadiscourse in spoken mode was higher than the written mode.

Also focusing on personal metadiscourse and adopting Ädel's (2010) functional taxonomy, Zare & Tavakoli (2017) compared the use of personal metadiscourse between the monologic and dialogic modes of academic speech (monologic lectures vs. dialogic discussions). The results reveal that while the broad category 'metatext' was more prevalent in monologues, the category 'references to the audience' was self-evidently more common in dialogues.

3.1.6. Cross-expertise studies

In this subsection, I introduce the variable—level of expertise—which has attracted increasing attention in recent years. Metadiscourse studies on this variable are meaningful because they can help understand extent to which metadiscourse use is a skill that can be acquired and improved through training, thereby further addressing pedagogical implications. In fact, quite a few studies (e.g., Carrió-Pastor, in press) have documented that metadiscourse follows a developmental trajectory and that expert or high-level writers employ metadiscourse resources differently from their novice or low-level counterparts. In what follows, I will review some of the cross-expertise studies on metadiscourse.

Aull & Lancaster (2014) investigated three metadiscourse categories—hedges/boosters, code glosses, and adversative/contrast connectors—across three expertise levels: incoming first-year undergraduates, upper-level undergraduates, and published academics. The findings show that first-year students, on the one hand, tended to underuse approximative hedges, code glosses, and contrastive expressions; on the other hand, they tended to overuse boosters and concessive/counter connectors. A similar study by Qiu & Ma (2019) compared stance markers (hedges, boosters,

attitude markers, and self-mentions) used by master's students, doctoral candidates, and expert writers. They found that master's students employed more hedges, boosters, and attitude markers but fewer self-mentions than the other two writer groups, and that doctoral candidates followed a similar pattern of stance use as expert writers.

Also focusing on stance markers, Crosthwaite et al. (2017) compared student writing with that of professional research reports in the field of dentistry. Their findings reveal that student writers used a statistically higher incidence of all types of stance markers than professional writers, which generally conform to the results in Qiu & Ma (2019). Additionally, they reported that student writers employed a greater variety of stance devices than their professional counterparts. Instead of comparing student writers with expert writers, Bax, Nakatsuhara, & Waller (2019) research L2 students writers' use of metadiscourse across three language proficiency levels: B2, C1, and C2. Their findings indicate that lower-level writers overall used more metadiscourse markers than higher-level writers but employed a substantially narrower range of devices in most metadiscourse categories (except for self-mentions). The results, however, are in contrast to those of Carrió-Pastor (in press), where it was found that English learners increased the use of metadiscourse devices as they progressed the path of language proficiency (from A1 to C2).

As a variant of cross-expertise studies, some research compares the different use of metadiscourse in successful and less successful essays produced by students. For example, Intaraprawat & Steffensen (1995) explored the metadiscourse in high-rated and low-rated argumentative essays written by English as a second language (ESL) students. Similarly, J. J. Lee & Deakin (2016) also analyzed interactional metadiscourse in successful and less successful argumentative essays produced by ESL students. However, what is different is that the latter study additionally included a set of successful essays written by L1 students as a comparison. In terms of the findings, the first study reports that good essays produced both a higher density and broader range of metadiscourse markers than poor essays, although whether the differences were statistically significant is unknown. Meanwhile, based on statistical analysis, the second study concludes that the overall usage of interactional metadiscourse between L2

successful and less successful essays was not significantly different, but significant differences were found in subcategories such as hedges and self-mentions.

3.1.7. Other studies

This subsection reviews studies on the two remaining variables: time and gender. They are under the label of ‘other studies’ because the two themes are relatively marginal compared to other variables mentioned above. However, metadiscourse research that focuses on these two variables has recently emerged. This type of study certainly deserves more scholarly attention so that findings from parallel studies can be compared and researchers can build up a complete picture of metadiscourse analysis.

Studies that explore the change of metadiscourse use over time mainly center around the interactional dimension (including stance and engagement). For example, Gillaerts & Van de Velde (2010) looked at the diachronic changes (the 80s, 90s, 00s) in the use of hedges, boosters, and attitude markers in research article abstracts. The results reveal an overall downward trend in using these resources, especially boosters and attitude markers. In a similar vein, Poole, Gnann, & Hahn-Powell (2019) analyzed the trends in the use of epistemic stance markers (including modal auxiliaries, hedges, and boosters) in over 300 scientific articles during five time periods (45-year span). In contrast with the previous study, their findings show that the overall use of hedges was on the decline while there was an apparent increase in boosters. A more recent diachronic study by Deng, Fatemeh, & Gao (2021) examined both interactive and interactional metadiscourse use in doctoral dissertations at the time intervals of 1966, 1986, and 2016.

Cross-gender studies can date back to the 1990s but have not gained much attention until recently. The problem is that, as will be seen below, the findings derived from those studies vary somewhat, indicating that no conclusive evidence confirms the influence of the gender variable on metadiscourse use (Ädel, 2012a). Crismore et al. (1993), for example, compared the frequency of occurrence of metadiscourse use by American and Finnish male and female students. No apparent gender differences were

found in the frequency of interpersonal metadiscourse and textual metadiscourse in general, although frequency-based differences were found in some particular subcategories, such as text markers, attitude markers, and hedges. Focusing on a quite specialized genre, Alotaibi (2018) explored how interactional metadiscourse in dissertation acknowledgments varies across gender. In total, 120 dissertation acknowledgments written by male and female Saudi PhD students were compared. Except for the absence of hedges and engagement markers, no gender differences were found in boosters and attitude markers. However, there was a clear gender difference in the employment of self-mentions: female students used them more than their male counterparts. A similar study by Amouzadeh & Zareifard (2019) investigated the role of gender in the use of interactional metadiscourse but within the genre of conference presentations in Persian. Their results, on the other hand, revealed significant differences between male and female presenters in terms of the use of hedges (male < female), attitude markers (male > female), self-mentions (male > female), and engagement markers (male > female).

3.1.8. Studies on crossed variables

Above I have reviewed metadiscourse studies focusing only on one variable. The reason these studies were able to look at one variable is that other potential variables were controlled by the researcher as much as possible. Taking the last reviewed study (Amouzadeh & Zareifard, 2019) as an example, the authors focused on the gender variable, and at the same time they controlled other variables like genre, i.e., within the single genre—conference presentations. Assuming that the authors also wanted to compare conference presentations with university lectures, then the genre variable besides the gender variable is concerned. In fact, quite a lot of prior studies have examined more than one variable at a time, which surprisingly is seldom mentioned in the literature. Therefore, this subsection is dedicated to a brief review of this type of metadiscourse study, which I label ‘studies on crossed variables’.

I label it ‘studies on crossed variables’ instead of ‘studies on multiple variables’

because, while both imply that at least two variables of interest are examined, only the examined variables are crossed in the former. Two variables are crossed when each level of one variable occurs in combination with each level of the other variable (see Figure 3-1). In other words, they can be transformed into a contingency table where there is at least one observation in every combination of levels of the two variables (see Table 3-1). So, for instance, in Hyland (2004b) he examined the use of metadiscourse by two expertise groups (doctoral students and master's students) as well as across six academic disciplines (Electronic Engineering, Computer Science, Business Studies, Biology, Applied Linguistics, and Public Administration). He first reported the different metadiscourse use across expertise levels and then across disciplines. But he did not report the metadiscourse use of each expertise level in combination with each discipline. That is, none of his observations was based on the combination of levels of expertise and disciplines. Therefore, Hyland (2004b) should not be treated as a study on crossed variables but multiple variables. In what follows, only studies based on crossed variables will be reviewed.

Figure 3-1 An example of crossed variables: the variable language is crossed with the variable discipline

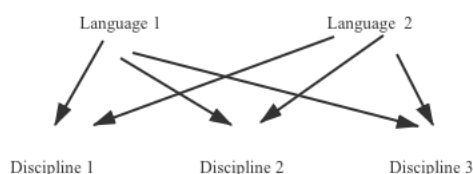


Table 3-1 Crosstabulation of the variable language and the variable discipline

	Language 1	Language 2
Discipline 1	(Observation)	(Observation)
Discipline 2	(Observation)	(Observation)
Discipline 3	(Observation)	(Observation)

Among this type of study, discipline is clearly the favorite variable that combines with other variables. For example, Hyland (1999a) compared metadiscourse across three disciplines (Microbiology, Marketing, and Applied linguistics) and at the same time

across two genres (textbooks and research articles). Discipline can also combine with language/culture. Dahl (2004) and Fløttum, Dahl, & Kinn (2006), for instance, investigate the use of metadiscourse in three languages—English, French, and Norwegian—and three disciplines—Economics, Linguistics, and Medicine. A parallel study by Vold (2006) explored the use of hedges in the same three languages as the said two studies but across two disciplines, Linguistics and Medicine. However, the author additionally took into account a third variable—gender—combining it with the language variable. Another study based on discipline and culture is by T. Li & Wharton (2012), who compared metadiscourse use by L2 English students from two different learning environments (studying in China and the UK) and in two different disciplines (Literacy Criticism and Translation Studies). A more recent study by Dontcheva-Navratilova (2021) examined engagement use across two disciplines (Linguistics and Economics) and two linguacultural backgrounds (Anglophone and Czech).

In addition to the combination of discipline and language/culture, another focus of variable combination is discipline and gender. Tse & Hyland (2008) compared male and female use of metadiscourse in book reviews of two disciplines, Philosophy and Biology. Wang & Jiang (2018), on the other hand, explored the possibility of combining discipline and expertise. The study investigated hedges, boosters, and self-mentions across four science disciplines (Material Science, Computer Science, Physics, and Life Science) and two writer groups (L2 English PhD students and L1 English professional writers).

More recently, Hyland (2019) and his colleague (Hyland & Jiang, 2016a, 2016b, 2020) have shifted their attention to the use of metadiscourse over time and across disciplines. Other researchers (F. Cao, 2014; F. Cao & Hu, 2014; Hu & Cao, 2015), on the other hand, have focused on the combined effects of disciplines and research paradigms (i.e., quantitative, qualitative, and mixed methods research) on metadiscourse use in journal articles.

Apart from the most popular variable of discipline, some scholars also explored metadiscourse based on other crossed variables, such as language/culture and research

paradigm⁷ (Hu & Cao, 2011), language/culture and expertise (Abdollahzadeh, 2019; S. Lee, 2009; Neff, 2008; Neff & Dafouz-Milne, 2008), and language/culture and part-genre (Pérez-Llantada, 2010).

3.2. Issues in contrastive studies

Having reviewed previous contrastive studies (including both one variable and crossed variables) on metadiscourse, I should raise some methodological issues that often occur in them. It is essential to address these issues here not only because they bear upon how rigorous the research design in studies of this kind is but also because they are relevant to the methodology of the present study (see Chapter 4). In what follows, I will be discussing issues regarding corpus comparability, observational variables, and statistics successively.

The first issue is the comparability of corpora. Same features from two randomly compiled corpora can always be compared, but the extent to which the two corpora are comparable often goes unnoticed by researchers. This question, however, is vital for contrastive studies because it directly influences the validity of the conclusions derived from the comparison. To design comparable corpora, Ana I. Moreno and her colleague (Connor & Moreno, 2005; Moreno, 2008) proposed a contrastive model, *tertium comparationis* (or ‘equivalence’), in which a set of criteria of comparison (or ‘contextual factors’), such as text form, genre, mode, targeted readers, discipline, and level of expertise, were established to help researchers make similarity judgments between two corpora. As we have mentioned at the beginning of the chapter, these are research variables that the researcher can manipulate. In a valid contrastive study, “[a]ll variables, except the independent variables under investigation, need to be constant” (Connor & Moreno, 2005: 157). If other (confounding) variables are left uncontrolled, the outcome derived from the comparison could be due to their influence instead of the independent variable we intended to measure.

⁷ Here the variable research paradigm was divided into two categories—empirical and non-empirical research—instead of quantitative, qualitative, and mixed methods research

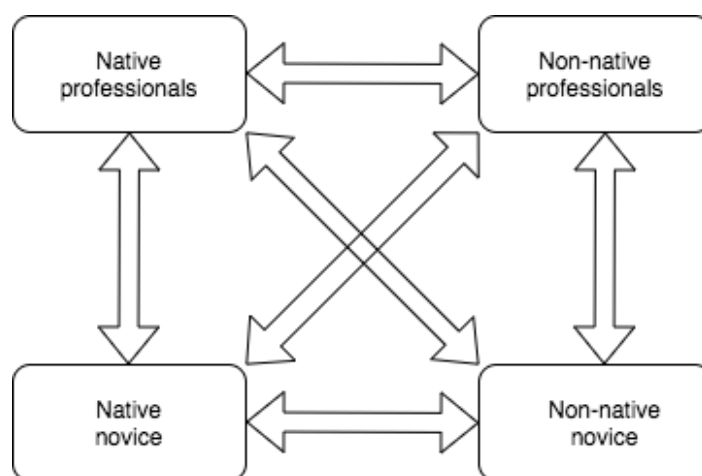
While metadiscourse studies often reflect the care taken to guarantee comparability (such as Markkanen et al., 1993; Ädel, 2006; Loi & Lim, 2013; J. J. Lee & Casal, 2014; Mu et al., 2015; Salas, 2015; Kawase, 2015; Curry & Chambers, 2017), in practice, “[i]t is notoriously difficult to control all potentially influential variables in contrastive studies” (Hyland, 2017: 25). Two possible explanations could account for this. Firstly, the difficulty could be simply because metadiscourse researchers are not aware of the existence of extraneous variables. For example, both Ädel (2012b) and Zhang (2019) intended to examine metadiscourse use in different registers, but in fact, the registers they chose were also across written and spoken modes, as well as possibly targeted at a different audience. Some researchers may be aware of the incomparability, such as Ädel (2010), who compared the use of personal metadiscourse between the written and spoken modes, recognizing that her self-compiled corpora also involved other variables such as the level of expertise, target audience, genre. Another similar example mentioned in Curry & Chambers (2017) is that the disciplinary factor can be problematic when academic prose in different languages are compared because unselective discipline structure in one language would be incomparable to that in another language. The solution to this first difficulty is that researchers should follow the principle of sameness, i.e., keeping as many extraneous variables constant as possible, to achieve maximum similarity of the compared corpora (Lorenz, 1999; Ädel, 2006; Connor & Moreno, 2005; Moreno, 2008).

Secondly, the difficulty could be due to the fact that certain variables themselves encompass other variables, as suggested in Moreno (2008). That means when researchers decide to examine one variable, more than one variable is actually examined. For instance, in cross-expertise studies (e.g., S. Lee, 2009; Aull & Lancaster, 2014; Abdollahzadeh, 2019; Qiu & Ma, 2019), the expertise level in the novice and expert writer groups at the same time involves the variables of age, sex, maturity, personality, etc. If these factors may not be problematic with a large and balanced sample size, then the differences in genre and target audience are something that needs to be considered seriously. One cannot expect, say, professional writers to produce argumentative essays in order to match students’ essays. Likewise, a PhD dissertation

certainly has a different target audience from a research article. Unfortunately, by nature these variables are uncontrollable (see also Section 4.1.3.2).

The second issue is exclusive to studies on crossed variables. As noted earlier, crossed variables demand at least one observation in every combination of levels of the two variables. So, two crossed variables with two levels in each require 2×2 observations in total; two crossed variables with three levels in each require 2×3 observations in total, and so forth. However, some studies on crossed variables lack observations. For example, in Abdollahzadeh (2019) and S. Lee (2009) the variables of language and expertise were examined simultaneously, and each had two levels (i.e., non-native and native, student and professional). However, they only had observational data of metadiscourse use from three corpora (non-native students, native students, native professionals). In other words, the observation in the combination of non-natives and professionals was absent from their research. While in principle they can compare three groups as a whole, the shortcomings of this practice are obvious: i) they downplayed the two variables involved in the design, nativeness and expertise; ii) it is unclear whether the observed differences among the three groups were due to the factor of nativeness, expertise, or both. The ideal case in a study of this kind is to compare data across each level of each variable. In this respect, Ädel (2006) proposed a heuristic model for comparing nativeness and expertise levels, as depicted in Figure 3-2.

Figure 3-2 Comparisons across nativeness statuses and expertise levels (adapted from Ädel 2006: 207)



The third issue is related to statistics. In contrastive studies, one of the most common statistical practices is to make frequency comparisons. Although it appears simple, three problems have been identified in the literature. First, some studies (e.g., Hyland, 1998a, 1999a; Dahl, 2004; Kawase, 2015) draw conclusions simply based on descriptive statistics such as percentages and normalized frequency. The problem is that whether the differences between groups are statistically significant is unknown, which means that the researcher cannot draw inferences from the observed data to a larger population. Second, while many studies (Ädel, 2006; Mur-Dueñas, 2011; J. J. Lee & Casal, 2014; Mu et al., 2015; Wang & Jiang, 2018; Dontcheva-Navratilova, 2021, to name a few) do include statistical tests in the data analysis, the authors tended to choose inappropriate ones such as the most welcome chi-squared test and log-likelihood. The reason and alternative test will be discussed in the next chapter (Section 4.3.1.1). Finally, when researchers examine more than one variable at a time, they tend to overlook relationships like the interaction between the variables (Plonsky & Oswald, 2017). Using Hyland (1999a) as an example, we might expect an interaction between discipline and genre as it is highly possible that the observed differences among academic disciplines depend on whether the genre is textbook or research article. Only a few studies (e.g., F. Cao, 2014; F. Cao & Hu, 2014; Hu & Cao, 2015; Fløttum et al., 2006) include an interaction effect in the data analysis when investigating more than one variable.

The present study, which is contrastive by nature, has also encountered these issues during the research design. In the next chapter, I will try to address them in a more detailed account to achieve maximum methodological rigor.

3.3. Metadiscourse use in academic Spanish

As the review in Section 3.1 suggests, there is ample evidence that metadiscourse use in academic English varies across different variables. Evidence from the Spanish context, in contrast, seems very little, although in the literature on metadiscourse, Spanish is often compared with English (see Section 3.1.1). Given that the present study

concerns metadiscourse use in Spanish academic writing, in this section I review studies that focus only on the metadiscoursal phenomenon in academic Spanish.

Beke (2005) probably is the first metadiscourse study of its kind conducted in the context of academic Spanish. In the study the author adopted Hyland's (1999b) early model to investigate the use of interpersonal (or interactional) metadiscourse in 15 research articles from a Spanish-medium educational journal. She found that hedges were the most frequent interpersonal resources employed by Spanish-speaking writers and that there were also variations in the use of metadiscoursal resources across different research types (e.g., synthesis, description, proposal, discussion, reflection). In a similar study, Osorio & Añez (2017) looked at interactional metadiscourse as well. The genre they were interested in, however, was doctoral thesis in the field of education. They compared ten theses written by Venezuelans with another ten by Spaniards. The two writer groups were found not to differ markedly in terms of metadiscourse use. Contrary to Beke's study, however, this study found that boosters were the most frequent metadiscoursal resources.

In contrast with the little research into metadiscourse as a whole, more studies in the Spanish context prefer to examine a specific metadiscoursal resource or category. For instance, Both Acín Villa (2016) and Chao Parapar (2018) were interested in the employment of hedging resources in Spanish academic writing, with particular attention paid to two hedging strategies: depersonalization (hiding authorial presence) and relativization (mitigating statements). However, as for the genre, the former analyzed the conclusion chapter of doctoral theses, whereas the latter investigated research articles. Moreover, the latter study further compared hedges across four disciplines (Education, Engineering, Medicine, and Psychology) and found that engineering articles used the least hedging resources. On the other hand, García Negroni (2008) explored the manifestation of subjectivity (either through explicit authorial self-mentions or through implicit depersonalized forms) in research articles across four academic disciplines (History, Linguistics, Geology, and Medicine). Also from a cross-disciplinary perspective, Müller (2007) analyzed the conceptualization, functions, and communicative acts of Spanish metadiscursive unit *como* + *X* across

four disciplines (Archeology, Natural sciences, Geology, and Linguistics).

A few studies have focused on metadiscourse use in learner Spanish. For example, Gómez García (2020) examined attitude markers used by heritage learners of Spanish and Spanish as a foreign language learners in the US. It is noteworthy that her analysis was based on an oral corpus of academic presentations, which is arguably scarce in the Spanish context. She found that heritage learners generally used more attitude markers than L2 learners and that evaluative adjectives were the most frequent lexical realizations to encode writers' attitudes. Menke (2021), on the other hand, reported on the frequency and lexico-grammatical distribution of stance elements (including attitude markers, boosters, hedges, and self-mentions) used by six advanced L2 Spanish learners in their writing assignments. The findings show that attitude markers were the common stance resources, followed by hedges, boosters, and self-mentions. She further discussed the reasons behind the different rates of stance use, such as the novicehood of these student writers, and finally provided some pedagogical suggestions for L2 Spanish learners.

Particular attention should be paid to the influential study by Salas (2015), where she adopted the reflexive model to research metadiscourse in Spanish-medium research articles across three disciplines (Linguistics, Economics, and Medicine). Her findings suggest that metadiscourse use in Spanish academic writing varies greatly depending on the discipline. For example, writers from Economics and Medicine were found to employ significantly fewer metadiscourse markers than linguistic writers. Regarding using specific functional categories, disciplinary writers also exhibited significant differences.

3.4. Summary

In this chapter, state-of-the-art literature on metadiscourse has been reviewed. We have seen that there has been a growing and widespread interest in the topic of metadiscourse. Diverse research themes have been explored through a contrastive lens. Briefly, a plethora of contrastive studies have demonstrated that variations of metadiscourse use

can be found across languages/cultures, disciplines, genres, registers, modes, expertise levels, gender, and time. These themes are also known as variables since the researcher can manipulate them to see how metadiscourse use is affected by configuring one of these. Some studies were interested in examining more than one variable at a time, for instance, examining discipline and genre collectively.

On the other hand, I have also discussed some potential issues related to the contrastive studies of metadiscourse, such as the comparability of corpora, the lack of observational group in crossed-variable studies, and the method of statistical analysis. I believe it is important for contrastive metadiscourse studies to take care of and address these issues before and during the research design.

Finally, due to the topic specificity of the present thesis, Section 3.3 focused on a review of metadiscourse studies on academic Spanish. Most studies of this kind chose to investigate a specific category of metadiscourse across variables, for example, the use of hedges across academic disciplines; meanwhile, little research examined metadiscourse resources as a whole. Generally, it can be said that there is a lack of research into metadiscourse within the Spanish context.

Overall, metadiscourse researchers have made unprecedented progress over the past few decades, both in theoretical and methodological terms. Their studies have laid solid foundations for the present one. However, this field is still far from being well-developed. Most previous metadiscourse studies have been centered upon English, either L1 English or EFL. Other languages such as Spanish are much less explored, let alone Spanish as a foreign language. Therefore, more observations and analyses from other languages are certainly needed to perceive metadiscourse as a pervasive linguistic phenomenon. We should also not ignore the fact that metadiscourse use is a multifactorial phenomenon in nature. For example, metadiscourse usage pattern from a randomly collected set of texts involves, among other factors, genre and discipline of the texts, the writer's native status and expertise level. As we have already seen, however, some metadiscourse studies that focus only on one research variable fail to control other variables; on the other hand, those studies with more than one variable taken into account often face issues like poor corpus design or inappropriate statistical

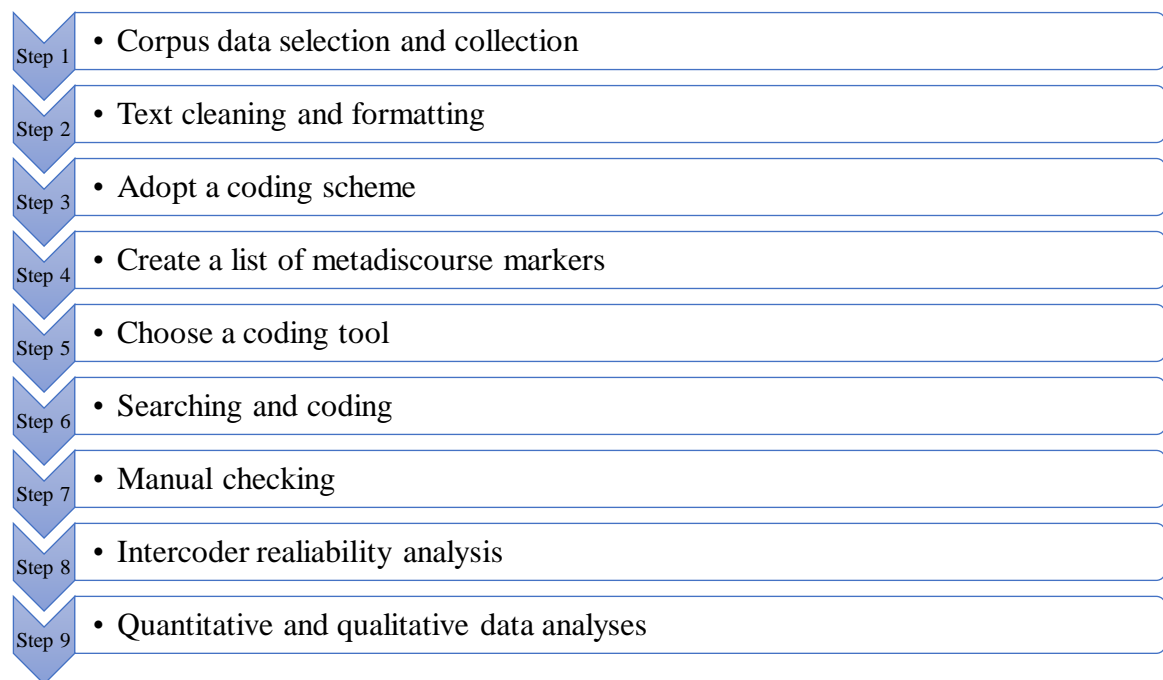
analysis.

All of these issues and ideas merit further discussion and investigation. As already stated in the introductory chapter, the general goal of the present thesis is to examine the role of nativeness and expertise in the use of metadiscourse by four academic writer groups of Spanish (L1 Chinese novice writers, L1 Chinese expert writers, Spanish-speaking novice writers, and Spanish-speaking expert writers). In this way, hopefully the current thesis can shed some new light and partially fill the gap left by previous studies on metadiscourse.

Chapter 4 Corpora and methodology

This chapter provides a detailed account of the present study's research methods, instruments, and procedures to address the research questions proposed in the introductory chapter. Additionally, the methodological values of choosing these methods and instruments instead of others are justified. As a brief outline, the figure below illustrates the main steps that this study followed. These steps in turn will be described in different sections and subsections.

Figure 4-1 Flow diagram of the research steps followed in the present study



4.1. Corpus construction

4.1.1. Corpus sampling

As noted previously, my thesis aims to see the extent to which the factors of nativeness and expertise affect metadiscourse use in Spanish academic writing. Hence, my study is not only contrastive by nature but also has crossed variables. Following Ädel's (2006) heuristic model for cross-comparison of nativeness and expertise level (see Figure 3-

2), I planned to set two levels for each variable: the factor of nativeness comprises non-native writer groups and native writer groups; the factor of expertise level consists of novice writer groups and expert writer groups. In total, four writer groups were examined, with each group bearing one of the levels of each factor, namely non-native novice, native novice, non-native expert, native expert (see a similar design in Marti, Yilmaz, & Bayyurt, 2019).

After the writer groups of interest were determined, the next step is to examine the writing samples that represent each writer group. Four written academic corpora with a large volume of authentic samples seem to be a necessity. However, whether it is necessary to compile specialized corpora or make use of existing corpora depends on each researcher's needs. Most ready-made corpora are designed for general use rather than a specific study. They may not represent the target population under analysis, such as a particular genre or discipline; thus, they are not suitable for corpus-based studies for particular research purposes (Biber, Connor, & Upton, 2007). In metadiscourse studies specifically, self-compiled corpora are much more common since researchers often aim to investigate a very specialized genre, a particular language, or a specific discipline. This kind of need cannot be easily fulfilled with ready-made corpora. As for the specific case of the present study, I also encountered this problem: while there are several existing Spanish written corpora available, such as *Corpus del Español* (CdE), *Corpus de Referencia del Español Actual* (CREA), *Corpus de Aprendices de Español* (CAES), they all failed to meet my particular research needs, such as the lack of the academic genres I intend to examine, the distinction between the four writer groups, and the issue of corpus comparability. In the end, I decided to compile my own four DYI corpora.

4.1.1.1. Student corpora

The starting point of corpus compilation is to collect master's theses from Chinese students majoring in Spanish Philology. Several considerations dictated the choice of this specialized corpus. Firstly, I did not choose students from other majors simply

because no students except those in Spanish Philology systematically learn and use Spanish, especially academic Spanish in China. Secondly, I did not choose Spanish learners from other language backgrounds because, as mentioned in the Introduction, I did bachelor's and master's degrees in Spanish Philology in China, and I have always been interested in knowing the different use of metadiscourse by Spanish natives and Chinese learners of Spanish. Thirdly, I did not choose the bachelor's thesis or PhD thesis because Chinese undergraduate students of Spanish usually focus on Spanish learning and acquisition, in preference to researching, in their four-year study. Although they must submit a bachelor's thesis in Spanish before graduation, I would not consider it as research-oriented as the master's thesis. On the other hand, there are barely any PhD theses in Spanish written at Chinese universities because only a few PhD programs are offered to Chinese students of Spanish as this language is at the early stage of its development. According to Lu (2018), while only three Chinese universities offer PhD programs in Spanish (7 students), in total 18 universities offer master's programs in Spanish (270 students). Given this circumstance, the master's thesis produced by Chinese students majoring in Spanish seemed to be the only option.

However, the master's theses written by Chinese students of Spanish have a relatively limited research scope. According to a case study by Y. Cao & Yang (2018), more than 90% of these theses are centered on Spanish linguistics, literature, and translation, as these three are the broad research lines that master students of Spanish typically choose for their theses. Although the research line (i.e., the subdiscipline of Spanish Philology) of the master's thesis is not the variable that the present study intends to measure, I kept and recorded this information during the sampling as it might be useful for future research⁸.

In terms of the sampling technique, at first, I decided to adopt stratified random sampling⁹, with the three research lines treated as strata. However, since I did not have sufficient information on the population (i.e., the number of all Chinese master's

⁸ The research line of each master thesis, as well as that of each research article introduced shortly, was determined based on my judgment on the research topic and content.

⁹ For a detailed description of stratified random sampling strategy, such as its procedure, advantages, and disadvantages, see Laerd (<http://dissertation.laerd.com/stratified-random-sampling.php>).

students of Spanish who chose each research line) to determine a proportionate stratification, I decided to use purposive sampling instead. Purposive sampling, also referred to as ‘selective sampling’ or ‘subjective sampling’, is a type of non-probability sampling technique that concerns selecting information-rich cases or units based on the researcher’s specific purposes rather than randomly (Teddlie & Yu, 2007; Patton, 2014). The specific procedure consists of two steps: first, I randomly trawled through master’s theses produced from four Chinese universities in the dissertation sub-database of China National Knowledge Infrastructure (CNKI)¹⁰; then, I purposefully selected theses for the targeted research lines. To match unevenly distributed research lines in the non-native expert corpus (see the next section), I eventually chose 21 master’s theses (14 in Linguistics, 2 in Literature, and 5 in Translation) as the corpus of non-native novice (TFM_ZH henceforth). Additionally, to avoid potential influence from the diachronic change of thesis writing, the publication year of each thesis is restricted to between 2009 and 2020.

For the corpus of native novice (TFM_ES henceforth), I followed a similar sampling procedure and technique as the TFM_ZH to collect master’s theses from the dissertation repository of five Spanish universities. However, note that many international students do master’s degrees in Spain and write master’s theses in Spanish. The author’s name was thus used to help determine their L1 status (see J. J. Lee & Casal, 2014; Carrió-Pastor, 2016a; Z. Li & Xu, 2020). At the same time, to match well the corpus of non-native novice, I only collected master’s theses in areas of Linguistics, Literature, and Translation. Finally, the TFM_ES too comprises 21 theses (14 in Linguistics, 2 in Literature, and 5 in Translation).

4.1.1.2. Expert corpora

For the two expert corpora (RA_ES and RA_ZH henceforth), while the purposive sampling technique was also applied to collect texts, the sampling procedure was

¹⁰ China National Knowledge Infrastructure (CNKI) is the most well-known and comprehensive online publishing platform for scholarly dissemination in China. See <https://oversea.cnki.net/index/>.

slightly different as we were dealing with research articles. First, using the Scimago Journal & Country Rank¹¹, I surveyed potential Spanish journals specialized in Linguistics, Literature, and Translation. To guarantee the quality of the articles, I only looked at journals indexed in Web of Science Core Collection (i.e., A&HCI, SCI, SSCI, and ESCI) and under specific categories (subject area: Arts and Humanities > subject category: Language and Linguistics + Literature and Literary Theory > region /country: Spain + Latin America). In the end, 11 journals were selected (see Appendix I).

Second, I accessed each journal's official website and purposely selected Spanish articles by looking at the title since many journals also publish English articles. At the same time, I checked authors' affiliation apart from authors' names to determine their L1 status (i.e., Spanish and Chinese) (see Carrió-Pastor, 2016a; Marti et al., 2019). In the case of RA_ES, I indiscriminately included authors affiliated with both Spanish and other Spanish-speaking (e.g., Chile, Mexico, and Argentina) institutions because it would have been more time-consuming to look for Spanish scholars only. That said, I would argue that Spanish-speaking scholars share similar academic writing features as they usually publish in the same journal and follow the same publishing norms.

For the RA_ZH, the collecting procedure was the most problematic one compared to all other corpora. The first issue is the paucity of research articles in Spanish published by Chinese scholars since most Chinese teachers of Spanish mainly focus on teaching rather than researching. As a result, to the best of my ability, the research articles I collected for the RA_ZH included almost all articles published by Chinese scholars, which directly limited the sample size. The second issue is that the Chinese scholars' research articles were confined to a limited range of journals: only five from the said 11 journals. Of the five journals, most articles centered on one journal, namely *Círculo de Lingüística Aplicada a la Comunicación* (see Appendix I), which could potentially skew the sample. The third issue, as noted in the last section, lies in the poor distribution in terms of research lines: 24 articles fall within Linguistics, 3 in Literature,

¹¹ The SCImago Journal & Country Rank is a publicly available portal that includes the journals and country scientific indicators developed from the information contained in the Scopus® database. See <https://www.scimagojr.com/>.

and 7 in Translation. To achieve maximum corpus comparability in terms of research lines (see also Section 4.1.3.2), the RA_ES has precisely the same number of articles for each research line, and the two student corpora, as said earlier, proportionally match the RA_ZH.

Briefly, I collected 110 texts in total: 21 texts for each student corpus and 34 texts for each expert corpus. While it was not an intended variable, the distribution of research lines among the texts was considered to maximize corpus comparability. Therefore, each student corpus consists of 14 texts in Linguistics, 2 in Literature, and 5 in Translation; each expert corpus comprises 24 texts in Linguistics, 3 in Literature, and 7 in Translation; all the texts were produced during the year range of 2009–2020. More details, such as the percentage of each research line and total word counts of each corpus component, can be found in the next section.

4.1.2. Corpus documenting, text cleaning and formatting

After compiling all the texts for the four corpora, the next step was to document, clean, and format the texts. First, I labeled each file to reflect its genre, L1 status, research line, and download order (see J. J. Lee & Casal, 2014). The naming system I followed is ‘academic genre_L1 language code_research line_number’. Academic genre: ‘RA’ stands for research articles, ‘TFM’ stands for master’s thesis; L1 language code: ‘ES’ stands for native Spanish-speaking writers, ‘ZH’ stands for Chinese writers of Spanish; research line: ‘LIN’ stands for Linguistics, ‘LIT’ stands for Literature, ‘TRA’ stands for Translation; number: two-digit serial numbers start from 01. So, for example, the first piece of a linguistic research article written by a Spanish-speaking scholar was labeled ‘RA_ES_LIN_01’; similarly, the first literary thesis written by a Chinese student was labeled ‘TFM_ZH_LIT_01’; and so on (see also Appendix I). Depending on their genre and L1 status, all labeled files were stored separately in four folders that correspond to the said four corpora. By doing so, the author can easily capture each text’s metadata (data about the data) by merely looking at its file name. Besides, it makes group comparisons in later quantitative and qualitative analyses more convenient and

systematic (Ädel, 2020).

All in PDF format, the downloaded texts are searchable and editable, except three master's theses produced by Chinese students are scanned versions of the original manuscripts. Therefore, the three theses underwent an OCR (optical character recognition) process with Adobe Acrobat DC Pro. Then, the cleaning procedure was done through three steps:

First, I used PDF Expert to start the first-round text cleaning directly on PDF files. Following the tradition of metadiscourse studies (e.g., Kuhi & Behnam, 2011; J. J. Lee & Casal, 2014; F. Cao, 2014; Carrió-Pastor, 2016a; Can & Cangır, 2019), all irrelevant elements in texts were removed. Since a master's thesis and a research article belong to different genres, excluded elements are slightly different (see table below).

Table 4-1 Summary of the removed elements during the first-round text cleaning

Text type	Removed elements
Master's thesis	cover, title page, acknowledgements, preface, abstract in a language other than Spanish, table of contents, list of tables, list of figures, abbreviation index, extensive quotations, extensive translated passages, excerpts, illustrations, tables, figures, example sentences, references, appendices.
Research article	title, author(s), abstract in a language other than Spanish, corresponding author's contact, header and footer of each page, extensive quotes, extensive translated passages, excerpts, illustrations, tables, figures, example sentences, references, acknowledgments, appendices, authors' profile, article history

Second, I used Mac built-in Automator to extract texts from all the PDF files and saved them as separate .rtf files¹² under the same file name and folder as the original PDF files.

Third, I imported all the texts (in .rtf format) into MAXQDA 2020¹³ under the exact four folders (document groups under "Document System" on MAXQDA 2020

¹² I preferred the Rich Text Format (.rtf) over the plain text format (.txt) because the former keeps the original format of the texts, such as bigger font size of chapter titles, bold and italics, which enables the author to easily follow the structure of a given text. This is especially useful when deciding whether a metadiscourse segment like *en el apartado 3.1* is a 'Preview' or a 'Review'.

¹³ MAXQDA 2020 is the coding tool I used for metadiscourse analysis in the present study. See Section 4.2.3 for more details.

interface) and started the final round of text cleaning. In this round, with edit mode on, the author adjusted mal-formatted texts during the second step (i.e., text extraction from PDFs). Besides, since the .rtf file is a single-page file like .txt, I needed to manually merge the paragraphs that were split due to page breaks in the original PDFs.

After the text cleaning procedure was completed, all cleaned files were stored again in separate folders for possible retrospective checking during the later analysis. Note that metadiscourse studies rarely rely on the text's part-of-speech (POS) information to perform analysis; therefore, no texts were grammatically parsed in the present study.

Table 4-2 Descriptive summary of the corpus architecture

Corpus	Texts (%)	Total words	Mean	SD	Range
TFM_ZH	21 (100%)	424,087	20,195	5,384	(34,434–12,366)
Linguistics	14 (66.7%)	276,978	19,784	5,762	(34,434–12,366)
Literature	2 (9.5%)	49,237	24,619	1,374	(25,590–23,647)
Translation	5 (23.8%)	97,872	19,574	5,072	(26,434–13,875)
TFM_ES	21 (100%)	387,613	18,458	5,317	(27,218–9,846)
Linguistics	14 (66.7%)	250,652	17,907	5,691	(27,218–9,846)
Literature	2 (9.5%)	45,747	22,874	359	(23,127–22,620)
Translation	5 (23.8%)	91,214	18,243	5,021	(25,180–13,364)
RA_ZH	34 (100%)	195,121	5,739	2,066	(10,832–2,931)
Linguistics	24 (70.6%)	143,746	5,989	2,117	(10,832–2,931)
Literature	3 (8.8%)	12,393	4,131	320	(4,498–3,907)
Translation	7 (20.6%)	38,982	5,569	2,165	(9,993–4,047)
RA_ES	34 (100%)	209,195	6,153	1,277	(8,897–3,146)
Linguistics	24 (70.6%)	151,297	6,304	1,381	(8,897–3,146)
Literature	3 (8.8%)	15,396	5,132	628	(5,688–4,451)
Translation	7 (20.6%)	42,502	6,072	953	(7,419–4,868)
Grand total	110	1,216,016	Year range (2009–2020)		

Finally, Table 4-2 summarizes the descriptive information of the four corpora, including

the number and percentage of texts, total word count¹⁴, mean word count, word count standard deviation, and word count range in each corpus and each research line component. The grand total of word counts (i.e., corpus size) exceeds 1.2 million words.

4.1.3. Additional considerations

4.1.3.1. Copyright issue

As noted earlier, I compiled my own corpora for this study because ready-made corpora did not meet my research needs. However, one of the major issues in developing a DIY corpus is copyright matters¹⁵. When a researcher builds a corpus, the central question is “whether the inclusion of published texts will infringe copyright laws” (Mikhailov & Cooper, 2016: 39). Another companion question is whether a researcher must obtain permission from the copyright holders when using their materials (Wilkinson, 2006). These questions are of particular relevance to the research where legality and ethics are concerned, but, unfortunately, they are seldom addressed in corpus research, including metadiscourse studies (McEnery, Xiao, & Tono, 2006; Nesi, 2016; Ädel, 2020; Crosthwaite et al., 2017; Abdollahzadeh, 2019 are notable exceptions). In the remainder of this section, I will draw on some existing discussions and legal documents to justify the legitimacy and ethicality of my corpus collection.

There are two types of corpora in terms of purposes: for commercial and for non-profit use (McEnery et al., 2006). It is illegal and unethical to build a corpus for the first purpose unless the researcher and copyright holders have reached an agreement. As my thesis’s corpora do not concern the first case, I will thus focus only on DIY corpora for non-profit use.

As McEnery et al. (2006: 77) acknowledge, “[c]opyright issues in corpus building are complex and unavoidable”, in the sense that even if corpus builders do not sell the corpus to make a profit, they may violate the copyright law or need to seek the

¹⁴ The final number of words was counted by MAXQDA 2020 after the text cleaning procedure.

¹⁵ Some researchers may use texts produced by the student, which is usually out of copyright question but more related to ethical issues. Since the present study does not concern this aspect, here we only discuss copyright issue. That said, it is advisable to refer to Ädel (2020) for ethical considerations and fair practices.

permission for the use of copyrighted text. This is because corpus researchers usually write an article based on examples of KWIC or excerpt displays from a specific text, and this kind of ‘spoiler’ could potentially diminish the profit of a particular textual material as a whole.

Under this circumstance, corpus builders often appeal to the doctrine of ‘fair use’ (in the US) or ‘fair dealing’ (in the Commonwealth of Nations) (McEnery et al., 2006; Wilkinson, 2006; Zanettin, 2012; Mikhailov & Cooper, 2016; Ädel, 2020). Fair use is a copyright principle that “permits the use of copyrighted material without the IPR [Intellectual Property Rights] holder’s consent in cases of non-commercial and non-profit activities such as research, teaching, news reporting, etc.” (Mikhailov & Cooper, 2016: 40). While there is no corresponding concept of ‘fair use’ or ‘fair dealing’ under the framework of the EU’s copyright law, the Directive 2001/29/EC of the European Parliament & Council provides for an exhaustive list of exceptions and limitations to the reproduction right and the right of communication to the public. Under the provision of the said Directive (Chapter II Article 5(3)(a))¹⁶, the exception and limitation to copyright can be applied when “use for the sole purpose of illustration for teaching or scientific research, as long as the source, including the author’s name, is indicated, unless this turns out to be impossible and to the extent justified by the non-commercial purpose to be achieved”.

Returning to my research, it was conducted within the EU, and the corpora I compiled were only for personal research purposes and also gave a proper attribution to the original authors of each text (see Appendix I). Therefore, I can justify that the corpus collection for my thesis does not need to obtain rightsholder’s clearance and does not infringe the EU’s copyright law.

4.1.3.2. Corpus comparability

We have already noted in Section 3.2 that researchers should be aware of the potential

¹⁶ See <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32001L0029&from=EN>. For the latest and amended version of the Directive, see <https://eur-lex.europa.eu/eli/dir/2019/790/oj>. Consulted on October 1, 2020.

issue of comparability when compiling corpora for their contrastive studies. While comparing two or more corpora is one thing, whether they can be compared is quite another matter. For example, we want to measure whether one factor causes a different use of a particular linguistic feature between two corpora. If the two corpora are incomparable, i.e., other factors besides the one we intended to measure are involved, then the possible differences from the comparison could occur due to other explanations instead of the intended factor. This could finally lead us to an invalid conclusion. My research is based on a contrastive study between four corpora; thus their comparability is one of the essential points I should consider when designing the corpus. In the following, I will be detailing the factors intended to measure, the ones that I controlled for the comparability of the four corpora, and the ones that I was unable to control.

Following previous metadiscourse studies (e.g., Mur-Dueñas, 2007; J. J. Lee & Casal, 2014; Kawase, 2015; Salas, 2015; Mu et al., 2015; Chen & Zhang, 2017), I adopted Moreno’s (Connor & Moreno, 2005; Moreno, 2008) contrastive model—*tertium comparationis*—where she listed a set of criteria of comparison that helped corpus builders to make comparability judgments between the corpora (also see another discussion in López-Arroyo, 2020). The basic idea is that “[a]ll variables, except the independent variables under investigation, need to be constant” (Connor & Moreno, 2005: 157). To put it differently, only the factors that the researcher wants to evaluate can vary between the corpora, while the possible (extraneous) factors should be controlled. In the case of the present study, I intended to assess whether the factors of nativeness and expertise affect the use of metadiscourse in Spanish academic writing. Therefore, only the L1 Spanish status and Spanish expertise level are variables across the four corpora, whereas other factors such as discipline, mode, and genre should, in principle, be constant. The following table is a checklist of factor comparability adapted from Moreno’s *tertium comparationis*.

Table 4-3 A comparability checklist of the four corpora (adapted from Moreno, 2008)

Tertium comparationis	TFM_ZH	TFM_ES	RA_ZH	RA_ES	Conclusion
Text form	Scientific exposition				Comparable

Mode	Written language		Comparable
Situational variety	Formal		Comparable
Dialectal variety	Standard		Comparable
Tone	Serious		Comparable
Channel	Graphical substance		Comparable
Point of view	Objective		Comparable
Global communicative event	Sharing results from research		Comparable
Global rhetorical strategy	Demonstrate a theory Describe and analyze a phenomenon Apply a model Establish and verify a hypothesis Evaluate an outcome		Comparable
Overall subject matter or topic	Linguistics and Literature		Comparable
Textual unit of analysis	Whole text		Comparable
Textual alteration	Revised version		Comparable
Global superstructure	Introduction-procedure-discussion Problem-analysis-solution		Comparable
Predominant text types	Argumentation Exposition Description		Comparable
Publication year	2009–2020		Comparable
Academic discipline	LIN (66.7%) LIT (9.5%) TRA (23.8%)	LIN (70.6%) LIT (8.8%) TRA (20.6%)	Comparable
Genre	Master's thesis	Research article	Incomparable
Participants: –Writers –Target audience	Master's students Thesis committee and judge	Researchers, professors Peer researchers	Incomparable
General purpose of communication	Writer: to obtain the approval from the committee and jury Reader: to examine whether the thesis meets the requirements	Writer: to get published and convince readers Readers: to criticize and obtain new knowledge	Incomparable
Text length	Word range (34,434–9,846)	Word range (10,832–2,931)	Incomparable
Number of authors	Single-authored (42 texts) Multi-authored (0 texts)	Single-authored (43 texts) Multiple-authored (25 texts)	Incomparable

Note that we additionally included ‘Textual alteration’, ‘Publication year’, and ‘Number of authors’ into the original table because we believe they are meaningful criteria of comparison, especially for the present study.

It can be seen in the table above that the four corpora are comparable in most of the criteria established by Moreno (2008), such as text form, mode, overall subject matter, and discipline. However, there are five criteria in which the differences between the two student corpora and the two expert corpora lie. In other words, the comparability issue occurs when we collect corpora across the level of expertise.

Why does the expertise factor cause the incomparability between the two broad corpus groups? Looking closely at those five criteria, we may notice that they can come down to one broad category, ‘Genre’, because the remaining four criteria directly reflect the genre difference between the master’s thesis and the research article. In other words, the differences in ‘Participants (writers and target audience)’, ‘General purpose of communication’, ‘Text length’, and ‘Number of authors’ are because a master’s thesis and a research article belong to two different genres. Kawase (2015: 114) refers to the former as “educational genre” and the latter as “professional genre”. Naturally, participants involved in the educational genre are different from those in the professional genre; hence their communicative effects should differ (D. Y. W. Lee & Swales, 2006; Nesi, 2012). A master’s thesis is a final examination after an apprenticeship finishes, and student writers try to obtain approval from the committee and judge; meanwhile, a journal article is a demonstration of researcher’s scholarly achievements and expert writers “need to survive severe competition to get their manuscripts published” (Kawase, 2015: 114). It is also strongly expected that a master’s thesis is longer than a research article as the requirement of text length specified by a university and a journal is quite different. Finally, while single authorship is mandatory in a thesis genre, this is not the case for the research article genre as it often has more than one author. This newly added criterion is particularly targeted on metadiscourse analysis since the number of authors is directly related to the use of ‘Self-mentions’ in academic writing (see Mur-Dueñas, 2007; Lafuente-Millán, 2010).

Now we can see the problem: we intended to investigate the factor of expertise, but at the same time the factor of genre implicitly infiltrates into the measurement. The question is how we can avoid this. Unfortunately, the answer is no. If we recall the issues of contrastive studies in Section 3.2, we know that one complex factor itself may comprise other factors that are impossible to be controlled, as acknowledged by Moreno (2008). Such is the case for the factor of expertise: genre and genre-related factors (i.e., participants, communicative purposes, text length, and the number of authors) are embedded in the factor of expertise (at least in the current study), and it is thus impossible to make the genre of student corpus same as that of expert corpus unless I completely change the research design by examining, for example, research articles written by both Spanish L1/L2 novice writers (such as early career researchers) and Spanish L1/L2 established writers. Of course, this is impractical at the current stage of the research. The only thing we can do is to interpret the later results cautiously and reach tentative conclusions, as well as try to improve the corpus design in future research. I will also return to this in the conclusion chapter.

4.2. Metadiscourse coding

This section details the coding procedure of metadiscourse analysis, which consists of several aspects and steps. First, coding involves building a coding frame/scheme¹⁷ or, more precisely, finding the main categories and subcategories of the coding scheme to structure the materials under analysis and specify relevant meanings (Schreier, 2012: 59–63). In the case of this study, I drew upon metadiscourse taxonomies of the existing studies as the coding scheme. Second, by combining different approaches, I created a list of metadiscourse items to search and code them later. Third, I chose MAXQDA 2020 as the coding tool to code the candidate segments. Fourth, since metadiscourse is context-dependent, we need to manually check each coded segment to remove inappropriately coded ones and add missed ones. Last but not least, we also estimated

¹⁷ In the literature of metadiscourse, the term “analytical framework” is commonly used in data coding procedure (see, for example, F. Cao, 2014; Carrió-Pastor, 2016a; Akbas & Hardman, 2018; Z. Li & Xu, 2020). Since the present study used a CAQDAS package (see Section 4.2.3) to code data, the term “coding scheme” or “coding frame” was preferred (see Lewins & Silver, 2007).

the intercoder reliability to ensure our coding was consistent.

4.2.1. Coding scheme

For this study, I chose Hyland's (2005a) interpersonal model of metadiscourse as a base for the coding scheme. In other words, I adopted a broad approach to metadiscourse analysis. While I was aware of other important models such as Ädel's (2006) model (see Section 2.1.2), the reasons that I chose Hyland's model are as follows:

- 1) It is "a more theoretically robust and analytically reliable model of metadiscourse, based on a number of core principles and offering clear criteria for identifying and coding features" (Hyland, 2005a: 37).
- 2) It is characterized by clarity, inclusiveness, and dynamicity (Abdi et al., 2010; F. Cao, 2014; J. J. Lee & Casal, 2014; Hyland, 2017).
- 3) It is well-developed and has a more accurate taxonomy (Fu & Hyland, 2014; Mu et al., 2015).
- 4) It is "the dominant paradigm" (Ädel, 2018: 780) and has been popularly adopted in many previous studies on metadiscourse (e.g., S. Lee, 2009; Mur-Dueñas, 2011; F. Cao, 2014; Kawase, 2015; Moya Muñoz, 2016). In this sense, it would be more convenient to draw cross-study comparisons, thereby examining the consistency of the findings from different studies.
- 5) This model often adopts the thin approach to code metadiscursive segments (Section 2.2.3), which lends itself to dictionary-based coding (see Section 4.2.4).

As already seen in Section 2.1.2.1, Hyland's interpersonal model distinguishes between interactive metadiscourse and interactional metadiscourse. The interactive resources of metadiscourse are used to organize propositional information and guide imagined readers through the text, whereas the interactional resources of metadiscourse are used to display the writer's persona and involve imagined readers in the text (Hyland, 2005a: 49). For each of these two dimensions, Hyland proposed several main categories by drawing on previous studies such as Vande Kopple (1985) and Crismore

Table 4-4 Coding scheme: interactive metadiscourse

Category	Function	Examples
Transitions	to indicate internal relationships between discourse parts	
Addition	to express relations of addition	<i>además, asimismo, por añadidura, del mismo modo</i>
Comparison	to express relations of comparison or contrast	<i>sin embargo, no obstante, ahora bien, de forma similar</i>
Consequence	to express relations of cause and effect	<i>por (lo) tanto, por eso, así pues, en consecuencia</i>
Frame markers	to signal text boundaries and text structure	
Sequencers	to order discourse-internal units	<i>primero, segundo, en primer lugar, por último</i>
Topicalizers	to shift between topics	<i>en cuanto a, con respecto a, en lo que concierne a</i>
Stage signals	to label discourse stages	<i>en conclusión, resumiendo, en resumidas cuentas</i>
Announcers	to announce discourse goals	<i>el objetivo de..., nuestro objetivo...,</i>
Endophoric markers	to direct readers to other text parts	
Previews	to alert readers to the following text parts	<i>a continuación, en el siguiente capítulo, epígrafe</i>
Reviews	to help readers recall the previous text parts	<i>en el apartado..., como se ha X, previamente</i>
Overviews	to outline the general content or structure of the text to readers	<i>en este estudio, la presente tesis, este artículo</i>
Visual references	to point readers to the visual representations of text	<i>tabla X, figura X, apéndice, arriba, abajo, en (X)</i>
Code glosses	to clarify writers' intended meaning	
Reformulation	to rephrase the previous discourse unit	<i>i.e., a saber, es decir, en otras palabras, me refiero a</i>
Exemplification	to elaborate meaning with examples	<i>por ejemplo, tales como, e.g., verbigracia</i>
Evidentials	to make reference to intertextual materials	
Integral citations	to include cited sources into text	author/s + (date)
Non-integral citations	to exclude cited sources from text	(author/s + date)

et al. (1993). Later studies such as F. Cao (2014), S. Lee (2009), J. J. Lee & Casal (2014) and Carrió-Pastor (2016a) also added more fine-grained subcategories within each main category. My coding scheme was built upon these studies. The main categories, subcategories, function, and typical Spanish instances are displayed in Table 4-4 (for interactive metadiscourse) and Table 4-5 (for interactional metadiscourse).

Table 4-5 Coding scheme: interactional metadiscourse

Category	Function	Examples
Hedges	to mitigate commitment/certainty	<i>*ría, a mi entender, al parecer, aparentemente</i>
Boosters	to increase commitment/certainty	<i>de hecho, en efecto, sin duda, ciertamente</i>
Attitude markers	to express affective attitudes	<i>curiosamente, gracias a, es interesante,</i>
Self-mentions	to mark authorial presence in text	<i>(yo), mi(s), (exclusive) (nosotros) *mos, nos, nustr*</i>
Engagement markers	to build a relationship with readers	
Reader references	to make reference to readers	<i>(inclusive) (nosotros) *mos, nos, nustr*</i>
Directives	to instruct readers to perform an action	<i>hay que, véase, nótese, considérese, cf.</i>
Shared knowledge	to refer to shared knowledge	<i>como es sabido, es sabido que, como sabemos</i>
Questions	to anticipate readers' questions	<i>¿?</i>

Under the interactive dimension, the first main metadiscourse category is **Transitions**. Transition markers organize ideas internal to the discourse and signal the semantic and pragmatic connections between propositions. They are essential linguistic devices for creating textual cohesion and coherence. Historically, this type has been construed under terms such as ‘text connectives’ (Vande Kopple, 1985), ‘logical connectives’ (Crewe, 1990; Crismore et al., 1993; Hyland, 1998a, 2004a), and ‘logical markers’ (Mur-Dueñas, 2009, 2011), as well as other terms with a more inclusive classification like ‘sentence connectors’ (Carrió-Pastor, 2013) and ‘linking adverbials’ (Biber,

Johansson, Leech, Conrad, & Finegan, 1999; Shaw, 2009; D. Liu, 2008; Lei, 2012) (see an overview in D. Liu, 2008). Three subcategories of transitions are distinguished: i) **Addition** (such as *además, asimismo, como añadidura*), which indicates that the following discourse unit is an addition of the previous argument; ii) **Comparison**, which signals argument either contrastive to the previous one (*sin embargo, por otro lado, en cambio, etc.*) or similar to the previous one (*análogamente, de forma similar/semillante, etc.*); iii) **Consequence** (such as *por ende, por consiguiente, consecuentemente, de este modo*), which marks the following discourse unit as a consequence of the previous one.

As another main category of interactive metadiscourse, **Frame markers** “signal text boundaries or elements of schematic text structure” (Hyland, 2005a: 51). They function as an imagined but clearly delineated map in a text so readers can quickly grasp the text structure. According to Hyland (2005a) as well as his followers (F. Cao, 2014; J. J. Lee & Casal, 2014; Hyland & Zou, 2020), frame markers can be further classified into four subcategories: i) **Sequencers** (e.g., *por un lado ~ por otro, primero ~ segundo...por último*), which serve to structure, order or enumerate a set of arguments; ii) **Topicalizers** (e.g., *en cuanto a, a este respect, por lo que se refiere a*), which indicate a shift between topics; iii) **Stage signals** (e.g., *en conclusión, a modo de resumen, para concluir, hasta ahora*), which signal text stages; iv) **Announcers** (e.g., *objetivo de este estudio, nuestra hipótesis es, el presente capítulo*), which are used to announce discourse purposes.

If frame markers are used to delineate an imagined map, then **Endophoric markers** should be “signposts” (F. Cao, 2014: 138) distributed throughout the map. These signposts point the reader to other parts of the text; more specifically, writers employ them to facilitate readers’ comprehension and support arguments referring to preceding text or expecting the following text (Hyland, 2005a: 51). Another four subcategories of endophoric markers can be distinguished functionally: i) **Previews** (e.g., *a continuación, siguiente(s), en adelante*), which alert the reader to what is going to unfold in the following text. Note that previews are different from announcers in that the former alerts the reader to examples, extracts, actions, etc. yet to come, whereas the

latter announces discourse goals, hypotheses, etc. ii) **Reviews** (e.g., *previamente, con anterioridad, como se ha X*), which refer to earlier materials helping the reader recall the writer's previous arguments; iii) **Overviews** (e.g., *el presente trabajo, este estudio, en esta investigación*), which give the reader a panoramic view over the entire study; iv) **Visual references** (e.g., *Tabla X, Fig. X, arriba, abajo, en el ejemplo X*), which point to visual elements of a text. Based on Bunton (1999), F. Cao (2014: 138) refers to the first three subcategories as “linear references” while the last one as “non-linear references”.

Code glosses provide additional information by reformulating or exemplifying the preceding discourse unit (Hyland, 2005a, 2007). Writers use them to make sure the reader can understand their intended communicative purposes. Two sub-functions of this purpose are distinguished: i) **Reformulation** (e.g., *es decir, dicho de otra manera, esto es, conocido como*) is used to rephrase or further explain what the writer thinks is not clarified previously; ii) **Exemplification** (e.g., *por ejemplo, a modo de ejemplo, verbigracia*) serves to elaborate the writer's meaning with examples.

The final main category of interactive metadiscourse—**Evidentials**—signals to readers that a given piece of information or idea comes from other sources. This category represents one of the most prominent practices in academic writing: citation practices, by which writers can support their arguments, contrast them with others' arguments, or situate their work in the relevant literature. Unlike the function-based subclassification under other main categories, I followed F. Cao (2014) and made a form-based distinction of evidentials: **Integral citations** and **Non-integral citations** (see also Swales, 1990; Hyland, 2002c). The former is the citation form where the name of the cited author(s) occurs in the citing sentence so the writer can give more prominence to the reported author; whereas, the latter form places the cited sources within parentheses or elsewhere so the writer can put greater emphasis on the reported message (Hyland, 2002c). In this study, I confined citation forms to the conventional in-text citations (i.e., the author-date system), such as *Smith (2010)* and *(Smith 2010)*, without considering other attribution markers like *según, de acuerdo con, para* because when searching evidentials in the text, the author-date system is more inclusive than

the attribution markers.

In terms of interactional metadiscourse, its first main category is **Hedges**. Writers employ this type of metadiscourse resource to withhold total commitment to propositions, signaling that the presented information is an opinion instead of an attested fact and is thus open to debate or negotiation (Hyland, 2005b, 2005a). There is, however, a disagreement on the terminology concerning hedging strategy. While most metadiscourse researchers prefer ‘hedges’ or ‘hedging’ (e.g., Hyland, 1996, 1998c, 2005b, 2005a; Hu & Cao, 2011; Mur-Dueñas, 2011; Abdollahzadeh, 2019), other scholars refer to them as ‘epistemic modality markers’ (e.g., McEnery & Kifle, 2002; Vold, 2006) as they perform epistemic functions, or ‘mitigation devices’ (Carrió-Pastor, 2016b). Historically, hedged expressions can be categorized formally (e.g., Crompton, 1997; McEnery & Kifle, 2002), functionally (e.g., Hyland, 1996, 1998d), or formal-functionally (e.g., Salager-Meyer, 1994; Martín-Martín, 2008). In the tradition of Hylandian metadiscourse studies, the present thesis did not subcategorize hedges but grouped all possible hedging expressions (such as **ría, parece, aparentemente, quizás*) under this one main category.

In contrast with hedges, **Boosters** (sometimes also referred to as ‘emphatics’ or ‘boosting’) increase the writer’s degree of certainty and convey the writer’s clear commitment to the propositions (Hyland, 2005a; F. Cao, 2014). By using boosters, writers persuade readers that their arguments are justified and that their observations are not judgments but facts (Peacock, 2006); and close down alternative or conflicting views, leaving no space for negotiation (Hyland, 2005a). Similar to the case of hedges, boosters can also be subcategorized formally or functionally (see F. Cao, 2014; Peacock, 2006; J. J. Lee & Casal, 2014). In this study, I followed the Hylandian tradition again, without making subdivisions. Some instances of boosters are *efectivamente, sin duda, siempre, es cierto que*, etc.

Attitude markers “indicate the writer’s affective, rather than epistemic, attitude to propositions, conveying surprise, agreement, importance, frustration, and so on, rather than commitment” (Hyland, 2005b: 180). While these resources can be categorized functionally under frameworks such as the Appraisal framework (Martin &

White, 2005), it is common to see a lexico-grammatical classification of attitude markers, such as Biber et al. (1999), Hyland (2005b, 2005a), J. J. Lee & Casal (2014), F. Cao (2014), and Carrió-Pastor (2019c, 2019d). Attitude markers of different kinds were treated as a whole in my thesis, although each marker by nature has its own lexical class, like verbs (e.g., *conviene*, *merece*, *cabe*), adverbs (e.g., *curiosamente*, *desafortunadamente*), adjectives (e.g., *necesario*, *útil*, *importante*).

Another main category of interactional metadiscourse, **Self-mentions**, explicitly signals the writer's persona and discoursal self in the text through first-person pronouns and possessive adjectives (Hyland, 2005b, 2005a; F. Cao, 2014; Mur-Dueñas, 2011). While the writer's presence is a controversial issue in written academic discourse, especially in hard science, the use of self-mentions has been found to serve various useful functions, such as self-promote to increase visibility in the field (Mur-Dueñas, 2007; Can & Cangir, 2019; Carrió-Pastor, 2020), create research space and a sense of newsworthiness in the discipline (Harwood, 2005a; Mur-Dueñas, 2007; Carrió-Pastor, 2020), establish a relationship with the discourse community and readers (Hyland, 2001b; Harwood, 2005a, 2005b). Several earlier studies (e.g., Tang & John, 1999; Hyland, 2002d; Harwood, 2005b; Lafuente-Millán, 2010) also proposed a fine-grained taxonomy for self-mentions or first-person pronouns; the present study, however, did not make a further classification. The typical instances of self-mentions in Spanish are first-person subject pronouns ((*yo*), (exclusive) (*nosotros*) **mos*), object pronouns (*me*, (exclusive) *nos*), and possessive adjectives (*mi(s)*, (exclusive) *nuestr**). Note that Spanish is a pro-drop language with respect to subject pronouns, which means subject pronouns are often omitted (at least orthographically and phonologically) as the verbal inflection suffices to suggest the person and number of the subject. This, however, poses a challenge to the electronic search of subject pronouns, especially the first-person singular form *yo*. Section 4.2.4 and Section 4.2.5 will address this issue.

The final category—**Engagement markers**—contrasts with the other four categories of interactional metadiscourse in that the former is more reader-oriented while the latter group is primarily writer-oriented (F. Cao, 2014; Zou & Hyland, 2020). In other words, engagement markers are used to “explicitly address readers, either to

focus their attention or include them as discourse participants” (Hyland, 2005a: 53) while the other types of interactional markers, to create “an impression of authority, integrity and credibility” for writers themselves (ibid). This could explain why in another work by Hyland (2005b), engagement markers themselves constitute a major category, whereas hedges, boosters, attitude markers, and self-mentions are grouped under another major category called ‘stance’. Within engagement markers, most scholars (e.g., F. Cao, 2014; Jiang & Ma, 2018; Carrió-Pastor, 2019a; Zou & Hyland, 2020) welcome Hyland’s taxonomy, which was also adapted for the present study: i) **Reader references** (e.g., inclusive (*nosotros*) **mos*, *nos*, *nuestr**, *uno*), perhaps the most explicit metadiscursive markers where readers are involved, function to establish solidarity as well as dialogue between the writer and reader (Hyland, 2005b); ii) **Directives** (e.g., *véase*, *cf.*, *hay que*), with which the writer can give the reader a kind of instruction on what to do at that point; iii) **Shared knowledge** (e.g., *como es sabido*, *es sabido que*) are used to situate both the reader and writer within the same disciplinary understanding; iv) **Questions** are writers’ strategies to actively involve readers in thinking about the rhetorical or real questions they proposed.

To conclude, the coding scheme used in the current study is primarily based on Hyland (2005a) and F. Cao (2014), although with some slight variations in the subsumed categories and their naming. This scheme, validated by numerous previous studies, is characterized by two dimensions: interactive metadiscourse and interactional metadiscourse. Each of them has several main categories, which, in turn, can have more fine-grained subcategories. Writers use interactive resources to guide imagined readers through the text so that the target readers would find the text coherent and convincing, and easy to understand. With interactional resources, writers show readers their stance on propositional information and their persona and invite them to participate in the discourse co-construction actively. A successful piece of academic writing precisely relies on the writer’s skill in applying these resources in an acceptable way within his or her discourse community. At the same time, by examining these resources systematically, we can understand better how metadiscourse works in writing and what discoursal/rhetorical purposes it achieves.

4.2.2. List of metadiscursive markers

In the preceding section, I only provided several examples for each category. However, to examine the metadiscourse phenomenon of the whole corpus more systematically, a list of metadiscourse items is a must.

As already noted in Section 2.2.3, when it comes to metadiscourse identification in the texts, there are two approaches: the corpus-based approach and the corpus-driven approach, which more or less correspond to the thin approach and the thick approach. The first one prefers a predetermined list of metadiscourse markers, where the metadiscourse units (either words or phrases) are predefined, and the selected items are “seen as inherently metadiscursive” (Ädel & Mauranen, 2010: 2). This is to say, each selected item by default carries a specific metadiscursive category; for instance, *no obstante* should be assigned to ‘comparison’. This kind of list is either determined by the researcher’s intuitions or preliminary searching in a small number of sample texts, or directly from existing metadiscourse lists developed by other researchers (Nesi, 2016; Hyland, 2016, 2017). Meanwhile, the second approach treats the corpus itself (usually a small one) as the starting point for any possible discovery while holding no or few presuppositions like the predefined metadiscourse list (Hyland, 2016). More specifically, metadiscourse researchers who adopt this approach expect to find metadiscourse units as large as clauses or sentences and obtain a final list of metadiscourse markers after scrutinizing the whole corpus.

In my thesis, I adopted a multi-step approach to identifying metadiscursive markers. At the initial stage, I built a metadiscourse list where each category and its subsumed search terms are predefined. Following many other previous studies, I started by consulting metadiscourse items in similar studies by other researchers. Unlike English studies, lists of metadiscourse items in Spanish are rarely seen in the literature, Mur-Dueñas (2011), J. J. Lee & Casal (2014), Salas (2015), and Moya Muñoz (2016) are notable exceptions. The first two studies created Spanish lists for cross-linguistic comparisons, while the last two focused only on Spanish metadiscourse. However, it should be noted that Moya Muñoz’s (2016) list was based on the news commentary

genre, and the one by Salas (2015) was designed for the reflexive model. On the other hand, the list of Spanish metadiscourse items in J. J. Lee & Casal (2014) is nearly a word-for-word translation of its English counterpart, which yields some inappropriate items. As a result, I selectively chose items from their list to create my own. Beyond the metadiscourse studies, I also consulted the classical work by Martín Zorraquino & Portolés (1999) and Fuentes Rodríguez (2009), where they provided a detailed and systematic description of Spanish discourse markers.

At the same time, it is noteworthy that the list of metadiscourse devices should be seen as an open set to which researchers could include new items as necessary (Hyland, 2005a; F. Cao, 2014). Therefore, the preliminary list was then supplemented with a close reading of the whole corpus during the step of manual checking (see Section 4.2.5). Items that should be considered metadiscourse markers but had not been included in the lists provided by previous researchers were appended to the preliminary list. By doing so, extended metadiscourse units such as *el presente trabajo de investigación tiene como objetivo principal* ('Announcers') and infrequent ones such as *mapa* ('Visual references') would not be missed during the metadiscourse coding.

Overall, the multi-step approach I adopted in the study can be seen as a combination of the thin and thick approaches. The former is the primary method, while the latter complements it to make the metadiscourse searching and coding more precise and dynamic. After this multi-step procedure, the final list of metadiscourse markers can be accessed in Appendix II.

About the final list, several points merit special mention:

- 1) Each item has a one-and-only-one category (or function). When discussing the issue of metadiscourse classification in Section 2.2.4, the question arises as to whether metadiscourse categories are mutually exclusive. Two readings can be suggested: i) only one category should be assigned to a metadiscourse item; ii) multiple categories can be assigned to a metadiscourse item. In this study, I adopted the first reading, i.e., I gave each metadiscourse item in the list one-and-only-one category. Of course, I was well aware that some metadiscourse items are multifunctional and context-dependent, so the

assigned category of each item was simply provisional and subject to change during manual checking. Note that the provisional category assigned was based on the author's experience or previous studies. For example, based on F. Cao (2014) and Mur-Dueñas (2011), expressions like *por un lado ~ por otro* were treated as 'Sequencers' by default but they can be classified into 'Comparison' in specific contexts, as illustrated in Section 4.2.5. Another example is *en el apartado X* (see fn. 12): its provisional category assigned is 'Reviews' because the preliminary search in the corpus showed a high incidence of reviewing function, but it can be 'Previews' too.

- 2) The present study follows F. Cao (2014), Crismore et al. (1993), Gardezi & Nesi (2009), and Mur-Dueñas' (2009) suggestion that transition markers are confined to inter-sentential devices¹⁸, i.e., adverbials or adverbial phrases whose function is to join two sentences or other larger discourse units. This is different from the original understanding of Hyland (2005a), who examined conjunctions, i.e., intra-sentential connectors that join or coordinate two clauses and phrases, such as subordinating conjunctions *although, because, since, while, whereas* in English or *aunque, porque, dado que, mientras, mientras que* in Spanish. F. Cao (2014) believes that these conjunctions mainly perform grammatical or structural functions rather than metadiscursive or cohesive functions (see also Halliday & Hasan, 1976: 234–235). That is, the omission of subordinating conjunctions would destroy “the well-formedness of the dependent clause” (Crismore et al., 1993: 49). Typical conjunctions (or more precisely, coordinating conjunctions) like *pero* and *y* (counterparts of English *but* and *and*), however, were included in my metadiscourse list because they can be inter-sentential devices under certain conditions, as we will discuss subsequently.

¹⁸ In Halliday & Hasan (1976: 231), these devices are also referred to as “conjunctive adjuncts”. However, to avoid possible confusion with the most conjunctions that we did not include as metadiscourse, we decided to use “inter-sentential devices” instead.

- 3) Since inter-sentence is an important feature of metadiscourse, it is reasonable to attach some orthographic information (such as initial letters in upper case, preceded or followed by period or comma) to certain metadiscourse items in order to increase the coding precision in the automatic coding. For example, *Y* in upper case and after a period (*. Y*) signals it is highly likely to be at the beginning of a sentence. It can thus be strongly believed that it functions to join two sentences instead of coordinating two clauses or phrases. Hence, there is a good chance that it will perform the function of metadiscourse category 'Addition' in the text.
- 4) What I consider novel of the current list is the inclusion of the items that are typically considered colloquial, such as *o sea*, *en fin*, *luego*, *entonces*, *por cierto* (see Martín Zorraquino & Portolés, 1999). It should be noted that the texts under scrutiny were produced not only by native expert writers but also by novice and non-native writers. Having trawled through the corpus, I found those colloquial metadiscursive markers were not sporadic cases but peculiar to certain writer groups. The reason behind and possible pedagogical implications deserve special attention and discussion, which will be detailed in the following chapters.
- 5) As noted in Section 2.2.2, some scholars (e.g., Crismore et al., 1993; Markkanen et al., 1993; Hyland, 2005a; Mur-Dueñas, 2011) argue that certain types of punctuation (such as question marks, exclamation marks, colons, dashes, and parentheses) should be seen as metadiscursive as they can produce some rhetorical effects such as expressing the writer's attitudes, mentioning the writer's personal asides, or involving the reader in the discourse. While I agree with them, the only punctuation mark I included in the list is the Spanish question mark (*¿?*). The reasons I did not include other punctuation marks are that i) metadiscursive exclamation marks are absent from the current corpus; ii) colons, dashes, and parentheses are extremely common in the corpus, and what is worse, they pose different kinds of obstacles for searching and analyzing, for example, the overlap between the

parentheses in non-integral citations and those in personal asides, the overlap between colons in in-text citations (i.e., page locator) and those in code glosses, and the overlap between single dash sentences and the pair of dashes in personal asides.

- 6) While most metadiscourse items of my list have a well-defined pattern for later corpus search, namely specific words, phrases, or even clauses, the search pattern of certain items is hard to define, such is the case with the category ‘Evidentials’. As noted earlier, evidential markers have two surface forms: integral and non-integral citations. However, their pattern is not fixed and therefore cannot be listed as exhaustively as other markers. For example, non-integral citations (*Smith, 2006: 12*) and (*White, 2010; Liu, 1998*) do not share the same unit nor the form, and theoretically any other authors’ surname and dates can replace them here. Fortunately, it is not impossible to search them in a corpus. Since these citations share some fixed features, such as within parentheses and at least one four-digit date, a regular expression (or regex) search can be of great help here. Some other types of markers that end or start with a specific string (see example items of ‘Hedges’, ‘Self-mentions’, ‘Engagement markers’ given above) can also be searched using regex (cf. Yoon & Römer, 2020). I will elaborate on how to use regexes to search these items in Section 4.2.4.

4.2.3. Coding tool

Having determined the metadiscursive markers and their corresponding category, our next step is to decide which coding tool should be chosen to code all segments that match the list of metadiscourse markers.

The literature suggests that metadiscourse researchers often use conventional corpus tools like AntConc and WordSmith Tools (e.g., Mur-Dueñas, 2011; McGrath & Kuteeva, 2012; J. J. Lee & Subtirelu, 2015; Çandarlı et al., 2015; Abdollahzadeh, 2019; Qin & Uccelli, 2019, to name a few), or sometimes unconventional corpus tools

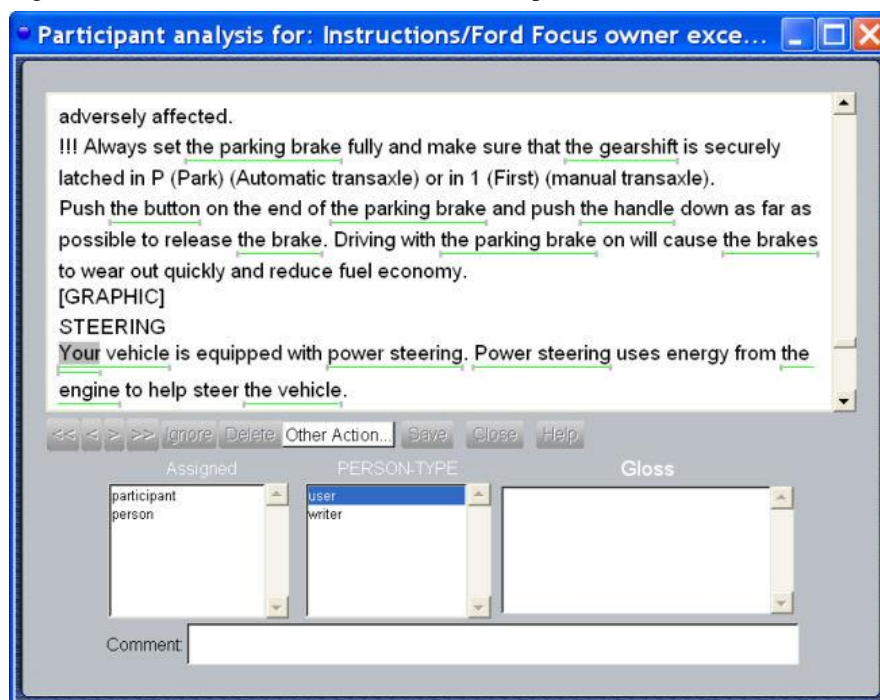
especially targeted at textual annotation like UAM CorpusTool and METOOL (e.g., T. Li & Wharton, 2012; F. Cao & Hu, 2014; Hu & Cao, 2015; Moya Muñoz, 2016; Carrió-Pastor, 2016a, 2020; Crosthwaite et al., 2017). On the other hand, a few researchers employ Computer-assisted Qualitative Data Analysis Software (CAQDAS) packages such as NVivo, ATLAS.ti, and MAXQDA (Mu et al., 2015; D'Angelo, 2016; Menke, 2021; C. Liu & Tseng, 2021). For the present study, I opted to use the CAQDAS package MAXQDA 2020 (VERBI Software, 2019) as the coding tool. The reasons are as follows:

First, I did not choose conventional corpus tools because they can only search target segments in the corpus but cannot, for example, build a coding scheme, code (or annotate) segments with the corresponding category directly in the concordancer nor record and count coded results (see Appendix 5-8 in S. Lee, 2009; Mur-Dueñas, 2011: 3070; Xia, 2017). This, from my point of view, is inconvenient, time-consuming, and prone to error. CAQDAS packages, on the other hand, can handle all kinds of analytical tasks in one workplace, as shown in Lewins & Silver (2007).

Second, when it comes to choosing between the unconventional corpus tools and CAQDAS, both are quite similar in terms of features, such as creating coding schemes, searching target segments, coding inside the software, and saving coded results. Nevertheless, there is one feature that distinguishes them and made me choose the latter in the end. I attribute this distinction to the different logic behind the coding procedure.

Software packages like UAM CorpusTool (O'Donnell, 2008) observe what I shall call 'the logic of addition'. Its basic idea lies in that when the analyst manually codes a segment, the count of the corresponding metadiscourse category adds one. More specifically, the software first highlights all possible metadiscourse candidates based on the provided list of metadiscourse items, and then the analyst checks them one by one (see Figure 4-2). If he or she judges that one metadiscourse candidate serves as a real metadiscourse marker in the given context, he or she then codes it by selecting one of the metadiscourse categories; while if the analyst thinks the given segment does not fulfill any metadiscourse functions, then he or she omits it (see F. Cao, 2014; Moya Muñoz, 2016).

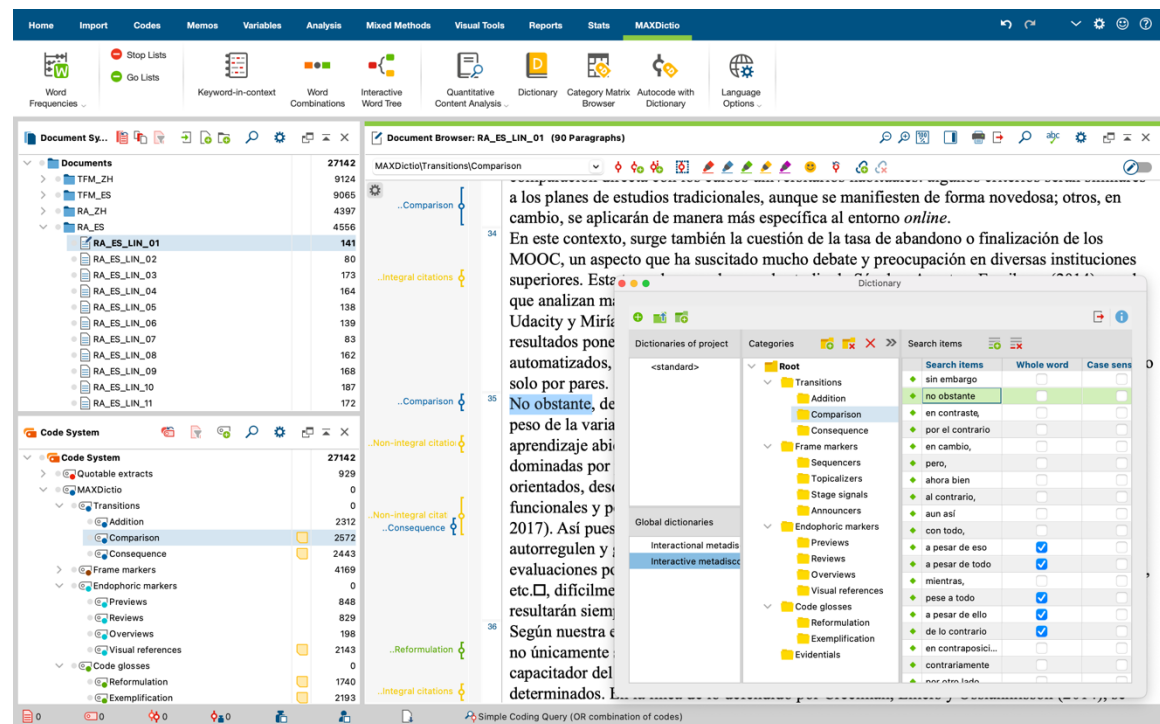
Figure 4-2 The annotation interface of UAM CorpusTool



On the other hand, the logic behind CAQDAS packages like MAXQDA 2020 is rather different, which I shall call ‘the logic of subtraction’. The basic idea is that when the analyst spots an inappropriate segment precoded by the software, they decide to delete it or change another category. In the end, the frequency count of coded segments would drop. Concretely, MAXQDA 2020 (MAXDictio module, see Figure 4-3) first loads the predefined list of metadiscourse items with each of them subsumed under its corresponding metadiscourse category. Then the software automatically assigns the category (or code) to each matched metadiscourse candidate, no matter what context the given segment has. Finally, when the researcher inspects all coded segments one by one, he or she either chooses to delete the wrongly coded ones (falsely coded propositional content) or replace the inappropriately coded ones (falsely coded another category) with a new category that fits.

The most prominent advantage of MAXQDA 2020 over UAM CorpusTool lies in the time it saves. With the MAXQDA 2020, the researcher needs not manually code every single metadiscourse candidate by selecting a specific category among the category set because the software can precode all target segments in a reasonably large corpus in less than one minute. The only remaining thing the researcher needs to do is

Figure 4-3 The interface of MAXDictio



manually find out poorly coded segments and delete them or change their category. However, some might be skeptical about this precoding procedure as metadiscourse items are known to be multifunctional and context-dependent (see Section 2.2.4). While I understand this concern, I would argue that we researchers should assume that, regardless of their context, most listed items should be inherently subsumed under one specific metadiscourse category (i.e., “inherently metadiscursive”). Thus in most cases, the preset metadiscourse markers are very likely to be correct (e.g., *por ejemplo* is entirely likely to be an exemplification marker; *sin embargo* should be a comparison marker in most cases) because if otherwise, the whole idea of building a predefined list of metadiscourse markers would be pointless.

In the next section, I will be elaborating on how MAXQDA 2020 automatically searches and codes metadiscourse items.

4.2.4. Searching and coding

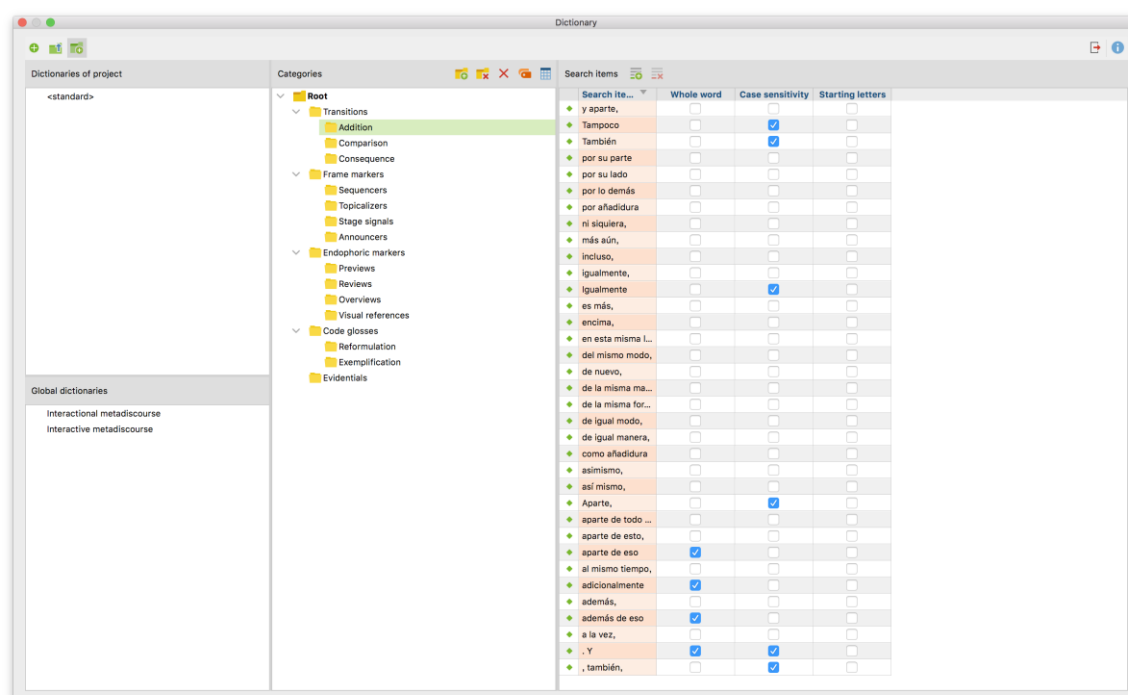
Two functions of MAXQDA 2020 were used for searching and coding: autocode with

dictionary and autocode with regular expression searching. The first function is the workhorse of the whole searching and coding procedure, while the second one complements the former when the automatic searching and coding is beyond its power.

Regarding the autocoding with dictionary, the MAXDictio module of MAXQDA 2020, available in its Plus and Pro version, is needed. First, I loaded the predefined list of metadiscourse markers (Appendix II) onto Dictionary, with ‘Categories’ and ‘Search items’ properly placed (Figure 4-4). Note that searching criteria such as ‘Whole word’ and ‘Case sensitivity’ were applied to some of the items to improve retrieval precision. For instance, with ‘Whole word’ ticked for the metadiscourse item *adicionalmente*, non-metadiscourse words like *tradicionalmente* will not be matched in a later search. When the whole dictionary was ready, ‘Autocode with Dictionary’ automatically searched all segments in the corpus that matched the said ‘Search items’ from the ‘Dictionary’. At the same time, it automatically assigned each segment to its corresponding category and counted frequency (see Schreier, 2012: 243). The frequency information can be directly found in the ‘Code System’ of MAXQDA 2020 after the automatic coding is finished (see an illustration in Figure 4-3). The whole coding procedure is so-called ‘dictionary-based coding’ (Kuckartz & Rädiker, 2019; Scharkow, 2017).

However, as mentioned in Section 4.2.2, not all metadiscourse items have the same clearly defined search pattern as those displayed in Figure 4-4. In other words, they do not always have a specific linguistic form like words, phrases, or clauses. Such is the case with ‘Evidentials’ and some interactional markers with a specific word ending or beginning (e.g., first-person plural pronoun as ‘Self-mentions’). Fortunately, there is another function in MAXQDA 2020—‘Lexical search’ (Analysis module)—where regular expression search is supported, thereby complementing the dictionary-based search. While searching markers with a specific word ending or beginning can be resolved with simple regexes, regexes used for searching ‘Evidentials’ are much more complex. Therefore, as an illustration, here I focus only on using complex regexes to pinpoint citation forms in our corpus, although all regexes used can be found in Appendix II.

Figure 4-4 Creating the Spanish dictionary of interactive metadiscourse on MAXQDA 2020



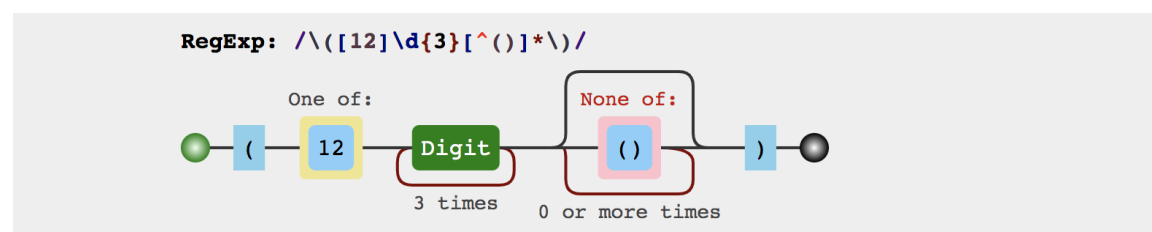
Two regular expressions were used to search integral and non-integral in-text citations¹⁹:

Integral citation regex: `\([12]\d{3}[^()]*\)`

Non-integral citation regex: `\([\w\s]*[A-Z][^()=]*[12]\d{3}[^()=]*\)`

For a better understanding, Regulex²⁰ was used to visualize each part of the searching pattern.

Figure 4-5 Regular expression visualizer for integral citations



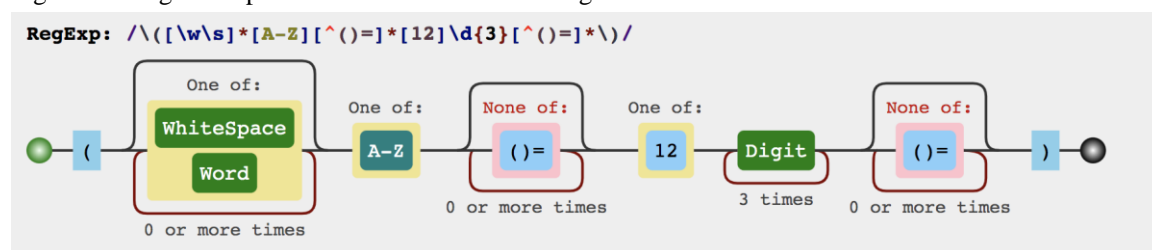
The regex for integral citations is relatively easier to understand. It is known that all

¹⁹ My special thanks go to Zi Huang, a predoctoral researcher at the Universitat Pompeu Fabra, who helped me build these regular expressions.

²⁰ Regulex is a JavaScript regular expression visualizer. See <https://jex.im/regulex/>

integral citations share a simple pattern: at least one four-digit date and within a pair of parentheses. In Figure 4-5 above, the leftmost and rightmost ends match a pair of parentheses; ‘one of 12’ means that the first digit must be 1 or 2, which is reasonable for citation year range; it is then followed by three digits, which can range from 0 to 9. And ‘none of ()’ means that after the four digits, there can be any characters or nothing except for any other parentheses, which can help match, for example, more than one date ‘(1998, 2001)’, the same year citation for several times ‘(2010b, 2008)’, page number ‘(2019: 23)’, etc.; but at the same time, it avoids greedy match ‘(2003) abcd... (2011)’.

Figure 4-6 Regular expression visualizer for non-integral citations



The regex for non-integral citations (Figure 4-6) shares some basic patterns with that for integral citations: within a pair of parentheses, ‘one of 12’ is followed by three digits, and finally followed by any characters or nothing except for any other parenthesis. But it adds more criteria: ‘one of WhiteSpace|Word’, ‘one of A-Z’, and ‘none of ()=’ together means that before the four digits, there must be at least one upper case letter (because of the surname) except for any other parentheses and equal sign. Note that ‘one of WhiteSpace|Word’ before the upper-case letter avoids filtering out good patterns like ‘(see also FooBar, 2004)’ as there are white spaces and word characters before the upper-case letter ‘F’. We already know the purpose of not matching parentheses. Here no ‘=’ filters out bad patterns like ‘(P=0.2120)’.

When the regular expression search was done, ‘Autocode search results’ was applied to automatically assign a specific category (say, ‘Integral citations’ or ‘Non-integral citations’) to all the matched segments.

One final note is that despite the powerfulness, both dictionary-based search and

regular expression search cannot match metadiscourse markers with spelling errors in the corpus (e.g., *con *respeto a*, TFM_ZH_LIN_03; *en *esta apartado*, TFM_ZH_LIN_12). However, this can reasonably be ignored since it is a small probability event.

Before starting the manual checking shown in the next section, I stored the coded but unaltered data in a separate file folder, in case there should be a necessity of drawing a comparison between pre-checking and post-checking data in a later analysis.

4.2.5. Manual inspection

In this section, following the ‘the logic of subtraction’, I started removing unwanted instances produced from the automatic coding in the previous step, and replacing inappropriately coded instances with new categories. This manual process, as Hyland (2017: 19) puts it, is essential because it “avoid[s] making superficial assumptions of form-function correspondence and [...] exclude[s] extraneous examples.”

Now the next question is which criteria I should be based on to exclude extraneous examples or replace poorly coded instances. Without surprise, this question goes back to the two fundamental issues of metadiscourse that have been discussed in Chapter 2: How to identify metadiscourse? And how to classify metadiscourse markers? I have already faced the same questions during the phase of building the metadiscourse list (Section 4.2.2), for instance, whether intra-sentential transition markers should be seen as metadiscourse, whether some colloquial discourse markers should be included in the list, or whether *en el apartado X* is classified as a ‘Preview’ or ‘Review’. However, these are merely pre-established rules, so they do not serve to determine whether every single instance is metadiscursive. For individual instances, as I have mentioned on several occasions, context or co-text is the ultimate criterion for metadiscourse identification and classification. In the rest of this section, I will demonstrate: i) how to apply specific context-based criteria to help manually identify an instance as metadiscoursal or propositional; ii) how to use co-text to classify a multifunctional metadiscursive instance.

The foremost criterion is whether the given instance is internal or external to the discourse, or in other words, whether the matter takes place in the text world or the real world. As already noted in Section 2.2.2, the distinction between discourse-internal and discourse-external reference has been taken up by quite a few scholars (see, for example, Hyland, 2005a; Ädel, 2006; F. Cao, 2014) to identify metadiscourse elements. Ädel (2006: 183) even claims that this distinction is one of the “obligatory features”. Here I use example pairs excerpted from the corpus to demonstrate the internal/external distinction. For example, the interactive markers in (4) below take place in the “world of discourse” (Ädel, 2006: 28) and build relations between discourse units: *por lo tanto* in (4a) indicates the following discourse is the conclusion that the writer is drawing based on the preceding discourse unit; *a continuación* in (4b) is a rhetorical strategy used by the writer to alert the upcoming content; *también* in (4c) adds writer’s additional observation apart from the previous one; *en un primer momento...~luego...~por último...* in (4d) presents an information flow with which the writer would expect the reader understand the discoursal organization. In contrast, the connecting devices in (5) build a relation between “worldly activities or phenomena” (Ädel, 2006: 28): *por lo tanto* in (5a) shows a consequence caused by a phenomenon that happens in the real world; *a continuación* in (5b) signals how things are ordered spatially in an actual tabulation; *también* in (5c) describes a case of a real-world phenomenon; *primer...~luego...* in (5d) indicates how the experiment steps are carried out in the real world.

- (4) a. La proporción de variantes con cambio semántico fue muy superior (73%) a la de aquellas que no presentaban variación en el contenido conceptual expresado en la variante (27%). Por lo tanto, en el corpus analizado, la función cognitiva es más relevante que la estilística, motivada por evitar la repetición o por economía verbal. (RA_ES_LIN_05)
- b. Uno de los géneros que desarrolla la capacidad de análisis y síntesis y el desarrollo del pensamiento crítico y creativo de los futuros profesores es el ensayo argumentativo cuyos elementos se explican a continuación. (RA_ES_LIN_12)

- c. Como muestra la Figura 1, un 93,1% declara prestar atención al uso de la terminología en los textos. También se observa que manifiestan una actitud favorable a la variación: (RA_ES_LIN_05)
 - d. A continuación, en un primer momento, analizamos la literatura concerniente al tema. Luego explicamos la metodología de investigación utilizada y presentamos los resultados y el análisis de los datos obtenidos. Por último, ofrecemos las conclusiones junto a las implicancias y limitaciones de este estudio. (RA_ES_LIN_12)
- (5)
- a. Aquí este “cuanto” emplea la función del adverbio relativo, y que ~~por lo tanto~~, no cambia ni el género ni el número, como por ejemplo: (TFM_ZH_LIN_04)
 - b. Los quince vectores de la Tabla I tienen unas frecuencias muy desiguales. El vector 2 es el que mayor frecuencia presenta (32; 42,67%), le siguen los vectores 1 y 3 (9; 12% cada uno), ~~a continuación~~ se sitúa el vector 10 (7; 9,33%), los vectores 9 y 11 (4; 5,33% cada uno) y el 15 (2; 2,67%); los vectores 4, 5, 6, 7, 8, 12, 13 y 14 sólo aparecen una vez. (RA_ES_LIN_07)
 - c. Sin embargo, no son un fenómeno exclusivo del idioma inglés. ~~También~~ existen en otros idiomas como alemán (“Das ist genau, was ich bache. – Eso es exactamente lo que pensé.”), francés (“C’est Jean que je cherche –Es Jean que estoy buscando.”), español (“Es Juan quien ha llegado tarde”) y chino (“我需要的是你的帮助 –Lo que necesito es tu ayuda.”) (TFM_ZH_LIN_01)
 - d. Cada participante lee ~~primero~~ la lista de palabras para familiarizarse con los materiales. Luego, lee las tres listas que contienen las mismas palabras en diferentes órdenes aleatorios mientras se graba su voz. (TFM_ZH_LIN_03)

The discourse-internal/-external distinction also applies to the interactional dimension. For example, *es necesario* in (6a) denotes a fact that happens in the real world instead of an attitude expressed by the writer (6b).

- (6)
- a. Sin embargo, para realizar este movimiento, “moverse en el aire”, ~~es necesario~~ despegarse del suelo, acción que coincide con el trayecto del verbo direccional qǐ lái (‘levantarse’). (RA_ZH_LIN_08)
 - b. Por lo tanto, es necesario realizar más estudios en profundidad de este campo, como la AL del profesorado de E/LE en China, la motivación del alumnado en su aprendizaje de E/LE, etc. (RA_ZH_LIN_13)

Apart from the internal/external distinction, I also adopted the criterion suggested by

Ädel (2006: 28), drawing a line between the “current text” and “intertextuality”. The difference lies in that the former focuses on the ongoing discourse itself while the latter describes references within a text to other texts. Markers that appear within an in-text quote²¹ or refer to other textual sources are seen as intertextual and are thus discarded in the current metadiscourse analysis. Note that evidential markers seem to be intertextual by nature because they refer to other textual materials; however, since writers use them to support or contrast their claims, thereby achieving the specific rhetoric purposes, evidentials are counted as metadiscourse in this study. Some intertextual examples are shown below. In (7a), *anexos* refers to the appendices of the manual that the student writer investigated, instead of the appendices of the writer’s own text; similarly, *este estudio* in (7b) points to the study by other scholars rather than by the current writer; the sequence of markers in (7c) is the topic discussed by the writer, instead of being used by the writer to organize the current text or interact with the current reader.

- (7) a. El curso estructura su contenido en diez unidades que, a su vez, se dividen en secciones. El manual incluye, además, dos ~~anexos~~: (TFM_ES_LIN_03)
- b. En cambio, el impacto es menor cuando los aspectos de la tarea tienen un carácter más centrado en la literalidad del texto (Miras et al., 2013). ~~Este estudio~~ se realizó con una muestra de 48 estudiantes del último curso de Educación Media Obligatoria (27 niñas y 21 niños), con edades comprendidas entre 15 y 16 años en Barcelona, España. (RA_ES_LIN_12)
- c. Un marcador que señala el límite de la conclusión: ~~así, por lo tanto, para concluir~~, etc. (RA_ES_LIN_12)

While most researchers have adopted the functional approach to identify metadiscourse markers (Hyland, 2005a), that is, the function of an instance can only be determined in relation to its co-text and communicative purpose, Khabbazi-Oskouei (2013: 94) argues that “relying purely on the functional approach results in a fuzzier classification of the already fuzzy concept of metadiscourse”. Therefore, some syntactic criteria were also

²¹ Although all lengthy quotes have been removed during the text cleaning procedure (Section 4.1.2), there remain many in-text quotes that cannot be removed one by one.

applied to supplement the functional approach to metadiscourse identification (F. Cao, 2014). The first syntactic criterion, noted earlier in creating the metadiscourse list, is whether the instance performs an inter-sentential function. Although I already added orthographic information such as an upper-case letter and comma to certain candidate items to increase retrieval precision, some of them require further contextual analysis to determine whether they are inter-sentential. Examples in (8) should be seen as non-metadiscourse devices as they connect two small clauses that cannot be separated from each other without losing the well-formedness of the whole sentence, or link two elements that have the same syntactic role. While the first syntactic criterion primarily applies to transition markers, the second one, which concerns the degree of separation from the main content (Khabbazi-Oskoueï, 2013; see also Section 2.2.2), is especially targeted at interactional metadiscourse. I followed Markkanen et al. (1993), Khabbazi-Oskoueï (2013), and F. Cao (2014) and considered that only adjectives in impersonal structures are metadiscursive. So, for instance, *It is important that...* or *it is easy to...* are attitudinal markers as they are separated from the main message or proposition in clauses; while qualifying adjectives or “evaluative lexis” (Hyland, 2005a: 31) in *the important results are...* or *the easy solution would be...* are excluded because they are part of the proposition. Similarly, I only took into account adverbs that can be freely separated from the propositional content and serve to comment on a whole sentence (i.e., sentence adverbs) instead of qualifying people, things, or events in the real world. It is often the case that this type of adverbs can be paraphrased as ‘It is adj. that...’. As an example, *seguramente* in extracts (9a) and (9b) qualify the whole proposition and can be paraphrased as ‘Es seguro que...’, they are thus metadiscourse markers; whereas *seguramente* in extract (9c) functions to qualify the preceding verb and cannot be paraphrased as the said wording, it is thus counted as propositional content.

- (8) a. Teng (1979) da una explicación preliminar de las oraciones escindidas, sostiene que “是” es un marcador de foco, el cual no se encuentra en la estructura subyacente, ~~sin embargo~~, es introducido con la finalidad de regir el componente focalizado. (TFM_ZH_LIN_01)

- b. Las propuestas desde el aspecto léxico (Riveiro Costa, 2004; Rosales Sequeiros, 2000, 2005) parecen más sólidas ~~pero~~, como se ha visto, no identifican de manera adecuada las clases verbales que manifiestan la alternancia. (TFM_ES_LIN_08)
 - c. El objetivo de la investigación fue identificar, describir y comparar las creencias sobre la escritura de estudiantes de 3º y 4º año y su influencia en la calidad de su producción escrita y, ~~además~~, identificar las categorías predominantes en la expresión de la voz del autor en cada una de las dimensiones analizadas para ambos grupos. (RA_ES_LIN_12)
- (9) a. Seguramente, los motivos que suscitaron ese comentario son diversos, y no pretendemos abordarlos en estas páginas. (RA_ES_LIN_17)
- b. Esto seguramente se debe a la comparación directa con la generación anterior ya que parece innegable que, si esta segunda generación es la responsable de proveer el input de la LdH a una tercera generación, (TFM_ES_LIN_01)
 - c. La ciudad fronteriza de Shen Congwen, las que consideramos más ~~seguramente~~ que son Rel. especificativas, así para formar un corpus pequeño para nuestro tema. (TFM_ZH_LIN_04)

Throughout the manual inspection of each coded segment, I also conducted a corpus-driven coding (see Section 4.2.2); in other words, I did not rule out the possibility of including missing metadiscourse markers. These markers had been missed during the automatic corpus-based coding because i) their surface form did not match the corresponding search terms from the predefined list that come with some orthographic restrictions, such as comma (10a–b), upper-case letter (10c–d); ii) they were too infrequent in the corpus to be included in the predetermined list (11); iii) they were variant forms of certain markers from the list (12); iv) they had a larger metadiscourse unit that cannot be easily delimited in the list (13); v) their surface form had little or no pattern that can be searched electronically, such is the case with Spanish first-person singular subjective pronoun (*yo*) (consider, for example, *he +X*, *considero*, *decidí*, *mencioné*, *introduciré*). All items found through corpus-driven coding were later added to the final list of metadiscourse markers (Appendix II), marked in italics.

- (10) a. Por último cabe destacar el ya frecuentemente mencionado papel de la motivación y el contenido afectivo de una lengua. (TFM_ES_LIN_01)

- b. No podemos entonces ignorar la posibilidad de que estos resultados contradictorios entre la pauta de cotejo y el cuestionario de creencias pudieran reflejar la influencia del efecto Hawthorne o efecto halo en los resultados derivados del cuestionario (Brown, 1991) (RA_ES_LIN_12)
 - c. No obstante, acerca del diseño del experimento, señalamos varios puntos de posible mejoramiento: (TFM_ZH_LIN_03)
 - d. El primero, como se mencionó anteriormente, corresponde a la sensación que tiene el hablante de estar frente a una unidad nueva; el segundo considera como neologismo a aquella unidad que no aparece documentada en un corpus lexicográfico de exclusión, que en este caso son... (RA_ES_LIN_13)
- (11) a. Según refleja el mapa I, los dos grupos que predominan son los nombres que designan partes del cuerpo y los relacionados con animales, siendo el primero el motivo principal y más extendido —con diferencia de los otros— en todo el territorio europeo de habla hispana. (TFM_ES_LIN_04)
- b. Con el objetivo de evaluar el nivel de acuerdo presentado por los anotadores (n= 8), se usaron dos criterios de medición. El primero estuvo a la base de... En segunda instancia, se calculó... (RA_ES_LIN_10)
 - c. Consideremos ahora el catalán. En esta lengua existe una abundante variación respecto a... (TFM_ES_LIN_02)
- (12) a. Por esta misma razón, el DP estaría compuesto por el Discurso Regulatorio y el Discurso Instruccional. (RA_ES_LIN_10)
- b. E incluso puede actuar como una fuerza aceleradora del cambio, es decir, puede ser causante de la aceleración de una innovación que, en cualquier caso, se hubiera producido. (RA_ES_LIN_14)
- (13) a. El presente trabajo de investigación tiene como objetivo principal el estudio del léxico del campo semántico de los juegos, (TFM_ES_LIN_04)
- b. Lo vamos a ilustrar con un ejemplo: Según Greenberg, hay seis posibilidades del orden para formar la estructura básica de las lenguas, (TFM_ZH_LIN_04)

Having dealt with the metadiscourse identification issues during the manual checking, I faced the challenges derived from metadiscourse classification: which category should be assigned to a segment given that that segment is indeed a metadiscourse marker? In most cases, each matched segment should be coded with one specific and presumably correct category because as I said, this is where building a metadiscourse

list to begin with comes in. However, as noted in Section 2.2.4, metadiscourse is known to be multifunctional: one particular marker might i) fulfill different functions in different contexts or, ii) perform different functions simultaneously in the same context. Under the first scenario, I encountered the problem of how to determine its category if that particular marker has different functions in different contexts. Under the second scenario, although I already decided that in the present study, each metadiscourse marker only had one category (see Section 4.2.2), i.e., many-to-one correspondence (instead of many-to-many correspondence) between markers and categories, there arises the question of which category should be selected from the several suitable categories.

Unlike metadiscourse identification issues, however, the issues derived from metadiscourse classification cannot be solved by applying external criteria because the classification of multifunctional items depends largely on the analyst's judgment with the context or co-text taken into account. In what follows, I will illustrate how I classified specific metadiscourse markers of the first multifunctional case, followed by a discussion concerning the multifunctionality of the second kind.

The connective device *por otro lado* serves as a good example of the first multifunctional case: the default category I assigned to it is 'Comparison' (14a), but it is also unsurprising to see it functions as a sequencer when it is accompanied by *por un lado* to enumerate arguments (14b); in few occasions, *por otro lado* has a so strong contrastive meaning that makes *por un lado* and *por otro lado* function as comparison markers (14c); finally, in another few occasions, *por otro lado* even functions as an additive marker to add further arguments (14d). None of these functions can be easily determined by reading the sentences where the markers occur. It is necessary to closely read the markers' co-texts, such as the preceding sentence (14a, 14d) or nearby markers (14b–c).

- (14) a. En español, el morfema /-o/ expresa mayoritariamente el género masculino y el sufijo /-a/ se emplea en el femenino. En estos casos y salvo algunas excepciones, se considera que el género responde a su marca de forma 'transparente' (Sagarra y Herschensohn, 2011). Por otro

lado, algunos sustantivos no cuentan con una expresión del género tan evidente, considerándose estos casos como de concordancia ‘opaca’.
(TFM_ES_LIN_01)

- b. El estudio individual de cada concepto se ha llevado a cabo desde distintas perspectivas. Por un lado, con el análisis motivacional se intenta averiguar si existen patrones comunes en la creación de variantes para designar dichas actividades. Por otro lado, al aplicar los postulados de la semántica cognitiva al estudio del campo léxico de los juegos se pretende conocer la existencia de procesos lingüístico-cognitivos comunes en la variación geoléxica. Por último, el análisis dialectal sirve para conocer el grado de variación léxica en las comunidades hispanohablante y la distribución espacial de las formas.
(TFM_ES_LIN_04)
- c. La enseñanza del léxico en ELE sufre cierta descompensación. Por un lado, se ha reivindicado la importancia de la adquisición de vocabulario en el contexto de aprendizaje de una L2/LE porque el dominio léxico tiene un papel relevante en la competencia comunicativa. Sin embargo, por otro lado, los avances y el conjunto de propuestas metodológicas novedosas que han presentado las distintas investigaciones no se han llegado a incorporar en los programas de enseñanza de lenguas
(TFM_ES_LIN_03)
- d. Con respecto al primer aspecto, se estima que la proporción de neologismos terminológicos que ingresaron en el diccionario es considerable, con casi un 40% del total de unidades incluidas. Lo anterior refleja la importante contribución de las áreas especializadas estudiadas, sobre todo economía y tecnología, al acervo léxico del español. Por otro lado, este dato también refleja el importante papel de la prensa generalista en la transferencia de terminología y el fenómeno de desteterminologización que experimentan estas unidades cuando ingresan en el léxico general. (RA_ES_LIN_13)

While the function of many markers can be classified by reading the adjacent co-texts as in (14), some markers’ function needs to be examined within a larger context, ranging from paragraphs to the entire writing piece. For instance, assigning a definite category to the markers in (15a–b) requires extensive reading of several paragraphs altogether. Similarly, *en el apartado X* and *en este trabajo* in (15c–d) need to be assigned with new categories (i.e., ‘Previews’ and ‘Reviews’, respectively) different from the default ones (i.e., ‘Reviews’ and ‘Overviews’, respectively) because they are located at a particular position within the whole text (i.e., introduction and conclusion, respectively). In this respect, MAXQDA 2020 has another advantage over other tools like corpus

concordancer in that it displays the whole text in one window rather than concordance lines only.

- (15) a. No obstante, a pesar de presentar una diversidad tan amplia, el marco teórico utilizado ha permitido observar la presencia de unas motivaciones comunes en la creación léxica. [next paragraph] Por un lado, la clasificación de las designaciones en grupos léxico-motivacionales (§ 4.1 y § 5.1) ha permitido... [three paragraphs after]. Por otro lado, aplicar los postulados de la semántica cognitiva (§ 4.2 y § 5.2) al examen de los nombres para referirse a los conceptos llevar a cuestas y llevar a hombros ha permitido... (TFM_ES_LIN_04)
- b. En conclusión, en este apartado hemos... [next paragraph]. En la siguiente sección, hemos... [next paragraph]. A continuación, hemos... [next paragraph]. Por último, hemos... (TFM_ES_LIN_02)
- c. [introductory section] En el apartado 3 se plantean las hipótesis del trabajo y la metodología seguida, en 4 se desarrolla el análisis del corpus y, finalmente, en 5 se presentan las conclusiones del trabajo. (RA_ES_LIN_06)
- d. [last chapter] En este trabajo, hemos ofrecido una visión panorámica de las preguntas principales que suscita la existencia de una restricción como la DIS y hemos analizado un fenómeno relacionado con dicha condición: la combinación de clíticos. (TFM_ES_LIN_02)

In regard to the second case of multifunctionality, that is, one metadiscourse item performs more than one function simultaneously, the first thing we need to know is for what reason(s) this kind of multifunctionality occurs. Based on the analysis of the corpus texts, two possible explanations can be made: ambiguous functional meaning and large metadiscourse unit.

In a certain context or co-text, a metadiscourse marker has an ambiguous functional meaning. Such is the case with the examples in (16). In my judgment, *por otra parte* in (16a) can function as ‘Comparison’ and ‘Addition’. Likewise, *por su parte* in (16b) can be treated both as a comparison marker and an additive marker. However, given that only one category is allowed to be assigned to each metadiscourse instance in the present study, I eventually selected the category ‘Comparison’ for both cases. Of course, these subjective decisions are open to debate.

- (16) a. De acuerdo con lo que sostienen Martin y Rose (2013), los GCOs presentan funciones primarias y secundarias. Desde esta perspectiva sistémico funcional, las funciones primarias se vinculan a un propósito social, lo que otros autores (al igual que en este trabajo) denominan el propósito comunicativo del género (Swales, 1990; Askehave & Swales, 2001; Parodi et al., 2008). Por otra parte, las funciones secundarias están relacionadas con el uso contextualizado en la escuela, es decir, la función que el género cumple durante el proceso de recontextualización en contextos escolares. (RA_ES_LIN_10)
- b. En español, la estrategia del espacio vacío se aplica más, y se aplica muy poco la estrategia de uso de pronombres relativos menos, y se aplica muy poco la estrategia de retención de pronombre. En chino, por su parte, la estrategia del espacio vacío es la estrategia básica para la relativización en chino, que se emplean a la mayoría de las Rel. en chino. (TFM_ZH_LIN_04)

The other reason related to the multifunctionality, as also discussed in Section 2.2.3, comes from the unit of analysis. Sometimes a large linguistic unit may encompass more than one metadiscourse marker, resulting in multiple functions occurring in the same context. For example, *tabla siguiente* in (17a) had two coded markers based on the automatic dictionary-based coding, i.e., *tabla* is a visual reference and *siguiente* is a preview. Here I manually coded them as one unit because only the two markers together can form a complete functional meaning. As for which category should be assigned to this large unit, I followed Flowerdew (2015) and judged one of the possible functions as primary. In this case, making visual reference to the table seems to be the primary function of this unit, and it was thus labeled ‘Visual references’. Similar examples are *en el ejemplo siguiente* in (17b), *veamos un ejemplo* in (17c), *en el apartado arriba* in (17d). By contrast, some large metadiscourse units should be treated as separate markers, as operated in the default automatic coding. For instance, *pero al mismo tiempo* in (18a) was treated by default as two separate markers. Although they are syntactically adjacent, they do not form a larger metadiscursive unit. Each marker has a complete and independent functional meaning, i.e., contrasting with the previous argument but at the same time adding a new argument. Similar examples can be found in (18b–c).

- (17) a. La tabla siguiente presenta el porcentaje de las Rel. en chino traducidas con Rel. en español entre todas las Rel. en chino, (TFM_ZH_LIN_04)
- b. el hablante puede emplear el diminutivo para expresar afecto y cariño hacia el objeto oyente nombrado, como en el ejemplo siguiente en el que el hablante se dirige a un bebé: (RA_ES_LIN_03)
- c. Veamos un ejemplo: “Mi cerebro no funciona”. En este caso, la metáfora conceptual es LA MENTE ES MÁQUINA. (TFM_ZH_LIN_08)
- d. Hemos mencionado dos tipos de corpus lingüísticos en el apartado arriba: (TFM_ZH_LIN_05)
- (18) a. Esta última idea, en cambio, a Comrie le parece “potencialmente no confirmable” como una “argumentación débil”, ya que con estudiar una sola lengua existe muy poca posibilidad de conseguir por ejemplo al final un universal implicacional. Pero al mismo tiempo, el autor sabe muy bien que tampoco es posible estudiar todas las lenguas naturales que existen o que se han extinguido en el mundo, pero insiste en que lo más relevante trata de investigar los idiomas representantes de su categoría, y que los lingüistas deben tener un horizonte de vista amplio, así que no se dejen guiar por sus preferencias de idiomas al recoger los datos lingüísticos. (TFM_ZH_LIN_04)
- b. En efecto, este tipo de atenuación suele tener lugar junto con actos directivos (Searle 1969), ya que estos pueden amenazar la imagen del oyente. Así por ejemplo, la usuaria del ejemplo (18) tiene una academia de baile que acaba de abrir y está intentando recabar nuevos alumnos. (RA_ES_LIN_03)
- c. Pero en cuanto a su modificación sobre la relativización del OCOMP de K&C en la estrategia de (+caso), no la podemos confirmar, puesto que en nuestro corpus no hay Rel. donde el elemento relativizado es el OCOMP. (TFM_ZH_LIN_04)

Finally, after the whole manual inspection process finished, the post-checking data (i.e., each coded segment, the final frequency count of each category, etc.) was stored in a separate folder before the quantitative and qualitative data analyses started.

4.2.6. Intercoder reliability

One primary concern related to the manual checking is that the author of the current study, as the analyst, made somewhat subjective judgments, such as whether this segment is a metadiscourse item or which category should be assigned to this marker.

The negative consequence would be that the present study findings could not be reproduced and expanded on in similar studies or later analyses. This is a so-called reliability issue in research.

The reliability of a measure in experimental design is to what extent it produces the same results on repeated trials. Meanwhile, the reliability of coding means whether the same coding procedure (including the coding scheme, coding tool, how-tos of manual checking) can consistently arrive at the same coding results by different human coders (Neuendorf & Kumar, 2015; Coe & Scacco, 2017). Thus, it is crucial to ensure intercoder reliability during manual checking.

As mentioned in Section 2.2.5, many metadiscourse analysts (e.g., Crismore et al., 1993; Abdollahzadeh, 2011; F. Cao, 2014; Mu et al., 2015; Akbas & Hardman, 2018; Qin & Uccelli, 2019) were aware of the reliability issue and conducted an intercoder reliability check in their study. They often recruit a second human coder to code the same texts independently and then do the cross-check. For the present study, I recruited a native Spanish speaker who is an expert in metadiscourse analysis as the second coder. Then, I adapted the three-step approach suggested by Coe & Scacco (2017) to achieve adequate intercoder reliability.

First, based on Schreier (2012: 95), a codebook (Appendix III), which contains code/category name, description of each code/category, good and bad examples, as well as explicit coding instruction, was developed considering the second coder needs to be familiar with the constructs in the coding scheme and be well-trained before the independent coding (see Akbas & Hardman, 2018).

The next step was to select sample texts for reliability assessment. Ideally, the second coder should code all the texts as the first coder did in order to assess the reliability based on the whole data (Brezina, 2018a). However, given the large size of the corpus, it is impractical for the second coder to code all the texts. Consequently, 10% of the total number of the texts (11 texts in the case of this study), a common subsample size according to Coe & Scacco (2017), were randomly selected from the corpus for the cross-check purpose. These 11 texts sampled were stored separately as a MAXQDA project file and sent to the second coder. After the second coder finished coding the 11

texts, the results were compared with those from the same 11 texts coded by the first coder (i.e., the author of the present study). One convenient feature of MAXQDA 2020 is that it can automatically assess the match rate of the coded segments between the two files and calculate coefficient kappa (κ_n)²² to estimate intercoder reliability. The kappa statistics were estimated for each main category (except for ‘Evidentials’²³), as shown below.

Table 4-6 Intercoder reliability coefficient of each main metadiscourse category

Interactive metadiscourse		Interactional metadiscourse	
<u>Main category</u>	<u>kappa (κ_n)</u>	<u>Main category</u>	<u>kappa (κ_n)</u>
Transitions	0.85	Hedges	0.88
Frame markers	0.70	Boosters	0.77
Endophoric markers	0.82	Attitude markers	0.75
Code glosses	0.86	Self-mentions	0.91
Evidentials	N/A	Engagement markers	0.89

Note: Values of kappa range from -1.0 to 1.0, with -1.0 indicating perfect disagreement below chance, 0.0 indicating agreement equal to chance, and 1.0 indicating perfect agreement above chance. The value interpretation can be based on the established benchmark notes for Cohen’s Kappa: as a rule of thumb, 0.6-0.8 is substantial, 0.8-1.0 is almost perfect (see Kuckartz & Rädiker, 2019: 281).

Finally, following Krippendorff (2004: 219) and Kuckartz & Rädiker (2019: 269), the two coders arranged a meeting to discuss the coded segments where the systematic discrepancies occurred in order to improve the codes where necessary and reach a final consensus.

4.3. Data analysis

After each segment was properly coded and the final frequency of each metadiscourse

²² MAXQDA does not provide commonly used Cohen’s kappa (κ), but coefficient kappa (κ_n) proposed by Brennan & Prediger (1981). Both are chance-corrected measures (in contrast with percentage agreement measures), but the latter is preferred because, according to Kuckartz & Rädiker (2019: 280), Cohen’s kappa determines the expected agreement by chance using the marginal distribution, but “unequal marginal distributions can lead to abstruse and paradoxical values in Cohen’s kappa”; meanwhile, Brennan-Prediger kappa uses the number of categories to calculate the expected agreement by chance, thereby avoiding unequal marginal distributions.

²³ Kappa estimation of ‘Evidentials’ was excluded because after using complex regex to search for evidential markers, the retrieval precision can reach nearly 100%. Therefore, discrepancies in the assignment of this category are not likely to occur between the two coders.

category was counted on MAXQDA 2020, the final step was to analyze the coded data. By doing so we can address research questions proposed previously and finally reach meaningful conclusions, as well as provide pedagogical suggestions.

In this study, the final data were analyzed both quantitatively and qualitatively. In the following two sections, I first deal with which statistical analyses were employed for the quantitative data and for what purpose they were used; then, I explain how to proceed with qualitative analysis based on the corpus texts and its purpose.

4.3.1. Quantitative analysis

The quantitative analysis performed in this study aims to answer if there are any statistical differences in the use of metadiscourse by the four different Spanish writer groups, i.e., non-native novices, native novices, non-native experts, and native experts. The following two subsections describe two types of quantitative analyses: first, an inferential statistical analysis was conducted to show significant differences in the use of metadiscourse resources between the different writer groups; second, an adapted keyword analysis was performed to locate metadiscourse markers that are statistically distinctive of each writer group.

4.3.1.1. Multivariate analysis of variance

For the first comparison, I chose Jamovi²⁴ as the statistical software package and adopted a two-way or factorial MANOVA (Multivariate ANalysis Of VAriance) as the inferential statistical test (i.e., can be generalized to the population). It is ‘two-way’ because two factors (independent variables) are under analysis, namely nativeness and expertise. Each factor has two levels (or categorical groups): native vs. non-native and expert vs. novice, respectively. Additionally, ‘two-way’ also assumes there could be a possible interaction between the factors (nativeness \times expertise), for example, it is possible that the effect of nativeness on metadiscourse use depends on whether the

²⁴ Jamovi is an open-source statistical software package, which is freely available at <https://www.jamovi.org>.

writer group is novice or expert; or equivalently, the effect of expertise could depend on whether the writer group is non-native or native²⁵. It is ‘multivariate analysis of variance’ because multiple dependent variables (different types of metadiscourse resources/ categories in this case) are simultaneously examined within a single ANOVA design.

Many previous metadiscourse studies, however, either only report descriptive statistics (e.g., McGrath & Kuteeva, 2012; Aull & Lancaster, 2014; Kawase, 2015; D’Angelo, 2016; Thomson, 2020) or use simple statistical tests like the chi-square test (e.g., Ädel, 2006; Mur-Dueñas, 2011; J. J. Lee & Casal, 2014; Mu et al., 2015; Xia, 2017; Wang & Jiang, 2018). The problem with descriptive statistics is that the findings can hardly be generalized to the population. Meanwhile, the most popular chi-square test considers the whole corpus as a unit of analysis (the so-called “whole corpus approach” Brezina, 2018b: 265), which first ignores the important and meaningful variations inside the corpus, namely individual texts produced by different language users (Brezina, 2018b; Egbert & Schnur, 2018; Bestgen, 2017); second violates one the assumptions of this test—*independence of observation*—which means linguistic features in one corpus have no relationship with the linguistic features in another and which is not the case for the chi-square test under the whole corpus approach. Therefore, I followed Brezina’s (2018b) and Egbert & Schnur’s (2018) suggestion that corpus should be treated as a sample of individual texts rather than a contrived data set. By doing so, I will be able to conduct inferential statistics without violating the assumption above.

Particular attention should be paid to the two-way ANOVAs adopted in F. Cao (2014), F. Cao & Hu (2014), and Hu & Cao (2015), as well as to the three-way ANOVAs in Yoon (2021). ANOVA is different from MANOVA in that the former examines only one dependent variable in a single design, which is the so-called ‘univariate approach’. However, since there are many metadiscourse categories (i.e., dependent variables) to be analyzed, one ANOVA test is certainly not sufficient. As a result, they ran separate

²⁵ See <https://statistics.laerd.com/spss-tutorials/two-way-manova-using-spss-statistics.php> (Accessed on Jan. 16, 2021)

univariate ANOVA for each metadiscourse category. However, this could increase Type I error rate, i.e., the chance of making false rejection of a true null hypothesis (Meyers, Gamst, & Guarino, 2006; Hair, Black, Babin, & Anderson, 2018), because with a series of separate univariate ANOVA tests performed, the probability of observing a significant result due to chance is higher, which “can inflate the operational alpha level” (Meyers et al., 2006: 367). Although Yoon (2021) adjusted the alpha level with the Bonferroni correction for his three-way ANOVAs, the univariate tests tend to ignore the intercorrelation between dependent variables (see Meyers et al., 2006: 368). Taking metadiscourse resources as an example, it can be assumed that the use of ‘Comparison’ is possibly intercorrelated with that of ‘Consequence’, because one is likely to write a consequence proposition after contrasting two arguments; hence, the frequency of ‘Consequence’ would increase in line with the occurrence of ‘Comparison’. In a similar vein, ‘Boosters’ is possibly intercorrelated with ‘Attitude markers’.

Considering the above, I argue that two-way MANOVA fits the present study well. It provides some control over the overall alpha level when multiple dependent variables are scrutinized simultaneously and collectively; at the same time, it highlights the fact that “some composite (linear combination) of the dependent variables may provide evidence of an overall group difference that may go undetected by examining each dependent variable separately” (Hair et al., 2018: 385). The two-way MANOVA will yield two results: multivariate significance test results and univariate significance test results. The former assesses the effects of the independent variable(s) (nativeness and expertise in our case) on the combined dependent variate (interactive metadiscourse and interactional metadiscourse in our case). If a statistically significant multivariate effect is detected, we can proceed to interpret the latter results, namely univariate test results of each individual dependent variable (in our case, ‘Addition’, ‘Comparison’, ‘Consequence’ and so on) and possibly apply post-hoc pairwise comparisons to find out in which writer groups the statistically significant differences lie.

On the other hand, however, to conduct the two-way MANOVA, I also need to do two other things beforehand: frequency counts normalization and part of assumption checks.

As already seen in Table 4-2, the corpus I collected for each writer group is of a different size. Group comparison of raw frequency counts derived from different-sized corpora is pointless. Hence, it is necessary to normalize the frequency counts of each category. This step is relatively easy: I normalized the frequency counts of each metadiscourse subcategory and main category to a common basis (per 10,000 words in this study²⁶) in relation to the total word count of each text. The reason I calculated the normalized frequency of the categories per text rather than per corpus has been given earlier. Nevertheless, one caveat has largely been omitted in previous studies but is worth being raised here: the legitimacy of normalized frequency based on word count. It is known that many metadiscourse markers are above the word level, such as phrases (*en el apartado, sin embargo, por un lado, en resumen, etc.*) and clauses (*como se ha apuntado anteriormente, como es bien sabido, etc.*). Normalizing this type of metadiscourse device according to word count is undoubtedly inappropriate. But to the best of my belief, it is not practical to calculate the phrase and clause count of a text. Echoing Hyland's (2005a: 55) reminder, we should cautiously interpret the normalized data; that is, we standardized the frequency counts of each metadiscourse category not to represent the accurate proportion of a metadiscourse category in a text but to compare the occurrence of metadiscourse in corpora of unequal sizes.

As in all other statistical tests, the assumption check is of particular importance. Only if the so-called assumptions are met is a test allowed to be used (see Brezina, 2018a: 13). The most central assumptions for a two-way MANOVA, according to Hair et al. (2018: chap. 6) and Laerd (<https://statistics.laerd.com/spss-tutorials/two-way-manova-using-spss-statistics.php>), are i) independence of observations, ii) adequate group sample size; iii) no univariate or multivariate outliers; iv) homogeneity of variance-covariance matrices; and v) multivariate normality. For the first assumption, as noted earlier, we treated individual texts as units of analysis, and they are assumed not to be influenced by each other. So this assumption is met. Hair et al. (2018: 391)

²⁶ This common basis was chosen because several studies (e.g., Mur-Dueñas, 2011; J. J. Lee & Casal, 2014) on Spanish metadiscourse adopted it. In this way, I can draw direct comparison between my findings with theirs without needing a further frequency conversion.

recommend that each group's sample size should be over 20. Since the sample texts for each writer group in our study are more than 20 (see Table 4-2), the second assumption is also met. As for the remaining three assumptions, they can only be checked during the presentation of results, which will be unfolded in the following two chapters. Where the assumptions are not met, the alternative solutions will be adopted accordingly (see Section 5.1.2).

4.3.1.2. Analysis of key metadiscourse markers

With regard to the second quantitative analysis, I decided to look at the key metadiscourse items that are statistically salient in one corpus against another corpus. This kind of analysis was adapted from keyword analysis in corpus linguistics. It is different from the 'top-n-frequent-words' (usually top 10) analysis adopted by some of the previous metadiscourse studies (e.g., F. Cao, 2014; Moya Muñoz, 2016; Ruan, 2019) because the latter approach only gives a general idea of the most frequent metadiscourse markers in each corpus, but the most frequent ones are not necessarily meaningful or worth a cross-corpus comparison. Meanwhile, under the keyword approach, scholars run statistical tests to generate a list of words that are statistically more frequent (positive keywords) or more infrequent (negative keywords) in one corpus in comparison with another (Scott, 2016; Bondi, 2008; Pollach, 2012; Xiao & McEnery, 2005). These generated keywords provide a valuable way to "[characterize] a corpus as against another" (Bondi, 2008: 36). As Brezina (2018a: 80) claims, "[k]eywords are important when identifying key concepts in discourses, typical vocabulary in a genre/language variety, lexical development over time, etc.". Therefore, in the present study I chose to analyze key metadiscourse items that characterize the writing of a particular writer group (e.g., non-native writing, novice writing).

Keywords are calculated by comparing the frequency of each word in the wordlist of the corpus of interest (i.e., study corpus) with that of the same word in the wordlist of another corpus (i.e., comparison corpus or reference corpus). While a wordlist usually refers to a list of all running words that appear in a corpus (Baker, Hardie, &

McEnery, 2006), in this study I treated the metadiscourse list (Appendix II) as the wordlist. Thus, I calculated key metadiscourse items by comparing the frequency of each marker in the metadiscourse list in one writing corpus (say, non-native corpus) with the frequency of the same marker in another corpus (say, native corpus) (see a similar operation in Crosthwaite et al., 2017).

Based on all the segments coded in MAXQDA 2020, I extracted around 500 different interactive metadiscourse markers²⁷ and another 500 different interactional metadiscourse markers, containing the frequency information of each marker. However, not all of them were eligible for inclusion in the wordlist, hence the final keyword calculation. Two reasons can be advanced in justification of this procedure.

Firstly, many extracted items should not be considered individual markers but should be clustered under one marker instead. For example, MAXQDA 2020 treated the singular and plural forms of the same Spanish words as two different markers (e.g., *tabla* and *tablas*, *siguiente* and *siguientes*); similarly, words and phrases with an uppercase letter and lowercase letter were exported as different entries (e.g., *además* and *Además*, *figura* and *Figura*). From a functional point of view, this kind of differentiation is neither meaningful nor necessary, so I grouped the pair into one marker, displayed as the basic form (i.e., lemma). Apart from these two, I also grouped the same words or phrases with and without a following comma into one marker (e.g., *a saber* and *a saber,* → *a saber*; *Ahora* and *Ahora,* → *ahora*), masculine and feminine forms into one marker (e.g., *conocido como* and *conocida como* → *conocido como*), and phrases with and without contracted prepositions *a* and *de* into one marker (e.g., *en lo que se refiere a* and *en lo que se refiere al* → *en lo que se refiere a*; *en el caso de* and *en el caso del* → *en el caso de*). Additionally, I decided to group phrases like *como se ha...*, *como se ha explicado en el apartado*, *como se ha mencionado previamente*, *como se ha visto arriba* into one marker ‘*como se ha X*’, because although their surface forms are different, they share the same construction, and their discoursal function does not

²⁷ I did not extract evidential markers because the surface form of each in-text citation varies considerably, for example, (*Smith, 2009*) and (*White & Liu, 2018*) are completely different evidential markers. It is thus pointless to count their frequency and examine their saliency between corpora.

differ too much. For interactional metadiscourse markers in particular, since many of them are verbs or have verb elements, logically, conjugated verbs should be grouped under one marker, displayed as the base form (e.g., *comprobamos*, *comprobar*, *comprobó*, *comprueba*, *comprueban*, *han comprobado* → *comprobar*; *es interesante*, *sería interesante* → *ser interesante*), except that the verb form itself carries a specific discourse function and has no other variants. For instance, the marker *puede que* was coded as ‘Hedges’ and did not have other variants such as *pueden que*, *poder que*, *podía que*. Lastly, many interactional resources (e.g., ‘Hedges’ and ‘Self-mentions’) were searched and coded through regex (see Appendix II). Although their base form was considerably diverse (e.g., *podría*, *haría*, *necesitaria*, *servirían*, *relaverían*; *abordamos*, *analizamos*, *clasificamos*, *encontramos*), they were grouped under one marker **ría(n)* and *(nosotros) *mos*. As the different forms were merged into one marker, their frequencies were added up accordingly.

Secondly, some markers had a very low occurrence (e.g., *mapa*, *verbigracia*) in the corpus or only occurred frequently in a handful of texts, making them not worthy of keyword analysis (see Egbert & Schnur, 2018). Therefore, I set a minimum frequency and text dispersion (i.e., whether a marker is sufficiently dispersed across texts) as thresholds for including a marker in the wordlist. Albeit with somewhat arbitrariness (Bestgen, 2017), my rule of thumb is that one worthy marker should have at least five occurrences in one of the corpora and occur in more than three text files.

In the end, the final list of interactive metadiscourse was reduced to around 300 items while that of interactional metadiscourse was reduced to around 200 items²⁸.

As for the tool for keyword analysis, I chose the Log-likelihood and Effect Size Calculator²⁹ to compare each marker’s frequency between corpora automatically. This calculator offers different statistical tests, such as log-likelihood (LL) ratio, %DIFF, and Bayes Factor (BIC). The commonly used one is the log-likelihood (LL) ratio, a contingency value representing significant differences of words between corpora,

²⁸ Since the two lists contain a lot of data, they cannot be displayed properly as an appendix of the thesis. Thus, they were uploaded to OSF (available at https://osf.io/ezak6/?view_only=f42b20377ae24e0aaba0ff6be60338ba).

²⁹ This spreadsheet is built by Prof. Paul Rayson on top of MS Excel spreadsheet. It is freely available at <http://ucrel.lancs.ac.uk/people/paul/SigEff.xlsx>.

whose cut-off point for significance at $p < .05$ is $G^2 = 3.84$ (Baker et al., 2006; Brezina, 2018a; Gabrielatos, 2018; Crosthwaite et al., 2017). Traditionally, how key (referred to as “keyness”) the words in the wordlist of a study corpus are depends on how large their LL value (G^2 score) is. However, as a statistical significance test, LL has been criticized by several scholars (Brezina, 2018a; Gabrielatos, 2018; Bestgen, 2017; Egbert & Schnur, 2018; Baker, 2006) because i) it uses the whole corpus rather than individual texts as a unit of analysis, which, like chi-square test mentioned earlier, violates one of the assumptions—independence of observation; ii) it is more prone to falsely identifying some statistically significant keywords, although, in fact, they could only occur frequently in one text (idiosyncrasy) or a small handful of texts in the corpus, or when the corpora to be compared simply have a large enough size; iii) its value (G^2 score) only shows how much confidence we have to believe that the existence of the frequency difference of the words in the two corpora is not due to chance but not how great the given frequency difference is, making it not suitable to measure keyness and rank key items.

In view of the above, I decided to report effect-size metrics (%DIFF and BIC) along with the LL (G^2) score because the effect-size measures do not assume the assumption of independence of observation, they are insensitive to corpus sizes, and finally, they reflect the size of frequency difference (keyness). The final list of key metadiscourse markers was ranked in descending order of BIC score, which varies between negative and positive scores. The higher the score of a metadiscourse marker, the more salient its difference between corpora. According to Gabrielatos (2018), items with BIC scores below 2 should be filtered out because their low effect is not worth much a mention. Therefore, in the present study the BIC cut-off value for key item analysis is 2.00.

4.3.2. Qualitative analysis

Many studies in corpus linguistics and EAP/EAP do not draw a line between quantitative and qualitative analysis during the data analysis step. They are not two

opposing camps but equally important aspects in considering findings (Nesi, 2012; Akbas & Hardman, 2018). Therefore, the quantitative analysis in the next two chapters will be followed by qualitative analysis.

In the qualitative analysis of this study, my focus of interest still lies in the mentioned two types, i.e., metadiscourse categories and metadiscourse markers. However, instead of drawing quantitative comparisons such as frequency differences, I conducted an in-depth qualitative and interpretative textual analysis. As for metadiscourse categories, I focused on the qualitative analysis of their functions because it is interesting to show a more nuanced classification of the discourse/rhetorical functions that each metadiscourse resource performs in the contexts or co-texts. Authentic examples excerpted from the corpora were provided to help better interpret the specific rhetorical purposes behind the pattern of use of metadiscourse. Moreover, potential differences in the employment of functions across the writer groups were highlighted where necessary. Regarding metadiscourse markers, I shifted my attention to explaining why some salient markers were peculiar to specific writer group(s).

4.4. Summary

To sum up, this chapter's central theme is the description of the methods I adopted in the present study. It started with constructing the four corpora that represent Spanish academic writing produced by the four writer groups of interest, namely non-native novice, native novice, non-native expert, native expert. Corpus construction also involves the procedure of corpus sampling, documenting, cleaning, and formatting, as well as the issues of corpora comparability and copyright.

Next, different aspects and steps are involved in metadiscourse coding. The coding scheme I adopted in this study was Hyland's (2005a) interpersonal model of metadiscourse, with some adaptation in its taxonomy. I then followed a multi-step approach to create the list of metadiscourse markers; that is, a set of markers and their corresponding category were predefined first and then joined by the corpus-driven

coding. As for the coding tool, I used MAXQDA 2020 (VERBI Software, 2019), a CAQDAS package. The built metadiscourse list served as a 'Dictionary' in MAXQDA 2020 to automatically search and code all matched segments in the corpora. Regular expression search was added as a complementary searching method when the surface form of certain metadiscourse markers such as citations could not be predefined. Given that metadiscourse is by nature multifunctional and context-dependent, I had to manually check the segments that had been coded automatically. During this step, I applied some criteria such as discourse-internal/-external distinction, current text vs. intertextuality, syntactic restrictions to identify whether a segment is truly a metadiscourse marker. At the same time, contexts and co-texts were of help during the classification of some multifunctional markers. Finally, as the manual checking is subjective, I recruited a second coder to code 10% of all texts and then performed an intercoder reliability analysis to assess the coding reliability.

As for the data analysis methods, I conducted both quantitative and qualitative analyses based on the final coded data. The two-way MANOVA test was run to examine whether the four Spanish writer groups significantly differ in the use of metadiscourse resources. A keyness analysis was also chosen to find the most salient metadiscourse markers used by one writer group compared with another. Finally, an in-depth qualitative and interpretative textual analysis accompanied the previous quantitative analysis to help understand and explain the specific discourse functions of metadiscourse resources and saliency of those key metadiscourse markers.

Chapter 5 Results: Interactive Metadiscourse

In this first results chapter, I present the results from the quantitative and qualitative analysis of interactive metadiscourse use across the four Spanish writer groups.

As noted in the previous chapter, three main analyses were carried out for the metadiscourse analysis, i.e., multivariate analysis of variance, analysis of key metadiscourse items, and qualitative interpretative textual analysis. The first quantitative analysis aimed to show whether there are any statistical differences in the frequency distribution of metadiscourse categories across the writer groups. The second quantitative analysis intended to generate a list of metadiscourse items that are statistically salient in one writer group when compared against another. The last qualitative analysis scrutinizes each metadiscourse category's specific discourse functions and characteristics.

In line with the analysis procedure above, the results presented in the following sections also follow this order. Firstly, I provide overall descriptive and inferential statistics of each interactive metadiscourse category based on their normalized frequency observed in the four corpora. Secondly, I select top key interactive metadiscourse markers of both factors (i.e., nativeness and expertise) to demonstrate key item analysis and explain the possible reasons behind these statistically salient markers. Lastly, I exemplify each interactive metadiscourse resource writers use to achieve specific discursual and rhetorical functions and detect possible cross-group functional differences. At the end of this chapter, a summary is given.

5.1. Results of multivariate analysis of variance

5.1.1. Overall descriptive statistics

Table 5-1 summarizes the means and standard deviations of the normalized frequency

(per 10,000 words) for each interactive metadiscourse category by nativeness and expertise.

Table 5-1 Means (M) and standard deviations (SD) of the normalized frequency of each interactive metadiscourse category across the four corpora

Metadiscourse category	Native				Non-native			
	Expert		Novice		Expert		Novice	
	(M)	(SD)	(M)	(SD)	(M)	(SD)	(M)	(SD)
Transitions	51.8	17.5	70.3	18.7	59.3	21.4	57.4	20.7
Addition	18.1	7.24	25.4	12.3	16.9	9.75	15.2	4.99
Comparison	17.3	10.2	22.4	6.91	22.6	11.5	21.4	9.14
Consequence	16.4	7.80	22.6	9.69	19.9	11.2	20.8	11.0
Frame markers	28.3	14.8	37.2	18.9	30.2	16.0	35.7	11.7
Sequencers	15.5	10.8	22.5	15.2	15.7	12.1	19.6	9.29
Topicalizers	8.35	6.03	9.55	6.10	8.88	6.17	9.65	4.49
Stage signals	1.18	1.45	1.93	2.10	2.03	2.45	2.40	1.76
Announcers	3.27	1.85	3.30	1.94	3.58	3.01	4.00	2.35
Endophoric markers	28.8	17.3	32.7	21.5	41.0	22.5	34.6	14.3
Previews	4.57	3.65	8.94	9.52	6.51	6.19	6.92	3.86
Reviews	5.18	3.11	8.59	7.09	5.04	2.92	7.38	4.48
Overviews	2.02	1.77	1.45	2.59	2.82	2.43	1.46	1.43
Visual references	17.0	15.8	13.7	11.7	26.6	18.4	18.8	9.87
Code glosses	26.7	20.4	29.9	12.7	39.4	18.5	33.5	13.6
Reformulation	11.5	10.8	13.9	8.65	17.6	11.4	14.2	7.85
Exemplification	15.2	11.7	16.0	11.0	21.9	13.6	19.4	9.42
Evidentials*	71.3	27.6	59.0	29.4	50.7	23.9	50.0	24.6
Integral citations	30.3	18.9	27.2	17.7	26.6	18.1	32.2	21.5
Non-integral citations	41.0	22.6	31.8	16.7	24.1	19.3	17.8	14.6

Note: This table is a simplified display of the test results from Jamovi. The full statistical report can be found in Appendix IV.1.

*‘Evidentials’ (‘Integral citations’ and ‘Non-integral citations’ included) in file TFM_ZH_TRA_04 was read as missing value because the writer did not follow the conventional in-text citation form but chose to cite references in the footnotes.

Based on a preliminary observation of the table above, some points merit attention: first, Spanish native experts used interactive metadiscourse resources less frequently than the other writer groups, except for ‘Evidentials’ (especially ‘Non-integral citations’), which has a clearly higher occurrence than the other three groups; second, the two novice writer groups tended to employ more ‘Transitions’ and ‘Frame markers’ than the two

expert counterparts in general; third, concerning the use of ‘Endophoric markers’, ‘Code glosses’, and ‘Evidentials’, the two non-native groups seemed to differ from the native groups: the former groups generally used more ‘Endophoric markers’ and ‘Code glosses’ than the latter; whereas, the former groups generally used less ‘Evidentials’ than the latter.

Note that these points are tentative findings based on a cursory reading of the descriptive statistical data. Whether or not the use of interactive metadiscourse by one particular group or groups is statistically different from other groups should be assessed with inferential statistics, which will be addressed in the next section.

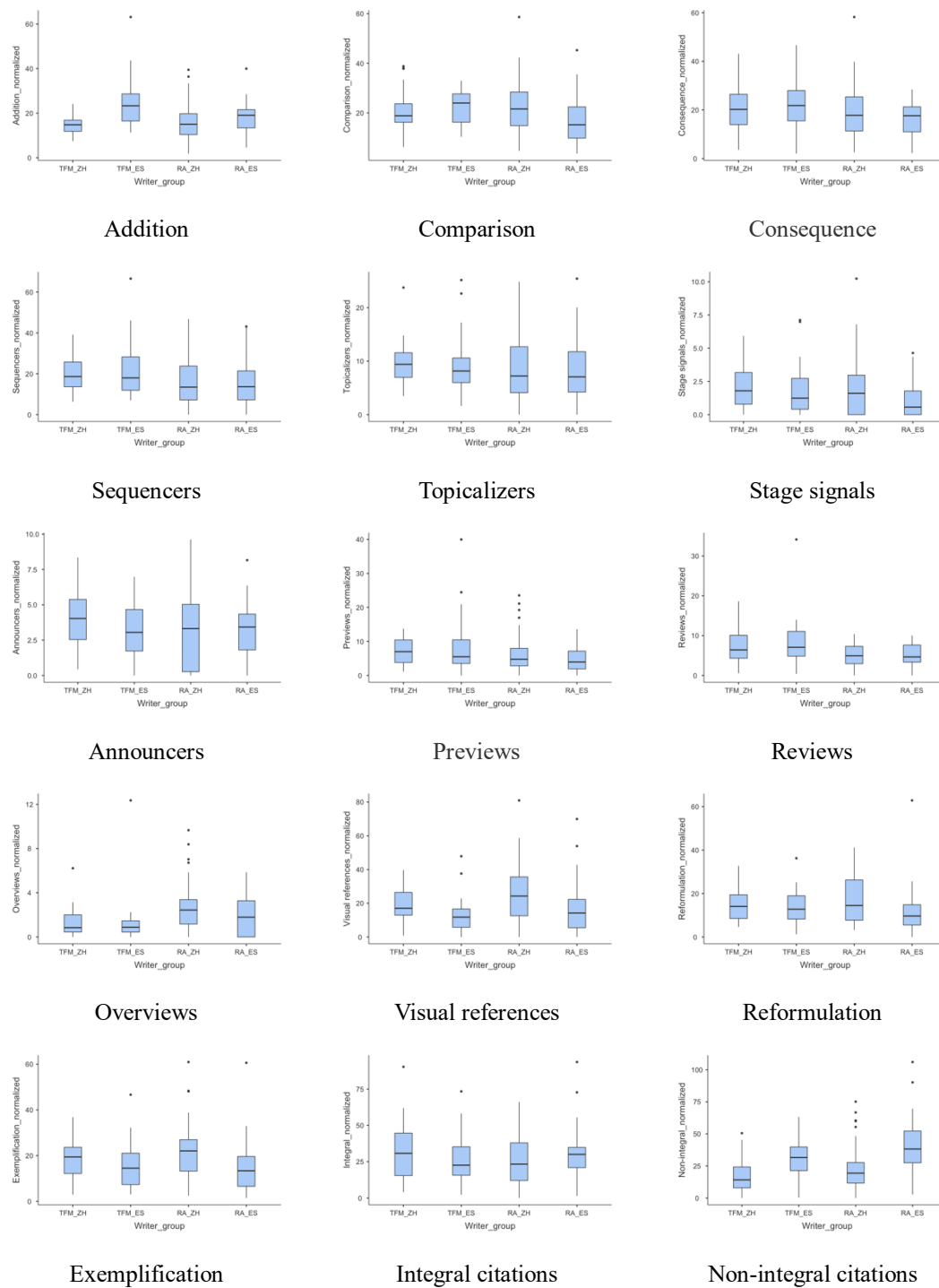
5.1.2. Inferential statistics

As already discussed in Section 4.3.1.1, the two-way MANOVA was considered as a more appropriate inferential statistical test for the data. Therefore, I decided to run a two-way MANOVA based on each text file’s normalized frequency of each interactive metadiscourse category.

Recall that in that same section, I also stressed the importance of checking assumptions before MANOVA is performed. It has already been verified that two out of five assumptions (i.e., independence of observation and adequate group sample size) were satisfied. The remaining three assumptions (i.e., no univariate or multivariate outliers, homogeneity of variance-covariance matrices, and multivariate normality) can only be checked when the statistical test runs.

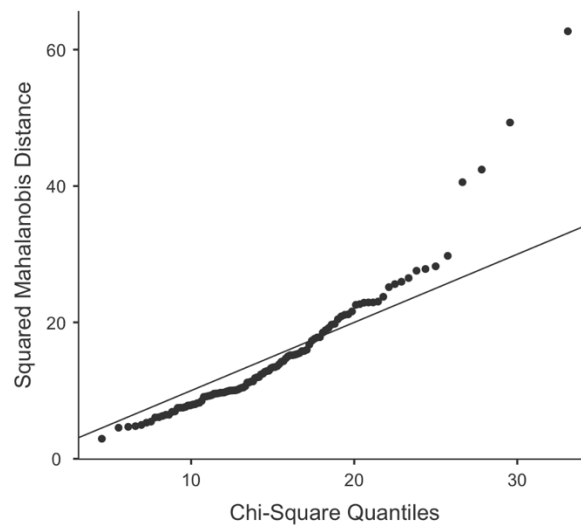
After running the two-way MANOVA on Jamovi, I inspected the box plots of each dependent variable (see Figure 5-1) and Q-Q plot of multivariate normality (see Figure 5-2), finding that there were significant univariate and multivariate outliers (dots in the box plots and dots deviated from the regression line in the Q-Q plot) in the data. The Box’s M test ($p < .001$) shows no homogeneity of variance-covariance matrices for each dependent variable across groups. Finally, the Shapiro-Wilk test ($p < .001$) indicates that the frequency of each interactive metadiscourse was not normally distributed. Hence, it can be concluded that the three assumptions were violated.

Figure 5-1 Box plots for each interactive metadiscourse category



However, the violation of assumptions does not mean that the MANOVA test should be discarded altogether. There are several remedies for the failure of assumption checks. For example, for outlying values in the data, Tabachnick & Fidell (2013) and Hair et al. (2018) recommend screening out outliers as long as the elimination is justified and it does not seriously impact the data analysis and interpretation. For non-normally

Figure 5-2 Q-Q plot assessing multivariate normality



distributed data, they recommend transforming the variable(s) whose data is not normally distributed. However, having applied square root and log transformation to all dependent variables, the normality issue remained unsolved. Moreover, as can be seen from Figure 5-1 and Figure 5-2, there are a considerable number of univariate and multivariate outliers. Eliminating them means losing many data points, which could reduce the sample size. Besides, there is no good reason for me to do so as these “anomalies” could be valid and meaningful in some ways.

In the end, instead of using two-way MANOVA, I decided to adopt an alternative route: run separate Mann-Whitney U tests for each dependent variable and by each factor. To put it differently, I first ran separate Mann-Whitney U tests to see whether native and non-native groups differ in the use of each interactive metadiscourse category; and then the same procedure was applied to see possible expert and novice differences.

Mann-Whitney U test is a rank-based nonparametric test dealing with non-normally distributed data. As a last resort, the Mann-Whitney U test has several inevitable shortcomings: i) it cannot assess the possible interaction effect between the two factors as each factor is examined separately; ii) multiple dependent variables cannot be scrutinized simultaneously and collectively, so a possible overall group difference may go unnoticed (see Section 4.3.1.1).

However, before the Mann-Whitney U test, I would like to report the two-way MANOVA test results despite the assumption violation mentioned above because the results are not meaningless after all. Firstly, while the multivariate test results in Table 5-2 point to the existence of significant differences in main effects of nativeness and expertise (hereinafter indicated by asterisk *), there are no significant differences in interaction effect between these two factors. In this sense, the misgiving that the Mann-Whitney U test cannot assess the interaction effect between the factor of nativeness and expertise can be somewhat dispelled.

Table 5-2 P values of multivariate tests for interactive metadiscourse

Multivariate test statistics	Nativeness	Expertise	Nativeness × Expertise
Pillai's Trace	0.004*	0.004*	0.270
Wilks' Lambda	0.004*	0.004*	0.270
Hotelling's Trace	0.004*	0.004*	0.270
Roy's Largest Root	0.004*	0.004*	0.270

Note: This table is a simplified display of the test results from Jamovi. The full statistical report can be found in Appendix IV.2.

Secondly, the p-value for each interactive metadiscourse category in Table 5-3, albeit unreliable after the failure of assumption checks, suggests in which category the significant differences across the writer groups could possibly lie. Additionally, I could further make use of the results and draw a comparison between them and those from the later Mann-Whitney U tests, thereby testing the robustness of the two-way MANOVA despite all the data “anomalies”.

Table 5-3 P values of univariate tests for interactive metadiscourse

Dependent variable	Nativeness	Expertise	Nativeness × Expertise
Transitions			
Addition	0.008*	0.110	0.012*
Comparison	0.132	0.321	0.114
Consequence	0.457	0.074	0.183
Frame markers			
Sequencers	0.683	0.023*	0.511
Topicalizers	0.744	0.393	0.850
Stage signals	0.067	0.156	0.633
Announcers	0.313	0.639	0.677

Endophoric markers			
Previews	0.712	0.045*	0.095
Reviews	0.511	0.001*	0.534
Overviews	0.235	0.019*	0.360
Visual references	0.007*	0.064	0.438
Code glosses			
Reformulation	0.049*	0.792	0.150
Exemplification	0.018*	0.728	0.469
Evidentials			
Integral citations	0.785	0.903	0.338
Non-integral citations	< .001*	0.033*	0.788

Note: This table is a simplified display of the test results from Jamovi. The full statistical report can be found in Appendix IV.3.

To easily make a parallel comparison between the two statistical tests, I combined the p values from the multiple separate Mann-Whitney U tests into one table (see Table 5-4). As can be seen from the table, statistically significant differences across nativeness were found in ‘Addition’, ‘Visual references’, ‘Reformulation’, ‘Exemplification’, and ‘Non-integral citations’. In terms of expertise level, statistically significant results were found in ‘Sequencers’, ‘Stage signals’, ‘Previews’, ‘Reviews’, and ‘Overviews’. In order to see whether the non-native/novice writer groups employed these resources significantly more or less than their counterparts, the median frequency was used here to draw the comparison³⁰. So, writer groups with a higher median indicate they used a given resource significantly more frequently (as indicated by ‘>’ in the table); conversely, writer groups with a lower median mean they used that resource significantly less frequently (as indicated by ‘<’ in the table). However, if the alpha level adjusted by Bonferroni correction was adopted to reduce the possible familywise Type I error rate³¹, then statistically significant differences were only found on ‘Visual references’ and ‘Non-integral citations’ across nativeness and in ‘Overviews’ across expertise (hereinafter indicated by dagger marker †). Finally, putting together the table

³⁰ We chose median instead of mean frequency because the former is recommended to consider in a rank-based nonparametric test like Mann-Whitney U test (see Crosthwaite, Cheung, & Jiang, 2017). The medians can be found in Appendix IV.1.

³¹ In principle, we should only consider adjusted p values because multiple simultaneous testing was conducted based on the same dataset. However, when alpha level is lowered drastically (divided 15 times in our case), the likelihood of type II errors will be increased considerably, which may cause truly important differences to have been deemed non-significant (see Perneger, 1998). Therefore, I am inclined to interpret the unadjusted p values in later analyses.

below and above, we would be surprised to see a large degree of overlap between the significant results. Therefore, it can be concluded with reasonable confidence that the two-way MANOVA is quite robust when dealing with the “anomalies” of the current data.

Table 5-4 P values of Mann-Whitney U test for interactive metadiscourse by nativeness and expertise

Dependent variable	Nativeness	Expertise
Transitions		
Addition	0.005* (Non-native < Native)	0.236
Comparison	0.223	0.146
Consequence	0.839	0.076
Frame markers		
Sequencers	0.969	0.013* (Novice > Expert)
Topicalizers	0.558	0.277
Stage signals	0.073	0.037* (Novice > Expert)
Announcers	0.528	0.538
Endophoric markers		
Previews	0.334	0.029* (Novice > Expert)
Reviews	0.790	0.005* (Novice > Expert)
Overviews	0.146	0.003* † (Novice < Expert)
Visual references	0.002* † (Non-native > Native)	0.207
Code glosses		
Reformulation	0.036* (Non-native > Native)	0.653
Exemplification	0.006* (Non-native > Native)	0.958
Evidentials		
Integral citations	0.801	0.943
Non-integral citations	<.001* † (Non-native < Native)	0.118

Note: This table is a simplified display of the test results from Jamovi. The full statistical report can be found in Appendix IV.4-5.

Recall that in the previous section, after an initial screening of the descriptive statistics I presented some tentative findings of which writer group(s) used certain interactive resources more frequently than other writer group(s). Some of them still hold after the inferential tests were conducted. For example, the non-native writer groups utilized significantly more ‘Code glosses’ (‘Reformulation’ and ‘Exemplification’ included) than the native ones. Meanwhile, in the non-native groups’ writing the frequency of ‘Non-integral citations’ is statistically lower than in the natives’ writing. Regarding the

effect of expertise on interactive metadiscourse, the novice writers indeed used more ‘Frame markers’ (including ‘Sequencers’ and ‘Stage signals’) than the expert writers. However, unlike what has been observed previously, there were no statistically significant differences between the novice and expert groups in employing all ‘Transitions’ resources. The difference in ‘Endophoric markers’ use would not be easy to discern as the divergent significant results of its subcategories masked the overall picture: novices used more ‘Previews’ and ‘Reviews’ but less ‘Overviews’ than experts; on the other hand, ‘Visual references’ were used more frequently by the non-natives than the natives.

5.2. Results of key interactive metadiscourse markers

In the next two sections and four subsections, I present the results of salient interactive metadiscourse markers by nativeness and expertise successively. Due to space constraints, the analysis of salient markers will be limited to the top 10 items if more than ten markers pass the 2.00 threshold of BIC score (see Section 4.3.1.2). Despite this, I will bring up more relevant markers when attempting to characterize their saliency³².

5.2.1. By nativeness

5.2.1.1. Characteristic markers of the non-natives

Before delving into Table 5-5, I would like to mention that although the LL and BIC point to different scores and reflect different aspects of significance testing, their ranking order for the interactive metadiscourse markers in my data is identical. Therefore, which column to read is just a matter of choice. In terms of %DIFF, the ranking order is quite different since it seems to highlight items that have a particularly low frequency (especially zero occurrences) in one of the corpora under comparison.

³² The full lists can be viewed at https://osf.io/ezak6/?view_only=f42b20377ae24e0aaba0ff6be60338ba.

As Gabrielatos (2018) points out, this could be seen as a drawback of the calculation because this would result in extremely high %DIFF scores as 0 occurrences have been substituted with 1E-18; but at the same time, this can be seen as a strength because “it flags up instances of absence”, which could point to “very useful differences” (p. 237).

Table 5-5 Top 10 most salient interactive markers characteristic of the non-native texts

Marker	Non-native		Native		LL	%DIFF	BIC
	RF	NF (pttw)	RF	NF (pttw)			
por eso	237	3.84	23	0.39	197.64	895.34	183.63
o sea	144	2.33	1	0.02	184.15	13809.58	170.14
arriba	166	2.68	18	0.30	132.14	790.81	118.13
pero	314	5.08	85	1.42	131.99	256.83	117.98
primero	128	2.07	14	0.23	101.50	783.15	87.49
abajo	59	0.95	0	0.00	79.76	9.55E+15	65.75
segundo	82	1.33	5	0.08	79.69	1484.15	65.68
en el capítulo	80	1.29	6	0.10	73.16	1187.92	59.15
en cuanto a	272	4.40	116	1.94	59.24	126.50	45.23
entonces	122	1.97	29	0.49	58.42	306.36	44.41

RF = raw frequency; NF = normalized frequency; pttw = per ten thousand words.

Now when looking closely at the markers in the table, we would find something particularly interesting. The first thing that captures our attention would be the first two most salient interactive markers (i.e., *por eso* and *o sea*) in non-native texts. A striking frequency contrast between the two corpora features strongly in these two markers: their occurrences are quite high in non-native texts (237 and 144 respectively) but extremely low in native texts (23 and 1 respectively). Even though the non-native and native corpora sizes are slightly different, their normalized frequencies still indicate a high contrast (*por eso*: 3.84 pttw vs. 0.39 pttw; *o sea*: 2.33 pttw vs. 0.02 pttw).

This begs the question of why these two phrases are more characteristic of the non-native group. According to Martín Zorraquino & Portolés (1999: 4123) and Galán Rodríguez (1998: 87), *o sea* is a frequent reformulator in oral discourse. On the other hand, consecutive marker *por eso* occurs in both oral and written discourse, according to Fuentes Rodríguez (2009: 263). In Moya Muñoz’s (2016) study³³, it was shown that

³³ Moya Muñoz (2016: 158) points out that many studies prefer not to include *por eso* as a discourse or metadiscourse marker because of the deictic element “eso”. This could explain why this phrase was not listed in

por eso was quite common in his corpus of online news comments, a speech-like written discourse. After a quick search of *por eso* in *Corpus del Español (Genre/Historical)*³⁴, it was observed that the phrase was much less frequent in the academic subcorpus than in the spoken one (0.23 pttw vs. 3.87 pttw). This data further supports my surmise that *por eso* is also a discourse marker with spoken traits. In a similar vein, *primero*, *segundo*, and *entonces* in the table above, as well as other salient markers not listed here such as *en fin*, *luego*, *tercero*, *hablando de*, should too be influenced by spoken language (see Martín Zorraquino & Portolés, 1999; Fuentes Rodríguez, 2009; Domínguez, 2016).

Therefore, it can be argued that the lack of register awareness could account for the overuse of these colloquial words and phrases. In fact, Ädel (2006) in her study on Swedish learners of English also brought up register awareness as one of the possible causes of variations in metadiscourse use. She adds that Swedish learners lack sufficient communicative competence in their L2 writing, which could adversely affect their use of metadiscourse. Her study is also supported by Altenberg & Tapper (1998) and Tapper (2005), where the authors also found evidence of less formal use of connectives (e.g., *but*) by Swedish learners. Gilquin & Paquot (2007) also found the general tendency among learners from different linguistic backgrounds to use spoken-like lexical items (such as *maybe*, *by the way*) in their academic writing. I believe that the lack of register awareness also holds good for the non-native experts in the corpus, although generally they managed the register or stylistic appropriateness better than the novice group. For example, out of the 144 occurrences of *o sea*, only 12 come from the non-native expert texts. Similarly, only 35 out of 237 occurrences of *por eso* were produced by the non-native experts.

Returning to the table, it is also interesting to see that the non-native groups used much more *arriba* and *abajo* than their native counterparts. After contextualizing and functionally analyzing those markers in the respective corpus, it is even more

Martín Zorraquino & Portolés (1999), Mur-Dueñas (2011), and J. J. Lee & Casal (2014). But we followed Moya Muñoz's opinion and treated it as a metadiscourse marker because it is believed that the phrase is undergoing a grammaticalized process (see also Fuentes Rodríguez, 2009).

³⁴ <https://www.corpusdelespanol.org/hist-gen/>. Accessed on Jan. 22, 2021.

interesting to find that L1 Spanish writers used *arriba* as ‘Reviews’ exclusively and did not use *abajo* whatsoever. In contrast, L2 Spanish writers mainly used these two markers as ‘Visual references’: 106 out of 166 occurrences of *arriba* and 55 out of 59 occurrences of *abajo*, respectively. In order to illustrate this, extracts from the corpora are given below:

(*arriba* as ‘Reviews’ in native texts)

- (19) a. Tanto la construcción locativa como la aspectual sirven a propósitos comunicativos similares, tal como lo mencionamos arriba, ambas construcciones responden a la pregunta: ¿dónde está? (RA_ES_LIN_22)
- b. Como indicamos más arriba, el trabajo se realiza según varios niveles de corpus. (TFM_ES_LIN_07)

(*arriba* and *abajo* as ‘Visual references’ in non-native texts)

- (20) a. Notamos desde los ejemplos arriba que el 12 (1) tiene la misma estructura que la oración con “被 (bei)”. (TFM_ZH_LIN_05)
- b. En los 126 SSNN anafóricos arriba puestos, 47 son de anáfora asociativa (RA_ZH_LIN_18)
- c. casi todas las construcciones resultativas que tratamos aquí rechazan este marcador, tal como se muestra abajo: (RA_ZH_LIN_12)
- d. En la tabla de abajo se recoge ejemplos para mostrar la relación entre el tipo de predicado y el sujeto del predicativo resultativo (RA_ZH_LIN_12)

Based on the data comparison and the extracts in (20), it can be noted that the non-native writers tended to use these two adverbs to point readers to the visual elements like examples or tables. This could be due to the negative transfer of a congruent usage in their L1 Chinese and L2 English, also known as “cross-linguistic influence” (Cenoz, Hufeisen, & Jessner, 2001; Murphy, 2003) on foreign language learning and production. Connor (2002) also points out that the linguistic patterns and rhetorical conventions of L1 often transfer to foreign language writing and thus lead to interference.

In both Chinese and English written academic discourses, it is typical to use spatial adverbs ‘above’ and ‘below’ to function as visual references, for example, *如上图所示*, *下图中*, *the above examples*, *as shown below*, *the table above*. In Spanish, on the other hand, the writer seems to prefer temporal wording such as *anterior*,

anteriormente, a continuación for this type of usage. Extracts from the native corpora provide a clear hint:

- (21) a. Le sigue un grupo de 5 con un promedio superior a 10 palabras/frase y 1 solo con una media entre 6 y 6,99 en el lado opuesto, como muestra la figura a continuación: (RA_ES_TRA_01)
- b. Además, se proponen otras restricciones sobre los verbos que permiten la alternancia, como se puede ver a continuación: (TFM_ES_LIN_08)
- c. Como muestran muchos de los ejemplos anteriores, por lo general la posición de los MS es al inicio del la UCT o del turno mismo, es decir, los MS anteceden a otras UCT. (RA_ES_LIN_15)

It can therefore be reasonably certain that apart from the lack of register awareness mentioned earlier, L1 Chinese and/or L2 English negative transfers could be another explanation for the overuse of specific metadiscourse markers by the non-native writers. Both factors are closely related to the deficiency of language users' communicative competence. This is not to say, however, that the Chinese participants in our corpus generally perform less well in Spanish academic writing. Although all of them are competent language users and skilled writers, there are certain areas of writing (including metadiscourse use) in which the unconscious transfer on the part of the non-natives is inevitable (cf. Murphy, 2003). With an abundant amount of training in linguistic awareness, non-natives should be able to produce native-like writing. I will return to this in the final chapter.

The remaining three interactive items characteristic of the non-native texts are *pero, en el capítulo, en cuanto a*. As already noted in the methodology chapter, in the present study transition markers like *pero* are confined to inter-sentential, in other words, connectors that join two sentences or larger discoursal units instead of two clauses or phrases. From Table 5-5 we know that the non-native writers are much more frequent users of this comparison marker. In fact, *pero* was the second most frequently used comparison marker by the non-natives (314 occurrences, after *sin embargo*, 514 occurrences, before *no obstante*, 147 occurrences). Meanwhile, the top 3 comparison markers used by the native Spanish writers are *sin embargo* (518), *no obstante* (182),

and *en cambio* (126). It is believed that *pero* as inter-sentential conjunction is more frequent in conversation and less common in academic prose, like *but* in English (Biber et al., 1999: 81; Altenberg & Tapper, 1998; Hyland & Jiang, 2017). Thus, register awareness seems again to play a role in the different use of this marker between the two writer groups.

The marker *en el capítulo* is another quite interesting salient item, but it is more interpretable when the factor of expertise is under analysis, which will be addressed in Section 5.2.2.1.

En cuanto a is the most frequent topicalizer in both native and non-native corpora, but its frequency is much higher in the non-native texts, especially the non-native novice corpus (202 out of 272 occurrences). A plausible explanation for this is that non-native novices tend to overuse certain markers when their lexical repertoire is limited. In other words, learners tend to “cling on” to specific words and phrases they are familiar with and confident in using (Granger, 1998: 156). This is evidenced by the frequency information of other topicalizers employed by the non-native novices: after the extremely frequent *en cuanto a*, other topicalizers have a rather low incidence, such as *sobre* (31), *con respecto a* (23), and *hablando de* (23). In the native texts, on the other hand, more topicalizer variants are available and their frequency distribution is less extreme: the most frequent *en cuanto a* are followed by *en el caso de* (106), *respecto a* (36), and *por lo que respecta a* (30). A similar case is that the salient marker *por ejemplo* (although not displayed in the table) was used extensively in the non-native novice texts (426 out of 1126 occurrences).

5.2.1.2. Characteristic markers of the natives

Now we turn to the interactive markers that characterize the native texts. The top 10 most salient ones are provided in Table 5-6. A point worthy of note is that although these markers are considered highly characteristic of the native texts, we should interpret them as markers ‘underused’ in the non-native texts because in the present study the native texts serve as the benchmark corpus (see Section 1.5).

Table 5-6 Top 10 most salient interactive markers characteristic of the native texts

Marker	Non-native		Native		LL	%DIFF	BIC
	RF	NF (pttw)	RF	NF (pttw)			
finalmente	17	0.28	169	2.83	149.43	929.17	135.42
por tanto	31	0.50	187	3.13	129.39	524.49	115.38
asimismo	66	1.07	246	4.12	116.88	285.87	102.87
así	68	1.10	235	3.94	103.26	257.77	89.25
como ya se ha X	0	0.00	42	0.70	59.69	7.04E+15	45.68
con todo	1	0.02	47	0.78	58.43	4765.71	44.42
como se ha X	23	0.37	99	1.66	53.68	345.61	39.67
así pues	14	0.23	79	1.32	52.41	484.18	38.40
anexo	19	0.31	88	1.47	50.67	379.49	36.66
en el caso de	36	0.58	110	1.84	41.91	216.33	27.90

RF = raw frequency; NF = normalized frequency; pttw = per ten thousand words.

From the table above, it is interesting to observe that the most distinctive interactive marker in the native texts is the closing sequencer: *finalmente*, which the non-natives used much less than the natives (0.28 pttw vs. 2.83 pttw). The reason behind its underuse is not as apparent as it seems, so I looked further at the use of all sequential markers by the native and non-native writers. Having examined their frequency distribution, I found that the most frequent sequencers in the native texts were closing markers (e.g., *finalmente*: 168³⁵; *por último*: 163), followed by opening markers like *en primer lugar* (168) and continuative markers like *en segundo lugar* (105). In the non-native texts, the most frequent sequencer was also the closing marker *por último* (126), followed by opening markers like *en primer lugar* (113) and continuative markers like *en segundo lugar* (81). However, based on the data comparison, it seems that Spanish-speaking writers favored closing sequencers. One plausible explanation could be that closing sequencers carry more discursal and functional weight than other sequencers: they not only signal the end of discursal series (Martín Zorraquino & Portolés, 1999: 4088) but also prepare for new arguments. Meanwhile, Chinese writers relied mainly on one simple closing marker (i.e., *por último*) without knowing other lexical options such as *finalmente* available. This could be attributed to a low lexical competence on

³⁵ The frequency count of *finalmente* as ‘Sequencers’ differs from the value in Table 5-6 because *finalmente* functions as ‘Stage signals’ in other contexts.

the part of the non-native writers.

This kind of inadequacy in lexical knowledge can also explain the underuse of other salient markers by the non-native writers. For example, the second most salient marker *por tanto* is actually a variant of the consequence marker *por lo tanto*. It seems that Chinese writers were much more familiar with the latter as it was used 297 times (4.81 pttw), in contrast with 167 occurrences (2.80 pttw) in the native texts. Going further down in the table, we found *asimismo* and *con todo*, two quite formal and advanced words and phrases in Spanish. The lexical sophistication of both markers is much higher than that of other functionally similar words and phrases like *además* and *sin embargo*. I believe that non-native writers, especially non-native novices, would take the time to have a good command of them.

On the other hand, the lexical advancedness cannot explain why the common adverb *así* is also a top salient marker in the table. In truth, it is because of its commonness that this adverb has developed multiple senses. *Diccionario de la Lengua Española*³⁶ has registered 11 different senses of *así*. This kind of polysemous nature, however, may cause a learning difficulty for learners at various levels (Morimoto & Loewen, 2007). The learning obstacles could become more prominent when the target sense is not the basic one and involves register information, which is the case with *así*. *Así* as a consecutive adverb is an atypical usage and is often used in formal register (see Fuentes Rodríguez, 2009). It can be argued that non-native writers are less likely to choose this marker to introduce a consequence of the previous discourse unit. Similarly, *así pues*, a formal and less common variant of *así*, has an even lower incidence in the non-native corpus: 14 occurrences (0.23 pttw).

Returning to the table, we see the non-native writers underused the construction *como se ha X* and its variant *como ya se ha X*. These reviewing markers are usually used as a parenthetical element to connect the current argument with earlier information (F. Cao, 2014), making text parts more cohesive. Based on my observation of the entire list of interactive markers, the non-native writers seemed to prefer the construction

³⁶ <https://dle.rae.es/as%C3%AD?m=form>. Accessed on Jan. 28, 2021.

como hemos X (87 occurrences = 1.41 pttw). The differences between *como (ya) se ha X* and *como hemos X* lie in that, firstly, the former as a passive construction is more depersonalized, whereas the latter as an active construction is more personalized; secondly, the former stresses more the reviewed information itself (22a), whereas the latter puts more weight on the person (i.e., the author or authors) who gives a piece of information earlier (22b). The latter sometimes engages readers in recalling previous information (22c). As we will see in Section 6.2.1.1 of the next chapter, non-native writers used the author-centered construction abundantly in the texts probably because they were not familiar with the writing convention of the Spanish academic discourse community, which welcomes passive impersonal expressions while discouraging authorial self-mentions as the latter is more associated with informal register.

- (22) a. El motivo por el que nos inclinamos hacia esta primera es porque, como se ha dicho anteriormente, las últimas investigaciones se decantan por esta denominación, aunque se aceptan las demás. (TFM_ES_LIN_05)
- b. En primer lugar, como hemos explicado, los nombres escuetos en chino pueden ser no referenciales o referenciales. (RA_ZH_LIN_01)
- c. Desde mi punto de vista, la segunda razón proporcionada por Mensching (2000) no es adecuada, porque originalmente otros determinantes de español no pueden seleccionar una cláusula proyectada por un infinitivo verbal, como hemos visto en el apartado anterior. (TFM_ZH_LIN_10)

The frequency of the visual reference marker *anexo* is much higher in the native corpora than in the non-native ones (88 vs. 19 occurrences = 1.47 vs. 0.31 pttw). However, we should note that the novice group produced 84 out of 88 cases in the native texts. Considering this group wrote master's theses, which are much longer and more information-rich than research articles, it is reasonable to include more supplemental materials at the end of the work. This is where the factor of genre intrudes into the factor of nativeness under analysis. The genre-related differences between master's thesis and research article lead to the high frequency of *anexo* in the native texts. As Ädel (2006) points out, the genre incomparability between corpora has an influence on the different use of metadiscourse. She warns that this kind of incomparability might mask the "actual differences between the groups of writers compared" (p.141).

Nevertheless, genre differences cannot explain why Chinese master's students used significantly less *anexo* (only 9 out of 19 occurrences), even when the alternative marker *apéndice* (18 occurrences) is counted. Various reasons can be mentioned: i) The statistically significant different use of *anexo* was not necessarily due to the native and non-native status of the writers, but probably due to random chance or sampling error. Increasing the sample size of corpora could lead to a relatively even distribution of this marker between native and non-native texts. ii) The research paradigm of the sampled texts could also influence the structure of the master's thesis or research article. For example, qualitative research is more likely to include supplements than pure experimental research. My general observation from the corpora is that Spanish master's students tended to conduct interview-based and questionnaire-based research, whereas Chinese master's students did a little research of this type. iii) The writing conventions or guidelines from different institutions or journals may play a role too. It is possible that some institutions asked students to put tables or pictures at the end of the main body as appendices. This kind of institutional factor, however, is hard to probe in the current study.

The last salient interactive marker featured in native texts is *en el caso de*. As one of the most frequent topicalizers, this marker has already been mentioned in the previous section. In that section, we also noticed that the non-native writers relied heavily on the single topicalizer *en cuanto a* (272 occurrences). Therefore, it seems reasonable to hypothesize that the underuse of *en el caso de* by the non-natives is because they might not be fully aware that this marker is one of the most frequent topicalizer resources used by Spanish-speaking writers.

5.2.2. By expertise

This section presents the interactive markers that were most distinctive of the novice texts and expert texts, respectively. As we will see, in comparison with the salient markers by nativeness, the statistical significance values (i.e., LL) and effect-size metrics (e.g., BIC) of the salient markers within the factor of expertise are generally

smaller, indicating that the level and size of frequency differences between the novice and expert corpora are lower and smaller. In other words, the saliency of these interactive markers is not as strong as we observed in the native and non-native corpora.

5.2.2.1. Characteristic markers of the novices

Table 5-7 presents the top 10 most salient interactive markers that characterize the novice texts. The first salient interactive marker is *en el capítulo*, which we already saw in Table 5-5. It can be a preview or review depending on its discoursal context. Other markers like *en el X (primer...) capítulo* and *en este capítulo* are also distinctive of the novice texts when compared against the expert texts. While these markers may have different discoursal functions ('Announcers' for example), they share one common feature: they were nearly absent from the expert corpora³⁷. The reason behind this is not difficult to pinpoint: only writing pieces of relative length (e.g., book, thesis) have chapter division; it is rare, if ever, to see a journal article is divided by chapters. So again, genre-related differences lead to different use of certain metadiscourse markers. As discussed in the case of *anexo*, the genre difference between the novice and expert corpora sometimes masks the actual differences between the writer groups compared.

Table 5-7 Top 10 most salient interactive markers characteristic of the novice texts

Marker	Novice		Expert		LL	%DIFF	BIC
	RF	NF (pttw)	RF	NF (pttw)			
en el capítulo	86	1.06	0	0.00	69.33	1.60E+16	55.32
o sea	133	1.64	12	0.30	50.92	450.22	36.91
por eso	224	2.76	36	0.89	50.90	208.89	36.89
en el X (primer...) capítulo	48	0.59	0	0.00	38.70	5.91E+15	24.69
como se ha X	106	1.31	15	0.37	27.87	250.82	13.86
entonces	129	1.58	22	0.55	27.16	191.09	13.15
al final	32	0.39	0	0.00	25.80	3.94E+15	11.79
en esta parte	32	0.39	0	0.00	25.80	3.94E+15	11.79
además	711	8.76	245	6.08	25.68	44.07	11.67
en este capítulo	39	0.48	1	0.02	24.30	1836.10	10.29

RF = raw frequency; NF = normalized frequency; pttw = per ten thousand words.

³⁷ There was one case of *en este capítulo* in the non-native expert corpora (specifically, in RA_ZH_LIN_08). I believe it was an inappropriate use since it is not common to use 'capítulo' in a journal article.

Put another way, markers like *en el capítulo* were seemingly distinctive of the novice texts as against the expert texts, but in reality, they were salient only due to the influence of the genre factor. This reason can also apply to another salient marker in the table, *en esta parte*, which is typically used in works of great length.

The next two salient markers (i.e., *o sea*, *por eso*) also appeared as the two most salient markers in the non-native texts (see Table 5-5). As discussed before, these two markers are colloquial phrases and are not common in academic writing. Therefore, it is almost certain that the lack of register awareness was the determining factor as to the high frequency of these two interactive markers. After examining their distribution in the corpus, it is interesting to find that the two markers' frequency was high in both non-native and novice corpora because the non-native novice writers accounted for the lion's share of the frequency counts (see Table 5-8). By the same token, *entonces* and *en fin* (although not displayed in Table 5-5) also became salient markers in both non-native and novice corpora. In the end, it can be concluded that the lack of register awareness by the non-native novice writer group made it different from the other three writer groups in choosing metadiscourse markers.

Table 5-8 Percentage of *o sea* and *por eso* used by the non-native novices in non-native and novice corpora

	Non-native		Novice	
	Novice/Total	Percentage	Non-native/Total	Percentage
<i>o sea</i>	132/144	91.7%	132/133	99.2%
<i>por eso</i>	202/237	85.2%	202/224	90.2%

The next salient marker of the table is the construction *como se ha X*, which, if we recall, also appeared in the table of native texts (see Table 5-6). It implies that the native novice writers produced the majority of the cases (86 occurrences). In fact, the native novice writer group produced the most variant construction *como ya se ha X* too (34 occurrences). As regards the reason behind the high frequency of these reviewing constructions in the native novice corpus, I believe that the genre factor, again, plays a significant role: given the sheer size of a master's thesis (containing many chapters and

sections), it is reasonable for writers to use more often this type of expressions to help readers recall previous information. By comparison, the non-native novice writers seemed to employ these reviewing markers insufficiently (*como se ha X*: 20 occurrences; *como ya se ha X*: 0 occurrences), although they shared the same academic genre as their native peers.

Going further down in the table, we can see another marker absent from the expert corpora—*al final*—whose frequency in the novice corpora mainly came from the non-natives (29 out of 32). It is interesting to remark that most previous work does not include this phrase as a discursal or metadiscursal marker, except for Briz et al. (2008), where *al final* was described as a sequencer. The data from the novice corpora also indicates that it is mainly used to mark the end of a succession of discursal units (‘Sequencers’) (23a) and sometimes used to signal the final conclusion of the previous argument (‘Stage signals’) (23b). Having consulted on *Corpus del Español (Genre/Historical)*, I found this phrase was much less frequent in the academic subcorpus than in the spoken subcorpus (0.06 pttw vs. 0.22 pttw). While this does not imply that *al final* is a colloquial expression, it could indicate that the phrase is not common in written academic discourse.

- (23) a. Aquí omitimos el inglés por las razones siguientes: primero, para los alumnos de Filología Hispánica, el español suele considerarse su primera lengua extranjera y el inglés la segunda: este orden se da tanto por el tiempo que dedican a las lenguas como su competencia lingüística; segundo, la educación de inglés varía mucho según regiones, escuelas y experiencias personales; al final, este factor aumentaría en gran medida la complejidad de nuestro análisis. (TFM_ZH_LIN_03)
- b. Al final, no nos gustaría decir que tener el wu como L1 favoreciera mucho la adquisición de las oclusivas españolas. Hay muchas diferencias entre los fonemas oclusivos sonoros del español y el wu, y el efecto del wu se detecta solo en algunas posiciones (inicial y tras nasal) y algunos parámetros (F0 inicial y VOT), pero para llegar a tener una pronunciación nativa todavía hay otras dificultades que superar, por ejemplo, el VOT de oclusivas iniciales y las aproximantes intervocálicas. (TFM_ZH_LIN_03)

The last salient interactive marker in the table—*además*— is also the most common

addition marker in our corpus: of the 1632 addition markers used by novice writers, 711 were *además* (47%); similarly, of the 680 addition markers used by expert writers, 245 were *además* (36%). As mentioned in the previous chapter, the discursual function of addition markers is to indicate that the following discourse unit is an addition to the previous one. It can be hypothesized that student writers tend to deploy more arguments to convince readers (especially in this case, thesis supervisors and judges) of one specific point (examples can be found in Section 5.3.1.1). As the most typical marker that joins arguments, it is logical that the novice writers more frequently used *además*. On the other hand, perhaps it is because of this typicalness that the novice writers clung to this marker in writing without considering that more lexical alternatives (e.g., *por otro lado*, *por su parte*, *al mismo tiempo*) can be used. Hence, I believe that the saliency of this marker is due to the lower lexical competence of the novice writers and the genre difference between master's thesis and research article.

5.2.2.2. Characteristic markers of the experts

In this last section of key item analysis, only the top 9 most salient interactive markers that feature prominently in the expert texts are presented (Table 5-9), because starting from the 10th marker, the BIC score is below 2.00, the threshold of adequate effect size (see Section 4.3.1.2). As in Table 5-7, the effect-size values in this table are also lower

Table 5-9 Salient interactive markers characteristic of the expert texts

Marker	Novice		Expert		LL	%DIFF	BIC
	RF	NF (pttw)	RF	NF (pttw)			
en el ejemplo	56	0.69	91	2.26	50.59	227.33	36.58
tabla	170	2.09	179	4.44	48.48	112.10	34.47
figura	52	0.64	81	2.01	42.67	213.77	28.66
los siguientes ejemplos	19	0.23	40	0.99	29.44	324.07	15.43
en el extracto	0	0.00	12	0.30	26.48	2.98E+15	12.47
p. ej.	23	0.28	40	0.99	24.12	250.32	10.11
tales como	64	0.79	71	1.76	21.49	123.47	7.48
con respecto a	29	0.36	41	1.02	18.88	184.79	4.87
en este artículo	0	0.00	8	0.20	17.65	1.99E+15	3.64

RF = raw frequency; NF = normalized frequency; pttw = per ten thousand words.

than those of key interactive markers by nativeness. This indicates that the keyness of the interactive metadiscourse markers by expertise is relatively lower.

Firstly, it is interesting that more than half of the list above (the first five salient interactive markers) are visual references. They share one common feature: they all refer to visual elements such as tables, figures, and examples. These visual elements are essential in academic writing as they “guide readers and illustrate ideas and research results” (Carrió-Pastor, 2019b: 67). Both Carrió-Pastor (2019b) and F. Cao (2014) found differences in the distribution of visual elements across disciplines. I believe this kind of difference can also be found across expertise levels. In our corpus, the novice writers employed fewer visual displays in their theses while the expert writers were inclined to present ideas and results in a more visual way. From my point of view, this difference is more related to the achievement of particular discursual/rhetorical goals than to the factor of expertise levels or other reasons mentioned above. I will illustrate this point in Section 5.3.3.4.

The following two interactive markers—*p. ej.* and *tales como*—are exemplifiers. The former is the written abbreviation of ‘por ejemplo’, whereas the latter is a more formal alternative to ‘como’. Both markers were used significantly more by expert writers. However, if we break their occurrences down, we will find that the non-native experts were the most frequent users of these two markers (*p. ej.*: 35 out of 40; *tales como*: 51 out of 71). As skillful writers, it is reasonable for the experts to use a quick and efficient gloss like *p. ej.* more frequently. However, one caveat is that the abbreviation *p. ej.* in Spanish academic writing might not be as conventionalized as ‘e.g.’ in English academic writing, because I found other variant forms such as *e.g.*, *ej.*, *p.ej.*, *por ej.* in our corpus. In terms of *tales como*, expert writers favored it probably because it is a formal and common alternative to ‘como’. Meanwhile, novice writers may not realize the register difference of this exemplification pair.

The salient topicalizer *con respecto a* has already been mentioned during the analysis of the salient markers by nativeness: the non-native writers used it far less frequently than another topicalizer *en cuanto a*. I discussed that case could be due to the lack of extensive vocabulary repertoire on the part of the non-natives. From the

novice's perspective, *en cuanto a* is still the favorite lexical device that student writers often drew on to shift topics: 279 occurrences in total, which account for 35.9% of all topicalizers used. Correspondingly, as one of the less common and less formal alternatives to *en cuanto a*, *con respecto a* is believed to be less readily accessible to the novices, who usually have a lower lexical competence.

The only remaining salient marker in the table—*en este artículo*—can function either as ‘Overviews’ or ‘Announcers’. It is noticeable that this marker was absent from the novice corpora. The reason would not be difficult to think of if we apply reasoning by analogy with the absence of markers like *en el capítulo* in the expert corpora (see the preceding section). That is, what determines the different use of these markers is the genre differences between journal article and master's thesis rather than the expertise level.

5.3. Qualitative analysis results for interactive metadiscourse

This section focuses on the results for the qualitative interpretative textual analysis of interactive metadiscourse. Specifically, I delve into each interactive metadiscourse resource's specific discoursal and/or rhetorical functions, which are illustrated by example sentences extracted from the corpora. Moreover, I look at whether there are any differences in the functions achieved across the writer groups. Lastly, I relate the qualitative interpretations to the previous quantitative results where necessary.

As already pointed out in the methodology chapter, the primary function of interactive metadiscourse is to help writers organize information flow and guide readers through the text. Based on Hyland's (2005a) interpersonal model, the interactive dimension of metadiscourse is usually divided into five main categories, namely ‘Transitions’, ‘Frame markers’, ‘Endophoric markers’, ‘Code glosses’, and ‘Evidentials’. Also drawing upon previous studies by F. Cao (2014), S. Lee (2009), J. J. Lee & Casal (2014), and Carrió-Pastor (2016a), the present study further subdivided the five main categories. In total, 15 subsumed categories were analyzed qualitatively. In what follows, I will go through each of them.

5.3.1. Transitions

The main function of ‘Transitions’ is to connect ideas or arguments and signal their semantic and pragmatic relations. Specifically, they signal additive, comparative, and consecutive relations in a series of discourse units. Transitional markers are of critical importance in written academic discourse as they allow writers to build coherent and cohesive texts and help readers interpret links between the ideas (F. Cao & Hu, 2014; Hyland, 2005a). As a result, it would not be surprising that this main category has the highest frequency among all the interactive categories (7,327 occurrences)³⁸. This result is consistent with J.J. Lee & Casal’s (2014) and Hyland’s (2005a) findings.

In the following three subsections, the qualitative results concerning the three subcategories of ‘Transitions’ are presented successively.

5.3.1.1. Addition

The first semantic relation between stretches of discourse is addition. Additive transitions are usually operationalized through adverbials (from most frequent ones such as *además* and *asimismo* to less frequent ones such as *por añadidura*, *por lo demás*) and the inter-sentential conjunction *y*.

In terms of its frequency distribution across the corpora, as noted earlier, the native novice group used the most additive markers on average, and the native groups together used them significantly more than the non-native ones.

Regarding the discourse functions, the additive transitions did not show a significant difference across nativeness statuses and expertise levels. Simply, they signal that the following discourse unit is an addition to the previous one. The following extracts serve to illustrate this function.

³⁸ I already discussed in Section 2.2.3 that the frequency comparison between categories may be questionable because the final frequency of a category very much depends on how many markers have been included in it. Including more markers might increase the overall frequency of that specific category. However, it can be argued that the fact that more markers can be included in a category (‘Transitions’ in this case) partly reflects its pervasiveness in the corpus.

- (24) a. En los manuales del MED, al inicio se explica que la comprensión lectora —implica encontrar sentido al texto, esta concepción es compatible con la perspectiva lingüística de la lectura, ya que desde este enfoque se concibe que el significado reside en el texto, independiente del lector y del contexto. También se señala que comprender es identificar información importante, hacer inferencias, sacar conclusiones, emitir juicios críticos, enjuiciar la posición de los demás y reflexionar sobre el proceso de la comprensión (MED 5, 2008a: 3); además señala como intención desarrollar las capacidades cognitivas: predice, identifica, discrimina, analiza, jerarquiza, recrea, interpreta, infiere, organiza, sintetiza, elabora, evalúa, enjuicia (MED 5, 2008a: 4). (TFM_ES_LIN_07)
- b. Gutiérrez Ordóñez (1986) retoma el término de estructura ecuacional de Martínez (1984) y admite que las estructuras ecuacionales son de énfasis, además, sostiene que una estructura no enfatizada le corresponde a cada ecuacional. Asimismo, el autor acepta sobre la idea de tres elementos en la frase: unidad enfatizada, verbo ser y oración de relativo. Por añadidura, este lingüista aporta una nueva visión, a saber, Segmento-A y Segmento-B para referirse a la unidad enfatizada y a la relativa respectivamente. (TFM_ZH_LIN_01)

5.3.1.2. Comparison

The second semantic relation between a series of discourse members is comparison. Comparative transitions are typically realized by adverbials (from most common ones like *sin embargo* and *no obstante* to less common ones like *aun así* and *en contraste*) and the inter-sentential conjunction *pero*.

Concerning the frequency distribution of comparative markers, as demonstrated in descriptive and inferential statistics, on average, the native experts used them less than the other three writer groups. Despite this, no significant differences were found in the use of these markers across nativeness statuses and expertise levels.

With regard to the pattern of discourse functions, comparative transitions did not appear to differ across the nativeness and expertise. In the present corpus, comparative markers were used mainly for four purposes: i) to mark similarity comparison between two related arguments (25a-b); ii) to show the contrast between two related arguments (25c-d); iii) to indicate the current argument is an unexpected circumstance, eliminating the inference of the previous one (25e-g).

- (25) a. Cabe mencionar que Caffi emplean hedges solo para designar los mecanismos atenuantes que operan en uno de los parámetros de interacción que propone ella, la ilocución. De manera similar, 冉永平 (2012) toman hedges como uno de los tipos de recursos atenuantes. (TFM_ZH_LIN_07)
- b. En la oración (8a), el Pr es un predicado que denota un evento del tipo de actividad kǔ ('llorar'). Como a este tipo de evento puede adjuntarse un cambio de estado que marque su inicio, puede servir para delimitar el evento denotado por el Prd1. Paralelamente, en la oración (8b), es el surgimiento de 'volverse loco' lo que marca la culminación del cambio de intensidad de gāoxīng ('estar alegre') y su consecuencia. (RA_ZH_LIN_12)
- c. De manera que una ratio más alta de palabras por minuto supondría un grado más alto de automatización del discurso. Una ratio más baja, por el contrario, podría implicar un mayor control del proceso, y significaría que el hablante necesita prestar atención al proceso mientras está teniendo lugar (Dewaele, 2001, p. 77). (RA_ES_LIN_24)
- d. algunos criterios serán similares a los planes de estudios tradicionales, aunque se manifiesten de forma novedosa; otros, en cambio, se aplicarán de manera más específica al entorno online. (RA_ES_LIN_01)
- e. Hoy en día existen numerosas aplicaciones que permiten consultar o esclarecer el significado de una palabra de forma rápida, fácil y multilingüe, pero, sin embargo, no todas las combinaciones ofrecen resultados fiables, (TFM_ES_TRA_04)
- f. Ambas lenguas comparten muchas similitudes como hemos visto anteriormente. Con todo, es pertinente añadir en este momento algunos procedimientos particulares del chino: (RA_ZH_LIN_03)
- g. Para finalizar diremos que consideramos que los traductores han realizado un buen trabajo a pesar de que, en algunos casos, se podría mejorar la traducción, con el fin de evitar algunas de las pérdidas de las que hemos hablado. A pesar de ello, creemos que el resultado final de la versión doblada es bueno y ha funcionado muy bien en el mercado, ya que fue una película que tuvo una gran acogida por parte del público español. (RA_ES_TRA_04)

Although the usage patterns of comparative transitions were shared among all the writer groups, there are some differences in using specific comparative markers. I found *ahora bien* especially interesting. The regular usage of this marker is similar to *pero*, that is, to contradict the preceding statement, as in (26a). However, it was found in the non-native texts that *ahora bien* sometimes functioned as a topicalizer. Admittedly, while

expressing counterarguments, *ahora bien* may also serve to switch to the next topic (Fuentes Rodríguez, 2009: 30), but some cases of this marker used by Chinese writers only had the topic-shifting function, losing the counterargument function, as in (26b-c). A plausible explanation is that the spoken English topicalizer *now* could influence this usage (consider *Now, the next point is quite complex.*), and the influence is perhaps further reinforced by the following spoken Spanish topicalizer *bien* (consider *Bien, vamos a tratar el siguiente asunto.*).

- (26) a. Se ha definido la cultura popular como el conjunto de manifestaciones culturales que tienen una influencia dentro de la vida cotidiana de la sociedad (Jenkins 2008: 277). Ahora bien, la cultura popular no es un conjunto monolítico y, como todo sistema, está sujeto a la jerarquización que hay en otros sistemas culturales. (TFM_ES_LIT_01)
- b. En esta frase anterior, obviamente “un autor” es el antecedente, el SNRel. está representado por “que”, y “que” al mismo tiempo es el relativizador. Ahora bien, dados estos reconocimientos, a continuación seguiremos con el tema de las estrategias de relativización en español. (TFM_ZH_LIN_04)
- c. Teniendo esto en cuenta, se establece la siguiente construcción, a la cual denominamos *DA* en este trabajo:
En ella, el carácter 大 corresponde con *pleno*. Ahora bien, el planteamiento expuesto al principio se ha transformado en dos cuestiones:
- (i) ¿Qué tipo de sintagmas pueden usarse en esta construcción?
 - (ii) ¿Qué funciones pragmática y gramatical desempeña esta construcción? (RA_ZH_TRA_02)

5.3.1.3. Consequence

The last type of semantic relation in ‘Transitions’ is consequence, which in our corpus was instantiated by adverbials such as commonly seen *por lo tanto* and *así* as well as less commonly seen *consecuentemente* and *por esta razón*.

With respect to the frequency information of consecutive markers across the four writer groups, no statistical significance was found according to the previous inferential statistics. However, the novice writers used, on average, more consecutive markers than the expert writers.

As for the functions of consecutive transition, no differences were found across the writer groups. Writers mainly used consecutive markers to mark the cause-effect relation of two discourse members. However, more nuanced functions can be distinguished within the relation: i) most markers that contain preposition *por* and *de* give more prominence to the cause, reason, or motive, as in (27a-c); ii) a small number of markers that include words like *consecuencia*, *consiguiente*, and *resultado* serve to highlight the result, consequence, or effect, as in (27d-e).

- (27) a. En cuanto a la evaluación por pares, el nivel de competencia en la lengua que se está aprendiendo puede afectar a la habilidad para llevar a cabo las valoraciones. Por este motivo, las instrucciones de la tarea deben ser muy precisas, con valoraciones basadas en rúbricas detalladas, y debe habilitarse un espacio concreto para que los participantes compartan sus resultados, dudas o consultas. (RA_ES_LIN_01)
- b. Los fragmentos no permiten la comprensión global del texto (macroestructura), porque el lector no sabe dónde empieza y termina el texto; por tanto los fragmentos impiden hacer una lectura crítica. (TFM_ES_LIN_07)
- c. White y Bruning (2005) afirman que las creencias que están planteadas en el cuestionario son independientes estadísticamente unas de otras. De esta manera, es posible que los individuos tengan niveles altos y bajos de cada creencia y se creen configuraciones tales como ‘transaccional medio/transmisivo bajo’; y ‘transaccional alto/transmisivo bajo’, entre otras. (RA_ES_LIN_12)
- d. De acuerdo con la cultura tradicional china, la palabra “familia” lleva consigo una implicación significativa para el pueblo chino, que está sumamente familiarizado con los conceptos como el amor y la devoción a la familia. Como consecuencia, en los discursos políticos chinos hay una abundancia de las metáforas conceptuales del dominio de familia. (TFM_ZH_LIN_08)
- e. El presente trabajo ha probado que el significado del verbo de desplazamiento salir cambia y se extiende, sobre todo, según los rasgos semánticos de la Figura y del Objeto- lugar de Referencia que lleva, y como resultado, se producen las modificaciones de valor aspectual y los sentidos ‘figurados’ y ‘metafóricos’ en el verbo. (RA_ZH_LIN_10)

One interesting finding based on an extensive textual analysis is that there is a frequent co-occurrence of consecutive and comparative transitions. In the corpus, it is common to see that consecutive markers were used jointly with comparative markers, especially

counter-argumentative markers, to form a coherent argumentation chain. The typical case is that the writer first formulates a counterargument and then concludes or deduces a statement from the previous reasoning. This pattern of usage is illustrated as follows:

- (28) a. Sin embargo, el dominio cognitivo del espectáculo, según hemos afirmado, va más allá del drama; por ello, el dirigente no solo se conceptúa como actor, como hemos visto hasta ahora; (RA_ES_LIN_04)
- b. El concepto de tema o tópico ha sido ampliamente estudiado tanto en chino como en español. Sin embargo, la estructura temática en estas lenguas no se ha investigado desde el enfoque de la lingüística contrastiva ni desde el ámbito de la traductología. Por lo tanto, este trabajo es una investigación que parte de la hipótesis de que el chino tiene mayor inclinación a utilizar construcciones topicalizadas que el español, (TFM_ZH_LIN_09)
- c. Sin embargo, en estos casos, el ser humano u otras criaturas no pueden resistir su afecto y siempre juegan el papel de paciente. En consecuencia, los verbos de este tipo también pueden aparecer en las oraciones sujeto-paciente, (TFM_ZH_LIN_05)

Frequency information from the corpus also supports this qualitative finding. Figure 5-3 is a heatmap generated from MAXQDA 2020, visualizing relationships between the interactive categories. The value displayed in each cell is the co-occurrence frequency of two categories in the same paragraph. The higher the value, the more frequent the co-occurrence. It can be clearly seen that the co-occurrence of ‘Consequence’ and ‘Comparison’ in the same paragraph is the most frequent one. This can be interpreted as indicating that this kind of usage pattern is quite common in Spanish academic writing.

After breaking down the co-occurrence frequency of this usage pattern according to the writer groups, I found no remarkable differences between them, although in the expert texts the combinatory usage of ‘Comparison’ and ‘Exemplification’ is slightly more widespread than the Comparison-Consequence pattern.

Figure 5-3 Heatmap that visualizes the co-occurrence of interactive categories

Code System	Addition	Comparison	Consequence	Sequencers	Topicalizers	Stage signals	Announcers	Previews	Reviews	Overviews	Visual references	Reformulation	Exemplification
Addition		977	1039	858	492	83	150	203	334	72	592	686	959
Comparison	977		1323	661	585	93	96	256	361	45	777	944	1118
Consequence	1039	1323		760	473	67	147	221	378	56	697	799	951
Sequencers	858	661	760		423	74	231	418	348	141	617	730	713
Topicalizers	492	585	473	423		40	48	122	196	33	386	399	434
Stage signals	83	93	67	74	40		14	36	43	6	49	77	59
Announcers	150	96	147	231	48	14		93	115	34	84	116	65
Previews	203	256	221	418	122	36	93		152	87	227	204	131
Reviews	334	361	378	348	196	43	115	152		10	234	235	258
Overviews	72	45	55	141	33	6	34	87	10		50	44	24
Visual references	592	777	697	617	386	49	84	227	234	50		688	549
Reformulation	686	944	799	730	399	77	116	204	235	44	588		683
Exemplification	959	1118	951	713	434	59	65	131	258	24	549	683	

Note: The categories ‘Integral citations’ and ‘Non-integral citations’ were removed from this heatmap because they have a high frequency in our corpus, but their co-occurrence with other markers in the same paragraph does not follow any pattern, which leads to the difficulty of interpretation.

5.3.2. Frame markers

Frame markers, another major type of interactive metadiscourse, are used to “signal text boundaries or elements of schematic text structures” (Hyland, 2005a: 51) and to “organise larger segments of texts to explicitly spell out to readers where the argument is going and what the writer intends to do next” (Hyland & Zou, 2020: 32). The category is no less important than the previous one as it displays an imagined but clearly delineated map with which readers can have both a panoramic and a more focused view of the text. In our corpus, it has the third highest number of markers among all the interactive categories (4,169 occurrences), after ‘Transitions’ and ‘Evidentials’.

This generic category, on the other hand, is built upon four more granular subcategories: ‘Sequencers’, ‘Topicalizers’, ‘Stage signals’, and ‘Announcers’. Each performs different functions and includes different metadiscursive markers. In what follows, I will present the qualitative results for each of the four subtypes successively.

5.3.2.1. Sequencers

The first subtype of ‘Frame markers’, sequencers, are mainly realized through a wide range of listing markers, such as very frequent *en primer lugar* and *por último*, as well as less frequent *por otro* and *seguidamente*.

In terms of frequency information, sequencers were the most frequent subtype of ‘Frame markers’ in the corpus when compared against the other three (2,382 occurrences). Additionally, both descriptive and inferential statistics presented

previously indicate that the novice writers clearly used more sequencers than the expert groups. I believe that the high frequency of these markers in the novice texts is because novice writers tried to use them more often to make their text seemingly cohesive.

With respect to discourse functions, writers generally used sequencers to structure, order or enumerate a set of ideas and arguments. For example, writers use sequencers to announce a package of discoursal goals within a short paragraph (29a) or link coherent ideas across paragraphs or even sections (29b-c). A particular finding, which has also been mentioned in Hempel & Degand (2008: 681), F. Cao (2014: 168), and Hyland & Zou (2020), is that sequencers usually follow an introductory discourse element (29d-e, in bold), containing a specified quantifier (e.g., *dos*, *tres*) and a classifier (e.g., *factores*, *funciones*). This structure gives a general idea of the following content so that readers can anticipate what and how many points will be listed next.

- (29) a. En primer lugar, haremos una breve descripción de los retos y las lecciones aprendidas en el recorrido de la enseñanza de segundas lenguas con tecnologías. En segundo lugar, presentamos un ejemplo de los esfuerzos realizados para construir espacios comunes de intercambio de modelos de experiencias entre diferentes lenguas y culturas de aprendizaje. Para terminar, con una breve descripción de las aportaciones del volumen que presentamos. (RA_ES_LIN_02)
- b. Primero, la distribución de variaciones sincrónicas puede reflejar la evolución de la lengua, en la que el principio de economía (economy principle) juega un papel bastante importante. Segundo, la distribución de las variaciones sincrónicas, también pueden interpretar la relación entre la frecuencia de uso y la lexicalización de las unidades lengüisucas. (RA_ZH_LIN_05)
- c. [3.2.1. Porcentaje de juicios discrepantes] El primer aspecto que se analizó sobre los resultados de esta tarea conductual fue el porcentaje de juicios emitidos por los participantes [...]
[3.2.2. Tiempos de reacción] En segundo lugar se analizaron los resultados del experimento conductual. (RA_ES_LIN_08)
- d. **La ubicuidad de la traducción en los medios de comunicación puede relacionarse con su doble invisibilidad en relación con dos factores:** por un lado, al predominio de una estrategia domesticadora que privilegia las expectativas del lector y la fluidez, y que vuelve la traducción transparente, ocultando que ésta ha tenido lugar; y por el otro, a la exitosa integración de la traducción en el periodismo, al hecho de que no se percibe en modo alguno distinta a la misma escritura o edición

de los textos periodísticos (RA_ES_TRA_05)

- e. **En este sentido, la aparición del nombre 船 (chuán) ‘bote’ desempeña dos funciones.** En primer lugar, predetermina los nombres (normalmente, escuetos) con que puede establecer cierto vínculo conceptual para que éstos tengan la posibilidad de ser referenciales en momentos necesarios. En segundo lugar, permite dar acceso a la información del tipo enciclopédico sobre tal objeto, el bote. (RA_ZH_LIN_01)

However, there was one minor discursual function that made the novice writers differ from their expert counterparts: the novice writers often used sequencers at the end of the introduction chapter to outline the general organization of their theses, as in (30); in the expert texts, on the other hand, it is not common practice to outline the article structure. Naturally, this difference is due to the genre differences between master’s thesis and journal article. Specifically, because of the great length of the master’s thesis, providing an outline of thesis chapters is usually recommended by students’ supervisors or institutions.

- (30) Este estudio se divide en seis capítulos. El primero es la presente introducción en la que se presenta la investigación y se explican las partes en la que está dividida. El segundo capítulo se compone de dos partes, una en la que se expone una breve introducción a la geolingüística europea e hispánica, el tipo de léxico que aparece en los atlas lingüísticos y el que más ha sido examinado hasta la fecha, así como las perspectivas teóricas desde las que se han llevado a cabo estos estudios, y otra en la que se explica la importancia del juego en la historia del desarrollo social y las investigaciones que se han realizado sobre este campo semántico. Además, se indica el lugar que este dominio léxico adquiere en los atlas. En el tercer capítulo se muestran los objetivos del trabajo, las características del corpus y la metodología. En los capítulos cuarto y quinto se aplican las nociones teóricas explicadas anteriormente al análisis de llevar a cuestras y llevar a hombros. Por último, en la conclusión se hace notoria la importancia de realizar un análisis multidisciplinar en el que se analicen los datos desde distintas perspectivas. (TFM_ES_LIN_04)

5.3.2.2. Topicalizers

The second subtype of ‘Frame markers’ is topicalizers. Linguistic devices that Spanish

writers frequently use are *en cuanto a*, *en el caso de*, etc., while the less common linguistic resources are *en lo que concierne a*, *por cierto*, *volviendo a*, etc.

Regarding the frequency of topicalizers' use, the previous descriptive statistics suggested that novice writers generally used them more often than expert writers. The inferential statistics, however, did not show any statistically significant differences across groups.

Functional analysis of topicalizers indicated that the principal discoursal function of these expressions used in academic writing is to signal topic shifts. The further qualitative textual analysis distinguishes four secondary functions of topicalizers. The most common one is to start a new topic, as in (31a). Another function of topicalizers is to introduce complementary information of what has been said (31b). The third function identified has a digressive value. This type of topicalizers often serves to provide marginal information, which is not the primary plan of the text (31c). The final type of topicalizers is used by writers to return to a topic mentioned earlier in the text (31d).

- (31) a. En cuanto a la percepción, Li (2010) muestra que un 16,46% de los errores producidos en el dictado de EEE-43 están relacionados con las oclusivas. Con respecto a la producción, Méndez Marrassa (2009) y Esteve Martín (2014) observan que al hablar, los sinohablantes tienden a confundir las oclusivas sordas y sonoras; (TFM_ZH_LIN_03)
- b. Como ya se ha señalado, el uso del diminutivo para expresar afecto es la estrategia más empleada en [AMIGOS], con algo más de la mitad de los casos (51%) mientras que su uso es inexistente en [FANS]. A este respecto, se puede argumentar que la cercanía real y cortesía positiva de los integrantes del primer grupo es el principal motivo por el que dan prioridad a estas expresiones de cariño. (RA_ES_LIN_03)
- c. Por cierto, aquí es interesante mencionar otro trabajo “Las Oraciones de Relativo en la Interfaz Gramática – Discurso” de Serrana Caviglia y Marisa Malcuori, (TFM_ZH_LIN_04)
- d. Volviendo al funcionamiento de este motor de TA, el principal funcionamiento es el de alinear frases, grupos de palabras o palabras individuales de textos paralelos y calcular las probabilidades para que una palabra expuesta individualmente o en una frase de cualquier lengua se corresponda con una palabra en una frase de una traducción con la que esté alineada. (TFM_ES_TRA_04)

When the four writer groups were compared in terms of these more granular functions, it was found that only the novice writers used digressive topicalizers in their writing, although the number was very small (7 occurrences). This may be due to the weak register awareness of some novice writers as the digressive markers are usually considered colloquial, and it also seems unprofessional for academic writers to make off-topic comments in a text.

5.3.2.3. Stage signals

Stage signals, the third type of ‘Frame markers’, are usually instantiated by phrases such as *en resumen*, *en conclusión*, *en resumidas cuentas*, *hasta ahora*.

About the frequency distribution in the corpus, the descriptive statistics showed that these markers were used most frequently in the non-native novice texts. On the other hand, the inferential statistics indicated that the two novice groups employed significantly more stage signals than the expert groups. It can be argued that in a relatively lengthy text like a master’s thesis writers tend to draw on this type of marker to help readers recall the content part by part.

Despite the frequency differences, the discourse functions of stages signal across the writer groups did not differ significantly. They were mainly used to sum up a section/chapter or even the whole text, as in (32a-b). Logically, these markers were usually located at the end of a section or chapter. Some of the stage signals such as *hasta ahora* and *hasta aquí* function to signal an interim recapitulation of what the writer has discussed so far and sometimes announce what comes next, as in (32c). They can appear at the beginning, middle, or end of a section/chapter.

- (32) a. En resumen, la situación de contacto ha proporcionado el modelo para activar (o acelerar) una innovación lingüística, en concreto, la ampliación de los valores de *y así*. (RA_ES_LIN_14)
- b. En resumen, en esta monografía de investigación hemos comparado los textos de la prensa china y la española por AntConc y hemos explorado los procedimientos de traducción desde la perspectiva de tres principios

de la teoría del escopo. (TFM_ZH_TRA_01)

- c. Hasta ahora hemos visto algunas de las infinitas formas que puede adoptar la heterogeneidad lingüística en torno a la frontera Estados Unidos-México en el cine y, sobre todo, hemos observado que tanto la traducción como la ausencia de ella pueden funcionar en este contexto como recursos eficaces en la construcción discursiva de la identidad. A continuación, examinamos algunas particularidades destacables de las versiones distribuidas en España de las películas citadas anteriormente para arrojar un poco de luz sobre las dificultades formales, pero sobre todo éticas e ideológicas que plantea la traducción de textos tan complejos como estos. (RA_ES_TRA_03)

5.3.2.4. Announcers

The last type of ‘Frame markers’, announcers, comprises many long and corpus-driven coded markers, such as *en este apartado*, *en este trabajo*, and *el objetivo principal del presente trabajo*.

Concerning the frequency distribution of announcers, no significant differences were found across the writer groups, except that the non-native writers on average used them more than the other three groups.

Our functional analysis of announcers suggested that the main functions of this type of interactive resource in academic writing were either to announce discourse goals (33a) or to anticipate specific plans that the writer will go through in the current section or chapter (33b). They were typically located at the beginning of a section and chapter.

- (33) a. El objetivo de la investigación fue identificar, describir y comparar las creencias sobre la escritura de estudiantes de 3º y 4º año y su influencia en la calidad de su producción escrita y, además, identificar las categorías predominantes en la expresión de la voz del autor en cada una de las dimensiones analizadas para ambos grupos. (RA_ES_LIN_12)
- b. En este apartado, para analizar el fenómeno de la combinación de clíticos prestaremos atención en primer lugar al proceso de cliticización. A continuación, nos centraremos en la composición interna de cada uno de los clíticos y, finalmente, nos detendremos en las combinaciones descritas abordándolas desde la perspectiva de la DIS. (TFM_ES_LIN_02)

As discussed previously, due to the genre differences between master's thesis and journal article, it is reasonable to expect that some markers in the novice texts were only used to announce chapter or thesis goals (34a), whereas some announcers in the expert texts exclusively served to announce article goals (34b).

- (34) a. En este capítulo, propondremos un mecanismo para explicar la asignación de caso en la dicha construcción infinitiva. (TFM_ZH_LIN_10)
- b. Este artículo pretende analizar el carácter intertextual de una obra clásica de la literatura infantil y juvenil como es la novela de Lewis Carroll, Alicia en el país de las maravillas. (RA_ES_LIT_01)

5.3.3. Endophoric markers

Another main category of interactive metadiscourse, endophoric markers, is generally used by writers to make explicit references to other text parts (Hyland, 2005a; Bunton, 1999). As mentioned in the methodology chapter, we can think of this type of marker as analogous to “signposts” in the map of text, which can point readers to specific information (F. Cao, 2014: 138). More specifically, writers utilize them to support current arguments or ideas by referring to previously discussed or upcoming content, thereby facilitating readers' comprehension (Hyland, 2005a). In the present corpus, the total frequency of endophoric markers lags slightly behind that of frame markers (4,018 occurrences).

Based on previous studies (F. Cao, 2014; S. Lee, 2009; Mur-Dueñas, 2011), I further divided this main category into four subcategories: ‘Previews’, ‘Reviews’, ‘Overviews’, and ‘Visual references’. Each was realized through a range of linguistic forms used for different discourse purposes. In the following four subsections, I will present the qualitative results based on the functional analysis of these four subcategories.

5.3.3.1. Previews

The first subcategory of ‘Endophoric markers’, previews, includes metadiscursive

words and phrases such as *a continuación, siguiente(s), en el apartado X, más adelante*.

According to the previous descriptive statistics, the native experts used the least previewing markers among the four writer groups, whereas the native novices used the most. On the other hand, the inferential statistics showed that previews were significantly fewer in the expert texts than in the novice texts. I believe that genre differences between master's thesis and journal article once again played a crucial role here. The great length of the master's thesis would impel writers to draw on previewing markers frequently to support the ongoing argumentation and prepare readers for the following text. By the same token, it can be expected that the novice writers used significantly more reviews than their expert counterparts, as we will see in the next section.

As for the discourse functions of previews, they were primarily used to alert readers to how the following text is going to unfold. Some of them allow readers to preview content much further ahead, as *más adelante* and *en el capítulo* in (35), while others only anticipate the immediate next text, as *a continuación* in (35).

- (35) Aunque hay una tendencia muy fuerte entre la posición final de la oración y el foco oracional, también encontramos casos de focos antepuestos con sentidos contrastivos, los cuales veremos más adelante en el capítulo 3.
A continuación, vamos a ver la relación entre el foco y la característica destacada prosódicamente. (TFM_ZH_LIN_11)

From the example above, we can also deduce that previewing chapter content is a function peculiar to novice texts, obviously because of genre differences.

5.3.3.2. Reviews

Reviews, the second type of 'Endophoric markers', are instantiated by common metadiscursive constructions like *como se ha X* and *como hemos X*, as well as by some linguistic forms such as *anteriormente* and *en el apartado*.

In terms of the frequency information of reviews, as expected, the two novice writer groups used significantly more reviews than the expert counterparts. This data

was also backed up by the mean frequency comparison in the descriptive statistics. The possible reason could lie in genre differences, as mentioned in the preceding section.

In contrast to previews, reviews were used by writers to link the current materials with the previously presented ones, thereby helping readers recall what had been mentioned.

- (36) a. Como adelantábamos al inicio del apartado, el análisis que se ofrecerá parte del modelo de distintividad que hemos discutido en la sección 3.2. (TFM_ES_LIN_02)
- b. Con el fin de observar la tendencia de usos en diferentes etapas de adquisición, calculamos las correcciones según diferentes variables mencionadas anteriormente. (RA_ZH_LIN_15)

While the overall discursual functions of reviews did not appear to differ considerably across the four writer groups, I did find that, as also noted earlier, native writers, especially native novices, preferred to use depersonalized reviewing constructions such as *como se ha X* and *como ya se ha X*. In contrast, non-native writers, especially non-native novices, favored personalized reviewing constructions such as *como hemos X*. The functional differences between them are that the former gives more prominence to the reviewed information per se, while the latter incorporates interactional resources (we will deal with them in more detail in the next chapter) to achieve the purposes of writers' self-mention or reader engagement. Examples that illustrate this usage difference can be found in (22) in Section 5.2.1.2.

5.3.3.3. Overviews

Another type of 'Endophoric markers' is overviews, which are usually realized through phrases such as *en este estudio*, *el presente trabajo*, *a lo largo del trabajo*, *nuestro estudio*.

Regarding the frequency distribution, this resource type had the least markers among the 15 interactive metadiscourse categories (198 occurrences in total). Both descriptive and inferential statistics suggested that the expert writers used significantly

more overviews than the novices. We can conjecture that expert writers use these markers more often to show academic peers their ability to control the article's overall content and give the passage's overall idea. Meanwhile, novice writers usually lack this kind of ability or simply are not aware of the importance of overviews in academic writing.

The importance of overviews, of course, lies in providing readers with an overall picture of the text so that readers know what general information they should expect from the following text. Logically, this type of metadiscourse resource often appears at the beginning of a writing piece, especially in abstracts. Some examples are provided below:

- (37) a. En este trabajo se muestra de qué modo influye la categorización que los hablantes del catalán hacen de las afecciones (enfermedades, signos, síntomas, lesiones, etc.) en la elección del verbo y en la estructura sintáctica de las frases en las que se expresa la relación entre una afección y la entidad animada afectada por ella. (RA_ES_LIN_18)
- b. A lo largo del estudio aplicamos varias teorías y conceptos a la investigación de cada aspecto, los cuales vamos especificando en este apartado, así como en cada parte del trabajo cuando se necesiten. (TFM_ZH_LIT_01)
- c. En este trabajo vamos desde la perspectiva de la TL, y discutimos la similitud y diferencia entre las SSNNRel. en español y en chino. Además de lo del orden que mencionamos arriba, también vamos a ver las estructuras y las marcas de las Rel., y al mismo tiempo el universal de las estrategias de relativización de la J-A de los SSNN de los dos idiomas. (TFM_ZH_LIN_04)

As already discussed in Section 5.2.2.2, due to genre differences, overviewing markers such as *en este artículo* and *el presente artículo* had only been used by the experts to summarize their articles, while markers such as *la tesina* and *en este trabajo de fin de máster* had only been used by novices to provide a brief sketch of their theses.

5.3.3.4. Visual references

The last type of 'Endophoric markers', visual references, is the writer's appeal to visual

displays and additional material to support arguments or ideas. It includes linguistic devices such as *siguiente(s)*, *tabla*, *anexo*, and *en el ejemplo*.

Visual reference markers were quite common in the present corpus (2,143 occurrences in total). The descriptive and inferential statistics from the earlier report indicate that non-native writers used this type of marker more frequently than native writers.

However, in relation to the discourse functions of visual references, the previous key item analysis seemed to suggest that the differences across expertise levels were remarkable. As noted earlier in Section 5.2.2.2, expert writers used considerably more visual elements such as tables, figures, and examples in the text to facilitate readers' information processing and comprehension, as in (38a-c). Meanwhile, due to a possible genre effect, novice writers used more supplementary materials such as appendices to direct readers (e.g., supervisors and dissertation committee) to the extra information that does not fit into the lengthy body text, as in (38d).

- (38) a. Así, en el ejemplo (24), la queja (whinge) de U1 seguramente está enfocada tanto a aliviar su propio descontento como a provocar la empatía de sus amigos en la red social. (RA_ES_LIN_03)
- b. El usuario puede emplear el diminutivo para expresar su afecto y cariño hacia el interlocutor, a menudo en expresiones de despedida así como en términos de tratamiento afectivos o en nombres propios (hipocorísticos), como ilustran los siguientes ejemplos: (RA_ES_LIN_03)
- c. Como se puede observar en la figura 6, la longitud promedio de todas las traducciones es superior a la del CLCC. (RA_ZH_TRA_03)
- d. Para valorar las grabaciones desde una perspectiva socioeconómica, los informantes debían responder a las preguntas 8, 9 y 10 del cuestionario de PRECAVES-XXI (véase Anexo C). (TFM_ES_LIN_12)

5.3.4. Code glosses

In this section we turn to code glosses, another major category of interactive metadiscourse used by the writer to “supply additional information by rephrasing, explaining or elaborating what has been said”, thereby “ensur[ing] the reader is able to

recover the writer's intended meaning" (Hyland, 2007: 268). In our corpus, this category produced 3,933 markers in total.

Previous studies (e.g., Hyland, 2005a, 2007; F. Cao, 2014; Mur-Dueñas, 2011) generally agree that two subcategories can be further distinguished within code glosses: 'Reformulation' and 'Exemplification'. Both represent a range of discourse functions and comprise different metadiscursive resources, which will be dealt with in the following two subsections.

5.3.4.1. Reformulation

The first subcategory of 'Code glosses', reformulation, is a communication process through which the previous discourse unit is reformulated or elaborated with different wording (Hyland, 2007). It is usually introduced by frequent phrases such as *es decir*, *esto es*, *o sea* and less frequent phrases such as *dicho de otra manera*, *más bien*, *entendido como*.

As for the frequency distribution of reformulation markers, both the previous descriptive and inferential statistics showed that non-native writers used this type of resource significantly more than their native counterparts. According to Hyland (2005a), using code glosses is a reflection of "the writer's predictions about the reader's knowledge-base" (p. 52). It can therefore be argued that using code glosses is at the same time a reflection of the writer's estimation of his or her own explanatory ability. As non-native speakers, writers are prone to think their explanation may not be clear enough to make readers (usually natives or experts) fully understand their arguments or ideas, so they tend to rephrase or reformulate what has been said.

Regarding the discourse functions of reformulation markers, based on the work by Martín Zorraquino & Portolés (1999), Hyland (2007), and Murillo (2012), I identified six fine-grained functions of reformulation in our corpus: i) explicative purpose; ii) concretization or specification purpose; iii) corrective purpose; iv) definition and denomination purpose; v) dismissal purpose; vi) recapitulative purpose.

Reformulation markers with explicative purposes are employed to explain further

or clarify what has been said in the preceding discourse unit, thereby making it more comprehensible:

- (39) a. En seguida, lo que haremos es profundizar de la superficie al fondo de las preguntas, a saber, las habilidades de lectura que se evalúan. (TFM_ZH_LIN_06)
- b. Este tipo de desaparición de lenguas no tiene que ver con la extinción de sus hablantes, sino con la sustitución lingüística (language shift en inglés); es decir, una comunidad de forma voluntaria, consciente o inconscientemente sustituye su lengua tradicional por otra más comunicativa, (RA_ZH_LIN_24)

Reformulation markers with specification function are used to specify or concretize the preceding unit, thereby constraining how readers might interpret it:

- (40) Para ello, se analizó la terminología neológica desde su difusión en la prensa escrita generalista hasta su inclusión en el diccionario de la lengua. Concretamente, se analizaron los neologismos presentes en las secciones especializadas de deportes, economía y tecnología del diario español El País registrados en la base de datos del Observatori de Neologia (Obneo) en el periodo 2003-2013. (RA_ES_LIN_13)

Corrective reformulators are used to modify or improve what has been presented in the previous discourse member, thereby steering readers to a more precise interpretation:

- (41) a. Según Bernstein (1990), a diferencia de otros tipos de discurso, como el discurso jurídico o el discurso político, el DP no posee un contenido propio, más bien, regula la forma en que se expresan otros tipos de discursos en contextos educativos. (RA_ES_LIN_10)
- b. Una vez conocida la puntuación distribuida, mejor dicho, la posición de la Comprensión de Lectura en el EEE4 y el EEE8, ya es tiempo adecuado para centrarse en su forma de evaluación. (TFM_ZH_LIN_06)

Writers use reformulators with definition and denomination purposes to introduce definitions of a term or provide alternative terms:

- (42) a. Por adecuación nos referimos a qué cantidad de significado o información original se ha incluido también en la traducción respondiendo a la pregunta «How much of the meaning expressed in the gold-standard translation is also expressed in the target translation?» (Linguistic Data Consortium, 2002) (TFM_ES_TRA_03)
- b. Observaremos que el aspecto exterior (i.e., el aspecto gramatical) se encuentra en una posición jerárquicamente más alta que el aspecto interior (i.e., el aspecto léxico) y, además, el primero manda-c al último. (TFM_ZH_LIN_14)

Dismissal reformulators serve to suspend the expected implication of the previous discourse unit and to start introducing a new and more relevant formulation to replace the previous one:

- (43) a. En efecto, además de estar basados en una muestra mayor a la del corpus de control, los datos porcentuales reflejan la preferencia de *y así* para rebajar el compromiso con lo enunciado, sobre todo en el CorpusPV (67.6%). Asimismo, también resultan frecuentes los usos atenuadores del contenido proposicional con significado aditivo, tanto en el COSER (37.5%) como en el CorpusPV (23.5%). En todo caso, una vez que *y así* encierra valores pragmáticos de atenuación de la fuerza ilocutiva, probablemente estos valores de distancia del hablante respecto a lo enunciado estarán también saturando los enunciados con funciones discursivas de adición de esta variedad de contacto. (RA_ES_LIN_14)
- b. El hecho de que no analicen la relación entre los enlaces podría deberse a que no son conscientes de que puedan revelar opciones ideológicas, pero también podría deberse a la falta de tiempo. En cualquier caso, lo cierto es que las alumnas no piensan en ningún momento en la posibilidad de que los textos revelen ideologías distintas. (TFM_ES_LIN_06)

Lastly, some of the reformulation markers also have recapitulative value. They function as a conclusion or recapitulation of the prior discourse unit or a series of units, as illustrated below:

- (44) a. Por lo tanto, el objetivo del docente deberá consistir en mostrar a los alumnos las distintas acepciones de un término concreto, su aparición en contextos y registros diversos, cómo se combina con las palabras más próximas a él... Además, previamente deberá dar respuesta a las

- preguntas de qué, cómo y por qué se va a tratar ese contenido concreto. En resumen, las actividades que realizarán los alumnos deberán estar orientadas a «comprender y generar mensajes en todas las situaciones comunicativas en las que, como usuarios, se ven envueltos» (Gómez Molina, 2004a: 491). (TFM_ES_LIN_03)
- b. Wang Dongfeng (2003) propone que la traducción es el proceso de introducir la ideología de lengua origen a la de lengua terminal. Según Sun Yifeng (2003), la ideología de traducción tiene relación con el poder político y cultural. En fin, la traducción está vinculada estrechamente con la ideología. (TFM_ZH_TRA_01)

Although the six discourse functions of reformulation were all detected across writer groups, we found that reformulators with dismissal function were more frequent in native texts than the non-native ones (0.82 pttw vs. 0.19 pttw). Two possible explanations can be advanced here: i) Dismissal reformulators are generally less common than other types in writing. Therefore, with less input, non-native writers, especially non-native novice writers, are more likely to use them very cautiously. ii) It would be more difficult for non-native writers to recognize the particularity and subtlety of the rhetorical function of dismissal reformulators. According to Chao Parapar (2021), in some cases when writers employ this type of reformulator to dismiss alternatives proposed in the previous discourse unit and introduce a new argument or view in the following discourse unit, their argumentation entails concession and even hedging; that is, writers try to keep a certain distance from the new argument made and allow readers to have other interpretations. This practice generally conforms to the convention of academic Spanish discourse, where courtesy and hedging are heavily favored (see the next chapter). Non-native writers who are unfamiliar with the target discourse community are less likely to adopt this rhetoric using the said markers.

5.3.4.2. Exemplification

The other subcategory of ‘Code glosses’ is exemplification. By definition, it is a strategy in which the writer clarifies or supports the prior discourse unit by providing example(s) (Hyland, 2007). In contrast with other categories, exemplification

comprises a relatively limited number of markers, ranging from highly frequent *por ejemplo* and *como* to extremely infrequent *a modo de ejemplo*, *sin ir más lejos*, and *verbigracia*.

On the other hand, exemplification markers are quite frequent in our corpora (2,193 occurrences in total). Both the descriptive and inferential statistics have shown that the non-native writer groups used them much more frequently than the native groups, which is similar to the case of reformulation. I believe the reasons for both cases share some similarities too as exemplification also “reveals something of the writer’s predictions about the reader’s familiarity with the topic and world knowledge” (Hyland, 2007: 270). Non-native writers are more likely to lower their expectations about the reader because of their unfavorable situation in foreign language writing, and thus tend to employ more examples to boost the accessibility and persuasiveness of their ideas.

As for the discourse functions of exemplification, based on Hyland (2007), Cao & Hu (2014), and Su & Zhang (2020), I identified three more granular functions. The first function, which constitutes the majority of cases, is to provide concrete or subordinate instance(s) of a generic or superordinate category (usually noun phrase) so that the said category can be made easily accessible to the reader, as in (45a-b). Another common type of exemplification marker presents real-world case(s) or existing studies to support the prior argument and point (45c-d). The final type of example is less frequent but special: it does not necessarily serve to illustrate the previous information but “to introduce or initiate the act of exemplifying” (Su & Zhang, 2020: 6) and provide specific content for the main verb, as in (45e-f).

- (45) a. Obviamente, los enunciados arriba citados contienen varios errores gramaticales como el uso del pronombre en acusativo “lo”, y también cuestiones léxicas como la misma palabra “cuestión” equivocada por la princesa. (TFM_ZH_LIT_01)
- b. Jiménez-Calderón y Sánchez-Rufat (2017) también puntualiza que los factores como la recurrencia (exposición repetida a una unidad en el input), la asociación con otras unidades léxicas (p.ej., colocaciones) pueden favorecer la memorización de vocabulario. (TFM_ZH_LIN_02)
- c. Sin embargo, la función cognitiva de la variación denominativa también está presente en contextos altamente especializados. Por ejemplo,

- Pecman (2014) observó en un corpus de artículos científicos que los expertos recurren a la variación como herramienta cognitiva para teorizar y explicar de manera más clara un concepto, y en definitiva, para “crear nuevo conocimiento”. (RA_ES_LIN_05)
- d. Además, cada familia de lenguas ocupa un cierto espacio, por ejemplo, las lenguas indoeuropeas y altaicas son habladas principalmente en el norte del país, y las lenguas tai-kadai y las siníticas en el sur. (RA_ZH_LIN_24)
 - e. Uno de los métodos más empleados para estudiar la expresión gramatical en niños con TEL ha sido la repetición de oraciones. Mediante este procedimiento se ha comprobado, por ejemplo, sus enormes limitaciones para la producción de oraciones de relativo (Riches, Loucas, Baird, Charman & Simonov, 2010; Frizelle & Fletcher, 2014). (RA_ES_LIN_09)
 - f. Desde siempre, el cambio ha tenido connotaciones negativas, por este motivo se ha intentado establecer una norma que regule el uso de la lengua para diferenciar, por ejemplo, lo que se considera correcto de lo que se considera incorrecto. (TFM_ES_LIN_05)

Based on the corpus inspection, the last type of exemplification was found to be more common in the native texts. I presume that this usage pattern is less salient and less likely emphasized in L2 learning, and it is thus not surprising that the non-natives underused it (cf. Paquot, 2008).

5.3.5. Evidentials

The final major category of interactive metadiscourse, evidentials, primarily indicates the external sources from which ideas or arguments of the current text originate (Hyland, 2005a; F. Cao, 2014; Mur-Dueñas, 2011). In written academic discourse, evidentials are typically realized through citations (Swales, 1986, 1990; Hyland, 2002c, 2005a). Its significance lies in supporting the writer’s persuasion and situating the writer’s work in the relevant academic community. Hyland (2002c) even claims that original research would not be able to be published if it does not make reference to other research. Given the importance of this academic convention, it would not be surprising that the frequency of evidential markers was consistently high across the four corpora (6,766 occurrences in total), only after transition markers.

As discussed in Section 4.2.1, I followed previous studies (Swales, 1990; Hyland, 2002c; F. Cao, 2014; F. Cao & Hu, 2014) and adopted a solely form-based subdivision for this category: ‘Integral citations’ and ‘Non-integral citations’. The essential difference between the two types is whether the cited source is incorporated within the citing sentence. Choosing one over the other directly affects the visibility of external sources, the prominence of cited authors, and the strength of writers’ voices (Muguiro, 2020; Hyland, 2002c; Wette, 2021). In the following two sections, I present specific differences and qualitative findings of these two citation types.

5.3.5.1. Integral citations

Integral citations are a citation form in which the name (usually surname) of the cited author(s) is integrated into the actual citing sentence and performs a specific type of syntactic role (Swales, 1990; F. Cao, 2014; Wette, 2021). By doing so, the projected sources are foregrounded and achieve maximum visibility (Muguiro, 2020; F. Cao, 2014); in the meantime, the writer’s own voice would “defer more to the authority of sources” (Wette, 2021: 84). As discussed in Section 4.2.2, citations do not have concrete linguistic forms but a pattern. In the case of integral citations, the pattern is that the cited author(s)’ name is followed by a parenthesized date, e.g., *Smith (2010)*, *Smith & Liu (2007)*.

With regard to the frequency distribution of integral citations, there were no statistically significant differences in their use across the writer groups, although the descriptive statistics suggested that the non-native novices on average used them more frequently.

Concerning the functions of integral citations, based on Petrić (2007) and Muguiro (2020), I identified three: i) attribution, i.e., to attribute a statement, theory, or methodology to someone other than the current writer, usually by controlling a lexical verb (“verb controlling”), forming a noun phrase (“naming”) (P. Thompson & Tribble, 2001: 95), or co-occurring with “reporting phrases” (Muguiro, 2020: 51) such as *según*, *de acuerdo con*, as in (46a-c); ii) exemplification, i.e., to offer existing studies

illustrating the writer's statement, which functionally overlaps with previously mentioned 'Exemplification' (see Excerpt 45c); iii) further reference, to refer to works for the reader's further reading, which usually appears in footnotes, as in (46d).

- (46) a. Hernández Pina (1984), quien realizó un estudio de caso sobre la adquisición monolingüe del español, menciona que el verbo 'estar' del niño aparece por primera vez en el vigésimo tercero mes. (RA_ES_LIN_22)
- b. Esto corrobora los planteamientos de Bernstein (1996) respecto a cómo el conocimiento disciplinar no puede comunicarse en el contexto pedagógico exclusivamente desde la lógica de la disciplina. (RA_ES_LIN_10)
- c. Según Cabré (1994: 95), los neologismos formados por truncación, entre ellos la acronimia, suelen responder a motivos fonológicos, no morfológicos; (TFM_ES_TRA_02)
- d. Para una lista más extensa, véase Llopart (2016). (TFM_ES_TRA_02)

Based on qualitative observation, I found that novice L2 writers seemed to favor the first type of integral citation, i.e., explicit attribution to the originators followed by a reporting verb. This is not hard to explain considering the most typical citation practice is to report someone did something, had an opinion, or reached a conclusion. However, novice writers tended to list this type of single-sourced citation in the literature review chapter of their theses, as in (47a-b). With very little variation in the pattern, these production-line-like citations seem monotonous and mechanical. To some extent, they also reflect that the inexperienced writer has a low ability in source synthesis and generalization, an issue which will be addressed in the next section.

- (47) a. Sin embargo, al comienzo se discutió sobre la existencia de la voz pasiva en el español. Gili Gaya (1958) cree que las oraciones pasivas sin ablativo son un tipo de oraciones atributivas aunque todavía insiste en la existencia de las oraciones pasivas. Alarcos Llorach (1973) piensa que las oraciones pasivas son atributivas esencialmente porque comparten la misma estructura. Hernández Alonso (1984) señala que la gramática tradicional divide el español en dos voces generalmente, que son la activa y la pasiva, y la gramática generativa apoya y profundiza esta división. (TFM_ZH_LIN_05)
- b. Huang Youyi (2004) considera que TCGC se trata de traducir la

información sobre China del chino a lenguas extranjeras por medio de libros, revistas, periódicos, radio, televisión, internet y conferencias internacionales. Y Zeng Lisha (2007) propone que TCGC es presentar China al mundo en política, economía, cultura, educación, tecnología, etc. Desde la perspectiva interdisciplinaria, Zhu Yihua (2013) considera que TCGC combina la teoría y práctica de traducción y comunicación. Es una actividad de compartir la información y presentar la ideología. Esta definición nos inspira en contemplar el medio, forma y características de TCGC desde el punto de vista interdisciplinario. En torno a la definición, Zhang Jian (2013) señala que TCGC se clasifica en dos tipos: en sentido amplio, TCGC abarca la mayoría de actividades de traducción, por ejemplo, la traducción en diferentes rangos de departamentos y distintos campos en nuestra vida. (TFM_ZH_TRA_01)

5.3.5.2. Non-integral citations

As the counterpart of integral citations, non-integral citations are a citation form in which the source author(s)' name usually appears in parenthesis and does not form part of the citing sentence (Swales, 1990; F. Cao, 2014). As a result, the reported author is backgrounded and has low visibility (Muguiro, 2020; F. Cao, 2014), but the writer's own voice is able to be expressed and foregrounded accordingly (Wette, 2021). The typical pattern of non-integral citations is that both the cited author and date are given in parenthesis, e.g., (*Smith, 2010*), (*Smith & Liu, 2010*), (*see Smith 1998*).

The previous inferential and descriptive statistics have indicated that non-integral citations were significantly less frequent in the non-native texts than in the native ones. Possible reasons will be given alongside the subsequent functional analysis.

Again, drawing on Muguiro's (2020) and Petrić's (2007) work, I identified two functions of non-integral citations. The first one is averral (see also P. Thompson, 2005). An averred source not only acknowledges the original source but also signals the writer's own interpretation and voice in the current statement. This first function can be further divided into two secondary functions, depending on how many sources are mentioned. If it has a single source (48a), the sourced averral is used to summarize or paraphrase the external source (Hyland, 2002c); if two or more sources are involved (48b), the sourced averral is used to present a generalized and synthesized statement,

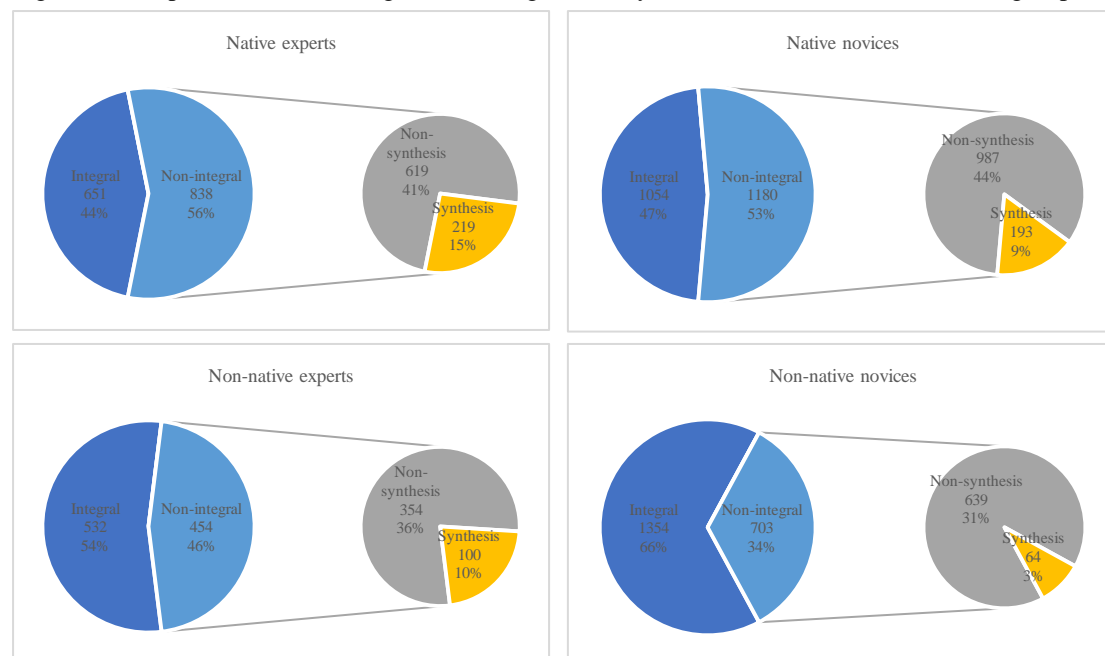
as well as to infer links between sources (Hyland, 2002c; Petrić, 2007; Wette, 2021). As for the second function, non-integral citations share the same function with the integral ones: further reference, i.e., writers refer to other relevant works for the reader's further reading. Based on my observation, this function was actually more common in the non-integral citations, as in (48c). Besides, as can be seen from the example, this function is intrinsically linked to directive markers such as *véase*, *ver*, *vid.*, which will be addressed in the next chapter.

- (48) a. Esta variable puede mostrar la capacidad de memoria que emplea un examinando para procesar la lengua, y al mismo tiempo, el grado de restricción que le impone la gramática para la expresión oral (Liu y Chen, 2013). (RA_ZH_LIN_19)
- b. En cualquier caso, tanto los estudios del habla puramente oral como los enfocados en el discurso digital coinciden, no obstante, en que el diminutivo en español goza de una gran versatilidad (Puga Larraín 1997, Álvarez 2005, César Vera 2015) y puede realizar numerosas funciones semánticas y/o pragmáticas como son la expresión de tamaño, afecto, cercanía, persuasión, un significado peyorativo, etc. (Zuluaga Ospina 1970, Beinhauer 1985, Náñez Fernández 2006, Jers 2009, Hägg 2016). (RA_ES_LIN_03)
- c. El modelo de la morfología léxica escogido se ha seleccionado según la perspectiva asociativa o relacional (vid. Pena, 2003; Pascual y García, 2007; Campos Souto y Pena Seijas, 2009), que permite vincular el significado con la forma, es decir, fomenta el estudio de los morfemas a partir de sus semejanzas semánticas. (TFM_ES_LIN_03)

Returning to the fact that the non-native writers used far fewer non-integral citations than their Spanish-speaking counterparts, I believe that it could be related to the limited summary and synthesis skills in source-based writing on the part of the non-native writers. First, non-integral citations are mainly about summarizing and synthesizing source(s). In principle, the general trend in citation practices should be that non-integral citations prevail across almost all academic disciplines and almost all the time, according to the observation of various research (e.g., Hyland & Jiang, 2019; Wette, 2021; Nesi, in press; Samraj, 2013). However, the fact that integral citations predominated in the non-native texts (especially in novice L2 texts) (see Figure 5-4)

contradicts this trend, which indicates that Chinese writers' summary and synthesis skills may not have reached a satisfactory level.

Figure 5-4 Proportional use of integral, non-integral, and synthesis citations across the writer groups



Focusing especially on citation synthesis³⁹ (pies on the right side), we can see a clear division among the writer groups: native experts used the synthesis technique most while non-native novices were at the opposite extreme. This gap is even wider if the size of each corpus is taken into account. Discourse synthesis is known to be challenging for inexperienced writers, as it requires the writer to select and compare multiple sources, condense and combine their main points, finally transform and construct new propositions (Segev-Miller, 2007; Wette, 2021). In this respect, even the native novices and non-native experts in our corpus may not have developed enough synthesis skills (see the figure above), probably due to inadequate training.

³⁹ In order to search synthesis citations in the corpus, we should know first that synthesis citations are a special type of non-integral citations, in which at least two publications should be included in parenthesis. Therefore, I adapted the previously mentioned regex pattern of non-integral citations (see Section 4.2.4), and the final pattern used was `\([w\s.]*[A-Z][^()=]*[12]\d{3}[^=():\[\]]*[12]\d{3}[^=()]*\)`. The only difference is that I added another four-digit publication date into this search pattern in order to retrieve non-integral citations with two or more publications.

5.4. Summary

This chapter presented both quantitative and qualitative results on the use of interactive metadiscourse across the four academic Spanish writer groups (i.e., native experts, native novices, non-native experts, and non-native novices). Throughout the previous three main sections, interactive metadiscourse categories, markers, and functions have been examined successively.

Firstly, I explored the effects of nativeness and expertise on the use of interactive metadiscourse resources. I presented the overall descriptive statistics of each main interactive metadiscourse category and subcategory coded in the four corpora. Based on the means and standard deviations of the normalized frequency (per 10,000 words), we saw that the native expert group generally utilized less interactive metadiscourse categories than the other three groups, except for non-integral citations. Non-native writers used more code glosses than their native counterparts. The subsequent inferential statistics helped to locate in which categories exactly there were statistically significant different employment of interactive resources across non-native/native and novice/expert groups. Specifically, it was found that native Spanish writers used markedly more additive transition markers and non-integral citations, whereas Chinese writers used significantly more visual references, reformulators, and exemplification markers. On the plane of expertise level, novice writers were found to employ more sequencers, stage signals, previews, and reviews; meanwhile, expert writers only yielded the sole significant result on the use of overviews.

Secondly, I also analyzed and displayed key interactive metadiscourse markers when different writer groups were compared. Most importantly, I tried to provide possible explanations for why these markers were salient in one group but not in the other. For example, the lack of register awareness on the part of Chinese student writers can account for the frequent use of markers like *o sea*, *por eso*, and *entonces* in both non-native and novice corpora; L1 Chinese and L2 English negative transfer can explain why markers like *arriba* and *abajo* were overused in the non-native texts; limited lexical repertoire can spell out why *en cuanto a* and *por ejemplo* were overused

by the non-native writers but other markers such as *finalmente*, *por tanto*, *asimismo*, *así pues*, *con todo*, *con respecto a* were underused by them; the genre factor, i.e., genre differences between master's thesis and journal article, can explain the high-frequency markers such as *en el capítulo*, *en el X capítulo*, *en este capítulo*, *anexo* in the novice texts and high-frequency markers such as *en este artículo* in the expert texts.

Finally, I presented qualitative results on functional analysis of each interactive metadiscourse category. The main goal was to investigate whether there were differences across the writer groups concerning those categories' discoursal/rhetorical functions. Generally, most functions were shared among all writer groups. This is understandable as we should expect all writers within the same academic community to follow the same discoursal/rhetorical conventions; otherwise, we would not be able to understand each other's writing. When it comes to functional differences, they can be observed at three levels: frequency, word, and genre. At the frequency level, some functions were used more frequently by one writer group than others. For example, non-native writers utilized fewer reformulators with dismissal function as against native writers, and only novice writers used digressive topicalizers in their writing. At the lexical level, the usage of certain markers was different between groups. For instance, while *ahora bien* functioned as a comparative marker in the native texts, it was surprisingly used as a topicalizer in the non-native texts; native writers used *como (ya) se ha X* to depersonalize reviews, whereas non-natives preferred *como hemos X* to project authorial self in the texts while reviewing information. At the genre level, certain discourse/rhetorical function differences between the novice and expert writer groups were related to genre, like many key interactive markers mentioned previously. For example, in the novice texts some announcers were employed to announce chapter or thesis goals, some previewing markers were used to preview upcoming chapter content, and certain overviews were utilized to describe the thesis in a general way. All these functions were either absent from the expert writing or accommodated to the article genre; for instance, announcers in a journal article were used to announce article goals accordingly.

Chapter 6 Results: Interactional Metadiscourse

In this second and last results chapter, I present quantitative and qualitative analysis results of the second dimension of metadiscourse—interactional dimension—used by the four Spanish writer groups.

Following the same structure of the preceding results chapter, I first provide the results of overall descriptive and inferential statistics based on the normalized frequency of each interactional metadiscourse category. This part allows us to see whether there are any statistical differences in the employment of interactional metadiscourse resources by the four writer groups. I then show some key interactional metadiscourse markers that were salient in one corpus when compared against other corpora. This enables us to focus on the different choices of interactional metadiscourse markers made by different writer groups. Possible explanations for the most salient markers are also provided. Lastly, I give contextualized examples from the corpora to illustrate how Spanish academic writers utilize interactional resources to perform nuanced discursal and rhetorical functions. A summary of the content is provided at the end of the chapter.

6.1. Results of multivariate analysis of variance

6.1.1. Overall descriptive statistics

The following table summarizes the descriptive statistics (based on a normalized frequency of 10,000 words) of each interactional metadiscourse category by writer nativeness and expertise.

As we can observe in Table 6-1, the categories of ‘Hedges’ and ‘Self-mentions’ have the most striking results: first, these two were the most frequently employed resources in the interactional dimension; second, their use displays a clear distinction

Table 6-1 Means (M) and standard deviations (SD) of the normalized frequency of each interactional metadiscourse category across the four corpora

Metadiscourse category	Native				Non-native			
	Expert		Novice		Expert		Novice	
	(M)	(SD)	(M)	(SD)	(M)	(SD)	(M)	(SD)
Hedges	53.1	35.1	52.7	23.2	39.1	17.1	38.2	16.7
Boosters	24.3	13.8	19.8	9.20	19.5	10.5	22.9	9.88
Attitude markers	11.4	7.33	16.2	6.78	14.1	8.45	15.7	7.94
Self-mentions	35.6	32.6	34.6	40.0	51.4	25.2	72.9	36.6
Engagement markers	18.8	17.5	31.1	34.1	27.1	20.6	29.7	17.9
Reader references	10.2	15.7	12.8	15.6	10.4	11.5	18.0	16.2
Directives	6.60	7.27	15.9	25.2	11.7	12.0	8.19	7.78
Shared knowledge	0.40	1.09	0.27	0.58	0.99	1.36	1.05	1.05
Questions	1.62	3.42	2.17	4.00	3.96	4.69	2.46	2.10

Note: This table is a simplified display of the test results from Jamovi. The full statistical report can be found in Appendix V.1.

between the writer groups. Specifically, the two non-native writer groups produced fewer hedges than the native ones. In contrast, self-mentions used by the two non-native groups outnumbered those by the native ones. It is noteworthy, however, that the frequencies of self-mentions in the four corpora have the highest standard deviations, which implies that there was a great deal of variation in self-mention use among individual writers of each writer group. In the following sections, I will investigate whether these differences are statistically significant and explain the possible reasons behind them.

It also seems that the subcategory of ‘Engagement marker’ —‘Shared knowledge’— indicates a difference between native and non-native groups. Nevertheless, it is hard to tell whether the difference is truly meaningful since this category is extremely rare in our corpus (only 81 cases in total).

Regarding the remaining interactional resources, the frequency differences across nativeness statuses and expertise levels are not evident enough to notice, although a single writer group may frequently or infrequently use one particular category against the other three groups. For example, Spanish-speaking expert writers generally employed less interactional resources than other writers, except for ‘Hedges’. Interestingly, this finding is quite consistent with the previous observation about

interactive metadiscourse, where native experts have also been shown to use fewer interactive resources than the other three groups (see Section 5.1.1).

6.1.2. Inferential statistics

As noted in previous chapters, the inferential statistical test I adopted for this part is two-way MANOVA since in our data two factors (i.e., nativeness and expertise) were involved, and multiple dependent variables (i.e., metadiscourse categories) were analyzed simultaneously and collectively in a single design, namely a multivariate approach.

Like the procedure of the MANOVA test applied to interactive metadiscourse, the current one also needs to check the statistical assumptions first. In Section 4.3.1.1, I already mentioned five main assumptions for conducting a two-way MANOVA. While the first two (i.e., independence of observation and adequate group sample size) have been verified in the same section, the other three assumptions (i.e., no univariate or multivariate outliers, homogeneity of variance-covariance matrices, and multivariate normality) can only be reviewed during the MANOVA test.

Therefore, I utilized Jamovi to run the two-way MANOVA and check the remaining assumptions at the same time. Having inspected the box plots of each dependent variable (Figure 6-1) and Q-Q plot of multivariate normality (Figure 6-2), as well as Box's M test ($p < .001$) and Shapiro-Wilk test ($p < .001$), I reached the same conclusion as the previous MANOVA test: all three assumptions were violated.

Given the failure of assumption checks, I first tried to implement some remedies such as data transformation (see also Section 5.1.2). However, it turned out that the normality issues remained unsolved. In the end, I did the same as the previous test and decided to run separate Mann-Whitney U tests for each dependent variable and by each factor.

Despite the problems observed, I still report the two-way MANOVA test results as I did in the last chapter because the multivariate and univariate test results from MANOVA at least can be seen as indicative of a possible existence of main effects (i.e.,

Figure 6-1 Box plots for each interactional metadiscourse category

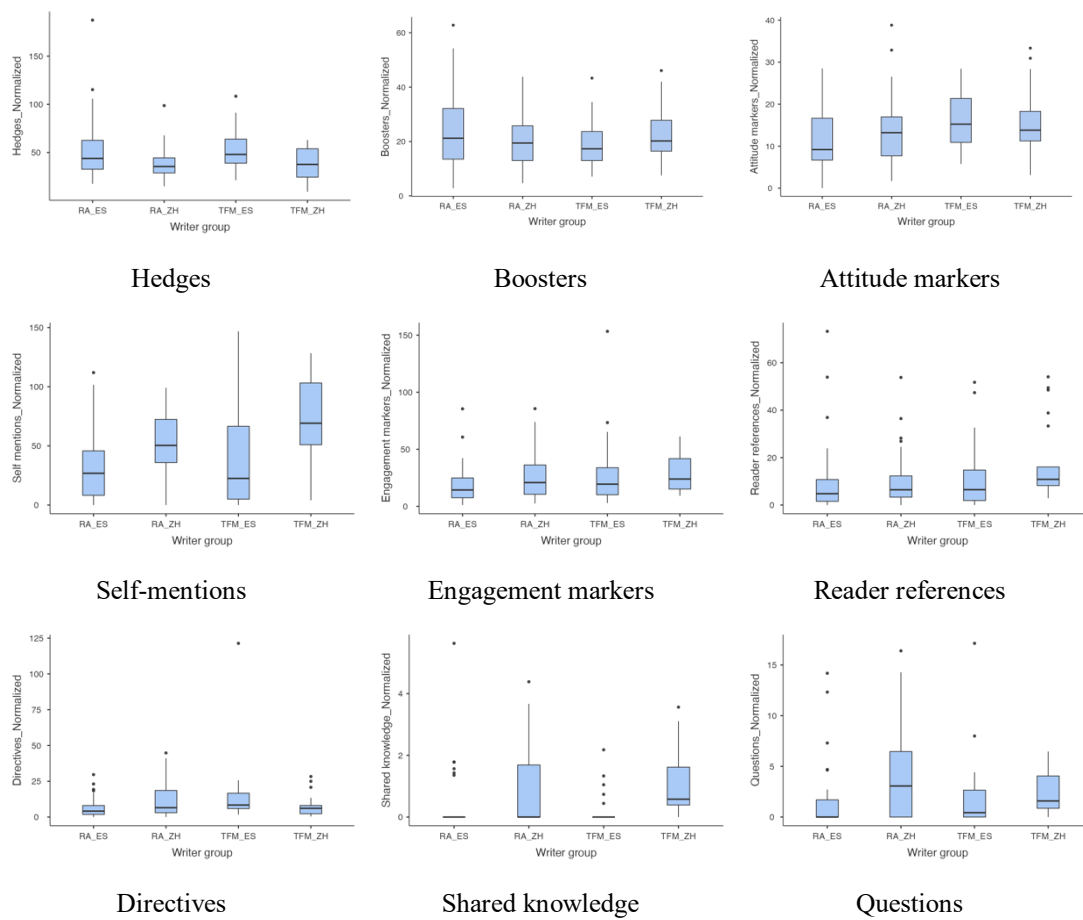
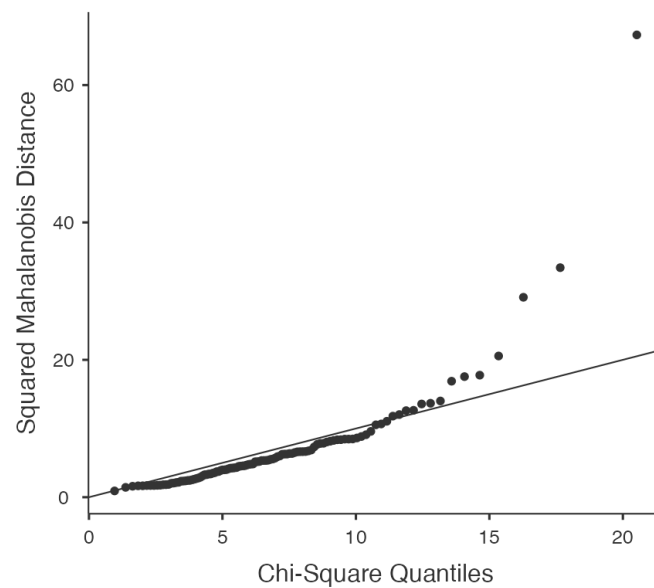


Figure 6-2 Q-Q Plot assessing multivariate normality (from Jamovi)



nativeness and expertise) and interaction effect (i.e., nativeness \times expertise) on

interactional metadiscourse as a composite (linear combination) (see Table 6-2) and each interactional metadiscourse category as an individual (see Table 6-3).

Table 6-2 P values of multivariate tests for interactional metadiscourse

Multivariate test statistics	Nativeness	Expertise	Nativeness × Expertise
Pillai's Trace	<.001*	0.245	0.025*
Wilks' Lambda	<.001*	0.245	0.025*
Hotelling's Trace	<.001*	0.245	0.025*
Roy's Largest Root	<.001*	0.245	0.025*

Note: This table is a simplified display of the test results from Jamovi. The full statistical report can be found in Appendix V.2.

Table 6-2 seems to suggest that there was a statistically significant difference in the use of combined interactional resources across non-native/native writer groups (as indicated by asterisk *), while no significant difference was found across novice/expert writer groups. On the other hand, there seemed to be an interaction effect between the factor of nativeness and expertise on the composite of interactional metadiscourse.

Table 6-3 P values of univariate tests for interactional metadiscourse

Dependent variable	Nativeness	Expertise	Nativeness × Expertise
Hedges	0.004*	0.895	0.958
Boosters	0.419	0.806	0.076
Attitude markers	0.305	0.040*	0.284
Self-mentions	<.001*	0.115	0.084
Engagement markers	0.293	0.093	0.278
Reader references	0.445	0.080	0.384
Directives	0.944	0.287	0.021*

Note: This table is a simplified display of the test results from Jamovi. The full statistical report can be found in Appendix V.3.

The univariate table (Table 6-3), on the other hand, seems to suggest that the main effects and interaction effect were only detected in a few individual interactional categories. Specifically, the main effect of nativeness was only found in the use of hedges and self-mentions. Although the main effect of expertise on combined interactional resources was not detected, there seemed to be an expertise effect on the use of attitude markers. Lastly, the results seem to indicate an interaction effect between

nativeness and expertise on the resource of directives. In this univariate test, I did not include the two subtypes of ‘Engagement markers’—‘Shared knowledge’ and ‘Questions’—in the statistical analysis because there were insufficient data for them (cf. Hu & Cao, 2015).

Now we turn to Mann-Whitney U test results. For a better comparison with the results of MANOVA, I grouped the p-values from separate Mann-Whitney U tests into one table (see Table 6-4). For the same reason mentioned above, I did not conduct this test on the categories of ‘Shared knowledge’ and ‘Questions’. Moreover, the interaction effect between nativeness and expertise is not provided here because the Mann-Whitney U test cannot assess it, a shortcoming already mentioned in the previous chapter.

As shown from Table 6-4, statistically significant differences across participants’ native status were found in ‘Hedges’, ‘Self-mentions’, ‘Engagement markers’, and ‘Reader references’. With respect to expertise level, statistically significant results were found in ‘Attitude markers’ and ‘Reader references’. If the alpha level was adjusted by Bonferroni correction, then the only statistically significant difference was detected in self-mention use across nativeness (as indicated by dagger marker †).

Table 6-4 P values of Mann-Whitney U test for interactional metadiscourse by nativeness and expertise

Dependent variable	Nativeness	Expertise
Hedges	0.010* (Non-native < Native)	0.553
Boosters	0.680	0.983
Attitude markers	0.406	0.019* (Novice > Expert)
Self-mentions	< .001* † (Non-native > Native)	0.348
Engagement markers	0.047* (Non-native > Native)	0.065
Reader references	0.037* (Non-native > Native)	0.032* (Novice > Expert)
Directives	0.570	0.553

Note: This table is a simplified display of the test results from Jamovi. The full statistical report can be found in Appendix V.4-5.

For the significant results, I further compared their median frequencies⁴⁰ across the writer groups to determine which group employed those resources significantly more

⁴⁰ For the reason why I chose to compare medians instead of means, see footnote 30.

(as indicated by ‘>’ in the table) or significantly less (as indicated by ‘<’ in the table) than the other group. Specifically, the non-native writer groups used significantly fewer hedging resources than their native counterparts but employed significantly more self-mentions than the native groups. This finding corroborates what has been observed from the descriptive statistics in the previous section. Apart from this, the non-native writers also used more engagement markers in general and reader references in particular. In terms of writer expertise, it is shown that the novice writers utilized significantly more attitude markers and reader references than their seniors.

To end this section, I should stress that the above findings are not simply a series of values that indicate statistically significant results, but they can be theoretically meaningful and interpretable. In what follows, I will combine the findings in key item analysis and qualitative textual analysis to understand and interpret these results.

6.2. Results of key interactional metadiscourse markers

This section presents the results of the key item analysis of interactional metadiscourse markers. Following the same method adopted in interactive metadiscourse item analysis, I generated two key interactional item lists: one for the non-native and native group comparison and the other for the novice and expert group comparison⁴¹.

In the following two sections and four subsections, I show salient interactional metadiscourse markers by nativeness and expertise successively. Due to space constraints, however, only the top 10 salient markers will be displayed and further analyzed if more than ten items pass the 2.00 threshold of the BIC score (see Section 4.3.1.2). Despite this, more relevant markers will be brought up where necessary to characterize their saliency.

⁴¹ The full lists can be viewed at https://osf.io/ezak6/?view_only=f42b20377ae24e0aaba0ff6be60338ba.

6.2.1. By nativeness

6.2.1.1. Characteristic markers of the non-natives

Table 6-5 shows the top 10 most salient interactional markers that are highly distinctive of the non-native texts. The first striking thing about the table is that the non-native writers used significantly more first-person plural pronouns, either in subject ((*nosotros*) **mos*), possessive (*nuestr**), or object (*nos*) forms. We know that the employment of these pronouns makes up a significant part of ‘Self-mentions’ (i.e., exclusive (*nosotros*) **mos*, *nuestr**, *nos*) and ‘Reader references’ (i.e., inclusive (*nosotros*) **mos*, *nuestr**, *nos*). After scrutinizing the category assigned to these three markers, I found that approximately 75% of the cases were ‘Self-mentions’, which, to a large extent, can explain why non-native writers were found to use significantly more ‘Self-mentions’ than native writers in the previous inferential statistical test. The use of self-mentions can be seen as a resource that writers employ to project an authorial persona and voice in their academic writing (Mur-Dueñas, 2007; Lafuente-Millán, 2010; Can & Cangır, 2019; Carrió-Pastor, 2020). In this sense, the non-native writers in our corpus were quite generous in showing their authorial presence and voice in writing.

Table 6-5 Top 10 most salient interactional markers characteristic of the non-native texts

Marker	Non-native		Native		LL	%DIFF	BIC
	RF	NF (pttw)	RF	NF (pttw)			
(nosotros) *mos	4187	67.77	1963	32.89	747.56	106.03	733.55
nuestr*	724	11.72	255	4.27	218.22	174.25	204.21
normalmente	140	2.27	23	0.39	89.29	487.97	75.28
nos	520	8.42	259	4.34	80.35	93.93	66.34
opinamos que	36	0.58	0	0.00	48.67	5.83E+15	34.66
hace falta	45	0.73	2	0.03	47.14	2073.37	33.13
a veces	92	1.49	22	0.37	43.81	303.94	29.80
generalmente	154	2.49	57	0.96	43.02	160.97	29.01
en realidad	98	1.59	27	0.45	40.41	250.60	26.40
descubrir que	39	0.63	2	0.03	39.59	1783.59	25.58

RF = raw frequency; NF = normalized frequency; pttw = per ten thousand words.

Indeed, the corpus data indicates a clear preference difference between Spanish non-native and native writers as to the use of self-mentions (*nosotros*) **mos*. Recall from the previous chapter (Section 5.2.1.2) that when reviewing earlier information, non-native writers preferred the author-prominent construction *como hemos X* while native writers opted for the depersonalized construction *como (ya) se ha X*. The roughly matched excerpts below further support the fact that non-native writers seemed to always foreground themselves as the collective agents (so-called *nosism*) who convey the commitments and perform the acts (49a-c); meanwhile, native writers seemed to prefer impersonal expressions to avoid an explicit agency as much as possible in the texts (50a-c), which is in line with Valero-Garcés' (1996) observation.

- (49) d. En este apartado vamos a analizar las estrategias de representación de las Rel. en chino. (TFM_ZH_LIN_04)
- e. Con un análisis preliminar de las distintas propuestas y el corpus, decidimos adoptar la propuesta de Nida, pero con la de Molina como complementaria. (TFM_ZH_TRA_04)
- f. Podríamos decir que la realización de estas investigaciones no sólo se debe a la voluntad personal de los estudiosos, sino también a la iniciativa colectiva. (RA_ZH_LIN_06)

- (50) a. En este apartado se van a analizar las percepciones indirectas de los profesores de ELE encuestados hacia las variedades cultas del español según dos vertientes (TFM_ES_LIN_12)
- b. Se decidió, entonces, orientar el presente trabajo de fin de máster hacia esta línea de investigación. (TFM_ES_LIN_12)
- c. Por tanto, podría decirse que no hay problemas a la hora de traducir las perífrasis verbales de participio con este motor. (TFM_ES_TRA_04)

Non-native writers' preference for authorial presence can also be evidenced by the overuse of a particular case of first-person plural pronoun *nos*: dative of interest. It especially serves to signal that the author is the recipient or beneficiary of an action or a state. Although not necessarily indispensable elements in a sentence, it certainly increases the authorial visibility. Some examples are shown as follows:

- (51) a. La descripción de estos objetos exóticos en la novela de Galdós,

- Fortunata y Jacinta, publicada en 1887, nos puede confirmar la popularidad de las mercancías chinas en la clase media-alta de Madrid (RA_ZH_LIT_01)
- b. En base del análisis de estos dos tipos del espacio narrativo, nos es posible llegar a conocer la conciencia femenina de Carmen Laforet. (TFM_ZH_LIT_02)
- c. nos es especialmente útil porque permite establecer qué aspectos estructurales de significado comparten las unidades léxicas semánticamente relacionadas (RA_ZH_LIN_05)

From the above, we know that Spanish native writers were generally more cautious about using self-mentions, which conforms to the general academic writing norms imposed by some style manuals and textbooks (see Lafuente-Millán, 2010; Jiang & Hyland, 2020; Z. Li, 2021). For instance, as indicated explicitly in a Spanish academic writing manual (Montolío & Santiago, 2018), first person and second person should be avoided in the academic text as they are generally considered informal and subjective; in contrast, strategies such as impersonal expressions (*se + v.*) are recommended to gain generalizing interpretation and convey the writer's objectivity and modesty.

Chinese writers in our corpus, on the other hand, seemed to have a carefree attitude towards a high presence of authorial self. This reflects to some extent their unfamiliarity with the writing conventions of the target academic community (Spanish in this case).

This speculation can be further corroborated by another salient marker in Table 6-5, *opinamos que*. Since it was only (and frequently) used by the non-native novice writers, it is also featured as a top salient marker when compared against the expert corpora (see Table 6-7). While it was treated as a hedging device in our corpus, it of course can be seen as a self-mention at the same time. The use of this marker demonstrates the writer's "strategy of subjectivisation" (Martín-Martín, 2008: 138), revealing their personal beliefs and subjective perceptions, from which the scientific and academic prose tries to be dissociated (Lafuente-Millán, 2010). Another similar marker that expresses personal belief is *creemos que*, which is distinctive of the novice texts and will be addressed later.

Back to the table, there are three hedging markers specific to the non-native texts,

namely *normalmente*, *a veces*, *generalmente*. I put them together for analysis because they all belong to the class of vague terms or “approximators” (Salager-Meyer, 1994; Martín-Martín, 2008) in academic writing. In other words, their use makes statements more imprecise and less categorical, thus more generalizable. When the exact information is not available or simply not relevant to the reader, by using approximators the writer can avoid giving overstatements (Martín-Martín, 2008). Non-native writers frequently used them probably because they wanted to lower the precision of their claims, guarding against criticism even if exceptional cases or circumstances of the claims come up. As regards native writers, while they do utilize this kind of vague terms, the frequency was not salient. Nevertheless, they relied heavily on other hedging resources—conditional verb form (**ría*) and *parecer*—which will be addressed in the next section.

Among these three approximators, *normalmente* merits further attention because the frequency contrast of this marker between the non-native texts and native texts is sharp (2.27 pttw vs. 0.39 pttw). I believe that there could be another reason apart from the fact that non-native writers favored approximators. According to Fuentes Rodríguez (2009: 232), *normalmente* is a colloquial variant of *generalmente*. It thus can be argued that the lack of register awareness might play a role in the overuse of this marker on the part of non-natives.

This latter reason may also account for another salient marker characteristic of the non-native texts, *hace falta*. This attitude marker, similar to *cabe*, *hay que*, *es necesario*, is often used to denote the writer’s obligation or necessity of (doing) something, although the writer’s presence can be explicit or implicit (52a-b) (see Section 6.3.3 for more details). While there was no considerable difference in the use of the other three markers, the frequency difference in the use of *hace falta* was significant between the native and non-native corpora. Further corpus examination revealed that 39 out of 47 cases were produced by the non-native novice writers. Based on the consultation in *Corpus del Español (Genre/Historical)*, I found that this marker is mainly used in spoken discourse and rarely used in academic discourse (oral vs. academic: 0.55 pttw vs. 0.03 pttw). Hence, it suggests that this marker may not be ideal

for a formal register like academic prose.

- (52) a. Al mismo tiempo, opinamos que el análisis teórico no basta para conocer la adquisición fonética de los alumnos; hace falta complementarlo con un estudio empírico de para confirmar los resultados del análisis (TFM_ZH_LIN_03)
- b. Para predecir si un verbo tiene el valor positivo o negativo del rasgo de duración, simplemente nos hace falta comprobar si es compatible con un adjunto de tiempo que denota la duración. (TFM_ZH_LIN_14)

The last two markers, *en realidad* and *descubrir que*, are boosters. I believe their overuse is due to different reasons. The first one could be related to low register awareness on the part of non-native writers. Based on the consultation in *Corpus del Español (Genre/Historical)*, *en realidad* was found to be significantly more frequent in the spoken register than in the academic register (2.89 pttw vs. 0.57 pttw). Another functionally similar phrase *de hecho* would be more suitable for formal academic prose. However, the non-native writers underused (although not significantly) this marker as against their native counterparts (1.17 pttw vs. 1.78 pttw).

The second booster *descubrir que* was more frequently used in the non-native texts while it was nearly absent in the native ones. The reason for this could have to do with the meaning of *descubrir*. Like its English cognate ‘discover’, this word is usually used to say something unknown before has been found now. In scientific writing, this often implies a major breakthrough of the findings. As Wette (2021) suggests, strong and definite statements should be avoided unless conclusive evidence supports them. Academic writers who know the convention well would be cautious about using this marker and prefer a more neutral and mild wording, such as *encontrar que*, which will be discussed later. Non-native writers, in contrast, were perhaps not aware of the nuances of meaning. The following examples produced by the non-native writers illustrate that the use of *descubrir que* might be inappropriate.

- (53) a. Ahora bien, si consideramos el ejemplo del (9b), descubrimos que el sintagma nominal en la posición del sujeto el pan puede tener dos interpretaciones (RA_ZH_LIN_07)

- b. Si revisamos la tabla que exponemos en el §2.1.2, descubriremos que después de la añadidura del aspecto perfectivo, tanto los estados como las actividades se interpretan con el mismo patrón de rasgos de las realizaciones, que es [+durativa] [+delimitada] [+dinámica]. (TFM_ZH_LIN_14)

6.2.1.2. Characteristic markers of the natives

Now we shall examine the interactional markers that are distinctive of the native texts.

The top 10 most salient markers are provided in the table below.

Table 6-6 Top 10 most salient interactional markers characteristic of the native texts

Marker	Non-native		Native		LL	%DIFF	BIC
	RF	NF (pttw)	RF	NF (pttw)			
*ría(n)	372	6.02	1146	19.20	441.10	218.93	427.09
cf.	12	0.19	210	3.52	221.32	1711.70	207.31
parecer	99	1.60	273	4.57	90.79	185.48	76.78
vid.	0	0.00	58	0.97	82.43	9.72E+15	68.42
precisamente	18	0.29	85	1.42	49.69	388.87	35.68
me	6	0.10	48	0.80	38.66	728.21	24.65
(yo)	33	0.53	96	1.61	34.35	201.17	20.34
ver	0	0.00	24	0.40	34.11	4.02E+15	20.10
ciertamente	0	0.00	22	0.37	31.27	3.69E+15	17.26
probablemente	11	0.18	49	0.82	27.34	361.16	13.33

RF = raw frequency; NF = normalized frequency; pttw = per ten thousand words.

First, let us look at the two hedging devices, **ría(n)* and *parecer*. The data of these two markers are striking as they are ranked first and third in the table, besides having the highest frequencies in the native texts. The extremely high frequency of **ría(n)* (around 28% of all hedges) can explain why the native writers used significantly more hedges than their non-native counterparts (see Table 6-4). It is therefore certain that native writers particularly favored them while non-native writers considerably underused them.

In the previous section, it has already been mentioned that non-native writers significantly employed more approximators (e.g., *generalmente*, *normalmente*) to make statements vaguer and more generalizable. These approximators pertain to the degree

of precision about a statement. Meanwhile, hedges like **ría(n)* and *parecer* signal the writer's degree of uncertainty about a statement or "the writer's confidence in the truth of a proposition" (Hyland, 1996: 441). This type of hedges is called "shields"⁴² (Salager-Meyer, 1994). When the writer has hesitation about the closeness between what is assumed or claimed and what actual fact is, she or he is more likely to use shields. Based on the saliency of these two markers, it can be deduced that the native writers tended to make statements with less conviction, probably because it is their preferred way of building a "humble servant" image in the academic community (Myers, 1989; Salager-Meyer, 1994). In contrast, the non-native writers did not seem to express many reservations concerning their claims, probably unfamiliar with the implicit "rules" of communicative behavior. This point can be illustrated with the roughly matched examples below:

- (54) a. Si la relación de sinonimia fuera discreta, sería esperable encontrar tiempos de reacción homogéneos en todas las parejas de palabras. (RA_ES_LIN_08)
- b. Para acabar, sería conveniente llevar a cabo una puesta en común con el resto de los grupos de clase para comparar los datos reunidos y proponer mejoras. (TFM_ES_LIN_03)
- c. Desde este punto de vista, resultarían cruciales aspectos como una detallada descripción de los rasgos idiosincráticos de los informantes y su contexto, un adecuado control sobre los factores situacionales y un análisis cruzado de las producciones de dichos informantes con las correspondientes en lengua fuente. (RA_ES_LIN_24)
- (55) a. Si carecemos de la existencia de las lenguas étnicas, nuestros conocimientos sobre el mundo no serán tan sistemáticos y completos. (RA_ZH_LIN_24)
- b. opinamos que será conveniente añadir una nota al pie de página explicando este "chengyu" y su relación de esta frase con el fin de conseguir una mejor equivalencia funcional. (TFM_ZH_TRA_04)
- c. En fin, el exceso o abuso del formas exóticas introducidas por la

⁴² Salager-Meyer's taxonomy of hedges was based on English. Shields includes all English modal auxiliary verbs expressing possibility (e.g., *may*, *might*), semi-auxiliaries (e.g., *to seem*, *to appear*), probability adverbs (e.g., *probably*, *likely*) and their derivative, and epistemic verbs (e.g., *to suggest*, *to speculate*). In the case of Spanish, while conditional morpheme of a verb *-ría(n)* seems not applicable to this taxonomy, it can be translated as modal verbs in English (Beke, 2005; Butt, Benjamin, & Moreira Rodríguez, 2018: 326–327). Following Mur-Dueñas (2011), J. J. Lee & Casal (2014), Acín Villa (2016), and Menke (2021), we treated **ría(n)* as shields in this study (see a similar operation in Crismore, Markkanen, & Steffensen, 1993 for Finnish conditional mood). Lastly, according to Martín-Martín (2008: 138), *parecer* is a semi-auxiliary.

extranjerización resultará desagradables e inaceptables para los
lectores de la lengua meta. (TFM_ZH_TRA_02)

Next, we look at *cf.*, *vid.*, *ver* together not only because they all function as ‘Directives’ (to direct readers to other materials) but also because their underuse by the non-native writer groups share the same reason: limited lexical repertoire. The first two are Spanish abbreviations of Latin words *confer* (‘compara’) and *vide* (‘véase’). It is possible that L1 Chinese writers were not very familiar with these two words because of their highly formal nature and infrequency. While their number of occurrences in native corpora was not low, further examination revealed that TFM_ES_LIN_02 alone contributed to 138 cases of *cf.* and that *vid.* appeared only in three text files of the native novice corpus, just above the threshold of text dispersion. The last one *ver* was probably unfamiliar to the non-native writers too. Although the word itself is an extremely common Spanish verb, its infinitive form with imperative tone (usually within parentheses, for example (*ver Tabla 1*)) is not common, unlike the case of imperative verbs in English. There is yet another interesting point with *ver*: the impersonal structure of this marker, which contrasts with other personal pronoun forms such as *véase*, *véanse*, and *veamos*, demonstrates again that native writers preferred a depersonalized way to tone down the directive language they used. As some scholars (Luukka & Markkanen, 1997) suggest, the strategy of impersonalization that concerns the avoidance of direct reference to the addressee can be seen as a form of hedging.

Thirdly, we look at the most direct form of showing authorial self in the text: first-person singular pronoun (*yo*) and *me*⁴³. It can be seen from the table that the non-native writers significantly underused these two pronouns. It was previously mentioned that L1 Chinese writers used significantly more self-mentions such as (*nosotros*) **mos* than Spanish native writers. Oddly enough, (*yo*) and *me* also belong to the category of self-mentions but are significantly underused by the non-native writers. This finding conforms to Wang & Jiang’s (2018) and Leedham & Fernandez-Parra’s (2017) observation on the use of *we* and *I* by Chinese students compared to English native

⁴³ Although the first-person singular possessive determiner *mi(s)* was not salient enough to appear in the table, it was still underused by the non-native writers (0.21 pttw) as against the native writers (0.60 pttw).

expert writers and English native students. I agree with Wang & Jiang's (2018) explanation that it can be attributed to the culture-bound factors, as in a collective culture like China “*I* is often subordinate to *we*” and “*we* is preferred to represent [...] collective body” (pp. 211-212) (see also T. Li & Wharton, 2012). Another possible explanation is suggested in Hyland (2002d), where a group of Hong Kong students was interviewed about their attitude towards using the first person. Some of them were reluctant to employ *I* because they were taught not to use it, which suggests that there might be an institutional factor at work (Uba & Baynham, 2017). Others thought *I* was too subjective and assertive for academic writing, whereas “‘collective *we*’ (*pluralis communis*)” or “‘humble *we*’ (*pluralis modestiae*)” (Vassileva, 1998: 173) was preferred as it maintains a rhetorical distance and authorial modesty, avoids personal intrusion but not completely eliminates their presence from the text.

Back to the table, the last three salient markers characteristic of the native texts are *precisamente*, *ciertamente*, and *probablemente*. The first two are boosters while the last one is a hedge. I grouped them together because the underuse of these three adverbial markers is possibly related to the lexical competence of the non-native writers. They can be seen as advanced vocabulary, especially the case for *ciertamente*, which was absent from the non-native texts. After an examination of the entire list of interactional markers by nativeness, the non-native writers were found to employ a limited range of familiar alternatives to these markers. For instance, *justamente* were preferred by the non-native writers; *sin duda alguna* and *seguramente* were the few options available to them; *posiblemente* and *ser posible* were quite frequent in the non-native texts.

6.2.2. By expertise

This section will present the most salient interactional markers in the novice texts and expert texts. However, as we will see, the BIC score of these markers by expertise is much lower than that of the salient markers by nativeness. Recall that a BIC score above 2.00 is considered positive evidence for statistical saliency (i.e., statistical significance

threshold), as mentioned earlier. Items with BIC scores below 2.00 are recommended to be filtered out (see Section 4.3.1.2). Hence, in the following two subsections, I only show and interpret those salient markers with BIC score above 2.00.

6.2.2.1. Salient markers specific to novice texts

After the cut-off value of 2.00 was applied, only six salient interactional markers distinctive of the novice texts were left (see table below). Interestingly, except for the last one, all the first five markers have also appeared in the previous tables of salient interactional markers by nativeness, which means that the frequency of these markers was extremely high in either the native novice corpus or the non-native novice corpus.

Table 6-7 Salient interactional markers characteristic of the novice texts

Marker	Novice		Expert		LL	%DIFF	BIC
	RF	NF (pttw)	RF	NF (pttw)			
(nosotros) *mos	4451	54.84	1669	42.16	88.13	30.06	74.12
vid.	58	0.71	0	0.00	46.76	7.15E+15	32.75
opinamos que	36	0.44	0	0.00	29.02	4.44E+15	15.01
(yo)	109	1.34	20	0.50	20.72	170.56	6.71
nuestr*	717	8.83	262	6.50	18.84	35.86	4.83
creemos que	91	1.12	17	0.42	16.84	165.74	2.83

RF = raw frequency; NF = normalized frequency; pttw = per ten thousand words.

Indeed, we have already seen that all 58 cases of *vid.* came from three text files of the native novice corpus (in fact, 57 cases from two of them), and that all 36 cases of *opinamos que* were produced by the non-native novice writers. Therefore, it can be said that the frequent use of *vid.* could be simply an idiosyncrasy of few native novice writers. Meanwhile, the frequent occurrence of *opinamos que* in the non-native novice texts can be accounted for by the unprofessional writing skill of non-native novice writers; that is, they were not familiar with the writing convention that the writer's personal beliefs and subjective perceptions should be avoided as much as possible, as noted earlier. The same reason can also explain the frequent use of *creemos que* in the novice corpora, where the non-native novices produced most cases of it (60 out of 108

cases). I even found 10 cases of *creo que* in the non-native novice texts, which is an obvious sign of amateurism on the part of non-native novice writers.

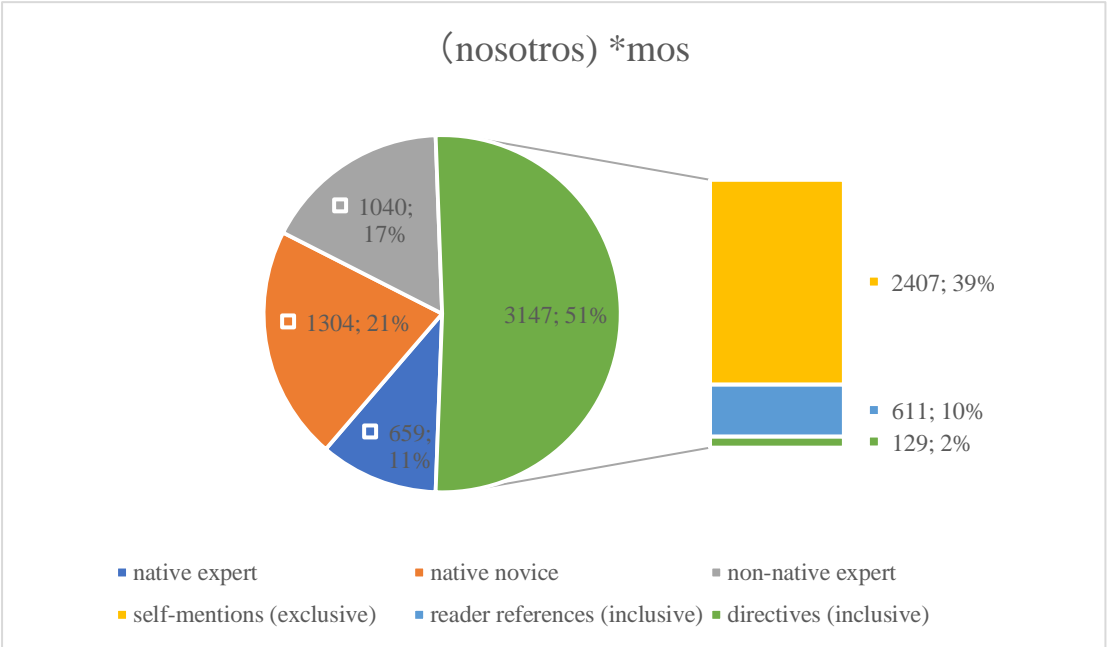
In terms of *(nosotros) *mos* and *nuestr**, based on their frequency distribution across the writer groups (see Figure 6-3 and Figure 6-4), we know that in total 3,147 cases of *(nosotros) *mos* (amounting to 51% of all cases or 71% of all cases from the novice texts) and 592 cases of *nuestr** (amounting to 60% of all cases or 83% of all cases from the novice texts) came from the non-native novice texts. When breaking down these cases according to their functions (see the stacked bars on the right side), not surprisingly, I found that non-native novice writers predominantly employed them as self-mentions. As already brought up previously, L1 Chinese writers especially liked projecting their authorial self in the texts through a collective agent (i.e., exclusive *nosotros*). This can be attributed either to their unfamiliarity with the Spanish academic writing conventions that the authorial presence tends to be kept invisible as much as possible or to the collective culture of Chinese writers.

Lastly, since the use of *(yo)* was salient in both native and novice corpora, it can be inferred that *(yo)* was frequently used by the native novice writers. The frequency information from the corpus indeed shows that this marker occurred 73 times in the native novice texts, which accounts for 57% of all cases and 67% of all cases from the novice texts. By comparison with Chinese students' reluctance to use *(yo)* (see the preceding section), Spanish students appeared to have no difficulties showing themselves as individual authors directly in the text. After contextualizing its use in the corpus (see also Section 6.3.4), I found that the Spanish native student writers tended to utilize this type of self-mentions to describe their first-hand experience (56a) and the procedure conducted in the research (56b).

- (56) a. En mi caso - y, quizás, como muchos otros aprendientes- también he aprendido léxico que jamás he llegado a utilizar. Por ello, considero de suma importancia que el profesor de Español como Lengua Extranjera (ELE) y EFE conozcan la existencia de corpus para tener una referencia sobre el léxico que realmente conviene enseñar. (TFM_ES_LIN_11)
- b. De este modo, informé a los informantes de que mis intervenciones

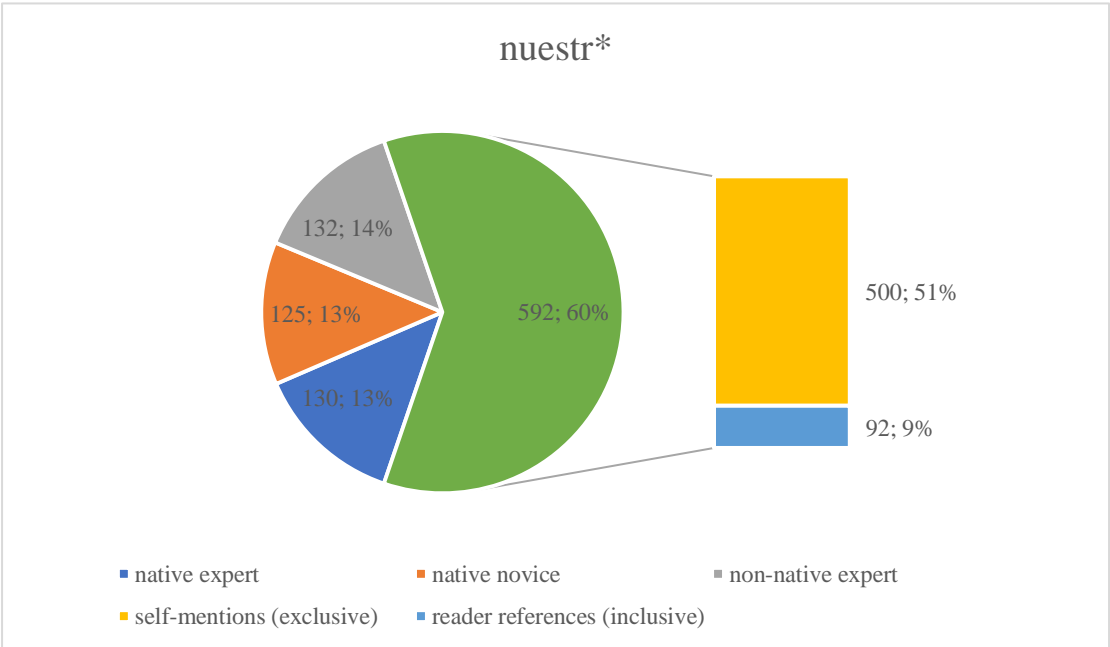
iban a ser mínimas y de que iba a intentar no interrumpirles en la medida de lo posible. (TFM_ES_LIN_14)

Figure 6-3 Frequency and proportional distribution of *(nosotros) *mos*



Note that I did not take into account the size of each corpus, because here I am only interested in overall proportional distribution.

Figure 6-4 Frequency and proportional distribution of *nuestr**



Nevertheless, the above finding that different writer groups had different choices between first-person plural pronoun and first-person singular pronoun becomes

complicated if we bring in the factor of genre. Recall that the genre differences between a master's thesis and a research article influence whether the text is single-authored or multiple-authored (see Table 3-3). This factor, to some degree, can explain that the novice writers, which are all single authors, used significantly more (*yo*) than the expert counterparts (single or multiple authors). This factor, however, cannot explain the low frequency of first-person singular pronouns but the high frequency of first-person plural pronouns in the single-authored theses produced by Chinese students. To make things even more complicated, the same situation also happens in Chinese expert articles, which are primarily single-authored too (27 out of 34 texts). I believe, when it comes to the special case of Chinese writers, the genre factor could be overbalanced by the culture-bound and institutional factors mentioned earlier. In other words, although most Chinese writers are single authorship, they try to avoid singular self-mentions but prefer plural self-mentions because of their collective culture or the writing requirements from the institution.

6.2.2.2. Characteristic markers of the experts

Regarding interactional metadiscourse markers characteristic of the expert texts, only five were left after the cut-off value of 2.00 was applied (see Table 6-8). Firstly, it is noticeable that **ría(n)* in the table also appeared as a top salient marker distinctive of the native texts (see Section 6.2.1.2). We can thus appreciate that the native expert writers especially favored using conditional tense to hedge statements. The frequency information by writer groups also reveals that the total 430 cases of **ría(n)* came from the native expert texts, accounting for 28% of all cases or 74% of all cases from the expert texts. As noted in Section 6.2.1.2, this type of hedging strategy (so-called 'shields') concerns the writer's degree of uncertainty about the statements made. With less assertive claims, native experts can detach themselves from the full responsibilities produced from the emitted message (Akbas & Hardman, 2018) and, at the same time, maintain a modest profile among other peers and in the discipline in general.

Table 6-8 Salient interactional markers characteristic of the expert texts

Marker	Novice		Expert		LL	%DIFF	BIC
	RF	NF (pttw)	RF	NF (pttw)			
en efecto	14	0.17	43	1.07	42.63	518.69	28.62
sugerir (que)	12	0.15	32	0.79	28.73	437.16	14.72
*ría(n)	933	11.49	585	14.52	19.22	26.30	5.21
encontrar que	2	0.02	13	0.32	18.52	1209.33	4.51
constatar (que)	9	0.11	21	0.52	16.95	370.02	2.94

RF = raw frequency; NF = normalized frequency; pttw = per ten thousand words.

Secondly, there is overall underuse of *en efecto*, *sugerir (que)*, and *constatar (que)* on the part of novice writers. I believe that lexical competence plays a role in it. All three markers are not common, as evidenced by their overall frequency in our corpus. Moreover, it can be said that they are advanced vocabulary. For example, of the 57 *en efecto* in the corpus, 33 cases were produced by the native expert writers while the non-native experts produced 10 cases, the native novices produced 9 cases, and non-native novices produced 5 cases. If different corpus sizes are considered, the frequency contrast between the expert and novice groups (especially between the native expert writer group and the other three groups) becomes more apparent. Thus, due to the high lexical sophistication of these three markers, it should be expected that novice writers, even non-native expert writers, were less likely to produce them in writing.

Lastly, I already brought up *encontrar que* early when discussing the saliency of the marker *descubrir que* in the non-native texts. While the latter is considered a booster with a firm tone only used to announce breakthrough findings, the former is generally considered neutral and mild. Therefore, expert writers who appreciate the nuanced difference between them would be inclined to choose *encontrar que*. Nevertheless, it should be noted that the overall frequency of this marker is very low (15 cases in the whole corpus), which suggests that it is generally uncommon in Spanish academic prose. I conjecture that the use of *encontrar que* might be influenced by its English counterpart *find that*, a very frequent booster in English academic prose.

6.3. Qualitative analysis results for interactional metadiscourse

This section discusses the qualitative results regarding the use of interactional metadiscourse across the four Spanish writer groups. Specifically, some example sentences excerpted from the corpus are given to illustrate specific discoursal and/or rhetorical functions of each interactional metadiscourse category. Additionally, I highlight potential differences across the four writer groups in relation to the functions of each category. Finally, I also try to link the previous quantitative findings to the qualitative interpretations to better understand both.

As already noted in the methodology chapter, the primary function of interactional metadiscourse is to allow the writer to express their stance on propositional information and engage with the reader in the co-construction of the text (Hyland, 2005b, 2005a; Wette, 2021). Under Hyland's interpersonal model, the key resources by which the interactional metadiscourse is realized are 'Hedges', 'Boosters', 'Attitude markers', 'Self-mentions', and 'Engagement markers'. In terms of the last resource, I also drew on Hyland (2005b) and F. Cao (2014) and further divided it into four subcategories, namely 'Reader references', 'Directives', 'Shared knowledge', and 'Questions'. In the following subsections, we look at each of the main categories and subcategories in turn.

6.3.1. Hedges

Hedging is one of the most prominent metadiscourse strategies used by the writer to mitigate knowledge claims and express vagueness, possibility, cautiousness, or tentativeness, thereby withholding full responsibility to propositions (Salager-Meyer, 1994; Hyland, 2005b; Vold, 2006; Yang, 2013). It plays an important role in different parts of academic prose, for instance, introducing the research gap in a respectful and cautious manner, guarding against possible critiques in the discussion of results, acknowledging research limitations, and drawing tentative implications (F. Cao, 2014;

Wette, 2021). Thus, we should expect that hedging devices are pervasive in academic writing in general. Indeed, previous studies (e.g., Hyland, 2005b; Hu & Cao, 2015; Dontcheva-Navratilova, 2020) found hedges were the most frequently used interactional metadiscourse category and even the most heavily used in interactive and interactional metadiscourse combined (see Hyland, 2005a; Mur-Dueñas, 2011). While in the present study hedges were not the most frequently employed interactional resources (5,499 cases, after ‘Self-mentions’), it should be noted that there was a clear distinction between the native and non-native groups in terms of hedging use (see Section 6.1.1). When only the native groups are concerned, hedges turn out to be the most frequent feature in interactional metadiscourse (see Table 6-1). In this sense, the pattern of hedging use by the native groups conforms to previous studies’ observation while that by the non-natives did not.

When utilizing the hedging strategy, Spanish writers in our corpus drew on a wide range of lexical forms, such as verbs with the conditional morpheme **ría(n)*, verbs (e.g., *soler*, *parecer*, *asumir*), adverbs (e.g., *generalmente*, *probablemente*, *aparentemente*), adverbial phrases (e.g., *a menudo*, *por lo general*, *tal vez*), or (noun) complement clauses (e.g., *ser posible que*, *puede que*).

A variety of hedging forms, accordingly, perform a range of functions. The qualitative textual analysis suggested that hedges mainly served five functions: i) to signal the writer’s degree of uncertainty or confidence about the statements; ii) to make statements less categorical or figures less precise; iii) to express the writer’s personal beliefs or doubts; iv) to show politeness; v) to offer suggestions or alternative solutions.

The first three functions have already been discussed in previous sections as we found significant differences in the preference for certain hedging devices across the writer groups. Specifically, native Spanish writers markedly favored the use of plausibility shields (e.g., **ría(n)*, *parecer*) to show the reader their degree of confidence about the truth of propositions. They tended to withhold total commitment to or keep a distance from the claims they made. Meanwhile, L1 Chinese writers significantly underused shields to achieve the same function. The possible reasons have been provided previously. Here I only offer some extracts to illustrate this specific function:

- (57) a. Una de las posibles aplicaciones sería la de prevenir posibles problemas de fosilización. De acuerdo con Long (2003, p.513), la ausencia de feedback adecuado podría ser una de las causas de dicha fosilización. Algunas revisiones recientes realizadas en torno a las evidencias que contamos con respecto al fenómeno de la fosilización (Long, 2003; Oddlin, 2003; Han, 2012), parecen indicar que se trataría de un fenómeno predominantemente local y selectivo que afecta únicamente a determinados dominios y subsistemas del sistema de conocimientos lingüísticos de los aprendices (Han, 2012, p. 485). (RA_ES_LIN_24)
- b. Sin embargo, una elevada competencia del hablante posiblemente evite que estas variables presenten una influencia negativa sobre la actuación gramatical del sujeto. (TFM_ES_LIN_01)

On the other hand, the previous key item analysis showed that L1 Chinese writers had a clear preference to use approximators (e.g., *generalmente*, *normalmente*) to express imprecise descriptions or indefinite claims. By doing so, they voiced possible reservations about the accuracy of propositions and opened a discursive space for their readers to disagree or discuss the interpretations (Hyland, 2005b; Wette, 2021). Alternatively, this strategy is simply an economical way of conveying messages, given that the precise information is irrelevant or the state of knowledge is limited (Salager-Meyer, 1994). Some examples of this function are provided as follows:

- (58) a. Generalmente, un estudiante aprobado en EEE-4 tiene el nivel B1 o B2 según el Marco Común Europeo de Referencia para las lenguas. (TFM_ZH_LIN_03)
- b. Este término tiene una amplia gama de significados y generalmente se refiere a frases que se usan comúnmente juntas y tienen formas específicas, la implicación de su significado a menudo no se puede especular a partir del significado de una sola palabra en la frase. (TFM_ZH_TRA_02)
- c. La tabla 22 indica que hay una diferencia entre la CD de las oclusivas sordas y sonoras. En cada par de fonemas, vemos que la CD media del sordo es más larga: aproximadamente, dos veces de la del sonoro. (TFM_ZH_LIN_03)

Hedges can also be used to express the writer's personal beliefs or doubts (Acín Villa,

2016). This function is unique in the sense that it is the only type of use where the writer's presence is explicitly displayed, hence the name "first person hedges" (Thomson, 2020: 32). The typical lexical forms of this type are *a nuestro juicio*, *desde mi punto de vista*, *creemos que*, *opinamos que*, etc. Our previous key item analysis found that the non-native writers (the non-native novice writers especially) significantly used more certain cognitive verbs of first person hedges. These verbs usually express a highly subjective point of view (e.g., *creemos que*, *opinamos que*), and sometimes are too subjective to sound professional (e.g., *creo que*). Possible reasons have been provided previously. Here I only exemplify this specific function:

- (59) a. Esto implica –a nuestro juicio– que la comparación que se está realizando no es serial, sino holística. Se comparan los dos ítems de forma global. (RA_ES_LIN_08)
- b. Al final, opinamos que incluso los alumnos que dominan el alófono aproximante pueden fallar de vez en cuando. (TFM_ZH_LIN_03)
- c. Creo que ello se debe al principio económico de lenguas (Vicentini 2003), como el sujeto ya ha aparecido en la cláusula matriz, no suele aparecer otra vez en la subordinada. (TFM_ZH_LIN_10)

Regarding the last two functions, no salient differences were detected across the Spanish writer groups. Specifically, hedging devices sometimes can be used as a politeness strategy to cautiously disapprove of peers' argument (Vold, 2006), as exemplified in (60a-b). It is noteworthy that *parecer* is usually treated as a plausibility shield, as mentioned above. However, in the examples below it should be seen as "strategic hedges" or "non-real hedges" (Vold, 2006: 81) because they do not intend to express real uncertainty but to convey dissenting voices politely.

- (60) a. Aunque el resultado de Chen (2011) parece apoyar tal predicción, un análisis más discreto debería abarcar el hecho de que en el caso de los alumnos que hablan el wu se intervengan tres lenguas, en vez de dos, entre las cuales el mandarín y el wu no estarían en las mismas condiciones de transferir al español, como indican Li (2016) y Yuan & Huang (en preparación). (TFM_ZH_LIN_03)
- b. Hay que decir a este respecto que Rodríguez Guerra (1997) identifica la telicidad con la puntualidad y la atelicidad con la duración, lo cual

parece poco adecuado. (TFM_ES_LIN_08)

Lastly, another group of hedging devices was utilized by Spanish writers to tactfully offer suggestions or alternative solutions so that the reader can choose to accept or not. As expected, hedges of this kind are usually located at the end of the writing piece.

- (61) a. Futuras investigaciones podrían enfocarse en la comparación del uso de los MS y observar si la hipótesis de universalidad es comprobable. (RA_ES_LIN_15)
- b. Quedan, sin embargo, algunas preguntas sin contestar. Al entender la sinonimia como un proceso metalingüístico (esto es, de reflexión consciente) sobre la distancia semántica, se debería considerar cómo distinguirla de otros tipos de relaciones como la hiponimia o la antonimia, por ejemplo. De igual manera, se debería investigar si es cierto, como afirman Hino, Lupker y Pexman (2002), que las palabras con muchos sinónimos se procesan más despacio y, de ser cierto, por qué ocurre. (RA_ES_LIN_08)
- c. Además, como hemos comentado, se puede profundizar en la exploración de las motivaciones y las explicaciones del uso de la atenuación en las ruedas de prensa, a lo mejor tomando en consideración los estudios del discurso político o haciendo comparaciones con su uso en otros géneros discursivos. (TFM_ZH_LIN_07)

Apart from all functions mentioned above, I also found the phenomena of “over-hedging” and “unbalanced hedging” (Wette, 2021: 90–91) in the corpus. The former, as its name suggests, concerns the overuse of hedges in one statement (62a-b), which may weaken the authoritativeness of the writer. The latter, on the other hand, is about the intermixture of hedges and boosters in one statement⁴⁴ (62c-d), which may confuse the reader.

- (62) a. Y desde el punto de vista de la forma de los dos tipos de Rel., las

⁴⁴ However, it should be noted that the combination of hedges and boosters does not always lead to unbalanced hedging. In some cases, a hedge can modify a booster to tone down the claim (Gillaerts & Van de Velde, 2010), as shown in this example:

Por tanto, podría concluirse que este motor no se recomienda para traducir perífrasis verbales. (TFM_ES_TRA_04)

explicativas generalmente suelen llevar una coma,
(TFM_ZH_LIN_04)

- b. Además, parece que puede sugerirse que su repercusión social no fue tan grande, pese a su indudable valor. (TFM_ES_TRA_01)
- c. Por lo visto, resulta evidente que la desviación estándar de TTR del corpus A es más baja que la del corpus B. (TFM_ZH_TRA_01)
- d. Por consiguiente, para determinar el carácter neológico de una unidad léxica, es necesario fijar algunos puntos de referencia, los cuales suelen ser siempre, en cierta medida, arbitrarios (Cabré Castellví, 1993, p. 445). (RA_ES_LIN_13)

6.3.2. Boosters

Contrary to hedges, which the writer uses to mitigate knowledge claims and withhold commitment to statements, boosters are a type of interactional metadiscourse resource that serves to strengthen the writer's claims and to express the certainty, validity, and veracity, thereby demonstrating their firm commitment to statements (Hyland, 2005b; Peacock, 2006; Bondi, 2008; F. Cao, 2014). In this sense, boosters and hedges can be seen as the two ends in the cline of epistemic modality (Crismore et al., 1993; F. Cao, 2014; Akbas & Hardman, 2018). In fact, Silver (2003) claims that there is not always a clear-cut distinction between these two terms; and Yang (2013) even considers these two resources as one, under the umbrella term 'Hedges'.

Although both boosters and hedges play a central role in academic discourse, the overall frequency of booster use is much less (2,634 occurrences), below half of the hedges. This frequency contrast has been well attested in the literature (e.g., Hyland, 2005b; Mur-Dueñas, 2011; Hyland & Jiang, 2016a; Wang & Jiang, 2018), suggesting that academic writing generally "privileges caution, possibility, and delimited claims over certainty" (Aull & Lancaster, 2014: 164). Previous inferential statistics did not show statistically significant differences across the writer groups. However, a few boosters (e.g., *en realidad*, *descubrir que*, *precisamente*, *ciertamente*) stood out as salient markers when two corpora were compared, due to different reasons mentioned already.

Booster strategies in Spanish academic writing can be realized lexically through

verbs (e.g., *afirmar*, *sostener que*, *concluir que*), adverbs (e.g., *siempre*, *efectivamente*, *indudablemente*), adverbial phrases (e.g., *de hecho*, *en efecto*, *sin duda*), or grammatically through clauses (e.g., *es evidente que*, *lo cierto es que*).

In terms of the discursual and/or rhetorical functions, boosters in Spanish academic writing are used to i) indicate that the writer's claims are evidence-based and data-supported; ii) amplify the tone of claims; iii) stress the accepted truth showing solidarity towards the reader.

The first function is also known as 'emphatics' (Hinkel, 2005; J. J. Lee & Casal, 2014), which reinforces the truth value of a proposition. Boosters of this kind signal that the statement the writer is making is not a subjective judgment but an "evidential truth" (Skelton, 1997: 128; see also Peacock, 2006; Skorczynska & Carrió-Pastor, 2021), as shown below. Previous key item analysis showed that the non-native novice writers underused certain epistemic verbs such as *constatar que*, *encontrar que* and epistemic adverbs such as *ciertamente*, probably due to their low lexical competence.

- (63) a. Lo cierto es que se ha demostrado que aquellos métodos válidos para la adquisición del español por parte de un hablante monolingüe de inglés no son plenamente válidos para un individuo que cuente con el español como LdH. (TFM_ES_LIN_01)
- b. Gracias a ambos artículos se puede afirmar que este campo léxico es uno de los menos cohesionados (TFM_ES_LIN_04)
- c. notaremos que el predicado es aún compatible con un modificador de tiempo durativo changjiu-de (长久地), lo cual demuestra claramente que la imperfectividad no cambia la interpretación de lo durativo de una situación. (TFM_ZH_LIN_14)

The second type of booster is known as 'amplifier' (Hinkel, 2005; J. J. Lee & Casal, 2014; Thomson, 2020), which mainly comprises adverbs that modify gradable verbs and adjectives and strengthen their scalar lexical intensity. However, recall that I adopted a rather conservative approach when including metadiscourse items; that is, adverbs that qualify a verb or adjective were discarded. Thus, many amplifiers were excluded from this study. Despite this, some amplifying adverbs such as *siempre*, *nunca*, *definitivamente*, *realmente* do perform a metadiscursive function according to their co-

text (64a-b), and a few adverbial phrases such as *sí que*, *de verdad*, *de veras* also have an amplifying function (64c). I also included a particular amplifier case, i.e., the superlative form of an adjective **ísimo,a,os,as*, as I believe this form is metadiscoursally meaningful, clearly signaling the writer's intention of strengthening the overall tone of the statement rather than solely the adjective (64d).

- (64) a. Las construcciones con *se* en el español siempre han sido las más confusas tal para los estudiantes del idioma como para los gramáticos. (TFM_ZH_LIN_05)
- b. Entonces el uso de complemento es realmente un gran problema para los alumnos peruanos. (TFM_ZH_LIN_05)
- c. Se nota que de verdad existen huellas para que detengamos si un adjetivo es pasivo o no en el español. (TFM_ZH_LIN_05)
- d. A simple vista, puede observarse una clarísima diferencia respecto a la frecuencia en el uso del diminutivo en ambos corpus, confirmándose la hipótesis de partida. (RA_ES_LIN_03)

Although all writer groups used amplifiers, there were some differences in the employment of specific markers. Previous key item analysis indicated a statistically significant difference between the native and the non-native groups in the use of *siempre*, although its saliency (BIC score: 12.28) did not reach the top 10. Further examination revealed that the non-native novice writers produced most of the cases (133 occurrences, which equals 46% of all cases or 70% of all cases within the non-native group). As Hinkel (2005) reminds, extreme amplifiers as *siempre* and *nunca* usually lead to overstatements, which should be used cautiously in academic prose (see also Hyland, 2005a: 131). In this sense, L1 Chinese student writers seemed not aware of this discourse convention.

The last type of booster is also known as 'solidarity boosters' (Peacock, 2006; Vassileva, 2001), which the writer uses to present an accepted truth and show solidarity towards the reader. When solidarity boosters are utilized, the writer presupposes that the reader as a member of the discourse community shares the same information, and that further explanation is not needed. Some extracts are provided below:

- (65) a. Como ya se ha comentado, esta recepción está influida en gran medida por la intersubjetividad y, obviamente, también por la subjetividad. (TFM_ES_LIT_01)
- b. Existen, claro está, otros repositorios, de carácter institucional generalmente, muy valiosos y extensos, que recogen casos de innovación docente, pero que adolecen de especialización temática. (RA_ES_LIN_02)
- c. Por supuesto, no existen normas para cada producto o servicio, y gran parte del comercio se lleva a cabo, en la práctica, directamente entre empresas por medio de contratos privados que se mantienen fuera del alcance del sistema de comercio multilateral. Este hecho representa un reto constante para la normalización. (RA_ES_TRA_07)

As we can tell, solidarity boosters are closely related to a subcategory of engagement marker, ‘Shared knowledge’ (see Section 6.3.5.3), as the former also serves to engage the reader and invokes some kind of sharedness. In fact, the difference between them is not clear-cut as metadiscourse itself is multifunctional (see Section 2.2.4). For example, in Hyland (2005b) *obviously* appeared in the examples of both boosters and shared knowledge. *Of course* was considered as a booster in Hyland (2005a) and Mur-Dueñas (2011) while as shared knowledge in Hyland (2005b) and F. Cao (2014). In Spanish, Martín Zorraquino & Portolés (1999) considered *desde luego*, *por supuesto*, *naturalmente*, *claro* as epistemic markers with confirmed evidence; but at the same time, they acknowledge that these markers allude to the communicative context and knowledge shared between the interlocutors. In the present study, I treated the above markers as boosters.

As for solidarity boosters, no distinct functional differences were found across the writer groups. They appeared to generally know how to develop a sense of sharedness in order to boost the truth of their statements.

6.3.3. Attitude markers

Whereas both hedges and boosters express the writer’s epistemic attitude towards propositions and show their degree of commitment to claims, attitude markers display the writer’s affective and evaluative attitude towards propositions and convey their

personal or professional feelings of “surprise, agreement, importance, frustration, and so on” (Hyland, 2005b: 180). Along with other metadiscourse resources, attitude markers also play an indispensable role in academic writing. As Mur-Dueñas (2010: 51) claims, “scholars need to express a clear stand towards the propositional meanings [...] in order to convince [the reader] of their credibility and validity of their outcomes”, and the use of “attitudinal markers can contribute to displaying an appropriate stance, indicating the writer’s judgements, views, and opinions”.

Spanish academic writers from our corpus, who of course adhere to this tenet, willingly employed this type of resources in their writing. In total, 1,788 cases of attitude markers were annotated in the corpus. The previous inferential statistics showed that the novice writers used significantly more attitude markers than their expert counterparts, which suggests that student writers were more willing to display their attitude openly. This is probably because their readers are usually supervisors or judges they know well. The closeness of discourse space allows novice writers to express their attitude freely in the thesis. On the other hand, the readers of the expert’s articles are usually peers or potential competitors. The distance between them makes expert writers express their attitude with more reserve. That said, previous key item analysis indicated that only a few attitude markers were statistically salient across the writer groups. For example, L1 Chinese writers (mainly novice writers) overused *hace falta*, probably due to their lack of register awareness.

When compared with other main interactional metadiscourse categories, attitude markers had the least frequency, which is in line with F. Cao’s (2014) and Hu & Cao’s (2015) findings. It implies that explicitly expressing attitude is still not a typical resource employed by academic writers despite its importance. On the other hand, however, the overall incidence of attitude markers in the present study is much lower than other parallel studies, either in English or Spanish. This is because many studies (e.g., Koutsantoni, 2004; Hyland, 2005b, 2005a; Mur-Dueñas, 2010, 2011; J. J. Lee & Casal, 2014; Carrió-Pastor, 2019c) included qualifying adjectives (e.g., *importante*, *fácil*, *esencial*) and evaluative nouns (e.g., *importancia*, *conveniencia*, *dificultad*) as attitude markers. In contrast, as noted in the methodology chapter, this study excluded

these highly frequent devices because “they were used to evaluate individual words and expressions within a proposition rather than the proposition itself” (F. Cao, 2014: 236).

Therefore, the lexico-grammatical realization of attitudinal evaluation in the current analysis comprises sentential adverbs (e.g., *sorprendentemente*, *curiosamente*, *paradójicamente*), adverbial phrases (e.g., *gracias a*, *por desgracia*), verbs (e.g., *cabe*, *esperamos*, *queremos*, *hace falta*), and impersonal structure (e.g., *es importante*, *es necesario*, *sería difícil*).

Based on previous studies (e.g., Mur-Dueñas, 2010; F. Cao, 2014; Koutsantoni, 2004) and my further textual analysis, attitudinal resources can be boiled down to four functions: i) to convey the writer’s evaluation of obligation and necessity of a proposition; ii) to explicitly express the writer’s emotion at the propositional content; iii) to indicate the writer’s significance judgment towards a proposition; iv) to signal the writer’s professional assessment of propositions.

The first function is mainly operationalized through modal verbs with deontic meaning such as *cabe*, *hace falta*, *hay que* and sometimes through impersonal structures such as *es necesario*, *es preciso*. Mostly they were used when the writer considers something important and feels obligated to point it out (66a-b). Sometimes the obligation or necessity was not imposed on writers themselves but others, such as the discourse community (66c-d). The latter roughly corresponds to the so-called “knowledge obligation”, which comprises “expressions of obligation to do with carrying out research” (Giltrow, 2005: 177; see also Hu & Cao, 2015).

- (66) a. Cabe decir, que en cuanto al nivel inter-lingüístico, los adverbios de actos de habla en español están más lexicalizados que sus paralelos chinos. (RA_ZH_LIN_05)
- b. En realidad, la clasificación de Molina es una adaptación de la de Nida. Comparando las dos, hace falta resaltar los siguientes puntos: (TFM_ZH_TRA_04)
- c. Por ello, a la hora de leer o escribir un texto especializado es necesario conocer las relaciones que los términos establecen con otras unidades, sus transformaciones discursivas y la función de la variación denominativa en el proceso de construcción textual. (RA_ES_LIN_05)
- d. Es necesario, pues, desarrollar una metodología de enseñanza que

favorezca la adquisición de la competencia intercultural a través de la lectura. Para ello, es preciso enseñar a los alumnos algunos métodos básicos del análisis del discurso. (TFM_ES_LIN_06)

The second function of attitude markers is probably the most obvious one as it clearly displays the writer's personal feeling about a proposition, and the reader can easily experience it or even shares it. Typical attitude markers of emotions include attitudinal adverbs (e.g., *sorprendentemente*, *afortunadamente*, *interesantemente*), adverbial phrases (e.g., *gracias a*, *por fortuna*), verbs (e.g., *esperamos*, *queremos*, *sorprende*), impersonal structure (e.g., *es sorprendente*, *es curioso*, *no es extraño*), and clauses (*lo interesante es que*, *resulta curioso que*). Some extracts from the corpus are provided below to illustrate this function:

- (67) a. Por lo tanto, excluimos tales muestras del análisis de CD, pero interesantemente, se observa que este fenómeno pasa con más frecuencia con /p/ que con otros fonemas. (TFM_ZH_LIN_03)
- b. Esperamos, por tanto, que nuestra propuesta de buenas prácticas contribuya en este sentido a avanzar en la mejora integral de la calidad en los MOOC de lenguas que se diseñen en el futuro. (RA_ES_LIN_01)
- c. Es curioso observar que el DIPELE no etiquete esta palabra teniendo en cuenta su connotación peyorativa. (TFM_ES_LIN_05)
- d. por eso no nos resulta raro que en novelas de Carmen Laforet, a pesar de que se mencionan asuntos relacionados con la Guerra, casi no se comenta nada y pocas veces se habla de lo político. (TFM_ZH_LIT_02)

The third function of attitude markers concerns the writer's evaluation of the importance or relevance of a statement. The rhetorical purpose is that the writer draws the reader's attention to what he or she is saying and hopes the reader appreciates the importance. Attitude markers expressing significance in our corpus were limited but frequent, such as *es importante/crucial/fundamental/imprescindible/destacable*, *es de suma importancia*, *consideramos importante*. Examples of this function are given as follows:

- (68) a. Con todo, es importante reconocer qué verbos modales de la lengua de destino corresponden al de origen. (TFM_ES_TRA_04)
- b. Consideramos que es de gran importancia que el léxico que el alumno estudie sea de alta frecuencia o, al menos, con una frecuencia intermedia, dado que le será útil en la vida real. (TFM_ES_LIN_11)
- c. Por eso, a pesar de lo específico de nuestro tema, consideramos imprescindible englobarlo en nuestra aula de ELE. (TFM_ZH_LIN_13)

The last type of attitude markers was used by the writer to assess the value attached to propositions, for example, the difficulty (e.g., *es difícil/fácil/sencillo/complicado*), usefulness (e.g., *es útil*), worthiness (e.g., *merece, vale la pena*), appropriateness (e.g., *parece adecuado, es apropiado/oportuno/inconveniente, conviene*), reasonableness (e.g., *es normal/lógico/razonable*), and acceptableness (e.g., *es aceptable, aceptamos, abogamos, estamos de acuerdo*). Some examples of this function are provided as follows:

- (69) a. Opinamos que es conveniente porque desde las connotaciones de edicto imperial y el contexto, no es difícil identificar su significado verdadero (TFM_ZH_TRA_04)
- b. Sin embargo, vale la pena destacar que los otros dos mecanismos más productivos, la composición culta y la siglación, se utilizan más del doble de veces en el corpus de especialistas que en el corpus de pacientes (TFM_ES_LIN_10)
- c. Estamos de acuerdo con Sokolik (2014) en que en los MOOC de lenguas deben evitarse los vídeos de bustos parlantes que imparten una lección magistral. (RA_ES_LIN_01)

Although the previous quantitative analysis has revealed significant differences in the use of attitude markers across expertise levels, qualitative comparisons did not find any marked differences in the employment of their functions across the writer groups.

A final note is that when followed by certain words such as *tener en cuenta, recordar*, the functions of some attitude markers are characterized more by the writer's engagement with the reader; specifically, the reader should perform an action on the writer's instructions. Thus, expressions such as *hay que/es importante/es necesario tener en cuenta* and *cabe/es preciso recordar* should be seen as directives rather than

attitude markers (see Lafuente-Millán, 2014). The category ‘Directives’ will be discussed later.

6.3.4. Self-mentions

Perhaps the most self-explanatory interactional metadiscourse category is ‘Self-mentions’ because mentioning themselves via first-person pronouns (i.e., *we, I, us, me*) and possessive determiners (i.e., *our, my*) is a common rhetorical strategy adopted by academic writers to present their discursual selves or persona. Moreover, the self-mention feature is indispensable in academic writing since writers cannot avoid projecting their persona during the writing process (Hyland, 2001b, 2005b). Many scholars (e.g., Hyland, 2001b; Harwood, 2005b; Mur-Dueñas, 2007; Lafuente-Millán, 2010; Carrió-Pastor, 2020) agree that the use of self-mentions can help the writer build an appropriate authorial identity and a credible ethos in order to promote their work, highlight the novelty and credibility of their work, and finally persuade their readers.

The importance and the general purpose of self-mention use still hold when it comes to Spanish academic writing. This study considered Spanish first-person pronouns and their corresponding possessive determiners and *el/la/los/las autor/a/es/as* as the lexical realizations of self-mentions. However, two things are worthy of note: first, the Spanish case is peculiar. As already mentioned, first-person subject pronouns (*nosotros/as, yo*) are left out almost all the time and reflected in verb conjugations (e.g., *hablamos, hablo, hablé*). This had caused difficulty in searching and coding them. Therefore, regular expression was utilized to search for the first-person plural pronouns, and manual inspection was carried out to find the first-person singular pronouns. Second, as also noted earlier, first-person plural pronouns can be distinguished between exclusive and inclusive depending on whether the reader is included in the pronoun reference. Only exclusive *nosotros/as*, i.e., excluding the reader, should be seen as self-mentions. Thus, sentential context must always be checked to ensure that a first-person plural pronoun indeed signals self-mention.

Despite the limited range of lexical realizations, self-mentions are the most

frequently employed interactional resources (6,177 cases in total). From what has been analyzed previously, we know that the high incidence of self-mentions can be accounted for by the high occurrences of first-person plural pronouns and possessive determiners, which, in turn, were produced mainly by L1 Chinese writers (especially the novice writers). This, on the other hand, can explain that in the previous key item analysis, *(nosotros)*mos* and *nuestr** were distinctive of both the non-native texts (see Table 6-5) and the novice texts (see Table 6-7), as well as that in the previous inferential statistics, the non-native writers were found to use significantly more self-mentions than their native counterparts (see Table 6-4).

When comparing the normalized frequency of self-mention markers in current data with that in other parallel studies, I detected a considerable inconsistency. For example, Spanish native expert writers in Mur-Dueñas (2011) produced 65.9 (pttw) cases of self-mentions, and Spanish native thesis writers in J. J. Lee & Casal (2014) produced 7.3 (pttw) cases of self-mentions, which is in sharp contrast with 35.6 (pttw) cases and 34.6 (pttw) cases respectively in this study. I believe this frequency contrast could be ascribed to disciplinary variation as the former two studies focus on Business Management and Engineering while my study focuses on Language and Literature. The only study with a roughly matched discipline is Menke (2021), in which advanced L2 Spanish student writers produced 18 (pttw) cases of self-mentions. This data is much lower than the occurrences of self-mentions produced by L1 Chinese novice writers (72.9 pttw) in the present study. Since the lingua-cultural background of the two studies is different (the US vs. China), it can be argued that the cultural factor plays a role here, which is entirely plausible if we recall that China has a collective culture. Apart from the above factors, another possible reason is that different analysts adopted different criteria when considering what should be seen as a self-mention marker and especially how to distinguish it with reader reference (i.e., exclusive vs. inclusive).

Regarding the discoursal/rhetorical functions of self-mention resources, quite a few previous studies have proposed different taxonomies or adapted them for different research settings (Vassileva, 1998; Tang & John, 1999; Hyland, 2001b, 2002d; Harwood, 2005b; Mur-Dueñas, 2007; Luzón, 2009; Lafuente-Millán, 2010; F. Cao,

2014; Walková, 2019; Carrió-Pastor, 2020). Based on their classification and our functional analysis of the corpus, I identified nine fine-grained functions: i) stating a goal or purpose; ii) outlining the content development; iii) previewing or reviewing information; iv) explaining a procedure; v) recounting the writer's previous personal experience; vi) expressing self-benefits; vii) elaborating an argument; viii) presenting results or findings; ix) assessing the strengths and limitations of the research. The following paragraphs will detail each function in turn with examples.

Self-mention resources are sometimes used by the writer to state their discursual purposes or goals. By doing so, the writer's directive role in the text is foregrounded. This type of self-mentions often co-occurs with the interactive resource, 'Announcers' (e.g., *en este artículo, en este apartado*). Example (33b) provided in the previous chapter is still a valid illustration of this function. Another example is given here as well:

- (70) a. En este artículo nos vamos a centrar en la persona que traduce como noticia, como objeto informativo. No trataremos del traductor-periodista que utiliza material informativo ni del proceso de traducción donde el gatekeeper que selecciona la información juega un papel primordial. (RA_ES_TRA_05)

Writers may also employ self-mention resources when outlining the overall content progression of their writing pieces. This kind of outline often occurs at the end of the Introduction chapter/section to give the reader a brief idea of the organizational structure of the writing (71a); or it sometimes occurs in the Discussion/Conclusion chapter/section to recapitulate what has been done in the research (71b) (Mur-Dueñas, 2007).

- (71) a. En nuestro trabajo, la primera parte es la descripción y la comparación de la voz pasiva de los dos idiomas. A base de esta parte, haremos el análisis contrastivo para predecir qué errores vayan cometer los alumnos en el aprendizaje en ambos idiomas. En la segunda parte, haremos una prueba tal a los alumnos chinos de español como a los hispanohablantes (peruanos) de chino para construir una base de datos

de errores. A través del análisis de errores, veremos en concreto qué problema tienen los alumnos y plantearemos soluciones para la enseñanza de las dos lenguas. (TFM_ZH_LIN_05)

- b. Después de la presentación del marco teórico, la revisión bibliográfica y la metodología y corpus de investigación, hemos explicado en el capítulo 2 todas las formas posibles pasivas de los idiomas español y chino según las perspectivas descriptiva y normativa, y las comparamos de manera intralingüística. Luego en el capítulo 3 hemos hecho un análisis contrastivo con temas de marcadores, verbos, sujeto gramatical y nocional, complementos, orden sintáctico, funciones semántica y pragmática y de las construcciones con valor pasivo, desde lo cual hemos previsto las dificultades posibles que podrán tener los alumnos en su adquisición de su lengua segunda de chino o español. (TFM_ZH_LIN_05)

In order to make the text cohesive and help the reader recall previous information or anticipate upcoming information, writers frequently use self-mentions to make anaphoric or cataphoric references to other textual parts (Lafuente-Millán, 2010; Mur-Dueñas, 2007; F. Cao, 2014). Logically, on these occasions they often co-occur with endophoric markers (e.g., *en la sección X*, *anteriormente*, *a continuación*). The following two examples illustrate this function. Note however that this function of self-mention may overlap with that of reader reference, which will be discussed in Section 6.3.5.1.

- (72) a. A continuación, vamos a contestar las dos preguntas formuladas al final del segundo capítulo resumiendo el experimento que realizamos. (TFM_ZH_LIN_02)
- b. Como hemos mencionado anteriormente, es recomendable extender el estudio a otras lenguas romances y a otras construcciones infinitivas, y, a través de métodos comparativos, verificar si existe algo común que yace debajo de todas estas estructuras. (TFM_ZH_LIN_10)

The fourth function of self-mention, i.e., explaining a research procedure, is prevalent in empirical research. The employment of first-person pronouns serves to explain the research process followed and research choices made (Hyland, 2002d; Harwood, 2005b; Luzón, 2009; Lafuente-Millán, 2010; F. Cao, 2014). In doing so, writers emphasize the rigor of the reported research and their contribution to it and assume their leading role

in the methodology (Luzón, 2009; Walková, 2019). As expected, self-mention elements of this kind usually occur in the methodology chapter/section. The following examples clearly illustrate this function:

- (73) a. Para responder esta cuestión acudimos a dos corpus de aprendices de E- LE/L2 y comparamos los resultados con los obtenidos a partir de un análisis previo del hecho lingüístico entre hispanohablantes. (RA_ES_LIN_21)
- b. El método que adoptamos en el experimento es seguir el marco teórico — Aprendizaje Basado en Datos (DDL, véase §2.2)— centrándonos en el potencial de la enseñanza del vocabulario basada en el corpus (Asención-Delaney et al. 2015). (TFM_ZH_LIN_02)
- c. En primer lugar, aumenté el número de participantes. En vez de utilizar los datos longitudinales de dos niños, utilicé los datos longitudinales de tres niños. En cuanto a la densidad de la muestra, agregué no solo datos recogidos de forma mensual sino una muestra más amplia, la de la niña Flor, que en ciertos periodos de la adquisición fue videograbada dos veces al mes. En segundo lugar, controlé ocurrencias (o tokens) y la frecuencia acumulada de tipos, ya que se ha probado que estos últimos pueden ser un buen índice para medir la productividad sintáctica en la adquisición infantil (Ruhland & Geert, 1998). (RA_ES_LIN_22)

When analyzing the saliency of self-mention (*yo*) in Section 6.2.1.2, I found that sometimes writers (especially native novice writers) use this type of self-mention to recount their first-hand experience in the research (see also Vassileva, 1998; Petch-Tyson, 1998). It is the fifth function of self-mention, usually operationalized through first-person singular pronouns and possessive determiners. Apart from the previous example (56a), here we can take a look at another example:

- (74) a. De hecho, mi inquietud por conocer otros países y sus concepciones diferentes de la vida ha sido una constante en mi vida y me ha llevado a especializarme en un campo que me permite viajar y vivir en un gran número de lugares. (TFM_ES_LIN_14)

Previously, I also examined the saliency of first-person plural objective pronoun *nos*. One particular function of this marker is to indicate that the writer is the beneficiary of

certain research acts or situations (see previous examples 51a-c). This constitutes the sixth function of self-mention (see also Hyland, 2002d). In addition to *nos*, the first-person singular objective pronoun *me* can also perform this function. See an example below:

- (75) a. Ambas asignaturas me han conducido a la reflexión de la importancia de saber cómo enseñar EFE si se quiere que el aprendiente sea competente en, por ejemplo, una empresa. (TFM_ES_LIN_11)

Another important function of self-mention is to elaborate arguments or make claims. As Hyland (2002d: 1103) argues, “[s]etting out a line of reasoning would seem to be a key purpose of academic writing”. However, elaborating arguments not only concerns the authorial presence but also involves the writer’s cognitive processes, the risk to their commitments, and the threat to their face (Hyland, 2002d; Lafuente-Millán, 2010; Walková, 2019). This is why writers tend to combine this kind of self-mentions with other stance markers such as hedging (e.g., *creer*, *opinar*, *sugerir*), boosting (e.g., *concluir*, *afirmar*, *insistir*), and attitudinal (e.g., *esperar*, *desear*) verbs. Note that self-mentions and other stance markers in Spanish are often reflected in one single verb (e.g., *creo*, *opinamos*, *conluimos*, *esperamos*). As demonstrated earlier, these verbs were considered stance markers instead of self-mentions. Despite this, I still found some examples of this function, as illustrated below:

- (76) a. Entendemos que el recurso didáctico posee gran interés, en tanto en cuanto desarrolla una capacidad a la que apenas se atiende en las clases. (RA_ES_LIN_17)
- b. A raíz de esto, considero que el propósito del crítico literario perteneciente al ámbito académico es analizar la obra de acuerdo a una metodología científico humanista que tenga en cuenta las características propias de la cultura popular (TFM_ES_LIT_01)
- c. Sin embargo, argumentamos que la otra estrategia descrita por Chen, la hipercorrección, no se observa en nuestro experimento, ya que la mayoría de los valores de VOT negativo cae en el mismo rango con la pronunciación nativa. (TFM_ZH_LIN_03)

Self-mentions may be used to present research results and findings. By doing so, writers show themselves as originators of new knowledge and contributors to their field (Lafuente-Millán, 2010; Walková, 2019). As Hyland (2002d: 1103) claims, this function is “the most self-assertive” use of self-mention. The self-assertation sometimes has a boosting effect on writers’ arguments and is thus considered boosters in the present study, such as first-person research verbs followed by a clause (e.g., *encontramos que, descubrimos que*). The following extracts, however, illustrate first-person pronouns with research verbs functioning as self-mentions.

- (77) a. Al observarlas, encontramos la diferente proporción de estas configuraciones en las oraciones escindidas y pseudo-escindidas en español y chino de la siguiente manera: (TFM_ZH_LIN_01)
- b. En nuestro estudio, mediante el análisis cuantitativo y cualitativo, observamos que algunas metáforas conceptuales culturales solo se encuentran en uno de los corpus, por ejemplo, las metáforas de familia y de círculo en el corpus chino y las metáforas de religión y de deporte en el corpus español. (TFM_ZH_LIN_08)
- c. Al clasificar, describir y comparar las diferencias entre las creencias de estos estudiantes y los textos producidos, identificamos creencias de dimensión transmisiva y transaccional, predominando el modelo transaccional medio – transmisivo bajo en el 4º año y transmisivo medio– transaccional bajo en el 3º año. (RA_ES_LIN_12)

The last function of self-mention resources is to assess the limitations and strengths of research. At the end of writing, academic writers usually explicitly project their authorial selves when evaluating their work, whose purpose is to display an image of a humble servant, save them from losing face, and stress their main contributions to the disciplinary community (Mur-Dueñas, 2007; Lafuente-Millán, 2010). The extracts below demonstrate this function:

- (78) a. Todavía las autoras no tienen una explicación suficientemente adecuada para algunos aspectos relativos a la distribución de los usos de los verbos y a los factores de la categorización que intervienen en su selección y, por lo tanto, habrán de ser abordados en estudios posteriores. (RA_ES_LIN_18)
- b. Reconocemos sin tapujos que ésta puede ser una tarea ardua, y que no

es, en ningún caso, inmediata. (RA_ES_LIN_17)

- c. Cabe decir, que nuestro trabajo también pone de manifiesto la viabilidad y la efectividad de estructura semántica conceptual compartida por las dos lenguas en contraste, que sirve como tertium comparationis en el estudio inter-lingüístico y abre una nueva perspectiva del análisis contrastivo entre dos idiomas tipológicamente diferentes como el español y el chino. (RA_ZH_LIN_05)

In terms of the variations in performing the above functions of self-mentions across the writer groups, the previous analysis has already hinted that, for example, the native novice writer groups seemed to have no difficulties in using first-person singular pronouns to recount their personal research experience while L1 Chinese writers tried to avoid it. On the other hand, L1 Chinese writers preferred to reveal authorial selves in the text when reviewing or previewing information; meanwhile in the same respect, Spanish-speaking writers opted to employ impersonal structures to hide their presence. However, more generally, it can be said that the non-native writers performed these self-mention functions more often than their native counterparts since obviously, the overall use of self-mentions by the non-natives was significantly more than the natives (see Table 6-4). Given that self-mentions are generally considered less formal (Hyland & Jiang, 2017), possible reasons behind the overuse of self-mentions (especially first-person plural pronouns and possessive determiners) by the non-native writers should not be hard to think of, namely the lack of register awareness (see also Section 6.2.1.1).

6.3.5. Engagement markers

Whereas the above four main interactional categories concern the writer's stance on the current discourse, the final interactional metadiscourse category, 'Engagement markers', refers to the explicit or implicit ways in which writers include readers as discourse participants and engage them (Hyland, 2005a), which G. Thompson (2001) calls 'reader-in-the-text'. The essence of engagement lies in the dialogic role of discourse. Even the most monologic discourse, like the written academic discourse, involves readers in the co-construction of the text in some ways (Hyland & Jiang, 2016b;

Jiang & Ma, 2018).

“Engagement is an essential aspect of academic persuasion” (Dontcheva-Navratilova, 2021: 19). According to Hyland (2005b, 2005a), academic writers use engagement markers to achieve two rhetorical purposes generally: i) to fulfill readers’ expectation of inclusion by establishing disciplinary solidarity with them; ii) to acknowledge them as critical readers, anticipating their likely response to the text and steering them to intended interpretations and certain actions. Moreover, writers can use engagement markers to build up a good rapport with the reader, bring in the reader’s voice, and show politeness (Lafuente-Millán, 2014; Dontcheva-Navratilova, 2021). A writer can invoke reader participation through various ways, such as reader references, directives, appeals to shared knowledge, and questions. In the following subsections, we will go over them in turn.

Before that, let us first look back on some statistical data of engagement markers as the main category. In total, 3,349 cases of engagement markers were found in the whole corpus. The native expert writers employed the least of these resources (18.8 pttw), which is in line with the data (18.5 pttw) of Spanish sub-corpora in Mur-Dueñas (2011) despite the disciplinary difference. Compared with the Spanish native thesis writer’s data (45.4 pttw) in J. J. Lee & Casal (2014), the native novice writers in my corpus used engagement markers less frequently (31.1 pttw). Unfortunately, no parallel study is available to be compared with the present study in terms of the engagement markers’ frequencies in the non-native expert texts (27.1 pttw) and non-native novice texts (29.7 pttw). The inferential statistics showed that L1 Chinese writers used significantly more engagement markers than their Spanish-speaking counterparts. One possible reason is that Chinese writers were perhaps not fully aware that engaging elements are often seen as an indicator of informality (Hyland & Jiang, 2017; Smith 1986, cited in Petch-Tyson, 1998), which by no means is incompatible with academic writing. However, if the target discourse community (Spanish in our case) prefers a more formal style, Chinese writers who write in Spanish should, in principle, follow this convention of formality. The other side of engaging language, like the attitude markers, is the rhetorical distance between the writer and the reader; the closer the

relationship between them is, the more engaging the text is. Since the readership of a master thesis (i.e., supervisors and judges) and a journal article (i.e., peers and potential competitors) is different, it can explain why the novice writers generally utilized more engagement markers than the expert groups, although the difference was not statistically significant (see Table 6-1).

6.3.5.1. Reader references

Through the reader reference, writers can bring readers into the text and give them an active discourse role (Lafuente-Millán, 2014). Mentioning readers can also help shorten the distance between the writer and the reader and build an in-group relationship and collegiality (Dontcheva-Navratilova, 2021).

Concerning the lexical realizations of reader references, the most common markers are inclusive first-person plural pronouns and possessives, contrasting with previously discussed exclusive first-person plural pronouns and possessives, namely self-mentions. As noted earlier, morphologically both share the same surface forms (*nosotros*) **mos, nos, nuestr**. Thus, checking the sentential context is needed to determine the ‘clusivity’ of each instance. A unique form of reader reference is the indefinite pronoun *uno*, which is rare in our corpus. Lastly, previous studies (e.g., Mur-Dueñas, 2011; J. J. Lee & Casal, 2014) also took into account second-person pronouns and possessives, i.e., *tú, usted(es) vosotros, te, os, vuestr**, *su*. Although they are perhaps the most direct and unambiguous way a writer can show the reader’s presence (cf. Hyland, 2005a), these forms were absent from the current corpus. However, it should be noted that second-person pronouns (especially the formal address *usted(es)*) can be reflected in certain verbs with imperative conjugation, which will be addressed in the next subsection.

Reader references were the most frequent engagement resource in my corpus (1,719 occurrences), which is in line with the observation in Hyland (2005b, 2005a) and Lafuente-Millán (2014). Remarkably, the non-native novice writers produced 47% of the cases, which could explain the statistically significant results in this resource by

nativeness and expertise (see Table 6-4).

Based on the in-depth qualitative textual analysis, I found that at least five functions can be achieved through the use of reader references: i) previewing and reviewing information; ii) inviting the reader to perform an action; iii) pointing the reader to an intended interpretation; iv) stressing the real-world experience shared between the writer and the reader; v) co-constructing a hypothetical situation with the reader.

As mentioned in the preceding section, both exclusive and inclusive first-person plural pronouns have the function of previewing and reviewing information, namely making cataphoric and anaphoric references to other textual parts. To distinguish them, I argue that the marker's context or co-text is of help; especially, the meaning of the main verb plays a crucial role. Specifically, if the main verb is a reporting verb (e.g., *comentar*, *mencionar*, *señalar*) or research verb (e.g., *analizar*, *describir*), the first-person plural pronoun is usually a self-mention; if the main verb is related to a visual verb (e.g., *ver*, *observar*), the first-person plural pronoun is usually a reader reference. The latter is considered reader references because on this occasion, through the same lens the writer invites the reader to recall what they have seen in previous textual parts or to anticipate what will be seen next (79a-c). Meanwhile, unlike visual act, the writer's speech acts and research acts cannot be shared with the reader, for example *como hemos comentado/señalado, vamos a analizar* (some examples can be found in 72a-b).

- (79) a. Hasta ahora hemos visto diferentes mecanismos y fenómenos observables ante la adquisición de un sistema de género más complejo que el de partida, sobre todo cuando la L1 carece de ello. (TFM_ES_LIN_01)
- b. Ambas lenguas comparten muchas similitudes como hemos visto anteriormente. (RA_ZH_LIN_03)
- c. A continuación, vamos a ver el uso de los atenuantes en los subcorpus CORPUS-G1, CORPUS-G2 y CORPUS-P. (TFM_ZH_LIN_07)

Related to the first function, reader references may be used by writers to invite readers

to perform a series of actions, not only to see (80a) but also to think (80b) or to agree (80c), etc. On these occasions, the writer uses “communal *we*” (Harwood, 2005a: 357) to appeal to collective identity and act on the reader’s behalf.

- (80) a. Tras revisar la clasificación de las palabras, vemos ahora estas modalidades enunciativas a partir de la transformación sintáctica de los enunciados en la traducción del español al chino. (RA_ZH_TRA_04)
- b. Pues concebimos el tiempo como un recurso limitado, dinero incluso, es decir, entendemos y experimentamos el tiempo como el tipo de objeto que puede ser gastado, calculado, invertido, ahorrado y despilfarrado. (TFM_ZH_LIN_08)
- c. Cuando el seleccionador no se combina con el seleccionado preferido por el primero, se producirá lo que llamamos “mismatch” o “desajuste”. (TFM_ZH_LIN_14)

Writers can use reader references to point readers to the interpretations preferred by writers, thereby foregrounding a common response (Lafuente-Millán, 2014), as can be exemplified below:

- (81) a. Por ejemplo, para Jackenoff (1972: 237), si la frase F es elegida como foco de una oración O, el acento más alto en O va a caer sobre la sílaba de F que es asignada como el acento más alto a través de las reglas de acento regular¹³, lo cual podemos considerar como una medida eficaz para la identificación de foco de una oración. (TFM_ZH_LIN_11)
- b. Desde los cuatro ejemplos arriba citados, podemos ver que el traductor usa la extranjerización, para que los lectores puedan contactar con la cultura china, aunque no todas las imágenes tienen su correspondencia. (TFM_ZH_TRA_02)
- c. Partiendo de esto, sabemos que los pronombres expresan siempre entidades dadas para los participantes de la conversación y los pronombres personales representan referentes del grado mínimo de novedad en palabras de Downing (2001: 356). (TFM_ZH_LIN_11)

Sometimes writers appeal to the real-world experience to bring readers to the text world and draw support from them. Since the real-world experience is built upon the shared understanding between them, readers can easily recognize writers’ references and are thus more likely to agree with writers. The following extracts can illustrate this function:

- (82) a. La palabra extinción en este contexto hace referencia al final de la existencia de una especie en todos y cada uno de los entornos geográficos de nuestro planeta. (RA_ZH_LIN_24)
- b. Los ejercicios siguen siendo necesarios, pero han de diseñarse de forma diferente, puesto que su objetivo es ayudarnos a penetrar en las propiedades del sistema interiorizado con el que damos forma a nuestros pensamientos y con el que comunicamos nuestras intenciones, nuestros sentimientos o nuestras experiencias. (RA_ES_LIN_17)
- c. Los seres humanos, afirma Landau et al. (2010), somos avaros cognitivos y, dado que la abstracción exige mayores esfuerzos de procesamiento, a menudo la gestionamos mediante metáforas. (RA_ES_LIN_04)

Lastly, reader references can be used to create a hypothetical scenario, in which both writers and readers are involved. I found the typical pattern of this function was first-person pronoun preceded by conjunction *si* or *cuando*:

- (83) a. Sin embargo, si prestamos atención a la posición donde aparece esta palabra en la novela, entenderemos su significado profundo. (TFM_ZH_LIT_02)
- b. Por ejemplo, cuando decimos que una persona es un “león”, la expresión tiene sentido porque construimos un parecido entre la persona y el animal: ambos son valientes. (TFM_ZH_LIN_08)
- c. Si pedimos a los alumnos que analicen la secuencia muy lentamente, nos dirán sin duda que se trata de un sintagma adverbial en el que el adverbio muy modifica al también adverbio lentamente. (RA_ES_LIN_17)

A particular case of the last function is worthy of note: “Hypothetical-Real pattern” (G. Thompson, 2001: 63; see also F. Cao, 2014). The writer employs the indefinite pronoun *uno* to present a hypothetical view or claim that the reader might put forward. It is usually followed by a contrastive marker (e.g., *sin embargo*, *no obstante*) to dismiss the hypothetical view and then present the writer’s real view. The following two examples clearly illustrate this special case:

- (84) a. Uno puede argumentar que (58a) no tiene un verbo de control así que es diferente de (58b). Sin embargo, estudios recientes muestran que existe control de adjunto, en que el PRO aparece en un adjunto y está controlado sin la necesidad de la intervención de un verbo de control. (TFM_ZH_LIN_10)
- b. uno podría pensar que los materiales preparados de antemano y seleccionados por el investigador van contra el espíritu del DDL [...] No obstante, como se mencionaba antes en la sección de los materiales que, bajo la situación actual de la enseñanza del español en China, la mayoría absoluta de los aprendientes no tienen experiencia en el uso de un corpus y es fácil desorientarse ante grandes datos de los corpus de la web. (TFM_ZH_LIN_02)

Regarding the cross-linguacultural and cross-expertise variations in the above functions of reader references, I found that when previewing or reviewing information, the native writers tried to avoid first-person plural pronouns, as in the case of self-mentions. For example, Spanish native writers preferred impersonal expressions such as *como se ha podido ver anteriormente* and *como se verá más adelante* to avoid explicit readers' involvement in the text. Chinese writers (especially the novice group), on the other hand, were more willing to overtly construct both themselves and readers as discourse participants to achieve previewing and reviewing functions. The reason could be the lack of register awareness on the part of non-native writers as showing writers' and readers' presence in the text is considered less formal.

6.3.5.2. Directives

Directives refer to a rhetorical strategy that allows the writer to give instructions to the reader so the latter can perform a specific action or understand the writer's purpose duly (Hyland, 2001a, 2002b). Although the directive language is deemed impolite and face-threatening in academic writing, it should be acknowledged that directives are helpful for writers to develop arguments clearly and vigorously, display proper conviction, and show control over the text (Hyland, 2002b; Dontcheva-Navratilova, 2021).

In my corpus, directives are mainly realized in three different surface forms: i) imperatives (impersonal: *ver*, *cf.*; personal: *véanse*, *veamos*, *recordemos*); ii) modals of

obligation or necessity (impersonal: *hay que, cabe, se debe*; personal: *tenemos que, deberíamos*); iii) certain predicative adjectives (*es importante/necesario/preciso*). As mentioned in the preceding section, the corpus has registered some cases of second-person reader references, but they were only found in imperative forms. The only imperative form of second-person reader references in the corpus was the formal address of second-person pronouns (i.e., *usted, ustedes*). Previously, it was also noted that some modals of obligation or necessity and predicative adjectives could be read as ‘Attitude markers’ (Section 6.3.3). To differentiate these two categories, the sentential context, especially the infinitive verb that follows these modals and predicative adjectives, should be checked. Specifically, when the verb is targeted on readers (or readers and writers together) and leads them to specific actions, the whole expression should be seen as directives. Some of the typical expressions are *cabe tener en cuenta, es preciso recordar, no debemos ignorar*, etc.

Directives were the second most frequent engagement feature in the corpus (1,248 occurrences), which conforms to the finding in Lafuente-Millán (2014). Moreover, despite the disciplinary difference between the two studies, the normalized frequencies of directives in the native expert subcorpus were close (6.60 pttw vs. 7.00 pttw). In terms of the frequency variation in the use of directives, no statistically significant differences were found across the writer groups in my study, although the native novice writers generally employed more directives (15.9 pttw).

Following the widely adopted functional taxonomy by Hyland (2002b, 2005b), I categorized directives into three main kinds according to the acts in which writers direct readers to engage: i) textual acts; ii) physical acts; iii) cognitive acts. These three acts perform different functions in discourse, which will be addressed in turn.

First, writers can use directives to instruct readers to perform textual acts, pointing them to other parts of the text or other texts. Specifically, textual acts can function intratextually when writers intend to lead readers to visual displays such as figure, table, or examples (85a), or to other parts of the same text such as appendix, section, or chapter (85b); textual acts can also function intertextually when writers want readers to refer to other citational support (i.e., evidential markers, especially non-

integral citations) for relevant information or comparison (85c) (F. Cao, 2014; Hyland, 2002b).

- (85) a. Los puntajes obtenidos en la evaluación de los ensayos mediante la rúbrica usada para este efecto se clasificaron en rangos por porcentajes de logros (ver Tabla 5). (RA_ES_LIN_12)
- b. Como los alumnos son del segundo año del GFE, con un nivel B2, seleccionamos dentro de los exámenes de DELE de dicho nivel un texto de 128 palabras de un tema neutro (véase anexo 1). (RA_ZH_LIN_13)
- c. No obstante, es posible encontrar estudios híbridos que combinan la aplicación de fórmulas de legibilidad con otros métodos, como la realización de entrevistas y grupos focales (cf. March Cerdá, 2010). (RA_ES_TRA_01)

Second, directives can also be used by writers to instruct readers to perform physical acts with different areas of focus. Specifically, writers can involve readers in a research process (86a-b) or in performing actions in the real world (86c). In addition, some physical acts may serve to offer suggestions to the reader (86d).

- (86) a. Analícemos ahora los casos anafóricos asociativos con los nombres escuetos. (RA_ZH_LIN_01)
- b. En primer lugar, debemos acceder a la ventana Búsqueda avanzada a través de la pestaña Configuración. Seguidamente, en el campo Buscar páginas con... debemos introducir en la opción esta palabra o frase exactas las palabras que deseamos buscar. (TFM_ES_LIN_11)
- c. Pero, la distribución de géneros ya tiene la tendencia de que el género argumentativo ocupará menos espacio. Para que permanezca la diversidad y equilibrio, hay que detener esta tendencia cuanto antes. (TFM_ZH_LIN_06)
- d. Cuando lo que se pretende evaluar es una determinada competencia, hay que preparar la prueba sigilosamente y buscar, en la medida de lo posible, los perfiles adecuados de estudiantes. (TFM_ES_LIN_06)

Finally, directives can lead readers to certain cognitive acts, securing their understanding of the argument same as writers' interpretation and reasoning. Specifically, writers can steer readers through a new domain of argumentation (87a) or an exposition (87b). Moreover, these markers highlight critical points in the text that

readers should note (87c-d).

- (87) a. Consideremos ahora el catalán. En esta lengua existe una abundante variación respecto a las soluciones que presentan las distintas variedades para realizar la combinación de un clítico acusativo y un clítico dativo de tercera persona (TFM_ES_LIN_02)
- b. Imagínese, por ejemplo, una lengua en la que se clasificaran y designaran afecciones como la diarrea o el vómito a partir de una sola palabra de sentido general equivalente a evacuación. (RA_ES_LIN_18)
- c. Por lo tanto, en el proceso de traducción, el traductor tiene que preponderar el contenido sobre la forma. Pero hay que tener en cuenta de que eso no significa que la forma no tenga importancia. (TFM_ZH_TRA_02)
- d. Es necesario recordar que la valoración directa se centra en los usos lingüísticos de las variedades, y consta de dos partes: el componente afectivo y el componente cognitivo. (TFM_ES_LIN_12)

In terms of the functional variations of directives across the writer groups, it was found that the difference mainly lay in textual acts. First, the previous key item analysis has indicated that the native novice writers used significantly more *cf.* and *vid.*, probably due to idiosyncratic factors. This fact, to some extent, can account for the highest frequency of directives in the native novice texts. Not surprisingly, it was also found that Spanish native writers preferred an impersonal directive language to allude to “implied reader” (Hyland, 2002b: 227), while L1 Chinese writers were far less reluctant to direct their readers to perform textual acts explicitly. For instance, impersonal imperative *ver* was only used in the native texts; meanwhile, the non-native writers employed significantly more *veamos*. As already noted, the reason could be that native writers try to tone down the directive language by using impersonalization, whereas non-native writers may not be aware of this common strategy in Spanish academic prose.

6.3.5.3. Shared knowledge

Appeals to shared knowledge is not an unfamiliar writing practice, with which

academic writers “seek to position readers within apparently naturalized boundaries of disciplinary understandings” (Hyland, 2005b: 184) and evoke “a feeling of sharedness and collegiality” (Dontcheva-Navratilova, 2021: 26). Therefore, there is a presupposition that as an intelligent and qualified member of the discourse and disciplinary community, a reader should possess background knowledge and recognize it as familiar or widely accepted. In doing so, writers and readers together co-construct arguments and reach an agreement. No less importantly, writers can demonstrate their insider status in the disciplinary community and their familiarity with disciplinary knowledge (Koutsantoni, 2004; F. Cao, 2014).

Concerning what should be seen as an explicit marker of shared knowledge, many previous English studies (e.g., Hyland & Jiang, 2016b; Jiang & Ma, 2018; Zou & Hyland, 2020; Dontcheva-Navratilova, 2021) have adopted a more relaxed criterion, for example *of course*, *obviously*, *normally*, *typically*, *commonly*, and *routinely* were all included. In the present study, however, the Spanish counterparts of these markers were treated either as hedges (e.g., *normalmente*) or boosters (e.g., *obviamente*, *por supuesto*), as noted earlier. I only took into account some markers related to the verb *saber* (e.g., *como es sabido*, *como sabemos*, *es bien sabido que*, *sabemos que*) and a few others related to the verb *conocer* (e.g., *conocemos que*, *es de conocimiento común que*). As a result, the overall frequency of this engagement resource was very low (81 cases in total).

In relation to the discourse functions of knowledge appeals, it was found that the majority of cases in the corpus referred to claims that are considered self-explanatory background knowledge in the disciplinary or discorsal community (88a). Some claims can be seen as common knowledge or facts outside the disciplinary community (88b). Finally, some knowledge appeals serve as common ground that the writer tries to establish with the reader after the exposition (88c-d).

- (88) a. Como es bien sabido, el género es una propiedad gramatical de los sustantivos en español, así como en otras lenguas, (RA_ES_LIN_23)
- b. Sabemos que, cuando la luz incide oblicuamente sobre una superficie y pasa de un medio al otro con distinto índice refractivo, dejará de

propagarse en línea recta, sino que cambiará su dirección.
(TFM_ZH_LIN_14)

- c. A través de la investigación, ya sabemos que la traducción de los MCE chino- español es una dificultad y la teoría de MCI tiene una influencia positiva para su traducción. (TFM_ZH_TRA_05)
- d. Según el análisis del poema anterior, sabemos que Lorca ha establecido una vinculación original entre las imágenes chinas y el mundo infantil.
(RA_ZH_LIT_01)

Despite the rather limited cases, I found that the non-native writers appealed to shared knowledge more frequently than their native counterparts (63 occurrences vs. 18 occurrences). This could indicate that the language used in the non-native texts was generally more engaging, as demonstrated in the previous statistics and qualitative textual analysis. Appeals to shared knowledge (disciplinary knowledge in particular) can be seen as a profitable strategy that the non-native writers employed to involve their readers in co-constructing and supporting claims.

6.3.5.4. Questions

Questions are perhaps the most straightforward way of showing the dialogic essence of engagement, in which “writers project the perceptions, interests, and needs of a potential audience into their unfolding argument” (Hyland, 2002e: 531). The use of questions evokes interest in the topic and challenges the reader to think on a par with the writer as an equal and knowledgeable participant in the discourse (Webber, 1994; Hyland, 2002e, 2005b; Lafuente-Millán, 2014; Jiang & Ma, 2018).

The only marker of questions that the present study considered was the Spanish question mark (¿?). Logically, almost all of them should be rhetorical questions as writers did not (also cannot) expect an immediate response from readers. Similar to what has been observed in previous studies (Lafuente-Millán, 2014; Dontcheva-Navratilova, 2021), this resource was not frequent in our corpus (301 cases in total) despite its rhetorical importance and effectiveness. One possible explanation for this, as also pointed out in Hyland (2002e), could be that its directness and potential impact on readers make writers cautious about inserting questions in the text.

Regarding the functions, I drew on the literature on questions in academic writing (Webber, 1994; Hyland, 2002e; Crawford Camiciottoli, 2008; F. Cao, 2014; Curry & Chambers, 2017) and in-depth textual analysis, and finally identified six kinds: i) framing the discourse; ii) organizing the text; iii) establishing a niche; iv) prompting readers to reflect; v) setting up claims; vi) acknowledging limitations and anticipating future research.

The first kind of question introduces readers to the main questions that offer a guiding path through which the following content is structured, and that the writer is going to explore and solve in the current work. It can thus be expected that these questions usually occur in introductory sections or abstracts. Moreover, questions of this kind are the most frequent ones as every academic writing piece is driven by research questions (Hyland, 2002e). Finally, it is interesting to note that this type of question usually appears in clusters, “creating a dynamic introductory ‘whirl’” (Crawford Camiciottoli, 2008: 1226), as shown below:

- (89) a. El presente estudio tiene como propósito estudiar, desde un punto de vista experimental, la naturaleza de la sinonimia léxica. En concreto, se pretende contestar tres preguntas diferentes: 1) ¿cómo es la relación de sinonimia, gradual o discreta? 2) ¿es realista la percepción consciente de los hablantes sobre el grado de sinonimia entre dos ítems? y 3) ¿cómo se procesa dicha relación en el cerebro? (RA_ES_LIN_08)
- b. Básicamente intentamos solucionar cuatro cuestiones: 1. En español ¿cuáles son [...]? 2. En chino ¿cuáles son [...]? 3. ¿Cuando se traducen [...]? 4. Cuando los estudiantes hispanohablantes redactan Rel. en chino, ¿se ven afectados por (TFM_ZH_LIN_04)

In contrast with the above questions providing an initial framework for the text, some other questions are distributed throughout the text’s progression, signposting different sub-contents. They tend to occur at the beginning of sections or new topics. The purpose of using these in-text signals is to focus readers’ attention or pique readers’ interest in what should be expected now, as exemplified below:

- (90) a. En las partes anteriores, hemos analizado la causa de la traición creativa del traductor. ¿Entonces cómo se produce la traición creativa por parte del receptor? (TFM_ZH_TRA_02)
- b. Ahora bien, ¿opinan igual los informantes si observamos los datos a la luz de su L1? En primer lugar, como puede verse en el gráfico 19, [...] (TFM_ES_LIN_12)
- c. Antes de entrar en el siguiente apartado, conviene solucionar la pregunta: ¿Cómo se utiliza la fórmula? (TFM_ZH_LIN_06)

Writers may also use questions to establish a niche or identify a gap for their research. In doing so, writers can highlight the novelty and significance of their work (Lafuente-Millán, 2014). The following extract can illustrate this function:

- (91) a. Aunque las clases y los manuales se organicen en torno a la traducción de textos, existe un gran vacío en cuanto a los objetivos y la metodología de la enseñanza: ¿qué objetivos de aprendizaje se persiguen?, ¿cuáles son los criterios utilizados para la selección de los textos?, ¿qué progresión conviene establecer?, ¿cuál es el trabajo pedagógico que ha de planificar el profesor para que el estudiante sea capaz de traducirlos? Son preguntas que quedan sin respuesta. (RA_ES_TRA_06)

It was also found that writers employed certain questions to stimulate readers to reflect on them, with or without an immediate answer provided. By doing so, writers can assign readers an active role (i.e., proactive thinker), creating greater involvement in the text:

- (92) a. Esto debería suponer un punto de reflexión, sobre todo retomando el debate que se abrió en la introducción, ¿de qué sirven los manuales con una perspectiva panhispánica si los docentes de ELE, por ejemplo, no son capaces de identificar la variedad chilena, o creen que la variedad castellana es más prestigiosa que la andaluza? (TFM_ES_LIN_12)
- b. Cabe preguntarse si a los estudiantes del Factor 1 de verdad les interesa el estudio del español y, si es así, ¿por qué les denominamos como el grupo de ‘solo inglés’? (RA_ZH_LIN_23)

Another quite common function of questions is to help writers set up claims. The questions raise a doubt first, and then writers immediately dispelled it by placing their

argument, as demonstrated in the examples below:

- (93) a. Entonces, ¿cuál es punto de encuentro entre los NEL y la literacidad crítica? Es evidente la relación que existe entre los NEL y la LC, ya que comparten gran parte de sus planteamientos, (TFM_ES_LIN_07)
- b. ¿Qué herramientas pueden emplearse cuando el nivel en la L2 de los alumnos es insuficiente para acceder a los conceptos curriculares? Una de las posibles respuestas fue la lengua franca, esa lengua vehicular comparten tanto alumnos como profesor sin que esta sea necesariamente la lengua materna de ninguno de ellos. (TFM_ES_LIN_13)

The last function of questions, which tends to appear in the concluding section/chapter, is to allow writers to acknowledge the limitations of the current research and suggest potential avenues of future research:

- (94) a. Sin embargo, el trabajo tiene todavía muchos límites, por ejemplo, con la teoría de los MCI, ¿si hay algunos consejos o medios para la enseñanza de los MCE hacia extranjera? ¿Si hay mejor traducción de los MCE? etc. (TFM_ZH_TRA_05)

Turning to the differences in using these functions, I did not find any marked variations across the writer groups. Most of these functions appeared in all corpora, which implies that all writer groups seemed to be aware of the rhetorical importance of this engagement resource in academic writing. Few functions, such as the last function, were absent from the native corpora. However, due to their rarity in the corpus, it is hard to provide any conclusive explanations.

6.4. Summary

Chapter 6 continued the last chapter to present the results of the second metadiscourse dimension, namely interactional metadiscourse. The primary purpose of this chapter is to explore quantitative and qualitative differences in the use of interactional metadiscourse in Spanish academic writing across nativeness statuses (native Spanish

writers vs. L1 Chinese writers) and expertise levels (expert writers vs. novice writers). Like the preceding chapter, this chapter has successively examined interactional metadiscourse categories, markers, and functions.

Firstly, the descriptive statistics of the frequency distribution (per 10,000 words) of each interactional metadiscourse category across the four writer groups revealed once again that the native expert group generally employed fewer metadiscourse resources than the other three groups, except for the use of hedges. Moreover, there was a sharp contrast between the native and non-native writer groups in the use of hedges and self-mentions. The subsequent inferential statistics corroborated this finding, indicating that the differences were statistically significant. Specifically, L1 Chinese writers were found to utilize significantly fewer hedges but more self-mentions than the Spanish-speaking writers. Additionally, the inferential statistics suggested that the non-natives used more engagement markers in general and reader references in particular than their native counterparts. Finally, the novice writers produced more attitude markers and reader references than the experts.

Secondly, I compared the incidence of individual interactional metadiscourse markers across nativeness and expertise to generate the most salient markers. Like in the preceding chapter, I also tried to account for the saliency of these markers. Some of the contributing factors identified in interactive metadiscourse still apply to interactional metadiscourse. For example, the lack of register awareness could explain the overuse of *normalmente*, *hace falta*, and *en realidad* by the non-native writers (especially the non-native novices); the low lexical competence of non-native and/or novice writers can account for their underuse of *precisamente*, *probablemente*, *ciertamente*, *en efecto*, *sugerir (que)*, and *constatar (que)*; the genre differences between master's thesis and research article can explain the overuse of *(yo)* in the novice texts. Apart from these factors, I also put forth some new factors that could explain the saliency of certain interactional markers. For instance, the underuse of shields **ría(n)*, *parecer* by the non-native writers and overuse of *opinamos que* and *creemos que* by the non-native novice writers can be attributed to their unfamiliarity with the conventions of native-speaker writing work; the collective culture of China

(i.e., culture-bound factor), together with the teaching practice (i.e., institutional factor), can account for the high frequency of first-person plural pronouns (i.e., *(nosotros) *mos, nos*) and possessives (i.e., *nuestr**) but the low frequency of first-person singular pronouns (i.e., *(yo), me*) and possessives (*mi, mis*) in the non-native texts.

Lastly, I conducted an in-depth qualitative textual analysis to examine the specific and nuanced discoursal/rhetorical functions of each interactional resource and to highlight the differences of these functions across the writer groups. Like the findings described in interactive metadiscourse, most functions that interactional resources perform in the texts were shared among all writer groups, which again demonstrates the discoursal/rhetorical homogeneity within the same academic community. Focusing on the cross-group variations in performing functions, I found that the differences were primarily reflected in the use of interactional markers that were distinctive of certain writer groups. For example, when it comes to hedging use, native-speaking writers preferred shields, which signals their degree of uncertainty or confidence about the statements made; meanwhile, L1 Chinese writers favored approximators (e.g., *generalmente, normalmente*), which serves to make statements less categorical and data less precise, and first-person hedges (e.g., *creemos que, opinamos que, creo que*), which expressed their highly subjective point of view. Another clear example is the functional differences in self-mention use. Since the native writers used significantly fewer self-mention markers than their non-native counterparts (especially the non-native novice writers), they were generally less likely to perform the diverse functions of self-mentions in their writing, such as previewing or reviewing information and elaborating arguments. Instead, they opted for an avoidance strategy (i.e., impersonalization) to achieve such discoursal goals.

Chapter 7 Conclusions

In the previous two chapters, the quantitative and qualitative analyses have yielded some interesting patterns in how interactive and interactional metadiscourse were used by Spanish academic writers (native experts, native novices, non-native experts, and non-native novices). This last chapter concludes the thesis. Firstly, I recapitulate the study's major findings to answer the research questions formulated previously. In view of the applied nature of this thesis, I then ponder on the pedagogical implications suggested by these findings. Thirdly, based on the whole thesis, I assess the contribution of the research. Lastly, I comment on the current study's limitations and recommend potential avenues for future research on metadiscourse.

7.1. Main research findings

This section summarizes key findings presented in the two preceding chapters to answer each of the research questions formulated in the Introduction.

RQ1. To what extent does nativeness affect the use of metadiscourse in Spanish academic writing?

The answer to this research question is divided into two parts, corresponding to the main findings of the two metadiscourse dimensions.

Interactive metadiscourse: i) the initially planned MANOVA test failed the assumption checks, as a result of which an alternative test, namely the Mann-Whitney U test, was adopted. This test showed that the statistically significant differences between Spanish non-native and native writers were found in 'Addition', 'Visual references', 'Reformulation', 'Exemplification', and 'Non-integral citations'. Specifically, the non-native writers were found to use significantly fewer additive transition markers and non-integral citations but significantly more visual references, reformulation and exemplification markers than their native Spanish-speaking

counterparts. ii) Enough evidence from the keyness analysis indicated that the L1 Chinese writers saliently favored certain interactive metadiscourse markers (e.g., *o sea*, *por eso*, *entonces*, *arriba*, *abajo*, *en cuanto a*) but significantly underused others (e.g., *finalmente*, *por tanto*, *asimismo*, *con todo*, *con respecto a*) when compared against the native Spanish writers. Possible explanations for this can be attributed to the lack of register awareness and low lexical competence on the part of non-native writers, as well as to L1 negative transfer. iii) In terms of the discoursal/rhetorical functions of each interactive metadiscourse, while most of them were shared between the non-native and native writer groups, some functions were not evenly distributed across the native and non-native corpora. For example, reformulators with a dismissal function (e.g., *en todo caso*, *en cualquier caso*) were less common in the non-native texts. In addition, non-integral citations that serve to summarize and synthesize source(s) were also less frequently employed in the non-native texts.

Interactional metadiscourse: i) The MANOVA test failed the assumption checks too, and the alternative Mann-Whitney U test was thus performed instead. The statistical report indicated significant differences across non-native/native groups concerning the use of ‘Hedges’, ‘Self-mentions’, ‘Engagement markers’, and ‘Reader references’. More specifically, L1 Chinese writers used significantly fewer hedging devices but significantly more self-mentions, engagement markers, and reader references than the Spanish-speaking writers. ii) The key item analysis suggested that the frequency of certain interactional markers (e.g., *(nosotros) *mos*, *nuestr**, *normalmente*, *generalmente*, *hace falta*, *en realidad*) was substantially higher in the non-native texts than in the native texts; meanwhile, the frequency of other interactional markers (e.g., **ría(n)*, *parecer*, *me*, *(yo)*, *cf.*, *precisamente*, *ciertamente*) was significantly lower in the non-native corpora than the native ones. I believe that some of the previous accounts for salient interactive markers (such as the lack of register awareness and low lexical competence on the part of non-native writers) still held for the saliency of specific interactional markers. Apart from those, I also proposed some other explanations, such as non-native writers’ unfamiliarity with the writing conventions of the target discourse community and their collective culture and different

institutional practices. iii) When it comes to the discoursal/rhetorical functions, yet again, most of them were shared between the non-native and native writer groups. However, the nuanced functions of certain interactional metadiscourse categories were found to vary across the two groups. For instance, when using hedging, Spanish natives preferred shields (e.g., *ría(n)*, *parecer*) to lower their degree of certainty and confidence about the statements, whereas L1 Chinese writers favored approximators (e.g., *generalmente*, *normalmente*) to lower the categoricalness and preciseness of the statements. Another example is that while the native writers (especially the novice group) had no difficulties using self-mentions (first-person singular pronouns and possessives) to recount their personal research experience, the non-native writers tried to avoid this function.

In short, the results from this study support the effect of nativeness on metadiscourse use in Spanish academic writing, and such influence is reflected in metadiscourse categories, markers and functions.

RQ2. To what extent does expertise affect the use of metadiscourse in Spanish academic writing?

As in the previous research question, the answer to the second research question is also divided into two parts, showing the main findings of the two metadiscourse dimensions.

Interactive metadiscourse: i) The statistical results revealed that the novice writer groups utilized significantly more ‘Sequencers’, ‘Stage signals’, ‘Previews’, and ‘Reviews’ but significantly fewer ‘Overviews’ than the expert counterparts. ii) As for the salient interactive markers by expertise, it was found that the novice writers particularly favored items such as *en el capítulo*, *en este capítulo*, *en esta parte*, *o sea*, *por eso*, *entonces* but significantly underused *en este artículo*, *en el ejemplo*, *tabla*, *figura*, *con respecto a* in comparison with the experts. I believe that the genre differences between a master’s thesis and a journal article played a significant role in the saliency of several items. Besides, it is noteworthy that some of these markers (e.g., *o sea*, *por eso*, *entonces*) were also salient in the non-native texts against the native ones. This suggests it was the non-native novice writers who used them significantly

more than the other three writer groups. Therefore, the low register awareness and lexical competence can still account for the saliency of these items. iii) The influence of genre differences between thesis and article was also reflected in variations of discourse functions performed by the novice and expert writers. For instance, not unexpectedly, some announcers (e.g., *en este capítulo, el presente trabajo final de máster tiene como objetivo*) in the novice texts only served to announce chapter or thesis goals, whereas other announcers (e.g., *este artículo, el objetivo de este artículo*) were exclusively used in the expert texts to announce article goals. Moreover, the novice writers tended to use sequencers (e.g., *el primer capítulo ..., el segundo capítulo ..., en el tercer capítulo ..., por último ...*) at the end of the introductory chapter to outline the overall thesis structure, which was not common in expert writing. Another functional variation across expertise levels is that the novice writers employed a few colloquial topicalizers (e.g., *por cierto, a propósito, entre paréntesis*) to temporarily digress from the main subject, a function that was entirely absent from the expert texts.

Interactional metadiscourse: i) The inferential statistics suggested that the novice writers employed significantly more ‘Attitude markers’ and ‘Reader references’ than their expert counterparts. ii) Only a few interactional markers showed salient differences between novice and expert writers after the keyness analysis was applied. Furthermore, more than half of these salient markers already appeared in key interactional markers by nativeness, e.g., *(nosotros) *mos, vid., opinamos que, (yo), nuestr*, *ría(n)*. Specifically, despite the single authorship in thesis writing, the non-native novice writers especially favored plural forms of self-mention or reader reference, such as *(nosotros) *mos* and *nuestr**, and first-person hedges such as *creemos que* and *opinamos que*; on the other hand, they significantly underused first-person singular pronoun *(yo)* and shield **ría(n)* when compared with the native novices and native experts. This can be explained by their unfamiliarity with the Spanish academic writing conventions or by the collective culture of China. iii) Regarding the discursal/rhetorical functions of each interactional metadiscourse category, no marked differences were found across expertise levels.

In short, based on the findings above, it can be said that the effect of expertise on the use of metadiscourse was not so clear and conclusive. Despite the fact that statistically significant differences between the novice and expert writer groups were found in both interactive and interactional metadiscourse dimensions, two points should be noted. First, the different use of interactive metadiscourse, ranging from the key interactive markers to nuanced discoursal/rhetorical functions, was influenced mainly by the factor of genre. In other words, the actual effect could be attributed to genre rather than expertise. For the interactional dimension in particular, I also believe that nativeness is more influential than expertise in accounting for the variations. For example, among the few salient interactional markers by expertise, most of them were at the same time characteristic of the non-native/native texts, with markers' saliency (BIC scores) by nativeness much higher than the one by expertise.

RQ3. Is there any interaction effect between nativeness and expertise on the use of metadiscourse?

As for the last research question, unfortunately, the present study cannot provide a satisfactory answer because the initially planned two-way MANOVA test, which could have measured the interaction effect between nativeness and expertise on the frequency distribution of each metadiscourse resource, failed the assumption checks. Despite this, I still reported the test results in the previous two chapters. Having compared the test results from the two-way MANOVA (Table 5-3 and Table 6-3) with those from the alternative Mann-Whitney tests (Table 5-4 and Table 6-4), I found considerable overlap between them in terms of the metadiscourse categories with (non)significant results. In this sense, the provided MANOVA test results could be seen as indicative of a potentially significant interaction effect between the two factors. Specifically, for interactive metadiscourse, no significant interaction was found in the multivariate test (i.e., all interactive metadiscourse categories were assessed simultaneously and collectively), but a significant interaction effect in 'Addition' was detected in the univariate tests (i.e., each interactive metadiscourse was assessed separately). As for interactional metadiscourse, there was a significant interaction effect in both

multivariate and univariate tests. The only interactional category with a significant interaction effect is ‘Directives’.

As for the potential interaction effects between the two factors on the choice of certain metadiscourse markers and the specific functions of metadiscourse resources, to the best of my knowledge, there was no way for the current methods to assess it.

7.2. Pedagogical implications

Based on what the present study has shown, we know that metadiscourse plays a crucial role in academic writing, in the sense that a successful and effective argumentation is always reflected in the writer’s tactical deployment of diverse metadiscourse resources throughout the text. However, the importance of metadiscourse has been largely ignored in the classroom, as Hyland (2005a) acknowledges. The present study also suggests that there are some problematic areas in metadiscourse use by non-native and/or novice writers and that the issues are worth paying much attention to in the classroom. Therefore, this section aims to discuss the pedagogical implications based on the findings from the earlier chapters. Specifically, I will focus on what ideas teachers and learners can draw on from the present investigation of metadiscourse.

7.2.1. Implications for teachers

When designing effective teaching courses or programs, teachers should know well the important role of awareness and noticing in language learning; that is, the “Noticing Hypothesis” —a hypothesis that input cannot be assimilated in language learning unless it is noticed or consciously registered (Schmidt, 1990, 2010). The current prevailing issue in metadiscourse use precisely lies in the fact that writers lack the awareness of metadiscourse (Mauranen, 1993b; Hyland, 2005a). Therefore, it is essential for language teachers or academic writing instructors to make their students consciously notice it.

To achieve this purpose, explicit instruction could accelerate the acquisition of metadiscourse (Hyland & Milton, 1997). The explicit type of instruction is a direct and

deductive approach to teaching, where learners are provided with clear goals, rules, explanations, and practice examples (Archer & Hughes, 2011). Previous meta-analyses (Norris & Ortega, 2000; Goo, Granena, Yilmaz, & Novella, 2015) on the effectiveness of implicit and explicit instruction in L2 learning suggest explicit instruction is generally effective. On the effectiveness of explicit instruction in metadiscourse learning specifically, previous experimental studies (Cheng & Steffensen, 1996; Jalilifar & Alipour, 2007; Tavakoli, Dabaghi, & Khorvash, 2010; Ahour & Entezari Maleki, 2014) have shown that English learners can benefit from explicit training of metadiscourse.

This is to be expected because metadiscourse, unlike pragmatic concepts such as presupposition, has explicit linguistic forms (Hyland, 2017), which means it can readily become the explicit focus on target forms in teaching courses. As a result of the present study, I would suggest that:

- i) In light of the lack of register awareness on the part of non-native writers (especially the novice group), foreign language teachers can include awareness-raising activities in the courses and expose L2 students to a broader range of registers in order to foreground the differences between written and spoken registers (Gilquin & Paquot, 2007; Altenberg & Tapper, 1998). For example, Spanish teachers can point out to students that *o sea* and *por eso* are used chiefly in speech rather than in academic writing; at the same time, they can provide their students with more formal alternatives, such as *es decir* and *por tanto*.
- ii) Given the L1/L2 negative transfer issue in non-native writers, academic instructors could remind them of different usages of a word or phrase between their mother tongue and foreign languages. For example, given that Spanish teachers are (in principle) competent users of both L1 and L2, they can tell their students that *arriba* and *abajo* as visual references are more commonly used in English and Chinese while in Spanish *anterior*, *anteriormente*, and *a continuación* are preferred for this type of usage.
- iii) Focusing on non-native writers' unfamiliarity with the conventions of the

target discourse community, teachers could help their students develop a consciousness of writing norms so that the latter can adhere consciously to the metadiscoursal usage conventions of the given discourse community. For instance, Spanish teachers can use contrastive examples (e.g., Examples (49) and Examples (50)) and data (e.g., Figure 6-3 and Figure 6-4) in the present study to demonstrate that professional Spanish writers tend to favor a depersonalized way of argumentation instead of explicitly showing authorial selves or including the reader.

- iv) When it comes to non-native/novices' issue of lexical competence, teachers or instructors can sensitize students to the different lexical choices made by native expert writers and by themselves so that the student writers are aware of their narrow lexical repertoire and encouraged to broaden it (T. Li & Wharton, 2012; Crosthwaite et al., 2017). More specifically, teachers or instructors can make use of the list of metadiscourse markers provided in this study and show their students a range of metadiscoursal expressions, especially those preferred in native expert writing. On the other hand, teachers should warn their students not to use too much metadiscourse to "bury their ideas" (Williams, [1981] 1991: 125) since the overuse of metadiscourse elements in a text is often deemed "didactic, interfering, and patronising" (Mauranen, 1993b: 189).
- v) As for the novice-expert writing differences resulting from genre variations between a master's thesis and a journal article, teachers and instructors could have less concern because genre awareness perhaps is an implicit knowledge that students can gradually and subliminally acquire with a substantial reading of different types of academic writing. That said, teachers and instructors can still prepare some genre-related reading activities to allow their students to compare and recognize particular discoursal/rhetorical purposes that specific metadiscoursal features of each genre can achieve. For instance, *en este capítulo* is clearly not an appropriate marker for a journal article as its discourse purpose is to

announce the chapter goal of a lengthy thesis.

The above pedagogical suggestions for foreign language teachers and academic writing instructors can be further translated into specific classroom activities. I agree with Hyland (2005a) that it is useful to create tasks based on authentic text samples of the target discourse community (e.g., native Spanish-speaking experts in language and literature area) because by doing so, students are exposed to valuable and contextualized items and more likely to develop relevant consciousness and skills. These tasks can be in a diversified format, such as metadiscourse marker identification in a text, multiple-choice questions, and gap-filling exercises (Hyland, 2005a; Crosthwaite et al., 2017). Some task templates can be found in Wette (2021: 95–104).

7.2.2. Implications for students

The above implications are highly teacher-centered. However, considering that students are also the key participants of classroom activities, we might ponder what implications student learners can obtain.

According to Hyland (2005a), ‘data-driven learning’ (DDL) can be deemed an important way of stimulating students’ independent search and engagement with the language. DDL (Johns, 1991) is a language learning approach in which classroom concordancing is used to enable students to discover regularities of patterning by independently exploring the authentic data of the target language. While DDL is also strongly connected to language awareness and consciousness-raising, it calls for more learners’ inductive skills (Granger & Tribble, 1998). In other words, students do discovery learning rather than spoon-feeding or rote learning (Bernardini, 2000; Tribble & Jones, 1997): to discover linguistic regularities and make generalizations based on observation, analysis, induction, and conclusion. In a previous study (Yao, 2019), I discussed evidence suggesting that DDL is an effective way of learning Spanish vocabulary for Chinese learners. Focusing on metadiscourse, only one study by Sun & Hu (in press) performed an empirical DDL study and showed the effectiveness of the DDL approach in facilitating Chinese students’ learning to hedge properly in English

academic writing. Therefore, while more empirical evidence is needed, the DDL approach to metadiscourse certainly is worth a try.

So the next question is how students practice DDL. Again, the fact that metadiscourse elements have explicit linguistic forms makes DDL more readily operationalized among students. Here I offer two possible practical ways of implementing DDL inside and/or outside class:

- i) Students can construct ‘do-it-yourself (DIY)’ (Charles, 2012) corpora by compiling individual, small-scale, tailor-made, and disciplinary-specific text samples. For a more profitable awareness raising, it is recommended that the texts of both target discourse community and students themselves should be collected for later comparison and contrast (Granger & Tribble, 1998; Hyland, 2005a; F. Cao, 2014). Then, under teachers’ guidance, they can learn how to use corpus concordancer or CAQDAS (some free options are AntConc, LancsBox, UAM CorpusTool) to make queries in their DIY corpora. Having familiarized themselves with the software interface and corpus techniques, students can proceed to perform their own search of metadiscoursal features and patterns, preferably driven by specific questions, such as how often native Spanish-speaking writers use self-mentions and integral citations in their writing and how often students use them; what are typical hedging resources employed by Spanish expert writers; which expressions should be used to perform adversative discourse function and which alternatives can be learned from the expert texts.
- ii) Students can also take advantage of ready-made corpora to practice DDL. Corpora of this type include corpora from the BYU corpus family, corpora by the Real Academia Española, corpora by Sketch Engine, etc. As these existing corpora usually have enormous data, it is not difficult for students to detect the general tendencies and patterns. For example, Spanish students can use *Corpus del Español (Genre/Historical)* to compare the register difference of specific metadiscourse markers, i.e., spoken or academic register; they can use free online bilingual concordance such as Linguee

and tr-ex.me⁴⁵ to find out how a metadiscourse marker is typically translated from source language to target language. The screenshot below demonstrates that English *as shown below* is more frequently translated as *como se muestra a continuación* (302 hits) than as *como se muestra abajo* (82 hits) in Spanish.

Figure 7-1 Translated examples of ‘as shown below’ in Spanish (from tr-ex.me)

The screenshot shows the tr-ex.me website interface. At the top, there is a search bar containing the text "as shown below". To the right of the search bar is a "Translate" button. Below the search bar, there is a section titled "Trans" with a subtitle "See examples translated by 'como se muestra a continuación' (302 examples with alignment)". This section contains a list of search results, each with a magnifying glass icon and the text "como se muestra a continuación". Below this list, there is a section titled "Examples of using As shown below in a sentence and their translations". This section contains a table with two columns: the first column shows the English sentence with "as shown below" highlighted, and the second column shows the Spanish translation with "como se muestra a continuación" highlighted. The table includes examples such as "And you enter the password as shown below don't lose it!" and "Install the battery as shown below.".

However, it should be noted that there are some advantages and weaknesses of the two paths. The most apparent advantage of the DIY corpus approach is that students can compare their own texts with those produced by natives or experts from the same disciplinary discourse community. This kind of direct comparison can help students become aware of the gap between their academic interlanguage and the target discourse (cf. Granger & Tribble, 1998). Moreover, building their own corpus also enables students to gain a more critical and deeper understanding of the nature of academic writing (Charles, 2012; Nesi, 2016). Nevertheless, the generally small size and subject specificity of DIY corpora could not answer all types of questions formulated by students, for example, how a metadiscourse marker is distributed across registers or

⁴⁵ Currently neither Linguee nor tr-ex.me support direct search between Spanish and Chinese; however, English as an intermediary language could be a workaround.

what is the typical translation of a metadiscourse marker in the target language. Apart from this, building a DIY corpus is usually time-consuming and inconvenient, such as collecting appropriate and available text samples and cleaning the corpus (Charles, 2012).

In terms of the established corpus approach, convenience is the most obvious advantage. Besides, the existing corpora with a large amount of data are usually good at locating linguistic patterns and regularities, especially for low-frequency items (e.g., *verbigracia*, *en otro orden de cosas*). However, a large general corpus is unlikely to have enough relevant data to respond to highly discipline-specific queries (Charles, 2012), for example, how Spanish scholars in linguistics employ hedging resources. Likewise, compared with a specialized corpus, a general corpus may have less reference value for students' own composition due to the lack of relevance, such as different genres, styles, and vocabulary use. Lastly, the benefits of translation memory in online bilingual concordance cannot be easily reproduced in the DIY corpus.

In view of the above, a final suggestion is that both the DIY corpus approach and ready-made corpus approach should be combined together and complement each other. As Granger & Tribble (1998: 204) rightly point out, "the usefulness of a particular corpus will depend on the type of investigation the student wishes to undertake". If the questions are specific to the discipline, a DIY corpus will suit their needs more; if the questions are broader and more general (such as register comparison and source language and target language comparison), a large general corpus should be of greater help to students.

7.3. Contribution of the thesis

This section is concerned with the contribution that the current thesis has made to the field. After evaluating the whole thesis retrospectively, I summarize the contribution from three perspectives: theoretical, empirical, and methodological perspectives.

7.3.1. Theoretical contribution

The first contribution of the present study lies in theoretical aspects. Specifically, Chapter 2 of the thesis helps clarify some central concepts and descriptive categories of metadiscourse by breaking down the notion into three major issues: the conceptual issues, the identification issues, and the classification issues. They have been addressed thoroughly based on three specific questions: i) what metadiscourse and its functions are; ii) how to identify metadiscourse elements in the text; iii) how to classify metadiscourse elements.

For conceptual issues, I reconsidered the long-standing debate about what is metadiscourse and what is proposition. As metadiscourse is a fuzzy concept, the boundary between metadiscourse and propositional content is also fuzzy. A stretch of discourse may act both as metadiscourse and proposition. Concurring with the view of several scholars (Hyland, 2017; Hyland & Tse, 2004; Ädel, 2006; Mao, 1993), I suggested that the rigid dichotomy between metadiscourse and proposition should be eased and that we should instead focus more on the definition of metadiscourse and its functions achieved in the actual discourse. However, the answer to what is meant by ‘metadiscourse’ varies among different scholars. Two general strands have emerged during the development of metadiscourse theory: the narrow approach and the broad approach (Ädel, 2006). The former adopts a narrow definition and reflexive model, while the latter uses a broad definition and interactive model (Ädel & Mauranen, 2010; Ädel, 2010). The key difference lies in whether stance is included in the definition and function scope. Briefly, the former does not see the writer’s stance (i.e., attitude, hedging, boosting) on the propositional content as metadiscourse while the latter does. As a result of this conceptual division, three divergent but not opposing metadiscourse models have been developed (see Section 2.1.2).

As for the metadiscourse identification matter, the first issue concerns which criteria should be adopted. Different researchers have applied different criteria: Hyland uses the criteria of explicitness and discourse-internal/external (Hyland, 2005a; Hyland & Tse, 2004); Ädel’s (2006) criteria include ‘explicitness’, ‘world of discourse’, and

‘current discourse’; and some others researchers (Khabbazi-Oskouei, 2013; F. Cao, 2014) even draw on syntactic criteria such as the syntactic position of metadiscourse in the sentence, even though metadiscourse is a functional category. Also, because metadiscourse is a functional phenomenon, its explicit linguistic forms in the text are not easy to define (Flowerdew, 2015). This comes down to the second identification issue: the delimitation of the metadiscourse unit. Some analysts prefer larger units (such as clauses and sentences) while some prefer smaller units (such as words and phrases), which correspond to the corpus-driven ‘thick’ approach and the corpus-based ‘thin’ approach, respectively (Ädel & Mauranen, 2010; Akbas & Hatipoğlu, 2018). Coincidentally, researchers who adopts the narrow conceptualization prefer the former approach to identifying metadiscourse, whereas proponents of the broader concept of metadiscourse tend to adopt the latter approach.

The above concept and identification issues finally lead to the third issue, which concerns metadiscourse classification. Firstly, since metadiscourse is fuzzy and has a varied size of the linguistic unit of analysis, many metadiscourse elements are multifunctional. It is quite common that a metadiscourse item performs different functions according to its context or conveys more than one function simultaneously in the same context. In either case, the consensus reached among metadiscourse analysts is that metadiscourse functions should be determined manually with contextual checking. At the same time, however, the multifunctional nature of metadiscourse and manual checking inevitably bring the second classification issue: subjective annotation. That is, which category should be assigned to a given metadiscourse marker depends on the analyst’s personal decision, which, in turn, could be influenced by many factors such as the analyst’s language proficiency, cultural background, and disciplinary knowledge. Therefore, it is generally recommended that the decision of metadiscourse category assignment should be guided by a clear codebook and cross-checked by more than one analyst independently to ensure inter-coder reliability (Akbas & Hardman, 2018).

7.3.2. Empirical contribution

Empirically speaking, the current thesis has provided a novel account of metadiscourse use in Spanish academic writing, which previous studies have not adequately covered. The novel aspects are reflected in both the language under analysis and the variables taken into account. This point can be attested by the state-of-the-art literature on metadiscourse (Chapter 3).

In prior studies on metadiscourse, English has always been the primary area of interest (Hyland, 2017). Although some scholars research metadiscourse in the Spanish academic context (e.g., Carrió-Pastor, 2016a, 2016b, 2019c; Lafuente-Millán, 2014; J. J. Lee & Casal, 2014; Martín-Martín, 2008; Mur-Dueñas, 2007, 2009, 2010, 2011; Murillo, 2012; Neff & Dafouz-Milne, 2008; Pérez-Llantada, 2010), they tend to explore patterns used by Spanish speakers' writing in English or compare their Spanish writing with the English one. Research specifically targeted at Spanish metadiscourse is rare, although some exceptions can be found in Section 3.3. Hence, the current thesis that focuses particularly on academic Spanish has offered fresh insights into how metadiscourse works in languages other than English and made valuable contributions to the growing body of this research field.

Within the literature on Spanish metadiscourse, one uncharted area is Spanish as a foreign language. The knowledge of how non-native Spanish users employ metadiscourse is scarce. Only Menke (2021) addressed this topic by looking at the stance use by six advanced L2 Spanish students in their academic writing. While her findings throw some light on the matter, the sample size was small and metadiscourse as a whole was not examined in the study. The present thesis addresses the foregoing issues and makes further progress by comparing Spanish as a foreign language with native Spanish. This level of comparison thus concerns the first factor that my research has measured: nativeness. The second factor I examined is expertise. As I stated in the introductory chapter, I am also interested in knowing how metadiscourse use by novice Spanish writers differs from that by expert Spanish writers. Since expertise level is part of the developmental process of language learning, including this factor in the study

surely contributes to gaining more comprehensive insights into metadiscourse use in Spanish academic writing.

Under a contrastive view, my study has adopted a comparison model adapted from Ädel (2006), in which metadiscourse use was compared across each level of the factors of nativeness and expertise level (see Figure 3-2). However, in several previous studies where two factors were measured simultaneously (e.g., Neff & Dafouz-Milne, 2008; S. Lee, 2009; Abdollahzadeh, 2019), not all levels of the factors were cross-compared because of data absence in certain levels, as also mentioned in Section 3.2. This could downplay the effects of the two factors, let alone the potential interaction effect between them. Another negative consequence of this practice is that possible differences between groups derived from the analysis can be hard to explain; that is, whether the differences are due to one of the factors or both is unknown. Therefore, the current model with each level of each factor taken into account can be of heuristic value to later research in which more than one factor or variable is assessed.

7.3.3. Methodological contribution

The current thesis followed clear and transparent research steps, which have been detailed in different sections and subsections of Chapter 4. This would facilitate replicability and reproducibility in future research. Moreover, some novel aspects of the methodological part include: the discussion of copyright and comparability issues of corpus construction, the creation of a comprehensive list of Spanish metadiscourse markers, the innovative use of CAQDAS as the coding tool, the codebook design for intercoder reliability analysis, and the quantitative analyses adopted in this study.

To begin with, I have raised copyright and comparability issues during the corpus construction, which have seldom been addressed in metadiscourse studies despite their importance. When researchers compile DIY corpus, as is often the case with metadiscourse study, they should be aware of the copyright of collected written text because there might be a copyright infringement if they use copyrighted material without the copyright holder's consent. Appealing to the copyright principle of fair use

or fair dealing could be of help to metadiscourse researchers. The issue of corpus comparability, on the other hand, is critical when two or more corpora are compared, which is often the case in metadiscourse study as well (e.g., cross-discipline, cross-linguistics, cross-genre). If two corpora are incomparable, i.e., factors besides the one we intend to measure are involved without being controlled, the potential differences found from the comparisons may not be accounted for by the intended factor but could be due to those uncontrolled factors. Therefore, Moreno's (Connor & Moreno, 2005; Moreno, 2008) *tertium comparationis* serves as good criteria for checking corpus comparability.

Secondly, drawing on a number of previous work (Martín Zorraquino & Portolés, 1999; Hyland, 2005a; Fuentes Rodríguez, 2009; Mur-Dueñas, 2011; F. Cao, 2014; J. J. Lee & Casal, 2014; Carrió-Pastor, 2016a; Moya Muñoz, 2016), I created a predefined list of metadiscourse markers for Spanish, which includes 681 interactive markers and 491 interactional markers (Appendix II). In addition, I also added corpus-driven items to the list during the manual checking. To my knowledge, it is thus far the most comprehensive list of Spanish metadiscourse markers. Hence, it would be of great reference value to other researchers who want to study Spanish metadiscourse.

Thirdly, I argue that CAQDAS such as MAXQDA, which has seldom been used in previous metadiscourse studies, has a great potential as it is annotation-friendly for both corpus-based 'thin' and corpus-driven 'thick' approaches to metadiscourse. The demonstration of this tool in the thesis allows later researchers to recognize its convenience, appreciate its value, and finally apply it to their study.

Fourthly, to achieve maximum intercoder reliability, I designed a codebook where each metadiscourse category's definition and illustrative examples were provided, and the coding instruction was clearly explained (Appendix III). Since the codebook for metadiscourse has been nearly absent from the literature (Akbas, 2014 is a notable exception), I believe the one provided in the current thesis could be of great reference value and transparency value to later relevant studies.

Last but not least, I innovatively employed a two-way MANOVA test to measure the main effects of nativeness and expertise and the interaction effect on metadiscourse

use in Spanish academic writing. As discussed previously, many prior metadiscourse studies either measure a single factor or ignore the interaction effect when more than one factor is involved, which could oversimplify the metadiscourse phenomenon or misinterpret findings. The current thesis has improved in this respect by using sophisticated statistical tests to assess two factors simultaneously and their interaction effect. Although the MANOVA test failed the assumption checks, leading to the adoption of the alternative Mann-Whitney U tests, it is still instructive to show the viability of this statistical test. Moreover, I also adapted keyword analysis from corpus linguistics to extract metadiscourse markers characteristic of specific writer groups. Previous studies tend to adopt a ‘top-n-frequent-words’ approach when showing the different use of metadiscourse markers between corpora. While it may give information about the most frequent items, the approach can hardly provide practically or pedagogically meaningful wording comparison. The analysis of key metadiscourse markers adopted in the present study, on the other hand, has revealed interesting and unexpected wording differences between different writer groups (as shown in Chapters 5 and 6), which can be helpful in metadiscourse teaching and learning.

7.4. Limitations and future work

Despite the contribution mentioned above, the current thesis is not without limitations. In fact, there are several limitations in terms of the methods adopted in this study, which are detailed below. Thus, the thesis’s contribution should be cautiously evaluated allowing for these limitations. Accordingly, future relevant studies should seriously take them into account for a better research design.

The first limitation has already been mentioned previously: the factor of expertise is inextricably interwoven with the factor of genre. This fact has caused issues with corpus comparability and results interpretation. First, the intrinsic genre difference (i.e., master’s thesis vs. journal article) and genre-related differences (target audience, communicative purposes, text length, single/multiple authorship, etc.) between novice writing and expert writing made comparability impossible during the corpus

construction. Corpus incomparability, in turn, leads to the question of whether any differences found between the novice and expert groups are due to the factor of genre. In fact, findings from this study have confirmed this issue: several interactive metadiscourse markers that were distinctive in the novice or expert corpora actually pointed to genre information (e.g., *en el capítulo*, *en el X capítulo*, *en este artículo*). Apart from this, some discourse functions of interactive metadiscourse category also reflected genre difference instead of expertise difference, for example, ‘Announcers’ in a master’s thesis usually function to announce chapter or thesis goals while ‘Announcers’ in a journal article tend to announce article goals. As noted previously, unfortunately, this first limitation cannot be overcome in the current thesis because of the fact that expert writers and student writers often produce different types of writing pieces. Future work could solve the problem by comparing journal articles written by seasoned experts and earlier career researchers. In doing so, the factor of genre can be controlled without interfering with the factor of expertise.

The second limitation concerns inferential statistics. The two-way MANOVA test was initially adopted to understand the main effects of nativeness and expertise and their interaction effect on the employment of different metadiscourse resources (collectively and separately). However, the test failed the assumption checks and thus cannot be used. In the end, I had to adopt alternative and less powerful tests, i.e., multiple Mann-Whitney U tests, to find out statistical differences in each metadiscourse resource by each factor. The side effects of this compromise solution, as noted earlier, are that the potential interaction effect between the factors cannot be examined and that different metadiscourse categories (dependent variables) cannot be scrutinized simultaneously and collectively. This second limitation cannot be overcome in the current thesis either as the data obtained were not subject to change. Nevertheless, future studies can follow the good rule of thumb that the larger the sample size, the better. Therefore, researchers can perhaps increase the corpus size, i.e., include more text samples in each corpus, to pass the assumption checks, such as no significant outliers and data normality.

The third limitation is related to the qualitative analysis. The present study only

conducted a qualitative textual analysis but did not include a qualitative “discourse-based interview” (Odell, Goswami, & Herrington, 1983; cited in Harwood, 2006). The former approach is confined to the researcher as the third person’s interpretation of how the writer as the first person uses metadiscourse, which would run the danger of “insider opacity” (Hyland, 2005a: 30; see also Flowerdew, 2015), i.e., the insider language of an academic discourse community (especially from other disciplines) is inaccessible to the researcher (see also Widdowson, 2000). Meanwhile, the latter approach uses the writer’s writing to elicit their own accounts of, for example, why metadiscourse is used as it is, what purpose has been achieved, what belief they have about metadiscourse use (Çandarlı et al., 2015; Ädel, 2012a). A more specific example is that when analyzing why Chinese writers in the present study avoided the use of (*yo*) in writing (see Section 6.2), I could have interviewed the writers about their opinion on the use of first-person singular pronouns in academic writing, instead of drawing on the accounts from previous studies. However, the criticism leveled against this third limitation may not carry so much weight if I as the researcher also qualify as an insider of the disciplinary discourse community. As I have studied Spanish for ten years and researched it for six years, my familiarity with the writing conventions and context of the Spanish academic community enables me to interpret the motives behind metadiscourse use more precisely and convincingly. That said, future studies are strongly recommended to include qualitative interviews to complement the corpus-based textual analysis and quantitative analysis, as quite a few previous studies do (Hyland, 1998c, 2001b, 2001a, 2004b, 2004a, 2005b, 2005a, 2010; S. Lee, 2009; Lafuente-Millán, 2010; McGrath & Kuteeva, 2012; F. Cao, 2014; Çandarlı et al., 2015; Jiang & Ma, 2018).

The fourth limitation is also concerned with the qualitative analysis part. In the qualitative analysis results of both metadiscourse dimensions (Section 5.3 and Section 6.3), I devoted a good deal of space to illustrate specific discoursal/rhetorical functions of each metadiscourse category; meanwhile, variations in performing different functions across different writer groups were described inadequately. This is because it is difficult to draw this kind of comparison without knowing full details of the functions of each metadiscourse category (including the frequency distribution of a given

function across writer groups, diverse markers that perform the given function, etc.). This information, however, is hard to obtain: given that more than 50,000 segments were automatically coded by MAXQDA 2020, it seems impractical to read the context or co-text of each segment to determine its specific function besides its metadiscourse category; therefore, in the present study, specific functions of metadiscourse category were not coded individually but observed in an imprecise manner. Future work may spend more time coding functions (for example, through effective teamwork) to provide a detailed and precise account of functional variations across writer groups.

The last limitation has to do with the pedagogical implications of the thesis. While I drew out the pedagogical implications from the current thesis's findings and suggested specific pedagogical practices to teachers and students in the preceding section, the extent to which the application of those suggestions is effective in the classroom remains unknown. To answer this question, it is necessary to provide empirical evidence that focuses on measurable outcomes. Therefore, one possible direction for future research is to carry out experimental work (e.g., experimental group vs. control group) to assess the actual effect that metadiscourse has on language teaching and learning (Ädel, 2012a; Hyland, 2005a). Some relevant studies that are worth referring to are Vande Kopple & Shoemaker (1988), Cheng & Steffensen (1996), Crawford Camiciottoli (2003), Aguilar & Arnó (2002), Jalilifar & Alipour (2007), Tavakoli et al. (2010), Kuhl et al. (2014), Abdelrahim & Abdelrahim (2020), among others.

7.5. Final remarks

Finally, I would like to end the thesis by revisiting some of the core questions about metadiscourse in light of the field's emerging trend.

Since the first seminal studies in the 1980s, metadiscourse has become a fully-fledged research area and has also taken a big step forward. This success is inevitably ascribable to the contributions made by numerous researchers in the field. However, this is not the end of the story. There is still a need to open the floor for discussion and debate. As the title of Hyland's (2017) recent article asks, "Metadiscourse: What is it

and where is it going?”.

More and more recent studies on metadiscourse have moved away from the scriptocentric research tradition and academic realm towards new forms of communication such as digital communication (D’Angelo & Consonni, 2020; Ädel, 2021). As Lorés-Sanz (2021) notes, metadiscourse seems to be always genre-specific and context-bound from the very beginning. Since the origin and concepts of metadiscourse have always been anchored in written and academic mainstream, what role does metadiscourse play in the digital contexts and genres? Before this, however, the first question we researchers should ask ourselves is whether this expansion is heading in the wrong direction. If the answer is yes, we all should stop and carefully reconsider the ultimate issue: what is metadiscourse? If the answer is no, the follow-up question is whether the traditional understanding of metadiscourse still holds for these new forms. This can be further broken down into several specific questions: Can the old definitions based on the written discourse (mostly academic) precisely describe the phenomenon of metadiscourse within a new discourse? Does the old classification system cover all types of metadiscourse resources? How to identify the realizations of new metadiscourse markers? etc. Only after these questions are answered can we obtain a deeper understanding of metadiscourse theory and a firmer underpinning in metadiscourse practices.

Of course, it can be expected that these questions could be controversial in the sense that different scholars may give rather different answers because they conceptualize metadiscourse in different ways. This, however, should not be seen as a bad sign but a good sign. I believe scholarship that approaches metadiscourse from different angles contributes to and continues to contribute to our understanding of how language works as communication.

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Appendices

Appendix I List of research articles and master's theses

Research articles in the native expert corpus

- (RA_ES_LIN_01) Amorós Negre, C., Recio Diego, Á., & Tomé Cornejo, C. (2018). La calidad de los MOOC como reto para la enseñanza de lenguas en entornos digitales. *Círculo de Lingüística Aplicada a la Comunicación*, 76, 49–66.
- (RA_ES_LIN_02) Fernández Juncal, C., & Hernández Muñoz, N. (2018). Vías de transformación en la enseñanza de lenguas con mediación tecnológica. *Círculo de Lingüística Aplicada a la Comunicación*, 76, 1–12.
- (RA_ES_LIN_03) Maíz-Arévalo, C. (2018). “Solo un poquito”. El uso y funciones del diminutivo en español peninsular en dos grupos de Facebook. *Círculo de Lingüística Aplicada a la Comunicación*, 73, 33–52.
- (RA_ES_LIN_04) Pinero-Pinero, G. (2018). Metáfora conceptual y el marco ESPECTÁCULO en el discurso político de los medios de comunicación. *Ibérica*, 36, 119–142.
- (RA_ES_LIN_05) Fernández-Silva, S., & Rojas, N. B. (2015). La variación terminológica en la comprensión y producción de textos académicos: Propuesta de representación en un diccionario especializado de aprendizaje de Psicología. *Ibérica*, 30, 183–208.
- (RA_ES_LIN_06) Climent, S., & Coll-Florit, M. (2017). La metáfora conceptual en el discurso psiquiátrico sobre la esquizofrenia. *Ibérica*, 34, 187–208.
- (RA_ES_LIN_07) Gaminde, I., Etxebarria, A., Romero, A., & Eguskiza, N. (2017). características De La Competencia prosódica de jóvenes bilingües vascos en la lectura en voz alta: Las cumbres tonales. *RLA: Revista de lingüística teórica y aplicada*, 55(1), 35–52.
- (RA_ES_LIN_08) Horno-Chéliz, M. D. C., Timor, R., & Sarasa, A. (2017). ¿Qué ocurre cuando comparamos dos unidades léxicas sinónimas? Un estudio psicolingüístico sobre la naturaleza de la sinonimia. *RLA: Revista de lingüística teórica y aplicada*, 55(1), 149–168.
- (RA_ES_LIN_09) del Valle Hernández, G., Acosta Rodríguez, V. M., & Ramírez Santana, G. M. (2018). La producción gramatical en el discurso narrativo de alumnado con Trastorno Específico del Lenguaje (TEL). *Revista signos*, 51(98), 264–284.

- (RA_ES_LIN_10) Ibáñez, R., Moncada, F., & Arriaza, V. (2018). Recontextualización del conocimiento en textos escolares chilenos. *Revista signos*, 51(98), 430–456.
- (RA_ES_LIN_11) Figueroa, J., Meneses, A., & Chandía, E. (2019). Desempeños en la calidad de explicaciones y argumentaciones en estudiantes chilenos de 8° básico. *Revista signos*, 52(99), 31–54.
- (RA_ES_LIN_12) Ormeño Cárdenas, V., & Rosas Villarroel, M. (2019). Influencia de las creencias en la voz del autor en un ensayo argumentativo en L2. *Revista Signos*, 52(99), 134–157.
- (RA_ES_LIN_13) Cañete González, P., Fernández-Silva, S., & Villena Araya, B. (2019). Estudio de los neologismos terminológicos difundidos en el diario 'El País' y su inclusión en el diccionario. *Círculo de Lingüística Aplicada a La Comunicación*, 80, 135-158.
- (RA_ES_LIN_14) Gómez Seibane, S. (2018). Gramaticalización, modalización y contacto: Y así en dos variedades de español. *Círculo de Lingüística Aplicada a la Comunicación*, 75, 155–172.
- (RA_ES_LIN_15) Vázquez Carranza, A. (2018). Características interaccionales de algunos marcadores secuenciales del español: Un estudio conversacional de partículas lingüísticas. *Círculo de Lingüística Aplicada a la Comunicación*, 76, 261–278.
- (RA_ES_LIN_16) Sánchez, M. J. & Fernández-Sánchez, A. (2016). Adaptación del léxico del inglés a las necesidades de los estudiantes. *Ibérica*, 32, 133-152.
- (RA_ES_LIN_17) Bosque, I., & Gallego, Á. J. (2016). La aplicación de la gramática en el aula: Recursos didácticos clásicos y modernos para la enseñanza de la gramática. *RLA: Revista de lingüística teórica y aplicada*, 54(2), 63–83.
- (RA_ES_LIN_18) Crous, B., & Gràcia, L. (2015). Verbos de movimiento, cambios de estado y categorización de afecciones. *RLA: Revista de lingüística teórica y aplicada*, 53(1), 149–174.
- (RA_ES_LIN_19) Vázquez-Cano, E., Mengual-Andrés, S., & Roig-Vila, R. (2015). Análisis lexicométrico de la especificidad de la escritura digital del adolescente en Whatsapp. *RLA. Revista de lingüística teórica y aplicada*, 53(1), 83–105.
- (RA_ES_LIN_20) Ibáñez O, R., Santana C, A., & Cornejo T, F. (2015). La dirección y la distancia en el establecimiento de la coherencia referencial durante el procesamiento de textos académicos escritos en español. *RLA: Revista de lingüística teórica y aplicada*, 53(2), 145–170.
- (RA_ES_LIN_21) Criado de Diego, C. (2019). Uso concordado del verbo 'haber' existencial en la lengua escrita de aprendices de español como lengua extranjera. *Revista Signos*, 52(101), 720-735.
- (RA_ES_LIN_22) Espinosa Ochoa, M. R. (2019). La perífrasis aspectual 'estar' + gerundio en español infantil. Entre el conocimiento previo y la influencia del

- input. *Revista Signos*, 52(101), 759-779.
- (RA_ES_LIN_23) Herrera Guevara, M., & Reig Alamillo, A. (2020). El empleo del masculino genérico plural en la descripción de grupos humanos mixtos: un estudio experimental. *Círculo de Lingüística Aplicada a la Comunicación*, 82, 179-192.
- (RA_ES_LIN_24) Pizarro, M., Doquin, A., & Ezeiza, J. (2020). Influencia interlingüística y eficacia comunicativa en las producciones orales de aprendices plurilingües de español. *Círculo de Lingüística Aplicada a la Comunicación*, 81, 209-230.
- (RA_ES_LIT_01) Falguera-García, E. (2019). Alicia en el laberinto intertextual: Del hipertexto a la pantalla. *Ocnos: Revista de estudios sobre lectura*, 18(2), 65–74.
- (RA_ES_LIT_02) Tennia, L. (2018). Entonces ¿eso es literatura? Concepciones sobre lo literario en los saraus de poesía de la periferia de São Paulo. *Latin American Research Review*, 53(2), 372–380.
- (RA_ES_LIT_03) García Suárez, P. (2017) Mujer, lectura y educación en la obra de Emilia Pardo Bazán, *Hispanic Research Journal*, 18(6), 466-478.
- (RA_ES_TRA_01) Martínez Motos, R. (2018). Análisis del efecto de la traducción (inglés-español) en la legibilidad del prospecto de medicamento. *MonTI: Monografías de Traducción e Interpretación*, (10), 43–73.
- (RA_ES_TRA_02) Pérez Estevan, E. (2018). La traducción y comunicación del consentimiento informado como medida para garantizar su comprensibilidad. *MonTI: Monografías de Traducción e Interpretación*, (10), 75–91.
- (RA_ES_TRA_03) Vidal Sales, C. (2019). La negociación de la diferencia cultural a través del multilingüismo y la traducción en el wéstern ambientado en la frontera Estados Unidos-México. *MonTI: Monografías de Traducción e Interpretación*, (Special issue 4), 229–252.
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Appendix II List of metadiscourse markers

Note: i) this list is not intended to be exhaustive; ii) markers listed here should be examined within their contexts and co-texts; iii) markers added later via data-driven coding are marked in italics.

Interactive metadiscourse

Transitions

Addition (65)

, también,
. Y
A ello hay que añadir
A ello se añade que
A ello se debe añadir
A este se añade
A esto debe sumarse que
A esto hay que añadir que
A esto hay que sumar que
A esto se añade
A la par
a la vez
a la vez,
además
además de ello
además de eso,
Además de todo esto
además,
adicionalmente
Al margen de esto
al mismo tiempo
al mismo tiempo,
Aparte de ello
aparte de eso
aparte de esto,
aparte de todo eso
Aparte,
así mismo,
asimismo

asimismo,
como añadidura
de igual forma
de igual forma,
De igual manera
de igual manera,
de igual modo,
de la misma forma,
de la misma manera,
De nuevo,
Del mismo modo
del mismo modo,
E incluso
en esta misma línea
en la misma línea,
Encima
encima,
Entretanto
es más,
Igualmente
igualmente,
incluso
incluso,
más aún,
mientras tanto
ni siquiera,
por añadidura
por lo demás
por otra parte
por otro lado
por su lado
por su parte
también

También
Tampoco
y aparte,

Comparison (51)

a pesar de ello
a pesar de eso
a pesar de esto
a pesar de todo
a su vez,
ahora bien
Ahora,
al contrario,
análogamente,
aun así
con todo eso,
con todo
con todo,
contrariamente
de forma semejante,
de forma similar,
de lo contrario
de manera alternativa
de manera análoga
de manera similar
de manera similar,
de modo semejante
desde una perspectiva similar
dicho esto
en cambio
en cambio,
en comparación,
en contraposición,
en contraste,
en tanto,
mientras tanto
mientras,
no obstante
paralelamente
pero
pero,
pese a ello
pese a esto

pese a todo
por contra
Por el otro lado
por el otro,
por el contrario
por otra parte
por otro lado
por su parte
por un lado
por una parte
semejantemente
similarmente
sin embargo

Consequence (51)

A consecuencia de eso
así
así pues,
Así que
así,
como consecuencia,
como resultado,
consecuentemente,
consiguientemente,
de ahí que
De ahí,
de esa manera,
de ese modo,
de esta forma,
de esta manera,
De este modo
de este modo,
De manera que
De modo que
Debido a ello
debido a este motivo
en consecuencia
entonces
entonces,
por consiguiente
por ello
por ello,
por ende

por esa razón
 por ese motivo
por eso
 por eso,
por esta misma razón
 por esta razón
por estas razones
 por este motivo
 por esto,
 por estos motivos
por la misma razón
 por lo cual,
 por lo mismo
Por lo que
 por lo que,
 por lo tanto
por tal motivo
por tal razón
 por tanto
por todo ello
por todo esto
pues
 pues,

Frame markers

Sequencers (83)

a continuación
 a su vez,
Al cabo
al final
 al final,
 antes de nada
 cuarto,
De entrada
 de otra,
 de una parte,
después
 después,
 El cuarto
el primer
 el primer
el primero

el quinto
 el segundo
 el tercer
el tercero
 El último
 en cuarto lugar
 en cuarto y último lugar
en el primer caso
En el primero
en el primero,
en el segundo
en el segundo caso
en el segundo,
en el tercer caso
En el último
En la primera
En la segunda parte
En la última parte
En las últimas
 en primer lugar
 en quinto lugar
en segunda instancia
 en segundo lugar
en segundo término
 en tercer lugar
en tercer y último lugar
en última instancia
 en último lugar
en un principio
Esta última
Finalmente
 finalmente,
 La cuarta
 la primera
la primera parte
 la segunda
La siguiente
 la tercera
 la última
 luego
para acabar;
para comenzar
 para empezar
para terminar

por el otro
por el otro lado
 por el otro,
 por la otra,
por otra parte
 por otra,
por otro
por otro lado
 por otro,
por su parte
por último
 por último,
 por un lado
 por una parte
posteriormente
 primeramente
primero
 primero,
 seguidamente
segundo
 segundo,
tercero
 tercero,

Topicalizers (53)

A ese propósito
 a este respecto
 a propósito de
 a propósito,
a su vez,
acerca de
 Acerca de
ahora
 Ahora,
 Al respecto
 Con referencia a
 Con relación a
 Con respecto a
Consideremos ahora
Cuando se trata de
 en cuanto a
en el caso de
 En el caso de

en lo concerniente a
 en lo que concierne a
 en lo que respecta a
 en lo que se refiere a
 en lo referente a
 En lo relativo a
 en lo tocante a
 En los casos de
En materia a
En materia de
 en nuestro caso
 en otro orden de cosas
 En referencia a
 En relación a
 En relación con
 En términos de
Entre paréntesis,
 hablando de
 Pasando a
Pasando ahora
Pasando ya a
 por cierto,
 por lo que atañe a
 por lo que respecta a
 por lo que se refiere a
por su parte
respecto a
 Respecto a
 respecto de
Retomando
 Sobre
 volvemos a
volvemos nuestra atención a
 volviendo a
volviendo nuestra atención a

Stage signals (31)

a modo de cierre
 a modo de conclusión,
 a modo de resumen
Al final,
 como conclusión
como hemos visto hasta aquí

como puede concluirse
como resumen
 en conclusión
 En definitiva,
 En fin,
 en palabras resumidas
 en resumen
 en resumidas cuentas
 en síntesis
 en suma
 en una palabra
Finalmente,
Hasta ahora
 hasta ahora,
 hasta aquí
 para acabar,
 para concluir
 para finalizar
 para resumir
 para terminar
 Recapitulando nuestro estudio
 Recapitulando todo lo que hemos
 mencionado arriba
 Resumiendo lo que hemos discutido
 hasta ahora
 Resumiendo,
 Total,

Announcers (89)

el objetivo de la investigación
 el objetivo del estudio
el objetivo es
el objetivo general del trabajo
 el objetivo principal
el objetivo que se plantea del presente trabajo
el objetivo último de nuestra investigación
el objeto de análisis del presente trabajo
el objeto de estudio
 el presente apartado
el presente artículo
 el presente capítulo

el presente estudio
el presente estudio tiene como propósito
el presente estudio tuvo como objetivo
el presente trabajo
el presente trabajo de investigación tiene como objetivo principal
el presente trabajo final de máster tiene como objetivo
el presente trabajo tiene como finalidad
el presente trabajo tiene como objetivo
el presente trabajo tiene dos objetivos
el presente trabajo tiene el objetivo
el primer objetivo del estudio
 El propósito de
 el segundo objetivo
 en el presente epígrafe
en esta investigación
 en esta parte
 en esta sección
 en este apartado
en este artículo
 en este capítulo
 en este epígrafe
en este estudio
en nuestra investigación
en nuestro análisis de este apartado
en nuestro estudio
en nuestro trabajo
esta investigación
esta investigación tiene como objetivo
esta sección tiene como objetivo
esta tesina
este apartado tiene como fin
este artículo
este artículo tiene como objetivo
este estudio
este estudio tiene como objetivo
este trabajo
este trabajo de investigación
este trabajo tiene como fin
este trabajo tiene como finalidad
este trabajo tiene como objetivo
este trabajo tiene como una de sus finalidades

la finalidad de este trabajo
 la finalidad general de la presente tesina
 la hipótesis de este trabajo
 la hipótesis de la que partimos en este estudio es que
 la hipótesis de la que se parte es que
 la hipótesis de la que se partía
 la hipótesis de mi trabajo
 la hipótesis de partida es que
 la intención es
 la presente investigación
 la presente investigación ha tenido como objetivo
 la presente investigación tiene como objetivo principal
 la presente tesina
 la presente tesina tiene como objetivos principales
 la primera parte tiene como fin
 las metas del presente estudio
 los objetivos de la investigación
 los objetivos del presente trabajo
 los objetivos principales
 mi objetivo es
 nuestra intención es
 nuestra investigación
 nuestro estudio
 nuestro estudio tiene como objetivo
 nuestro principal objetivo
 nuestro propósito
 nuestro trabajo
 objetivo de esta
 objetivo de este
 objetivo de nuestro estudio
 objetivo del presente
 objetivos de esta
 objetivos de este
 objetivos del presente
 uno de los objetivos de la investigación
 uno de los objetivos es

Endophoric markers

Previews (42)

a continuación
 a lo largo del trabajo
 abajo
 como sigue
 como veremos
 como veremos,
 el epígrafe
 en adelante
 en el apartado
 en el apartado siguiente
 en el capítulo
 en el capítulo siguiente
 en el cuarto apartado
 en el cuarto capítulo
 en el primer apartado
 en el primer capítulo
 en el quinto capítulo
 en el segundo apartado
 en el segundo capítulo
 en el séptimo capítulo
 en el sexto capítulo
 en el tercer apartado
 en el tercer capítulo
 en el último apartado
 en el último capítulo
 en este apartado
 en este capítulo
 en este trabajo
 en esta sección
 en las próximas páginas
 en lo que sigue
 en lo sucesivo
 en los apartados
 en los apartados siguientes
 en los capítulos más atrás
 en seguida
 luego
 más adelante
 más tarde
 seguidamente
 siguiente
 siguientes

Reviews (50)

A lo largo de este capítulo
A lo largo de este trabajo
A lo largo del presente estudio
A lo largo del presente trabajo
a lo largo del trabajo
 anteriormente
 arriba
capítulos anteriores
Como adelantábamos al inicio del
apartado
como antes
 como hemos
 como se ha
como se había
 como ya hemos
 como ya se ha
 con anterioridad
 el análisis previo
 el epígrafe
el estudio
el presente capítulo
el presente estudio
el presente trabajo
 en apartados anteriores
 en el apartado
en el apartado anterior
en el apartado arriba
 en el capítulo
en el primer capítulo
en el segundo capítulo
en esta investigación
en esta tesis
en este apartado
en este artículo
en este capítulo
en este epígrafe
en este estudio
en este trabajo
 en la sección
 en los apartados
 en los capítulos
Este artículo
Este capítulo
Este estudio

Este trabajo
la presente investigación
 lo anterior
 los anteriores
 los epígrafes
 previamente
Según hemos visto en nuestro análisis
precedente

Overviews (33)

a lo largo de este apartado
 a lo largo de este trabajo
a lo largo del desarrollo de la
investigación
 a lo largo del estudio
a lo largo del marco teórico
 a lo largo del trabajo
El artículo
 el presente artículo
 el presente estudio
El presente monográfico
 el presente trabajo
el trabajo
 en esta investigación
en esta parte
 en esta tesina
 en este artículo
En este capítulo
 en este estudio
 en este trabajo
En este trabajo de fin de máster
 en nuestro estudio
en nuestro trabajo
 Esta investigación
 Este artículo
Este capítulo
 Este estudio
 Este trabajo
 la presente investigación
 la presente tesis
la tesina
 Nuestra investigación
 Nuestro estudio

Nuestra trabajo

Visual references (46)

a continuación

abajo

anexo

apéndice

arriba

cuadro

diagrama

el ejemplo anterior

el siguiente ejemplo

el siguiente fragmento

en el ejemplo

en el extracto

en el fragmento

en el primer ejemplo

en el segundo ejemplo

en las oraciones

en los ejemplos

en los extractos

en los fragmentos

esquema

fig.

figura

gráfico

he aquí algunos ejemplos

he aquí los fragmentos

he aquí otro ejemplo

he aquí un ejemplo

he aquí veamos otro ejemplo

ilustración

imagen

la siguiente oración

las siguientes frases

las siguientes oraciones

los ejemplos anteriores

los siguientes ejemplos

los siguientes extractos

los siguientes fragmentos

mapa

siguiente

tabla

vamos a ver algunos ejemplos

veamos algunos ejemplos

veamos el ejemplo

veamos los ejemplos

veamos un ejemplo

veamos unos ejemplos

Code glosses

Reformulation (58)

, entendida como

, entendido como

a fin de cuentas

a saber

a saber,

al fin y al cabo,

Al final,

con eso queremos decir

con esto queremos decir

concretamente

concretamente,

conocida como

conocido como

conocidos como

de manera específica

De toda manera,

de todas formas

de todas maneras

de todos modos,

dicho de otra forma

dicho de otra manera

dicho de otro modo

En conclusión

en concreto

en cualquier caso

en definitiva,

En fin,

en otras palabras

en otros términos,

en resumen

En síntesis

en suma

En términos específicos

en todo caso
En una palabra,
 en unas palabras
 es decir
 eso quiere decir
eso significa que
 eso supone
 específicamente,
esto es
 esto es,
 esto indica
 esto quiere decir
 esto significa
 i.e.
lo que quiere decir
 lo que significa que
 más bien,
 me refiero a
 mejor dicho,
 nos referimos a
 o sea
 quiero decir,
 reconocida como
 reconocido como
 sea como sea

Exemplification (27)

a modo de ejemplo
a modo de ejemplos
a modo de ilustración
como
como ejemplo
como ejemplos
como en este ejemplo
 como por ejemplo
 e.g.
 ej.
ejemplificando esto
en el caso de
lo vamos a ilustrar con un ejemplo
otro ejemplo

otros ejemplos
 p. ej.
 p.ej.
Para demostrarlo
 Para ilustrar
Para poner un ejemplo
 por ej.
 por ejemplo
 sin ir más lejos
 tales como
tomamos como ejemplo
 tomando como ejemplo
 verbigracia

Evidentials

Integral (1)

author/s + (date); author et al. + (date).
 Regex: `\([12]\d{3}[\^()]*\)`

Non-integral (1)

(author/s + date); (author et al. + date).
 Regex: `\([^\w\s]*[A-Z][^\=]*[12]\d{3}[\^()=]*\)`

Interactional metadiscourse

Hedges (169)

*ría(n) Regex: \w*rían?\b

a grandes rasgos
a lo mejor
a menudo
a mi juicio
a nuestro entender
a nuestro juicio
a nuestro modo de ver
a nuestro parecer
a veces
aconsejamos
al parecer
aparentemente
apenas
aproximadamente
asumimos que
asumo que
básicamente
cabe la posibilidad de que
casi
casi siempre
colegimos que
colegir que
creemos
creemos que
creo que
de algún modo
de alguna forma
de alguna manera
de forma general
de forma generalizada
de forma global
de manera general
De modo general
debe de
debe ser
deducimos que
deducir que
desde mi punto de vista
Desde nuestra perspectiva

desde nuestro punto de vista
digamos
en alguna medida
en algunas ocasiones
en algunas veces
en algunos casos
en cierta manera
en cierta medida
en ciertas ocasiones
en cierto grado
en cierto modo
en cierto punto
en cierto sentido
en ciertos casos
en general
en global
en gran medida
en la mayoría de los casos
en la medida de lo posible
en líneas generales
en mayor medida
en mayor o menor grado
en mayor o menor medida
en menor medida
en muchas ocasiones
en muchos casos
en nuestra modesta opinión
en nuestra opinión
en nuestras opiniones
en nuestros ojos
en ocasiones
en parte
en principio
en rasgos generales
en sentido general
en su mayor parte
en teoría
en términos generales
era posible que
es de esperar que
Es de suponer que
es habitual

es habitual que
 es mejor
es muy posible que
es muy probable que
es posible
 es posible que
 es probable que
es recomendable
existe la posibilidad de que
 Frecuentemente
 frecuentemente,
 generalmente
grosso modo
 habitualmente
hasta cierto punto
hasta cierto punto
hasta donde conocemos
hasta donde llega nuestro conocimiento
hasta donde sé
la mayoría de las veces
lo más habitual es que
lo más probable es que
lo óptimo es que
Lo recomendable es que
 más o menos
 mayoritariamente
 muchas veces
no es siempre
no estamos seguros
 no necesariamente
 no siempre
 normalmente
 nos inclinamos
 nos parece que
nos proponemos
 opinamos que
para nosotros
 parece
 parecen
parecer
parecía
parecían
pareciera
 por lo general

por lo visto
 por regla general
 posiblemente
 potencialmente
 prácticamente
 presumiblemente
principalmente
 probablemente
proponemos
pudiera
puede
 puede que
 puede ser
pueden
 pueden ser
quisiera
 quizá
 quizás
 recomendamos
Regularmente
resulta posible
 se asume que
 se cree que
se deduce que
se espera que
 se inclina
se puede inferir que
 se supone que
según nuestra opinión
sería mejor
solemos
 suele
 suelen
 sugerimos
 sugiere que
 sugieren que
sugiero que
 suponemos que
 supuestamente,
 tal vez
tendían a
 tiende a
 tienden a
Boosters (102)

*ísimo,*ísima Regex: \w*ísim[oa]\b

a buen seguro

absolutamente

afirmar (conjugations) que

ciertamente

claramente

Claro

claro está

claro que

como es lógico

como es natural

como es obvio

como se evidencia

como se ha mostrado

Como se ha podido comprobar

comprobar (conjugations)

concluir (conjugations) que

confirmar (conjugations)

constatar (conjugations)

corroborar (conjugations)

de hecho

de ningún modo

de ninguna manera

de veras

de verdad

definitivamente

demostrar (conjugations)

descubrir (conjugations) que

desde luego

efectivamente

en absoluto

en efecto

en realidad

encontrar (conjugations) que

es cierto que

es evidente que

es imposible

es incuestionable

es indiscutible que

es indudable que

es innegable que

es más obvio que

Es muy evidente que

es muy natural que

es natural

es natural que

es obvio que

es válido

es verdad que

eso sí

estamos convencidos

estamos seguros

evidenciar (conjugations) que

exactamente

fundamentalmente

ha quedado de manifiesto

ha quedado demostrado

indiscutiblemente

indudablemente

innegablemente

insistimos

justamente

la conclusión de que

lo cierto es que

lógicamente

mostrar (conjugations) que

nadie duda que

nadie puede negar que

naturalmente

no cabe duda

no cabe duda de que

no cabe ninguna duda de que

no es menos cierto que

no es posible

no es probable que

No hay duda de que

no podemos negar

no se puede negar que

Nos resulta evidente

nos resulta imposible

nunca

obviamente

poner (conjugations) de manifiesto

por supuesto

precisamente

probar (conjugations) que

puede concluirse que

reafirmar (conjugations) que
realmente
resulta evidente
resulta imposible
revelar (conjugations) que
seguramente
Seguro que
sí que
siempre
sin duda
sin duda alguna
sin lugar a dudas
sin ninguna duda
sostener (conjugations) que
verificar (conjugations) que

Attitude markers (140)

abogamos
acentuamos
aceptamos
afortunadamente
agradecemos
apoyamos
cabe
cabría
coincidimos con
compartimos
considerar adj. (importante, necesario, etc.)
contribuye
convendría
convenientemente
conviene
creer adj. (interesante, oportuno, etc.)
curiosamente
Da sorpresa
debemos
deberíamos
desafortunadamente
deseamos
desearíamos
desgraciadamente
era necesario

es absolutamente indispensable
es aceptable
es adecuado
es apropiado
es arriesgado
es claramente necesario
es complicado
es conveniente
es crucial
es curioso
es de adj. importancia Regex: \bes de (\w)? importancia*
es de destacar que
es de nuestro deseo
es deseable
es destacable
es difícil
es encomiable que
es esencial que
es especialmente útil
es fácil
es fundamental
es imperativo
es importante
es imprescindible
es inapropiado
es increíble que
es indispensable
es inevitable
es interesante
es lástima que
es lógico
es más adj. (difícil, importante, etc.)
es muy adj. (difícil, importante, etc.)
es necesario
es normal que
es oportuno
es pertinente
es poco razonable
es preciso
es preferible
es primordial
es raro
es razonable

es recomendable
 es relevante
 es sencillo
 es sorprendente
Es también interesante
es tan importante
es una lástima que
es urgente
 esperamos
estamos a favor de
 estamos de acuerdo
estamos en desacuerdo
estamos interesados
estamos muy de acuerdo
estoy de acuerdo
fue adj. (importante, inevitable, etc.)
 gracias a
habría que
 hace falta
haría falta
hay que
 hemos de
inevitablemente
 inevitablemente,
 interesa
 interesantemente
 irónicamente
 lamentablemente
lo adj. (interesante, lamentable, etc.) es
que
me parece interesante
 merece
miserablemente
necesitamos
 no es de extrañar que
 no es extraño
no menos importante
nos complace que
nos conviene
nos da lástima que
 nos gustaría
nos hace falta
nos interesa
nos interesaría

nos merece
nos parece adj. (interesante, necesario, etc.)
 nos resulta adj. Regex: \bnos result\w*\w*
 paradójicamente
parece adj. (necesario, razonable, etc.)
 por desgracia
 por fortuna
 preferimos
 queremos
queríamos
quisiéramos
 resulta adj. inf. Regex: \bresulta \w*\w*[aei]r\b
 resulta adj. que Regex: resulta \w* que
 se espera que
se hace necesario
sería adj. (aconsejable, interesante, etc.)
sería más adj. (adecuado, fácil, etc.)
sería muy adj. (difícil, etc.)
 sorprende
 sorprendentemente
sorprendió
suscribimos
tenemos que
tengo la esperanza de que
Un punto interesante es que
Una cosa muy interesante es que
 vale la pena
vemos indispensable
vemos necesario

Self-mentions (15)

(yo)
 mos Regex: \w[a|e|i]mos\b
 autor
 autores
 el autor
 he pp. Regex: \bhe \w*o\b
 la autora
 las autoras
 los autores

me
mi
mis
nos
nuestr* Regex: muestr[oa]s?
somos

Engagement markers

Reader references (7)

te
uno podría
uno puede
usted
ustedes
veremos
vustr* Regex: vustr[oa]s?

Directives (42)

(imperatives: detengámonos, fijémonos,
etc.) Regex: \b[a-z]*[áéí]monos
(imperatives: véase, nótese, consúltense,
etc.) Regex: \w+[áéíóú]\w*[aen]se\b
cabe
cf.
cfr.
conviene
debe
debe recordarse
debe tenerse en cuenta
debemos
deberemos
deberíamos
era necesario
era necesario
es crucial tener en cuenta
Es importante
es importante tener en cuenta
es importante tener presente
es imprescindible tener presente
es menester
Es necesario

es necesario tener en cuenta
es pertinente
es preciso
habría que
hay que
hemos de
no debe olvidarse que
No debemos olvidar
no hay que olvidar
No podemos entonces ignorar
no podemos ignorar
No podemos olvidar que
No puede olvidarse
pongamos
recordemos
se debe tener en cuenta
tenemos que
tomemos
veamos
ver
vid.

Shared knowledge (15)

como es bien sabido,
como es sabido,
Como sabemos
como sabemos,
como ya sabemos
conocemos
es bien sabido que
es de conocimiento común que
es de sobra sabido que
es muy sabido que
es sabido que
es un sentido común que
sabemos
sabemos que
ya sabemos que

Questions (1)

¿? Regex: \¿

Appendix III Codebook for intercoder reliability check

Introduction

Dear coder,

Thanks for accepting this Spanish metadiscourse annotation task for my PhD research. As for your participation in the study, you will remain anonymous in the task as well as in any report of research findings, so that your privacy will be protected to the maximum extent allowable by law.

Essentially, this task aims to assess the extent to which your annotation of metadiscourse matches my annotation of metadiscourse with respect to the same group of Spanish texts, so that I can find out whether my annotation is subjective or not, as well as in which parts the discrepancy between our annotation may occur.

To this end, 11 texts were randomly selected from my Spanish corpus (10%) to calculate inter-coder reliability. The texts have already been automatically precoded by MAXQDA, which is the coding tool we are going to use for this task as well. As can be expected, there must be some errors with the automatic coding. Therefore, what we need to do is that each of us independently check whether the coded segments were properly assigned with a category, or whether some potentially good metadiscourse segments have been missed. In other words, we coders are going to manually revise the 11 texts and do some modifications where necessary. In the end, the 11 texts that each of us checked independently will merge into one project file, and MAXQDA will automatically calculate the coding agreement between us.

Since you may not be familiar with the coding tool MAXQDA and the coding procedure, a how-to codebook was designed to guide you through this.

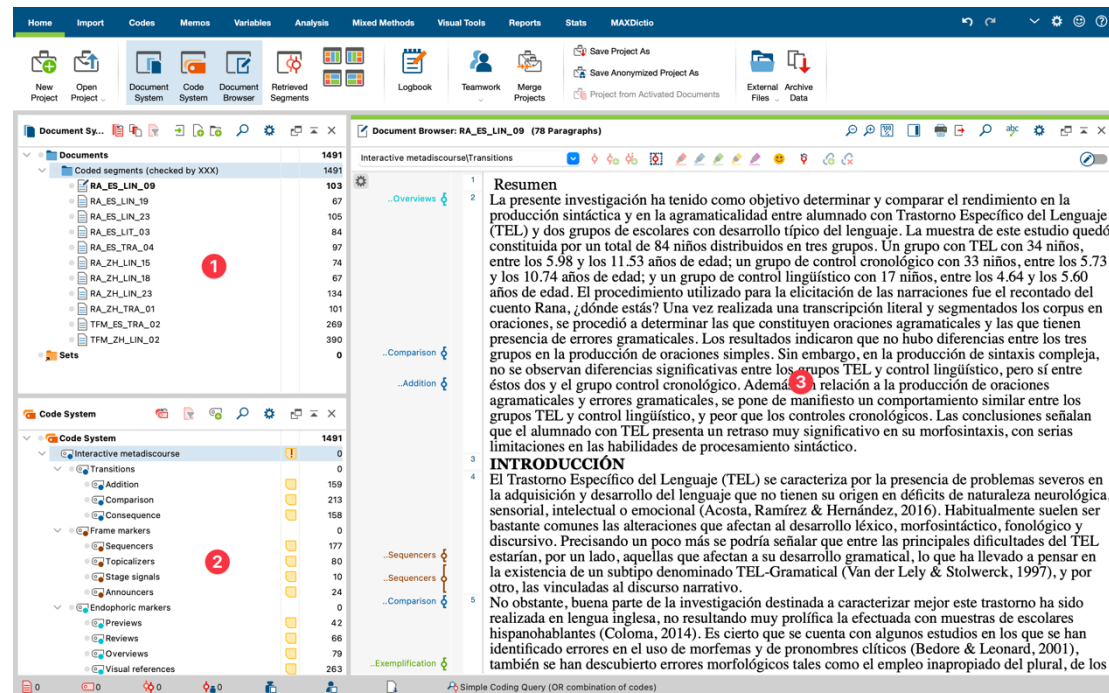
In what follows, I will briefly introduce the software. I will then show you how to revise the coded segments. Later, I will elaborate on the coding frame of metadiscourse, in which the definition, together with some illustrative real examples, of each metadiscourse category is provided. Lastly, I will also mention some points that we need to be aware of during the coding in order to achieve maximum consistency.

Before coding starts

Download a free trial copy of MAXQDA 2020 from the official website (<https://www.maxqda.com/trial>). It's valid for 30 days. If you cannot finish revising the 11 texts in 30 days, please let me know and I will let you use my license.

Know the software

Having downloaded the software, you open the project file (.mx20) that I sent you through email. You shall not be frightened by the seemingly complicated interface of the software, because you only need to focus on the three windows in the ‘Home’ module: ‘Document system’, ‘Code system’, and ‘Document browser’. See the screenshot below:



① ‘Document System’ provides an overview of all the texts of the project (11 texts in our case).

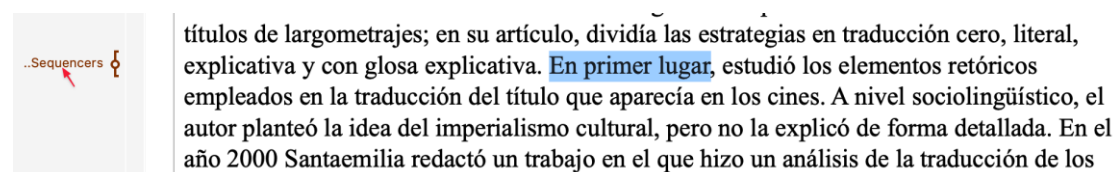
② ‘Code System’ displays all the codes (or categories if you like), subcodes, and code memos along with the occurrence of associated coded segments. The code system in the current project is the coding scheme for metadiscourse, which will be presented shortly.

③ ‘Document Browser’ displays one of the documents from the ‘Document System’, where it can then be worked on. You can delete, change, and assign codes there.

You don’t need to change anything in the ① ② window. The only thing you need to do is to revise each coded segment in window ③.

How to revise a coded segment?

Simply click on a code, and you will see the corresponding segment is selected too.



Three scenarios that you may encounter during the revision:



- If you think this code is badly assigned, right-click on the code, then select ‘✕ delete’.
- If you think another code is more appropriate for this segment, delete the bad code first and then simply drag a code you consider appropriate from the ‘Code System’ to the current ‘Document Browser’ (note: you don’t have to drag the new code to the exact position of that segment because the software “knows” well you mean to replace it).
- If you find a segment that should have been coded but was not coded by the software, you can manually select that segment and then assign an appropriate code.

Some tips that you might find useful:

- ✓ If you delete or change the code by accident, use the keyboard shortcut ‘Ctrl+Z (win)/ Command + Z (mac)’ or click on the “↶” in the toolbar to reverse the last action.
- ✓ If you think the font size in ‘Document Browser’ is small, simply click on ‘🔍’ in the toolbar to zoom in on the current document.
- ✓ MAXQDA autosaves every step that you go through and even the last textual position where you stop the coding. So you don’t have to manually save the file; that is, you can close the software and continue your checking another day without any worries.

Coding scheme for metadiscourse

A coding scheme or a coding frame is the theoretical foundation on which the coder is based during the revision. It usually consists of codes (and subcodes) as well as their corresponding definitions and illustrative examples.

The coding scheme for metadiscourse is divided into two parts: interactive dimension and interactional dimension. Each dimension has its own codes and subcodes, and their corresponding definition has also been provided (click on code memos  in  ‘Code System’ to see). As for the illustrative examples, four types were provided:

- True positive examples: examples where the metadiscourse marker **has been** automatically coded by the software **and also correctly** assigned with a code.
- False positive examples: examples where the metadiscourse marker **has been** automatically coded by the software **but should not have been assigned**. Examples of this kind correspond to the first scenario mentioned above.
- Examples with code changed: examples where the metadiscourse marker **has been** automatically coded by the software **but should have been assigned with another code**. Examples of this kind correspond to the second scenario mentioned above.
- False negative examples: examples where the metadiscourse marker **has not been** automatically coded by the software **but should have been assigned with a code**. Examples of this kind correspond to the third scenario mentioned above.

Note that the provided examples by no means encompass all possible cases. Also note that except for the first, the other three types of examples may be absent from the corpus.

Even though clear definitions and illustrative examples for different scenarios have been provided, the revision process involved in real situations can be complex for different reasons. To achieve maximum coding consistency between the intercoders, some coding rules for each metadiscourse dimension will be mentioned below as well.

Transitions

Addition

Definition: markers used to express relations of addition

True positive examples:

1. Además, cuenta con los datos procedentes de cuatro entrevistas de quince minutos aproximadamente cada una, que corresponden a las intervenciones de esos mismos cuatro participantes con el profesor/investigador.
2. En los manuales del MED, al inicio se explica que la comprensión lectora [...]. También se señala que comprender es identificar información importante, [...].
3. Además, contribuye a aportar al conocimiento de una parte de la historia de España y de cuestiones relacionadas con traducción y censura. A la vez, puede contribuir a ampliar el conocimiento que se tiene de cuestiones relacionadas con traducción e ideología.
4. El fenómeno es mencionado en otros trabajos de diverso tipo. Gómez Pintor (1984, pp. 284-5) relaciona la estructura con matices locativos y partitivos [...]. También hay algunos comentarios en Cidrás (1998), para quien la construcción está determinada por factores contextuales [...]. Por su parte, Sánchez Rei (2010, pp. 81-4) se limita a revisar propuestas previas, clasificando la construcción como complemento preposicional.

False positive examples:

1. los cursos deben estar disponibles de manera gratuita y, ~~además~~, tener licencias abiertas, de tal modo que el material pueda ser reutilizado, remezclado, retrabajado y redistribuido (por ejemplo, usando Creative Commons).
2. Para el nivel B1, los alumnos pueden concentrarse en estas combinaciones, por ejemplo “juguetes educativos, trato personal, [...]” Además, Navajas Algaba (2006) sugiere “acuerdo bilateral, luz intermitente, [...]”. ~~También~~ se usan preferentemente por los españoles.
3. Además, cuando se trata de negociaciones, los "atenuantes allocéntricos", es decir, los que protegen la imagen del oyente y la del hablante ~~a la vez~~, son también más frecuentes en los enunciados de los hablantes suecos que en las palabras de los hablantes españoles.

Examples with code changed:

1. Los xMOOC son el formato impulsado mayoritariamente en las plataformas de MOOC, dado que [...].
Por su parte, (Topicalizers) los cMOOC son elaborados desde aproximaciones conectivistas y, por consiguiente, basan su planteamiento en la construcción de un conocimiento compartido [...].
2. En Ciencias Sociales, el manual del MED desarrolla un tema (texto de lectura) por página; por su parte (Comparison) Santillana lo hace en dos páginas, aunque la segunda contiene notas ampliatorias o fragmentos sobre el tema tratado.

False negative examples:

1. Cruschina además confirma que las construcciones escindidas no solo codifican foco informativo

simple, sino también transmite una interpretación exhaustiva.

2. Observamos también que lo indicado hasta ahora sobre técnicas de clasificación y elementos clasificatorios es coherente con una correlación fuerte (pero no estricta) entre las técnicas de clasificación y la tipología clásica de lenguas de base morfológica.
3. Hoy no se lee como antes. Del mismo modo tampoco leemos con el mismo sentido; cada lector pertenece a una cultura, una sociedad, un grupo que le proporciona un background y actúa en función de frameworks;

Comparison

Definition: markers used to express relations of comparison or contrast

True positive examples:

1. Las metáforas de viaje en el corpus chino y el español constituyen una cantidad muy considerable entre todas las metáforas conceptuales, sin embargo, cabe señalar que existen diferencias en cuanto al significado latente de estas metáforas.
2. Un lector no crítico podría leer un libro de Ciencias Sociales para aprender los hechos o los datos históricos; en cambio, un lector crítico leería la misma obra para apreciar cómo se toman y seleccionan los hechos desde una perspectiva particular.
3. Dadas las diferencias entre estas lenguas, es muy probable que los resultados de las traducciones de los motores de TA no sean del todo satisfactorios; con todo, hay que tener presente que se estudiarán tres tipos de motores de TA distintos y, ya que cada uno de ellos funciona de forma diferente, es probable que alguno de ellos origine la traducción esperada.
4. En primer lugar, los resultados del experimento 1 ratifican los hallazgos de Clark y Sengul (1979), así como también los de Ehrlich y Rayner (1983), [...]
En este mismo experimento, por otra parte, los resultados respecto de la variable dirección son inconsistentes con hallazgos anteriores.

False positive examples:

1. Al igual que los estados, estos eventos son atéticos y poseen duración ~~pero~~, a diferencia de los estados, son dinámicos (hay una cierta “actividad”).
2. en estos casos se usa sin el artículo definido y, ~~en cambio~~, acepta un cuantificador

Examples with code changed:

1. En esta contribución, analizo la sintaxis y la semántica del fenómeno. Por una parte, defiendo que se trata de una alternancia entre funciones sintácticas distintas y no entre variantes de una misma función. Por otra parte (Sequencers), examino el fenómeno desde el punto de vista del aspecto léxico, para concluir que el alternante oblicuo expresa un evento agentivo del tipo actividad.
2. Por otra parte (Addition), estos resultados también permiten afirmar que el conocimiento previo asociado a la disciplina sí tiene un rol importante en el establecimiento de la coherencia referencial.
3. no se puede aplicar una lista elaborada a priori para obtener las estadísticas, porque por un lado, no existe una lista que agote todas las posibilidades de la forma de la atenuación y por otro lado (Sequencers), resulta ficticio que las estrategias de esa lista funcionen como atenuantes en todas las situaciones.

False negative examples:

1. A pesar de esto, ya se ha visto como algunos teóricos definen un subgénero de la ciencia ficción como prospectivo, debido a su propósito de querer transmitir una idea sobre el future [...].

2. el enfoque lingüístico se preocupa por la decodificación y prioriza la comprensión literal (datos explícitos en el texto); en cambio el enfoque cognitivo y psicolingüístico prioriza las actividades inferenciales, porque están centrados en la capacidad mental del lector;

Consequence

Definition: markers used to express relations of cause and effect

True positive examples:

1. Dichos criterios obedecen a concepciones didácticas e ideologías; por lo tanto el libro texto es un artefacto social, cultural e histórico.
2. Como consecuencia, en los discursos políticos chinos hay una abundancia de las metáforas conceptuales del dominio de familia.
3. Estas lecturas apoyan nuestro argumento en el sentido de que su lectura de fase/estadio permite establecer una analogía con las construcciones que la preceden en la adquisición. Así que, independientemente de la frecuencia del gerundio en el input, una vez adquirida la construcción locativa, el niño solo necesitaría conocer o dominar el uso de la perífrasis en un contexto específico, con un solo verbo.
4. Sin embargo, el desconocimiento del perfil del intérprete por parte de los profesionales sanitarios desemboca en dificultades a la hora de trabajar en equipo. Es de suma importancia, pues, saber distinguir qué tareas son propias del intérprete y qué partes son trabajo extra, como puede ser el recabar el consentimiento de un paciente, aunque sí sea partícipe o colaborador del proceso.

False positive examples:

1. Las editoriales privadas (Santillana y Norma) presentan mayor cantidad de contenidos y textos de lectura; ~~por tanto~~ (Not in discourse world), mayor número de páginas y unidades didácticas que los manuales del MED.
2. La traducción pospone el tópico en chino y coloca el resultado destacado al principio de la oración. ~~De esta manera~~ (Not in discourse world), la oración traducida pierde la construcción topicalizada.
3. Por supuesto, estos estudios han considerado diversos factores lingüísticos y psicolingüísticos, respondiendo, ~~de este modo~~, a la necesidad de un trabajo interdisciplinario ya propuesta por Sanders y Gernsbacher (2004).
4. A continuación, se proporcionan los signos fundamentales del sistema de transcripción propuesto por Briz y el grupo Val.Es.Co que se han utilizado en el presente trabajo. Se trata, pues, de un extracto del original:

Examples with code changed:

False negative examples:

1. No podemos entonces ignorar la posibilidad de que estos resultados contradictorios entre la pauta de cotejo y el cuestionario de creencias pudieran reflejar la influencia del efecto Hawthorne o efecto halo en los resultados derivados del cuestionario (Brown, 1991).
2. La construcción de tópico duplicado es propia del chino y no existe en español. Por eso en esta parte sólo estudiamos las estrategias de traducción del chino al español.
3. Debido a ello, operativamente, se denomina neologismo al vocablo en uso no recogido por una obra lexicográfica de referencia.

Frame markers

Sequencers

Definition: markers used to order discourse-internal units

True positive examples:

1. El capítulo dos primero da a conocer los conceptos más básicos de la lingüística de corpus por si acaso el lector desconoce totalmente el corpus. Luego se hace una revisión bibliográfica sobre el marco teórico del trabajo, Data-driven Learning (DDL), cuyos origen y características se presentan en primer lugar. Después se dedica mucho espacio a elaborar el estado del arte del DDL. Por último, proponemos dos preguntas de investigación que conducen a nuestro estudio empírico.
2. Parece que la lectura en Internet es mas rápida que la lectura en soporte papel, y eso se debe, por un lado, a la instantaneidad del hipertexto, y por otro, a los objetivos del tipo de lectura que se lleva a cabo en Internet (Cruz Piñol, 2002).
3. El primer problema al que se enfrenta Genly Ai es que los guedenianos desconfían de él por dos motivos. El primero por pertenecer a una sociedad de la que ellos no poseían constancia. Desde su perspectiva, Genly Ai es un extranjero. Por otro lado, los guedenianos también consideran a Genly Ai un elemento extraño por su incapacidad de cambiar de sexo.

False positive examples:

1. Partiendo del principio de que las ocurrencias de cada construcción predice el orden de adquisición, consideré entonces ~~en primer lugar~~ las ocurrencias del HDN, para comprobar si tienen alguna correlación con la adquisición de la perífrasis infantil.
2. Para que la legibilidad se muestra de una manera más nítida, a base de los datos de arriba, creamos ~~primero~~ (Not in discourse world), un gráfico de puntos con el objetivo de reflejar la ubicación precisa de los valores en la escala INFLESZ, y ~~luego~~ (Not in discourse world), un gráfico de líneas para que se ofrezca la tendencia en los últimos 8 años.
3. Analizamos los casos de ‘haber’ existencial + sintagma plural en el Corpus de Aprendices de Español (CAES, versión 1.0, de octubre de 2014) y en el Corpus para el Análisis de Errores de Aprendices de E/LE (CORANE). ~~El primero~~ es un compendio de textos escritos por estudiantes de español de nivel A1 a C1, procedentes de seis lenguas maternas: árabe, chino mandarín, francés, inglés, portugués y ruso.

Examples with code changed:

1. La recepción crítica de José Trigo está saturada de contradicciones. Por un lado (Comparison), es la obra más esperada del año, con un fragmento publicado de antemano en el periódico y una entrevista con el propio autor (Carvajal 1966), despertando cierta espera en los críticos y en el público lector; por otro lado, sin embargo, recibirá a su publicación ácidos rechazos de la crítica literaria, afirmando que la novela se limita a ser un experimento fallido y excesivo.

False negative examples:

1. En este apartado, primero vamos a analizar los resultados de las colocaciones anotadas en los textos de lectura de DELE B1 y luego examinar la frecuencia de uso de las colocaciones que se consultan con el Corpus del Español.
2. El trabajo presentado está estructurado del siguiente modo: en un primer apartado nos referimos a las nociones teóricas de hipertextualidad e intertextualidad. Posteriormente, nos adentramos en el análisis de la novela victoriana como ejemplo de texto hipertextual desde dos vertientes:

3. En cuarto y último lugar, los recursos lingüísticos de cada lengua ofrecen una amplia área de investigación.

Topicalizers

Definition: markers used to shift between topics

True positive examples:

1. En cuanto al segundo punto, la tradición gramatical ha identificado un diverso conjunto de propiedades asociadas a los oblicuos con en.
2. En el caso de la metodología cualitativa, es posible distinguir dos posibles aproximaciones aplicadas a los textos relacionados con la salud en general y los prospectos en particular.
3. Volviendo al funcionamiento de este motor de TA, el principal funcionamiento es el de alinear frases, grupos de palabras o palabras individuales de textos paralelos [...].
4. Ahora, se pasará a analizar la figura de los diferentes traductores de esta obra en España.

False positive examples:

1. De este grupo sobresale la valoración que recibe la variedad castellana, que destaca notablemente con su alto valor ~~en cuanto al~~ nivel de estudios.
2. La necesidad de encontrar una gran cantidad de recursos no comporta un gran problema ~~en nuestro caso~~, pues hoy en día cualquier persona tiene a su alcance una gran cantidad de aplicaciones móviles cuyo idioma de partida suele ser el inglés.

Examples with code changed:

False negative examples:

1. Entre paréntesis, quizás quepan algunas dudas sobre la habilidad de traducción, porque creen que la destreza traductora no tiene que ver con la de lectura, y, por consiguiente, no se debe contar.
2. Consideremos ahora el catalán. En esta lengua existe una abundante variación respecto a las soluciones que presentan las distintas variedades para realizar la combinación de un clítico acusativo y un clítico dativo de tercera persona (cf. Moll 1980).

Stage signals

Definition: markers used to label discourse stages

True positive examples:

1. En resumen, no existen diferencias significativas entre los libros de texto del Ministerio de Educación y de las editoriales privadas Norma y Santillana sobre la concepción y el tratamiento metodológico de la lectura crítica.
2. Hasta aquí hemos planteado algunos aspectos externos relacionados con el libro de texto. Respecto a la parte interna, existen diversas variables como la estructura global, las unidades, los componentes, los enfoques, el tratamiento metodológico, los textos de lectura, las actividades, etc.
3. En definitiva, lo anterior lleva a la conclusión paradójica de que lo que define una función sintáctica no es su comportamiento sintáctico, sino una compleja interacción de elementos semánticos (propiedades del paciente, en este caso) y léxicos (la no rección de preposición por parte del verbo).

False positive examples:

1. ~~Hasta ahora~~, la novela ha sido traducida a varios idiomas, incluyendo inglés, ruso, francés, alemán

y español, y así sucesivamente.

Examples with code changed:

1. El beneficio que ofrece el aprendizaje basado en proyectos (ABP) es que la herramienta para llevar a cabo el proceso de evaluación se diversifica: los exámenes quedan relegados a un segundo plano en favor de las exposiciones orales, los debates en grupo, trabajos de investigación... En definitiva (Reformulation), herramientas que permiten evaluar la evolución progresiva del alumno convirtiendo realmente el aprendizaje en adquisición y no en memorización para pasar una prueba.
2. a continuación presentamos un breve resumen de todos ellos.
En primer lugar, poder tener una somera idea de quién fue Jacques Lacan, la figura tras los neologismos, permite [...]
En segundo lugar, consideramos que el corpus textual y el corpus de neologismos, [...].
En definitiva (Sequencers), es destacable, a pesar de la cercanía entre lenguas, la complejidad de análisis de cada uno de los neologismos y su posterior traducción.

False negative examples:

1. Resumiendo lo que hemos discutido hasta ahora, aunque muchos lexicógrafos giran sus miradas a la importancia de los estudios estructurales y los de usuarios, no hay mucha bibliografía disponible para explicar o dar instrucciones sobre un mejor uso de diccionarios en el aula.

Announcers

Definition: markers used to announce discourse goals

True positive examples:

1. El objetivo de este trabajo es identificar los factores que pudieran estar ejerciendo una influencia en la adquisición relativamente tardía pero repentina de la perífrasis aspectual ‘estar’ + gerundio.
2. En esta sección intentaré proporcionar una caracterización semántica de la estructura con preposición en que supere la relativa dispersión que ha caracterizado el tratamiento tradicional de la materia.
3. Por eso, en este capítulo, exploraremos fenómenos típicos observados en el espacio social en las tres novelas de Carmen Laforet para entender de forma global su influencia positiva.
4. La hipótesis de partida es que una diferencia contextual tan marcada tendrá un efecto tanto en la frecuencia de uso de los diminutivos como en las funciones que cumplen [...].

False positive examples:

1. Ahora bien, el control de dichas variables no es necesario para alcanzar los ~~objetivos del presente~~ trabajo, ya que estos se centran en la detección e identificación de determinados elementos que influyen en la legibilidad de los prospectos, [...]
2. se le asigna una alta importancia a la metacognición, como un proceso que permite controlar y regular la comprensión, ya que ~~el objetivo principal~~ de la lectura es la comprensión del texto.
3. Los informantes, ~~en este apartado~~, se han agrupado entre aquellos que adoptan una perspectiva comparativa entre culturas y aquellos que adoptan una perspectiva crítica.

Examples with code changed:

1. En conclusión, en este apartado (Reviews) hemos presentado las diferentes cuestiones teóricas a las que haremos referencia a lo largo de los próximos apartados y hemos desarrollado el marco dentro del cual se insertará el presente trabajo.
2. En este capítulo (Reviews) hemos analizado los datos de VOT y F0 inicial de las oclusivas

iniciales producidas por alumnos chinos.

False negative examples:

1. El trabajo, en base a la Teoría de Equivalencia Funcional, intenta estudiar la versión en español de la Fortaleza Asediada y analizar las estrategias de traducción en los aspectos como la cultura, el estilo y la semántica con el fin de que sirva de un buen ejemplo en la práctica de traducción.
2. La presente investigación ha tenido como objetivo determinar y comparar el rendimiento en la producción sintáctica y en la agramaticalidad entre alumnado con Trastorno Específico del Lenguaje (TEL) y dos grupos de escolares con desarrollo típico del lenguaje.
3. En esta investigación, uno de los objetivos es tratar de encontrar algún indicio sobre la naturaleza de la sinonimia:

Endophoric markers

Previews

Definition: markers used to alert readers to the following textual information

True positive examples:

1. Como trataré de demostrar a continuación, este tipo de clasificación verbal permite explicar qué verbos presentan la alternancia OD/OBL-en del gallego.
2. Como se verá más adelante, no es el mismo el lenguaje que se estudia en las disciplinas de ciencias que el de las disciplinas sociales, por ejemplo, por lo tanto, el contenido modifica el continente.
3. El trabajo se compone de la introducción, cinco capítulos y las conclusiones. En la introducción indicamos la motivación, la justificación y los objetivos del trabajo, así como su estructura. En el primer capítulo, repasamos los estudios realizados pertinentes para aclarar sus méritos e insuficiencias, basándonos en los cuales formulamos nuestras propias opiniones sobre este tema. En el segundo capítulo, revisamos las teorías de la lingüística formal que son cruciales para el presente estudio así como las innovaciones teóricas concernientes junto con sus justificaciones, [...]

False positive examples:

1. Históricamente se remite a los trabajos en la Grecia antigua (Sócrates, Platón y Aristóteles), aunque ~~más adelante~~ emergiera el pensamiento crítico social de Marx.
2. ~~Más tarde~~, Nida (2001: 3) propone que el biculturalismo es mucho más importante que el bilingüismo en una traducción exitosa y el traductor no puede entender bien el texto sin tener en cuenta los factores culturales.

Examples with code changed:

1. Primero (§1.1), introduciré los conceptos de alternancia diatética y estructura argumental, para, posteriormente (§1.2), hacer un repaso de la literatura que ha tratado el fenómeno. Al final de la introducción (§1.3), plantearé las hipótesis que guiarán el desarrollo de esta contribución. A continuación (Sequencers), el trabajo se centrará en probar estas hipótesis: [...]
2. Sin embargo, el verbo shànglái (‘subir hacia a uí’) señala la llegada a una posición más alta que su posición de origen, indicando un evento con la última fase prominente, tal y como se observa a continuación (Visual references):

False negative examples:

1. En las próximas páginas, exploraré las posibilidades de análisis que ofrecen distintos modelos

teóricos, mostrando las dificultades que enfrentan.

Reviews

Definition: markers used to help readers recall the previous textual information

True positive examples:

1. Como ya se ha dicho, la enseñanza de una L2 a través de contenidos es una nueva propuesta metodológica surgida de las carencias del modelo tradicional de enseñanza de lenguas en contextos escolares.
2. En cuanto a restricciones de otro tipo, se ha visto en la sección 1.2.3 que la entidad puede ser tanto física como conceptual, en contra de lo defendido por Rosales Sequeiros (2000, 2005) [...].
3. Con lo expuesto anteriormente se ve que la traductología de corpus es un ámbito de investigación relativamente nuevo.
4. La relación asimétrica entre dos elementos es crucial para la linealización, como hemos mencionado en el apartado anterior.

False positive examples:

1. En este apartado, echamos un vistazo a los estudios ~~previamente~~ realizados sobre la atenuación desde distintas perspectivas por investigadores de distintos orígenes.
2. El primer SN (entre las capas de hojas), ya ha sido introducido ~~anteriormente~~ en el discurso y tiene menos dinamismo comunicativo, y en esta oración funciona como tópico.

Examples with code changed:

1. La (a)telicidad y su relación con la construcción con en se tratarán en la sección (Previews) 3.3.
2. El trabajo está organizado del siguiente modo. En el apartado (Previews) 2 se introduce el TC y la perspectiva del análisis del presente trabajo, con el fin de construir la forma lógica de la EC de eventos de actos habla en español. En el apartado (Previews) 3, basándose en las representaciones obtenidas en el anterior apartado, [...].

False negative examples:

1. Según hemos visto en nuestro análisis precedente, los personajes de las narraciones de Bartleby, pese a mostrar unos contornos psicológicos evidentes, son expuestos sin pasado, sin biografía, como perfiles en un absoluto presente.

Overviews

Definition: markers used to outline the general content or structure of the text to readers

True positive examples:

1. A lo largo del estudio aplicamos varias teorías y conceptos a la investigación de cada aspecto, los cuales vamos especificando en este apartado, así como en cada parte del trabajo cuando se necesiten.
2. En este trabajo se entrenan, mediante la plataforma MTradumática, tres motores de traducción automática estadística con corpus de aplicaciones móviles de distinta composición para la combinación lingüística inglés-español.
3. El presente trabajo se divide en siete capítulos. En el primer capítulo, ofrecemos el objeto de estudio, la justificación del trabajo, las preguntas de investigación y la estructura del trabajo. En el segundo capítulo, hacemos un recorrido por los estudios previamente realizados desde distintas perspectivas sobre la atenuación [...].

False positive examples:

1. Itamar Even-Zohar y su teoría de los polisistemas se han introducido ~~en este trabajo~~ para poder definir el modelo de sistema literario en el que se enmarcan las obras tratadas.
2. ~~El presente trabajo~~ se enmarca en los exámenes de idiomas (en inglés, lenguaje testing), que ya es un tema muy estudiado.

Examples with code changed:

1. A lo largo del presente trabajo (Reviews) se han expuesto los conceptos teóricos relativos a la traducción automática y lo diferentes motores que se han evaluado.
2. El presente trabajo (Announcers) trata de investigar las colocaciones utilizadas en las pruebas de DELE B1 para los alumnos taiwaneses que estudian el español como lengua extranjera.
3. Basándose en un corpus específicamente creado, el presente trabajo (Reviews) ha estudio el uso de la atenuación producida en las ruedas de prensa posteriores a las reuniones del Consejo de Ministros de España y ha intentado darle explicaciones. Los hallazgos principales son los siguientes:
4. Este trabajo tiene como objetivo (Announcers) analizar la traición creativa desde la perspectiva de la traducción literaria y explorar los motivos de su éxito, a fin de encontrar una estrategia de traducción más efectiva para promover que la literatura china tenga mejor difusión en el mundo hispano.

False negative examples:

1. El presente monográfico está formado por un conjunto de estudios que inciden en los diferentes modelos de procesos de transformación de la enseñanza de segundas lenguas.

Visual references

Definition: markers used to point readers to the visual representations of text

True positive examples:

1. El sentido semántico de los dos ejemplos arriba mencionados se puede inducir como “alguien juega tal papel o asume tal cargo”.
2. Manfred Jahn distingue tres niveles dentro de la comunicación del texto narrativo, como exponemos abajo:
3. En el ejemplo (4), la preposición a expresa la simultaneidad entre el tiempo de la cláusula matriz y la subordinada, así que la subordinada adquiere el tiempo pasado del verbo principal atragantó.
4. Se podrían aducir numerosos ejemplos de ello, pero tal vez los más ilustrativos son los que figuran en el Anexo 3 (vid. fig. 18 y fig. 19).
5. Ante las dificultades que se encuentran los usuarios al consultar los diccionarios, entonces nos hacemos la siguiente pregunta: ¿qué información quieren ellos? Veamos el siguiente gráfico:

False positive examples:

1. En los últimos 8 años, la legibilidad de los textos se concentra principalmente en las categorías “Bastante Fácil” y “Normal”, no mostrando, en general, clara tendencia hacia ~~arriba~~ o ~~abajo~~.
2. Para la evaluación de estos, el docente deberá recurrir a los criterios del MCER (2002) donde encontrará unas ~~tablas~~ de descriptores que le ayudarán.
3. Cabe mencionar que en esta parte solo nos centramos ~~en los fragmentos~~ donde los dos se usan como verbos inergativos, es decir, excluimos los fragmentos como el siguiente:
4. El paso ~~siguiente~~ consiste en analizar en la pizarra los errores más repetidos en las propuestas de los alumnos, para finalmente pasar a considerar las que sí corresponden a la pauta solicitada.

Examples with code changed:

1. Los tres enfoques o concepciones expuestas más arriba (Reviews) nos permitirán entender mejor cómo cada uno de estos enfoques trata la lectura crítica.
2. La selección de los alumnos y el diseño de la tarea se explican abajo (Previews).
3. En esta perspectiva, es importante analizar estos materiales escolares y el papel juegan en las prácticas de lectura y escritura, aspectos que desarrollamos en el siguiente (Previews) apartado.

False negative examples:

1. En la primera imagen, pues, veremos cómo la construcción estar + listo tiene el significado de “preparado”, mientras que en la segunda imagen la construcción ser + listo tiene el significado de “astuto”, “inteligente”:

Code glosses

Reformulation

Definition: markers used to rephrase the previous discourse unit

True positive examples:

1. En el conteo, se descartó las construcciones que aparecían como parte de lectura de libros, canciones y repeticiones inmediatas del discurso precedente, dicho de otro modo, se contaron únicamente las emisiones espontáneas.
2. Así pues, trataré de identificar las propiedades básicas que definen esta estructura, dejando aparte otros rasgos tradicionalmente asociados a estos OBLs, cuya vinculación al fenómeno no es sistemática (me refiero a los aspectos imperfectivo e incoativo, la partitividad, el énfasis o los vestigios locativos).
3. La última prueba (Apéndice VI) es una prueba de memoria demorada, o post-test diferido (delayed posttest, en inglés), cuya intención recae en comparar el efecto de los dos tratamientos experimentales sobre la memoria a largo plazo, concretamente, sobre la retención de los conocimientos de vocabulario aprendidos del post-test inmediato.
4. Desde el esquema planteado por el psicólogo Abraham Maslow sobre las necesidades de los seres humanos, conocido como la pirámide de Maslow, sabemos que existen necesidades básicas, necesidades de seguridad y protección, necesidades sociales, necesidades de estima y autorrealización (Maslow, 1954: 15-22).

False positive examples:

1. Como señala Simón (2016), cuando hablamos de archivos de texto en formatos estándar ~~nos referimos a~~ «any format based on simple text, tagging language or a format for data interchange that uses a systematic syntactic pattern of a “key/value” pair (or, in other words, an “identifier/translatable text” pair)».
2. Las competencias son las habilidades relacionadas con esa disciplina ~~en concreto~~ que el alumno debe trabajar.
3. La novela Sueño en el Pabellón Rojo es ~~conocida como~~ una “Enciclopedia de la cultura china”, ya que contiene una gran cantidad de elementos de la cultura tangible o intangible.

Examples with code changed:

False negative examples:

1. Resulta que en nuestro corpus, los atenuantes inciden en los actos asertivos y los directivos. En

términos específicos, los actos asertivos atenuados son generalmente los actos de comentar, afirmar, informar y describir.

Exemplification

Definition: markers used to elaborate meaning with examples

True positive examples:

1. En cuanto al género de texto de la comprensión lectora de EEE4, el Programa de evaluación del EEE4 (2011: 20) exige que el género sea variado, por ejemplo, el narrativo, el expositivo, el argumentativo, etc.
2. De hecho, en el chino coloquial, otros conectores adversativos también se utilizan con más frecuencia, tales como 可是(kěshì), 可(kě).
3. Apoyándonos en las propuestas de la Teoría del Lexicón Generativo (TLG), diseñamos abajo la estructura léxica (EA, EE y EQ) del verbo salir según su uso básico de desplazamiento espacial (p. ej. Juan (se) ha salido de la habitación).

False positive examples:

1. Es necesaria una aclaración: se suele distinguir entre el marco conocido como gramática de construcciones o construccionismo “tradicional”, de corte cognitivista (~~e.g.~~ Goldberg, 1995), y el neoconstruccionismo, que bebe de la tradición generativa (~~e.g.~~ Borer, 2005).
2. El hablar, y el cómo se habla, reflejan indefectiblemente aspectos no solo sociales sino también ideológicos de la persona, aunque diferentes grupos puedan tener diferentes niveles de consciencia de la existencia de estas ideologías subyacentes (véase ~~por ejemplo~~ Kroskrity 2004).

Examples with code changed:

False negative examples:

1. Estos autores han ocupado la rúbrica de SAT2 para evaluar la calidad de la escritura en inglés, en la que integran criterios como el desarrollo de un punto de vista, el desarrollo de las ideas, la organización, la coherencia, la progresión y la variedad léxica (McNamara et al., 2010).
2. Aquí en la oración incorrecta del alumno o de la alumna, además de otros fallos (como la falta de signos de puntuación, uso incorrecto de vocabulario), hablando de la formación de las dos Rel., en la primera falta el relativizador “的”, y en la segunda falta la palabra núcleo relativizada.
3. A veces, se hablan estas lenguas también con otras etnias vecinas con las que conviven. Como ejemplos podemos citar las etnias Zang, Kazajo o Uigura, entre otras.

Interactive metadiscourse: Points for attention

General rules:

- All coded segments in quotes and headings should be deleted.

Specific rules:

- As “*como*” is so frequent in the corpus and has different meaning and functions (either metadiscourse or proposition), it has not been automatically coded by MAXQDA. Therefore, **you need to closely examine the texts and to manually code them.** (See ‘Exemplification’–False negative examples 1-2)
- Be careful with metadiscourse markers with comma followed or case sensitive:

MAXQDA won't code a marker without comma or with lower-case if comma or capitalization is predetermined. For example, capitalized *También* and comma-followed *entonces*, were predetermined markers in order to increase match precision; thus, lower-cased *también* and no-comma *entonces* were not automatically coded by MAXQDA because they were not matched. However, the problem is that sometimes good examples of lower-cased *también* and no-comma *entonces* may be missed (see 'Addition'–False negative example 2 and 'Consequence'–False negative example 1). Therefore, **you need to closely examine the texts and manually code them.**

- MAXQDA only coded the smaller unit but missed the larger units: sometimes MAXQDA doesn't code the larger unit when it contains a smaller unit and both units are metadiscourse items. Some examples are *como por ejemplo* (including 'por ejemplo'), *así pues* (including 'pues'), *aun así* (including 'así'), and *p.ej.* (including 'ej.'). **You need to reselect the larger unit and code it with relevant category.**
- Two adjacent metadiscourse elements need to be assigned with one category: **sometimes two adjacent metadiscourse elements should be coded with one code** because they perform the **same** discourse function. For example, *siguiente tabla* together should be coded as 'Visual references' rather than *siguiente* 'Visual references' and *tabla* 'Visual references' separately; *como hemos ... anteriormente* as in *como hemos mencionado anteriormente* should be coded as 'Reviews' instead of *como hemos* 'Reviews' and *anteriormente* 'Reviews' separately.

Hedges
Definition: markers used to mitigate commitment or certainty
<p>True positive examples:</p> <ol style="list-style-type: none"> 1. Una de las posibles aplicaciones <u>sería</u> la de prevenir posibles problemas de fosilización. 2. Este término tiene una amplia gama de significados y <u>generalmente</u> se refiere a frases que se usan comúnmente juntas y tienen formas específicas, la implicación de su significado <u>a menudo</u> no se puede especular a partir del significado de una sola palabra en la frase. 3. Por consiguiente, el estudio de la metáfora conceptual en el ámbito de la psiquiatría <u>puede ser</u> de gran utilidad para avanzar hacia una mejor comprensión y tratamiento del trastorno mental. 4. <u>Desde mi punto de vista</u>, los ejemplos de Hemanz (1999) no son suficientes para desvalorizar los criterios establecidos por Vareta (1979). <p>False positive examples:</p> <ol style="list-style-type: none"> 1. Los problemas con caracteres escapados se presentan sobre todo en el caso de los apóstrofes en inglés, pues se emplean bastante a menudo. 2. No obstante, Santiago Alcoba Rueda (1983) confirma que con la estrategia de uso de pronombres relativos también es posible (Not in discourse world) llevar a cabo la relativización del OCOMP, lo que presentamos en el capítulo 2.3. 3. No obstante, eso no quiere decir que el estilo no es importante y puede ser ignorado. 4. Sus lenguas de trabajo son el catalán, el español y el inglés, aunque, normalmente (Not in

discourse world)), traduce del inglés al catalán.

5. Pero a los receptores extranjeros les ~~parecen~~ difíciles de entender.

Examples with code changed:

False negative examples:

1. Actualmente, todavía no existe un consenso sobre esta cuestión, aunque en rasgos generales no es complicado hallar ciertos paralelismos entre lo que aportan las personas especializadas en este tema.
2. Ahora bien, la restricción sobre los términos introducido por en, lejos de ser algo específico de la construcción que examina este trabajo, es, hasta donde sé, fruto de una restricción sintáctica, pues la posibilidad de objetos intensionales solamente se da con verbos transitivos.
3. Cabe la posibilidad de que Sayles compartiese las objeciones expresadas por estos autores y de que su compromiso con el empleo del español y con un subtítulo que podríamos denominar “denso”, [...].

Boosters

Definition: markers used to increase commitment or certainty

True positive examples:

1. Sin duda, la traducción de Fu Donghua llega a su propósito y logra gran éxito.
2. El análisis estadístico confirma la hipótesis de incidencia de la variante lengua materna solo en el registro de los casos con presente de indicativo ($\chi^2 = 14,040$ sig. = 0,015// V de Cramer = 0,151 sig. =).
3. Lo cierto es que se ha demostrado que aquellos métodos válidos para la adquisición del español por parte de un hablante monolingüe de inglés no son plenamente válidos para un individuo que cuente con el español como LdH.
4. sin embargo, debemos tener en cuenta que nunca podemos estar seguros por completo de la calidad lingüística de una aplicación a menos que se analicen en profundidad los archivos con las cadenas de texto.

False positive examples:

1. Por este motivo, aunque el DE se dirija a un público conocedor de la lengua, no deben escatimarse los esfuerzos por definir ~~claramente~~ un vocablo.
2. De acuerdo con Erikson, muchos adolescentes ~~demuestran~~ su necesidad urgente de dependerse de un “líder” en su tránsito hacia la adultez y prefieren un líder adulto y capaz de comportarse como un modelo.
3. A modo de resumen, en el presente epígrafe se sintetizan los datos expuestos en los anteriores apartados con el fin de determinar si las hipótesis de partida se ~~confirman~~ o se refutan.
4. Justo a partir de la publicación del atlas empieza lo ~~realmente~~ (Qualify the adjective not the clause) novedoso, ya que lo interesante deriva de la interpretación de los mapas, a través de los cuales se puede reconstruir la vida de la lengua.

Examples with code changed:

1. Los 9 restantes son participantes cuyo sexo no puede identificarse basándose en el alias utilizado (como señalan en su web, la política de Facebook es que los usuarios empleen su identidad “real” <https://www.facebook.com/help/112146705538576>, aunque esto no es siempre (Hedges)

necesariamente así).

False negative examples:

1. Sea como sea, no cabe ninguna duda de que la Comprensión de Lectura forma una gran parte en el EEE4 y el EEE8.
2. Nadie puede negar la importancia de la economía y de los beneficios que puede producir el español.
3. Por lo tanto, estamos convencidos de que la Rel. constituye un tema importante e interesante, y queda mucho que estudiar.

Attitude markers

Definition: markers used to express affective attitudes

True positive examples:

1. Por tanto, es importante que el docente sepa encontrar concordancias sobre determinadas palabras para facilitar el aprendizaje del alumno.
2. Antes de empezar el análisis de los errores cometidos por los alumnos chinos en la traducción al español de prensa china, es necesario hacer una breve presentación de las teorías: el Análisis Contrastivo (AC) y el Análisis de Errores (AE).
3. Antes de empezar las delineaciones más detalladas de ellos, primero, cabe mencionar las opiniones existentes sobre ellos, con el fin de demostrar por qué hemos preferido abarcarlos al grupo de foco.
4. En fin, esperamos que a través de los estudios de este trabajo, la conclusión que sacaremos sirva tanto para la enseñanza de las Rel. de español en China como viceversa.

False positive examples:

1. La elección de términos adecuados al nivel de especialización ~~es relevante~~ (**Qualify the noun phrase not the clause**) para una comunicación efectiva, pues garantiza que el contenido especializado se ajuste al nivel de conocimientos del receptor.
2. Sin embargo, para realizar este movimiento, “moverse en el aire”, ~~es necesario~~ (**Not in discourse world**) despegarse del suelo, acción que coincide con el trayecto del verbo direccional qílái (‘levantarse’).
3. En cambio, en casos no restrictivos, sólo ~~cabe~~ (**Polysemy**) una posibilidad de combinación, es decir, aquella en la que no se inserta la partícula: “adjetivo+nombre”.

Examples with code changed:

1. En cuanto a la clasificación de los estos neologismos, es necesario (**Directives**) tener en cuenta que existen diferentes maneras de producir nuevas unidades terminológicas y también existen diferentes tipos de unidades que se pueden crear en una lengua determinada.
2. Sin embargo, cabe (**Directives**) recordar que este traductor no aparecía en la edición de Vergara del año 1964 junto a Eduard Cardona.
3. En el ejemplo (e), cabría (**Hedges**) la posibilidad de emplear ambas traducciones.
4. En este trabajo, queremos (**Self-mentions**) elegir un nuevo ángulo, a saber, la validez de contenido.
5. De esta forma, nos resulta posible analizar (**Hedges**) la estructura del sintagma nominal en chino aplicando la teoría de Abney (1987), tomando los demostrativos o el numeral yi como el núcleo de la proyección máxima.

False negative examples:

1. Por esta razón, se hace necesario identificar las creencias de los alumnos para poderlas encauzar adecuadamente durante su formación académica.
2. Un punto interesante es que del total de 52 estudiantes que conformaron la muestra en estudio, 62% no utilizó la estructura textual de un texto argumentativo, [...].
3. Sin embargo, nos da lástima que los críticos no se hayan profundizado en la conciencia femenina de la novelista.
4. Por consiguiente, teniendo en cuenta los datos recolectados hasta este punto, parece sensato sugerir que se produce una dinámica en el tratamiento de la morfología derivativa en ELE: la presencia de la derivación es menor en los niveles iniciales (Aula Internacional 2) y mayor en los niveles avanzados.

Self-mentions**Definition: markers used to show authorial presence in text****True positive examples:**

1. A través de una comparación entre los culturemas en chino y sus traducciones respectivas, hemos identificado las técnicas utilizadas en la traducción de cada culturema presentado en el apartado anterior, pero por problema de espacio no podemos mostrarlo todo aquí.
2. El principio de escopo siempre predomina sobre los otros dos. Estos tres principios nos han sido de gran utilidad en orientar la práctica de traducción de la presente tesina.
3. Aunque somos conscientes de que el sexo puede ser una variable en el análisis, de momento las condiciones aún no nos permiten mantener una razón de sexo más equilibrada.
4. Comparamos la versión original en español de 2666 y la versión traducida en chino sobre el uso de Rel., es decir, queremos saber cuando se traduce una Rel. del español al chino, se emplea otra Rel. en chino o no. Tras el estudio, vemos que en las 300 Rel., hay 105 Rel. que presentan una correspondencia de la aplicación de Rel. en el texto original y el traducido, entre las cuales hay 55 Rel. con la posición relativizada como el SU, 40 como el OD, 9 como el OBL y solo 1 como el GEN.

False positive examples:

1. No obstante, si quitáramos el CI ~~me~~ de la primera frase, su ausencia la llevaría a los límites de la aceptabilidad a menos que el CI se encuentre implícito en el contexto, algo que no acontecería al segundo ejemplo.

Examples with code changed:

1. Una vez llevado a cabo este proceso, hemos obtenido los corpus finales que se emplearán para el entrenamiento de los motores. En la siguiente tabla podemos (Reader references) ver el número de segmentos y palabras de cada uno de ellos.
2. Observemos (Directives), antes de nada, la línea de color azul ligero, que representa la longitud total de textos.
3. Por lo tanto, no estamos seguros (Hedges) de qué parámetro contribuye más a la falta de sordez en la pronunciación de los alumnos, pero proponemos (Hedges) que más atención debe prestarse a las oclusivas sordas, [...].
4. Todo ello es compatible con el hecho de que apoyemos (Attitude markers) sin reserva la idea de que es posible hacer un uso creativo, productivo e innovador de los conceptos sintácticos más

tradicionales, tal como se argumenta en Bosque (1994).

5. Consideramos importante (*Attitude markers*) incluir una sección específicamente destinada a desarrollar estrategias de comprensión y producción de textos, [...].

False negative examples:

1. Considero que todas estas propiedades del fenómeno pueden ser explicadas de manera simple en base al siguiente principio:
2. Seguiré esta línea y me concentraré en dicho modelo pero al mismo tiempo mencionaré unas innovaciones teóricas que también sean cruciales para el análisis del presente trabajo y ofreceré evidencias para justificar que dichas innovaciones son aplicables al español, con el propósito de aclarar la estructura básica de las cláusulas pertinentes a este trabajo.
3. Como lectora habitual de Zadie Smith soy consciente del destacado papel que desempeña la recreación de unas voces ficticias auténticas en su estilo literario personal y, por tanto, también la variación intralingüística.
4. Es preciso remarcar que seleccionar partes de la entrevista para después clasificarlas en apartados temáticos ha sido una decisión de la autora, ya que podrían haberse seleccionado otros temas presentes en las entrevistas.

Engagement markers

Reader references

Definition: markers used to make reference to readers

True positive examples:

1. Tampoco debemos olvidar la existencia de diversas herramientas que nos permiten personalizar los motores de TA según nuestras propias necesidades, lo que también ha servido para favorecer este incremento.
2. Pero si consideramos el caso del artículo indefinido, vedmos algo diferente, como se presenta en el siguiente ejemplo:
3. Como podemos ver, las estructuras temáticas de las construcciones están ordenadas como el tema seguido del rema, sin embargo, en comparación con el primer modelo, el segundo expone la diferencia en el orden de la información conocida y nueva.
4. Educamos sobre todo a los alumnos para que aprendan a admirar (por lo general, correctamente, ya que los valores estéticos se suelen potenciar de forma adecuada en Secundaria y Bachillerato), pero también para etiquetar, clasificar, comentar y amplificar.
5. Si emitimos un nombre escueto sin ningún contexto pragmático (por ejemplo, “agua”, “libro”) la referencia que refleja la palabra en nuestro cerebro es el concepto que indica ésta, o mejor dicho, es cualquier miembro individual que pertenece a la clase denotada.

False positive examples:

Examples with code changed:

False negative examples:

Directives
Definition: markers used to instruct readers to perform an action
True positive examples: <ol style="list-style-type: none"> 1. <u>Nótese</u> que tanto Glauser como Germer son dos personajes que, tal y como los describe Walser, son conscientes del entorno deshumanizado que constituye la oficina y la vida del empleado, [...]. 2. Una vez realizados los pasos anteriores, <u>debemos</u> clicar en concordancia para visualizar la frecuencia. 3. A propósito del uso de los marcadores de género, <u>hay que</u> tener en cuenta los factores pragmáticos y cognitivos que forman parte de los conocimientos extralingüísticos. 4. hasta aquí ya es el cuarto fallo respecto a la falta del relativizador “的”, lo que significa que cuando enseñamos a los hispanohablantes la estructura de la Rel. de chino, <u>tenemos que</u> enfatizar más la importancia del relativizador “的” y la palabra núcleo de relativización.
False positive examples: <ol style="list-style-type: none"> 1. Además, hay que tener claro dónde se encuentran los archivos que hay que traducir, dentro de todo entramado de carpetas de una aplicación. 2. Es decir, que para desarrollar una competencia crítica lectora hay que reconocer pistas discursivas que ayuden a desvelar la ideología (Atienza, 2007).
Examples with code changed: <ol style="list-style-type: none"> 1. <u>Hay que</u> (Attitude markers) indicar que, tras un largo periodo necesario para la formación de una actitud, suele mantenerse habitualmente en un cierto grado de sostenibilidad, pero siendo un elemento situado en un ambiente de cambio y desarrollo social, puede variar con una cierta frecuencia. 2. <u>Debemos</u> (Attitude markers) subrayar que han sido los hablantes y los oyentes los que convirtieron el uso genérico en el específico. 3. Dado que pretendemos hacer un estudio suficientemente amplio de las extensiones semánticas del verbo salir en combinación con otras palabras, <u>tenemos que</u> (Attitude markers) encontrar las combinaciones representativas que comprendan casi todos sus significados posibles.
False negative examples: <ol style="list-style-type: none"> 1. <u>No podemos olvidar que</u> los estudios ontológicos son de la voz pasiva española no la china y son de la pasiva perifrástica y la pasiva refleja generalmente sin mencionar las construcciones que tienen sentido pasivo. 2. <u>Note</u> que esto no indica una pronunciación errónea, sino una realización rara pero aceptable.
Shared knowledge
Definition: markers used to appeal to shared knowledge
True positive examples: <ol style="list-style-type: none"> 1. Todos <u>sabemos que</u>, el chino pertenece a la familia sino-tibetana, mientras el español pertenece a la familia indoeuropea. 2. <u>Es bien sabido que</u> la lengua vasca, la única lengua no indoeuropea en Europa occidental, y varias lenguas romances han estado en contacto durante aproximadamente dos milenios.
False positive examples:
Examples with code changed: <ol style="list-style-type: none"> 1. Habiendo calculado la media y la desviación estándar de los dos grupos, sabemos (Self-mentions)

que la media del GE es mucho más alta que la del GC.

2. Esto va un poco en contra de nuestra suposición, pero desde la estadística nos da acceso a conocer el esfuerzo tanto del profesor como del alumno, pues ya sabemos (Reader references) que no es un punto fácil de dominar si tenemos en cuenta la gran distancia lingüística.

False negative examples:

1. Por otro lado, hoy en día, es de conocimiento común que la lengua posee otras funciones. Puede ser el símbolo de un Estado, de una nación, de una comunidad, o de algún estrato social.

Questions

Definition: markers used to evoke readers' interest in the topic and challenge them to think

True positive examples:

1. Por eso, se confirma la necesidad de crear actividades que ayuden al alumno extranjero a interpretar los discursos en Internet. ¿Cómo?
2. La respuesta a la primera pregunta de investigación, puede a la vez responder: ¿Cuál verbo copulativo se usa más?, ¿cuál se usa menos?, y ¿qué debe aprenderse primero?
3. ¿Qué es la colocación? Según el Diccionario del Español Actual (DEA) (1999), la definición de la colocación es:

False positive examples:

1. En líneas generales, las dudas y confusiones de los adolescentes se producen en torno a la pregunta “¿quién soy yo?”, la cual Erikson explica:
2. Las oraciones que se traducen son: (a) ‘¿Tienes tiempo?’ y (b) ‘Hoy hace buen tiempo’, cuya traducción al alemán es: (a) Hast du Zeit y (b) Heute ist das Wetter schön.
3. En las entrevistas, para identificar las opciones del idioma en el Banco Santander, las preguntas incluyeron ejemplos como los siguientes: “¿Qué idiomas usa más en la sede de España y en la sucursal de Shanghai? “¿Utiliza idiomas diferentes para informes escritos, correos electrónicos, reuniones y charlas informales?”

Examples with code changed:

False negative examples:

Interactional metadiscourse: Points for attention

General rules:

- All coded segments in quotes and headings should be deleted.

Specific rules:

- Try to not manually extend an interactional metadiscourse unit that has been automatically coded by MAXQDA, unless extending a larger unit is absolutely needed because the larger unit translates into a code change. For example, the negative item *no* before some hedges and boosters should not be included as part of metadiscourse unit (e.g., *no parece*, *no es fácil*, *no creemos que*), because adding it does not lead to a different metadiscourse category. Another example is the construction *hemos X*: only *hemos* is coded while the

following past participle should not be included, even though the participle makes the whole construction meaningful. A few exceptions in which extending unit is needed are *no es siempre, casi siempre*.

- MAXQDA redundantly coded both larger and smaller metadiscourse units: sometimes a larger metadiscourse unit includes a smaller unit but both units were automatically coded by MAXQDA. This happens especially when the two units have been precoded with **different metadiscourse categories**, such as *no siempre* (hedge includes the booster ‘siempre’), *sería útil* (attitude marker includes the hedge ‘sería’), *a nuestro juicio* (hedge includes the self-mention ‘nuestro’), *nos gustaría* (attitude marker includes the self-mention ‘nos’ and the hedge ‘gustaría’). **You need to manually delete the smaller unit.**
- Sometimes automatic coding assigns two codes to the same segment as both are possible coding and one of them is coded due to a “greedy” regular expression coding. For example, some items with ‘-mos’ ending (e.g., *constatamos, confirmamos, comprobamos*) have been coded both as ‘Self-mentions’ and ‘Boosters’; and ‘Self-mentions’ was coded because of regular expression coding (i.e., all words that end with ‘mos’ were coded as ‘Self-mentions’). By the same token, *cabría* was coded both as ‘Hedges’ and ‘Attitude markers’. **You need to delete the one coded by regular expression.**
- If two items with ‘-mos’ ending share the same subject pronoun (*nosotros*), **keep one code and delete the other one.** For instance, in sequences like *analizaremos and explicaremos* both verb items were coded as ‘Self-mentions’ because of the regular expression coding. But they should have been seen as one self-mention as there is in fact only one implicit subject pronoun (*nosotros*).
- If an interactional marker occurs inside a *si/cuando* clause, you should be careful, because sometimes it indeed is an interactional marker (e.g., *si consideramos ...*); while some other times it should not be seen as an interactional marker (e.g., *reflexionar sobre si ~~es necesario~~*).
- Almost all Spanish first-person plural pronouns ((*nosotros*) **mos, nos*) and possessives (*nuestr**) were automatically precoded as ‘Self-mentions’. Very few instances were precoded as ‘Reader references’. Therefore, **you need to examine each coded segment to determine if it indeed is a self-mention or a reader reference.** If it is the latter case, replace the code.
- Due to the irregular conjugation reflected in the verb, many Spanish **first-person singular pronoun (yo)** cannot be coded automatically. Therefore, **you need to read the text closely and manually code them** (see ‘Self-mentions’–False negative examples 1-3).
- The construction ‘es + adj.’ is only considered as metadiscourse marker when it is in ‘es adj. que...’ and ‘es adj. inf...’ because it qualifies the whole proposition. If it is in ‘noun es adj.’, then it should not be seen as metadiscourse marker because it qualifies the noun (see ‘Attitude markers’–False positive example 1).

Appendix IV Full report of the multivariate and univariate test results (interactive metadiscourse)

1. Descriptive statistics of interactive metadiscourse by writer groups

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2. Multivariate test results of interactive metadiscourse

Effect	Test statistic	value	F	df1	df2	p
Nativeness	Pillai's Trace	0.288	2.48	15	92	0.004
	Wilks' Lambda	0.712	2.48	15	92	0.004
	Hotelling's Trace	0.404	2.48	15	92	0.004
	Roy's Largest Root	0.404	2.48	15	92	0.004
Expertise	Pillai's Trace	0.287	2.47	15	92	0.004
	Wilks' Lambda	0.713	2.47	15	92	0.004
	Hotelling's Trace	0.403	2.47	15	92	0.004
	Roy's Largest Root	0.403	2.47	15	92	0.004
Nativeness \times Expertise	Pillai's Trace	0.166	1.22	15	92	0.270
	Wilks' Lambda	0.834	1.22	15	92	0.270
	Hotelling's Trace	0.199	1.22	15	92	0.270
	Roy's Largest Root	0.199	1.22	15	92	0.270

3. Univariate test results of interactive metadiscourse

Effect	Dependent Variable	Sum of Squares	df	Mean Square	F	p
Nativeness	Addition	584.875	1	584.875	7.3826	0.008
	Comparison	227.620	1	227.620	2.3045	0.132
	Consequence	54.845	1	54.845	0.5566	0.457
	Sequencers	23.845	1	23.845	0.1680	0.683
	Topicalizers	3.660	1	3.660	0.1076	0.744
	Stage signals	13.518	1	13.518	3.4329	0.067
	Announcers	5.797	1	5.797	1.0259	0.313
	Previews	4.932	1	4.932	0.1370	0.712
	Reviews	8.222	1	8.222	0.4345	0.511
	Overviews	6.351	1	6.351	1.4236	0.235
	Visual references	1724.627	1	1724.627	7.6134	0.007
	Reformulation	405.222	1	405.222	3.9600	0.049

Expertise	Exemplification	805.872	1	805.872	5.7841	0.018
	Integral	27.233	1	27.233	0.0746	0.785
	Non-integral	7156.184	1	7156.184	19.3973	<.001
	Addition	206.094	1	206.094	2.6014	0.110
	Comparison	98.029	1	98.029	0.9925	0.321
	Consequence	319.939	1	319.939	3.2472	0.074
	Sequencers	760.552	1	760.552	5.3588	0.023
	Topicalizers	25.015	1	25.015	0.7355	0.393
	Stage signals	8.040	1	8.040	2.0418	0.156
	Announcers	1.249	1	1.249	0.2211	0.639
	Previews	148.378	1	148.378	4.1214	0.045
	Reviews	215.350	1	215.350	11.3803	0.001
	Overviews	25.163	1	25.163	5.6399	0.019
	Visual references	793.617	1	793.617	3.5035	0.064
	Reformulation	7.120	1	7.120	0.0696	0.792
	Exemplification	16.943	1	16.943	0.1216	0.728
	Integral	5.480	1	5.480	0.0150	0.903
	Non-integral	1729.213	1	1729.213	4.6871	0.033
Nativity × Expertise	Addition	523.660	1	523.660	6.6099	0.012
	Comparison	251.265	1	251.265	2.5439	0.114
	Consequence	176.851	1	176.851	1.7949	0.183
	Sequencers	61.746	1	61.746	0.4351	0.511
	Topicalizers	1.227	1	1.227	0.0361	0.850
	Stage signals	0.903	1	0.903	0.2294	0.633
	Announcers	0.989	1	0.989	0.1750	0.677
	Previews	102.061	1	102.061	2.8349	0.095
	Reviews	7.374	1	7.374	0.3897	0.534
	Overviews	3.777	1	3.777	0.8465	0.360
	Visual references	136.998	1	136.998	0.6048	0.438
	Reformulation	215.549	1	215.549	2.1064	0.150
	Exemplification	73.734	1	73.734	0.5292	0.469
	Integral	338.870	1	338.870	0.9281	0.338
	Non-integral	26.861	1	26.861	0.0728	0.788

Residuals	Addition	8397.710	106	79.224
	Comparison	10469.854	106	98.772
	Consequence	10444.027	106	98.529
	Sequencers	15044.135	106	141.926
	Topicalizers	3605.051	106	34.010
	Stage signals	417.401	106	3.938
	Announcers	598.922	106	5.650
	Previews	3816.230	106	36.002
	Reviews	2005.849	106	18.923
	Overviews	472.923	106	4.462
	Visual references	24011.567	106	226.524
	Reformulation	10846.938	106	102.330
	Exemplification	14768.604	106	139.326
	Integral	38704.875	106	365.140
	Non-integral	39106.212	106	368.927

4. Mann-Whitney U test results of each interactive metadiscourse category across nativeness

Category	Statistic	p	Mean difference	95% Confidence Interval		Effect size
				Lower	Upper	
Addition	1043	0.005	4.3355	1.36	7.2139	0.31041
Comparison	1308	0.223	-2.4564	-6.18	1.4280	0.13521
Consequence	1478	0.839	-0.4165	-4.39	3.4675	0.02281
Sequencers	1506	0.969	0.0852	-3.80	4.0961	0.00463
Topicalizers	1414	0.558	-0.5358	-2.56	1.5350	0.06512
Stage signals	1218	0.073	-0.4468	-1.24	1.24e-5	0.19471
Announcers	1407	0.528	-0.3113	-1.29	0.6022	0.07008
Previews	1351	0.334	-0.7339	-2.42	0.7430	0.10711
Reviews	1468	0.790	0.1848	-1.23	1.6822	0.02975
Overviews	1270	0.146	-0.4167	-1.02	0.0772	0.16033
Visual references	982	0.002	-8.0554	-12.87	-3.0279	0.35074
Reformulation	1161	0.036	-3.3158	-6.72	-0.2005	0.23273
Exemplification	1055	0.006	-5.7239	-9.81	-1.5170	0.30248
Integral	1443	0.801	0.8725	-5.92	7.8389	0.02828
Non-integral	768	< .001	16.4542	9.73	23.1171	0.48283

5. Mann-Whitney U test results of each interactive metadiscourse category across expertise

Category	Statistic	p	Mean difference	95% Confidence Interval		Effect size
				Lower	Upper	
Addition	1235	0.236	-1.8540	-4.981	1.424	0.13515
Comparison	1191	0.146	-2.6573	-6.524	1.033	0.16597
Consequence	1139	0.076	-3.5001	-7.348	0.318	0.20238
Sequencers	1024	0.013	-4.8573	-8.730	-1.143	0.28291
Topicalizers	1251	0.277	-1.0753	-3.006	0.921	0.12395
Stage signals	1095	0.037	-0.6872	-1.096	-1.42e-5	0.23319
Announcers	1328	0.538	-0.3173	-1.188	0.652	0.07038
Previews	1074	0.029	-1.6984	-3.473	-0.156	0.24825
Reviews	966	0.005	-2.1308	-3.711	-0.600	0.32353
Overviews	952	0.003	1.0247	0.292	1.612	0.33333
Visual references	1223	0.207	3.0537	-1.628	8.782	0.14391
Reformulation	1355	0.653	-1.0325	-3.828	2.377	0.05147
Exemplification	1419	0.958	0.0954	-4.154	4.175	0.00630
Integral	1382	0.943	-0.3499	-7.488	6.610	0.00861
Non-integral	1144	0.118	5.7128	-1.685	13.251	0.17970

Appendix V Full report of the multivariate and univariate test results (interactional metadiscourse)

1. Descriptive statistics of interactional metadiscourse by writer groups

	Writer group	HEDGES_Normalized	BOOSTERS_Normalized	ATTITUDE MARKERS_Normalized	SELF-MENTIONS_Normalized	ENGAGEMENT MARKERS_Normalized	READER REFERENCES_Normalized	DIRECTIVES_Normalized	Shared knowledge_Normalized	QUESTIONS_Normalized
N	RA_ES	34	34	34	34	34	34	34	34	34
	RA_ZH	34	34	34	34	34	34	34	34	34
	TFM_ES	21	21	21	21	21	21	21	21	21
	TFM_ZH	21	21	21	21	21	21	21	21	21
Missing	RA_ES	0	0	0	0	0	0	0	0	0
	RA_ZH	0	0	0	0	0	0	0	0	0
	TFM_ES	0	0	0	0	0	0	0	0	0
	TFM_ZH	0	0	0	0	0	0	0	0	0
Mean	RA_ES	53.1	24.3	11.4	35.6	18.8	10.2	6.60	0.399	1.62
	RA_ZH	39.1	19.5	14.1	51.4	27.1	10.4	11.7	0.986	3.96
	TFM_ES	52.7	19.8	16.2	34.6	31.1	12.8	15.9	0.273	2.17
	TFM_ZH	38.2	22.9	15.7	72.9	29.7	18.0	8.19	1.05	2.46
Standard deviation	RA_ES	35.1	13.8	7.33	32.6	17.5	15.7	7.27	1.09	3.42
	RA_ZH	17.1	10.5	8.45	25.2	20.6	11.5	12.0	1.36	4.69
	TFM_ES	23.2	9.20	6.78	40.0	34.1	15.6	25.2	0.583	4.00
	TFM_ZH	16.7	9.88	7.94	36.6	17.9	16.2	7.78	1.05	2.10
Minimum	RA_ES	17.6	2.84	0.00	0.00	1.12	0.00	0.00	0.00	0.00
	RA_ZH	15.0	4.68	1.70	0.00	2.56	0.00	0.00	0.00	0.00
	TFM_ES	21.2	7.12	5.76	0.00	2.93	0.00	1.76	0.00	0.00
	TFM_ZH	9.38	7.35	3.13	4.05	9.26	2.69	0.423	0.00	0.00
Maximum	RA_ES	187	62.8	28.5	112	85.4	73.2	29.7	5.63	14.2
	RA_ZH	98.7	43.9	38.8	99.1	85.6	53.8	44.8	4.39	16.4
	TFM_ES	108	43.3	28.4	147	153	51.8	12.1	2.18	17.1
	TFM_ZH	62.9	46.1	33.3	128	61.2	54.1	28.3	3.56	6.47

2. Multivariate test results of interactional metadiscourse

Effect	Test statistic	value	F	df1	df2	p
Nativeness	Pillai's Trace	0.2267	4.19	7	100	< .001
	Wilks' Lambda	0.773	4.19	7	100	< .001
	Hotelling's Trace	0.2932	4.19	7	100	< .001
	Roy's Largest Root	0.2932	4.19	7	100	< .001
Expertise	Pillai's Trace	0.0850	1.33	7	100	0.245
	Wilks' Lambda	0.915	1.33	7	100	0.245
	Hotelling's Trace	0.0929	1.33	7	100	0.245
	Roy's Largest Root	0.0929	1.33	7	100	0.245
Nativeness × Expertise	Pillai's Trace	0.1446	2.42	7	100	0.025
	Wilks' Lambda	0.855	2.42	7	100	0.025
	Hotelling's Trace	0.1691	2.42	7	100	0.025
	Roy's Largest Root	0.1691	2.42	7	100	0.025

3. Univariate test results of interactional metadiscourse

Effect	Dependent Variable	Sum of Squares	df	Mean Square	F	p
Nativeness	Hedges	5557.257	1	5557.257	8.84404	0.004
	Boosters	84.393	1	84.393	0.65851	0.419
	Attitude markers	63.101	1	63.101	1.06065	0.305
	Self-mentions	16410.674	1	16410.674	15.16691	< .001
	Engagement markers	566.885	1	566.885	1.11877	0.293
	Reader references	125.570	1	125.570	0.58660	0.445
	Directives	0.960	1	0.960	0.00498	0.944
Expertise	Hedges	11.071	1	11.071	0.01762	0.895
	Boosters	7.780	1	7.780	0.06071	0.806
	Attitude markers	257.413	1	257.413	4.32679	0.040
	Self-mentions	2731.928	1	2731.928	2.52488	0.115

Effect	Dependent Variable	Sum of Squares	df	Mean Square	F	p
Nativeness × Expertise	Engagement markers	1455.767	1	1455.767	2.87301	0.093
	Reader references	668.732	1	668.732	3.12397	0.080
	Directives	220.975	1	220.975	1.14711	0.287
	Hedges	1.737	1	1.737	0.00276	0.958
	Boosters	410.406	1	410.406	3.20236	0.076
	Attitude markers	68.961	1	68.961	1.15914	0.284
	Self-mentions	3299.781	1	3299.781	3.04969	0.084
	Engagement markers	602.910	1	602.910	1.18987	0.278
	Reader references	163.616	1	163.616	0.76433	0.384
	Directives	1063.910	1	1063.910	5.52287	0.021
Residuals	Hedges	66606.385	106	628.362		
	Boosters	13584.676	106	128.157		
	Attitude markers	6306.253	106	59.493		
	Self-mentions	114692.517	106	1082.005		
	Engagement markers	53710.599	106	506.704		
	Reader references	22690.905	106	214.065		
	Directives	20419.536	106	192.637		

4. Mann-Whitney U test results of each interactional metadiscourse category across nativeness

Category	Statistic	p	Mean difference	95% Confidence Interval		Effect size
				Lower	Upper	
Hedges	1083	0.010	9.634	2.21	17.326	0.2840
Boosters	1443	0.680	0.884	-2.98	5.213	0.0460
Attitude markers	1373	0.406	-1.393	-4.25	1.638	0.0922
Self-mentions	822	< .001	-28.208	-39.82	-15.755	0.4565
Engagement markers	1179	0.047	-5.536	-11.36	-0.107	0.2205
Reader references	1164	0.037	-2.697	-5.35	-0.105	0.2304
Directives	1417	0.570	-0.550	-2.93	1.569	0.0631

5. Mann-Whitney U test results of each interactional metadiscourse category across expertise

Category	Statistic	p	Mean difference	95% Confidence Interval		Effect size
				Lower	Upper	
Hedges	1331	0.553	-2.4727	-10.10	5.635	0.06793
Boosters	1424	0.983	-0.0378	-4.06	4.215	0.00280
Attitude markers	1047	0.019	-3.5653	-6.15	-0.644	0.26681
Self-mentions	1275	0.348	-6.2987	-24.29	7.179	0.10714
Engagement markers	1128	0.065	-4.8453	-10.67	0.325	0.21008
Reader references	1079	0.032	-3.0385	-6.09	-0.248	0.24440
Directives	1203	0.167	-1.7345	-3.89	0.774	0.15756

