Modality as a reflection of pragmatic competence: exploring modification of ELLs' pragmatic knowledge based on the use of modality in the context of peer feedback

Liya Zalaltdinova

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MODALITY AS A REFLECTION OF PRAGMATIC COMPETENCE:

EXPLORING MODIFICATION OF ELLS’ PRAGMATIC KNOWLEDGE
BASED ON THE USE OF MODALITY IN THE CONTEXT OF PEER FEEDBACK

By

Liya Zalaltdinova

A Dissertation
Submitted to the University at Albany, State University of New York
in Partial Fulfillment of
the Requirements for the Degree of
Doctor of Philosophy

The School of Education
Department of Educational Theory and Practice

2019
ABSTRACT

The aim of the study is to identify characteristic features of modality use as demonstrated by intermediate and advanced English Language Learners (ELLs), to examine the change, if any, in the characteristic set of features of modality use by advanced as compared to intermediate ELLs, and finally to explore the factors triggering identified modality use as demonstrated by advanced ELLs while they provide evaluation and suggestions in the context of peer feedback. This cross-sectional, developmental, mixed-method study of sequential-explanatory design relied on a new theoretical framework to guide research on pragmatic competence – one for all language codes –, a discourse functional concept-oriented approach for the analysis of language use by ELLs, and on both qualitative and quantitative data in its attempt to get a nuanced understanding of the nature and elements of the pragmatic competence development as related to modality.

Additionally, this study recruited the population to be inclusive and representative of diverse socio-cultural backgrounds. The results of the study point to the developmental, but at the same time dynamic and complex, nature of pragmatic competence related to modality. While advanced ELLs showed much more alignment with the expected modality use in the context of peer feedback than intermediate group, they still demonstrated their own unique pattern of modality use. The possibility of identifiable pattern of modality at each proficiency level regardless of ELLs’ affiliation with a particular socio-cultural group ruled out the effect of L1 as the only or most decisive factor affecting ELLs’ pragmatic language use and development in L2. The same was true for the lack of meta-pragmatic knowledge, since ELLs were well aware of the expected modality use. This study revealed the following factors to be worth considering for the explanation of characteristic modality pattern by ELLs: a partially synergized network of tightly related synergetic concepts, resistance and the effect of subconscious and unreflective habitus.
ACKNOWLEDGEMENTS

The journey that has led me to this PhD thesis has never been lonely. First of all, I would like to express my heartfelt gratitude to my advisor, Distinguished Professor Istvan Kecskes, who has never ceased to expand my potential with his considerate guidance, expertise and patience.

The support, competence and energy of the committee members, Dr. Elly Ifantidou (National and Kapodistrian University of Athens, Greece) and Dr. Monika Kirner-Ludwig (The University of Innsbruck, Austria) have strengthened me professionally and spiritually all the way up to the Doctoral Defense itself at the Sorbonne university. The work with Monika has been inspiring and rewarding.

I own a sincere gratitude to all the participating students for their voluntary contribution to this study, to the instructors for their collaboration, and particularly to the focus group interviewees for sharing their precious time with me. A special thank you goes to my fellow students for sharing their time and expertise with me, especially to the teammates with whom I had the pleasure to work with on Albany Corpus of Intercultural Communication. Thank you so much to Barb Brunner, our ETAP ‘heart and soul’ for her immediate help, but most importantly for her care and attentiveness.

I also want to thank SUNY at Albany for the Benevolent Association Award, which served as an indispensable support to solve practical issues connected to the tasks of the dissertation research, but also an important motivation for my dissertation study, and for the opportunity to get interdisciplinary preparation. I have been always inspired by my many encounters with outstanding professors — James Collins (Anthropology), Alan Zemel (Communication), Scott South (Sociology) and Adam Gordon (Anthropology), just to mention a few.

I am particularly grateful to all those who have been there even before I entered the PhD program. Arlene Forman has believed in me since I first met her. She always knew when I needed
her the most and was always ready to help. Peter Demetz has recognized my potential, he has taught and supported me in my professional growth.

I would have not made it to the program without the love for the English language learning and teaching that Galina Albina has cultivated in me and my sister, Dina, while I was still an undergraduate student in Russia. Her enthusiasm, strong spirit and knowledge have been an incentive for me all these years.

The lively conversations of my extended Sicilian side of the family have always provided food for thought and inspired linguistic analysis. Their delicious food and warm sea have kept me healthy and ready for every upcoming academic year.

My sister and my soulmate – Dina Zalaltdinova – has and continues showing how one’s dream can come true through strong belief, aspiration and hard work. Her example, her energy and positive life attitude have kept me going through this long journey.

My heartfelt gratitude goes to Elvira and Ilgizar Zalaltdinovu, whom I am lucky to have as parents and who have invested so much more in my growth and development than I ever did myself. With their own example, they teach me how to work, how to expand my horizons, how to value what is important, how to persist with my dreams. I experience their unconditional love, trust and wisdom regardless of any geographical distance.

I am also exceptionally fortunate to have my husband, Alberto Iozzia, as my inspiration, my friend and my colleague. Being with me through rough and rewarding patches of the process, he has given me encouragement, confidence and strength not only to persist but to enjoy it. Only with my family’s love and belief in me I could be where I am today.
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CHAPTER I INTRODUCTION

Background of the Study

Since Chomsky’s introduction of pragmatic competence in 1978 – “knowledge of conditions and manner of appropriate use, in conformity with various purposes” (1978, p. 224) – it has received extensive attention from scholars and educators. Studies include foci on, e.g., lexical-grammatical representation of pragmatic knowledge (e.g. Blum-Kulka & Levenston, 1987), the relation between pragmalinguistic and sociopragmatic competence (Chang, 2011), the relationship between pragmatic and grammatical development (e.g. Blum-Kulka & Olstain, 1986; Kasper & Rose, 2002; Schmidt, 1983; Stepahny, 1995; Takahashi & Beebe, 1987); first language to second language (L1-L2) transfer of pragmatic knowledge (e.g. Gibbs, 1990; Nguyen, 2007), methodology of teaching pragmatic competence (e.g. Abolfathiasl & Abdullah, 2015; Ellis, 1992; Elsamman, 2014; Scarcella & Brunak, 1981; Takimoto, 2012). However, the acquisition of pragmatic skills remains inaccessible to grasp in its complexities just as much as it remains difficult to obtain and implement even for advanced English Language Learners (ELLs) (e.g. Chang, 2011; Fordyce, 2014; Youn, 2014).

Such a situation is still effective, even after a new research agenda – primarily with regard to the modification of research design components to address the shortcomings of the pragmatic competence research – have been advocated (e.g. Bardovi-Harlig, 1999, 2012; Chang, 2011; Wortham, 2008). The points of revision included but were no limited to the avoidance of any one-sidedness of data collection and interpretation (Kasper & Schmidt, 1996; Chang, 2011), call to conduct acquisitional (when possible, longitudinal) studies (Bardovi-Harlig, 1999; Kasper, &
Rose, 2002; Nguyen, 2007); investigation of some particular Interlanguage development, and its relation to pragmatics (Bardovi-Harlig, 1999).

While the design and methodology of previous studies on pragmatic competence varies in an attempt to advance the field, theoretical framework guiding previous research still remains primarily common for all pragmatic competence research and have not been challenged: the Interlanguage model of second/foreign language acquisition (Selinker, 1972). This theory treats pragmatic competence of a new acquiring language as a separate unit from the pragmatic competence of an existing language (L1) and predisposes native-speaker production as an indispensible “measure stick” to evaluate language learners’ performance for success. In other words, researchers have been comparing language production of a group of Native Speakers (NSs) on the one hand and a group of Second Language Learners (SLLs) identified by their common linguistic and ethnic backgrounds on the other hand. As it has been noticed already by researchers (e.g. Kecskes 2015; Nguyen, 2007), the focus of such studies very often is on the exploration of simple speech act production and comprehension by SLLs such as requesting, thanking, and greeting as well as transfers from L1 to L2. The treatment of L2 pragmatic competence as a separate entity for each language and the use of L1 background as the main cause of ‘impaired’ L2 pragmatic competence production are implicit in these studies and are automatically imprinted by the application of the common theory of Interlanguage.

In addition to previously proposed research agenda, therefore, there is also a need to scrutinize the effect of theoretical and conceptual foundation for pragmatic competence research. The theoretical conceptions “provides the basis for making decisions of how-the method to be used” (Brinkman & Kvale, 2014, p. 217), therefore acting as a ‘spine’ to our investigation design as well as how we approach and what we see in our research data.
The shift in theoretical understanding and assumptions has a potential to refocus the research agenda on the nature, direction, and elements of the pragmatic competence development, leading therefore to significantly different outcomes in pragmatic competence research. Furthermore, the focus on more complex speech acts that still remain under-researched, e.g. criticizing and responding to criticism, has a promising effect for new discoveries in pragmatic competence research (Nguyen, 2007, p. 14). Moreover, a recent call for gaining a fine-grained understanding of pragmatic performance by ELLs independent of their L1-socio-cultural backgrounds needs to be answered to explore the potential of this approach to advance our knowledge. Currently only a few studies adopted this approach (e.g. Gablasova et al., 2015; Zalaltdinova, 2018).

**Statement of the Problem**

In order to contribute to the advancement of pragmatic competence research, this study follows the above-proposed direction for future studies. Taking native-speaker production only as a reference point, treating ELLs as one group, regardless of their L1-socio-cultural backgrounds and using a relatively recent model of Second/Foreign Language Learning as its theoretical framework, this study seeks to gain a fine-grained understanding of ELLs’ nature of pragmatic competence and its development, so as to provide implications for practical application in second/foreign language teaching and learning.

Incorporating the Dual Language Model proposed by Kecskes (2010), according to which pragmatic competence of second/foreign language learners does not form anew or separately for each language, but rather is altered and extended from the existing L1-governed pragmatic competence under the influence of a new emerging language and as a result reflecting a unique
dialectical symbiosis of pragmatic rules and expectations of both languages, this study explores modification of pragmatic knowledge based on the use of modality in the context of peer feedback.

While modality use by ELLs has previously captured the attention of the researchers as being one of the most difficult structures to acquire by or teach to language learners (Bensaid, 2015; Celce-Murcia & Freeman, 1999), the body of research that focuses on modality exclusively to explore its potential in being one of the most effective tools to affect pragmatic competence modification is relatively not that large (e.g. Belz & Vyatkina, 2005; Chen, 2010; Dittmar & Terborg, 1991; Hinkel, 1995; Ishida, 2006; Kecskes & Kirner-Ludwig, 2017). In fact, modality reflects a socio-cultural value system tied to the language (Hinkel, 1995). This socio-cultural value system (henceforth SCVS) is part of one’s conceptual system and includes socio-pragmatic knowledge, which regulates language production (Kecskes, 2015). Due to the fact that modality is tightly connected to the functioning of one’s conceptual system and has the ability to reflect that system, I claim that modality is a plausible candidate for playing one of the most important roles in the modification of existing L1 pragmatic competence.

In order to explore what socio-cultural value loads specific to each language are, I selected peer feedback as a suitable context so to frame certain expectations of language use according to its SCVS. In this study, the assumption is that, according to English SCVS, epistemic modality is used to mitigate negative judgment, imposition and criticism or to convey tentativeness used as a face-saving strategy (Nguyen, 2007; Valor, 2000). Learners’ choices of either deontic or epistemic modality expressions in their peer feedback suggestions and evaluations reflect their pragmatic knowledge in reference to socio-cultural value loads specific to each language.
While, generally speaking, this study can be characterized as a developmental cross-sectional one, it zooms in on the modification process of pragmatic competence at a more advanced level of language proficiency – from intermediate to advanced. This choice of focus has been made with the desire to capture an under-researched obscure transition from a more homogenous pattern of modality use by an intermediate group of ELLs to a more varied and flexible pattern of modality use by advanced ELLs (Zalaltdinova, 2018), where more complex factors than just language proficiency are expected to stand behind such a pattern of modality use in the given context.

**Objective of the Study**

The objective of this study is to identify characteristic features of modality use as demonstrated by intermediate and advanced ELLs, to examine the change, if any, in the characteristic set of features of modality use by advanced as compared to intermediate ELLs, and finally to explore the factors triggering identified modality use as demonstrated by advanced ELLs while they provide evaluation and suggestions in the context of peer feedback.

While modality has been identified as playing an important role in peer feedback communication (e.g. Nguyen, 2007), the factors influencing or determining ELLs’ modality use have not been agreed upon or even been set as the main focus of any earlier research I am aware of. It is this “sociopragmatic judgment [that] seems to often play a more important role than pragmatic judgment in the success of intercultural communication” (Nguyen, 2007, p. 32). Therefore, further research on learners’ use of modality over time and factors affecting such use has been proclaimed to be of the greatest need (Nguyen, 2007). This cross-sectional, developmental, mixed-method study of sequential-explanatory design will tend to this very need.
putting forth the following research questions:

1. What characteristic features of modality use do intermediate and advanced English language learners (ELLs) demonstrate and how do these evolve over time?
   a. What patterns of modality use do advanced as opposed to intermediate groups of ELLs express in giving evaluations and suggestions within the frame of peer feedback?
   b. What traits of the L2 socio-cultural value system can be detected in the use of modality by both groups of ELLs?

2. How does the use of modality reflect learners’ modified (bilingual) pragmatic competence?
   a. Do advanced ELLs recognize socio-cultural differences behind the use of modals when expressing evaluation and suggestions?
   b. How do advanced students explain any deviation from L2 socio-cultural value system guiding the use of modals in giving evaluations and suggestions?

Significance of the Study

According to the analysis of a new database on foreign student visa approvals from 2001 to 2012, the number of international students at colleges and universities in the US grew dramatically from 110,000 in 2001 to 524,000 in 2012 (Ruiz, 2014). According to the annually published Open Doors report by the Institute of International Education (2018), “the numbers of international students studying in the United States reached an all-time high of 1.09 million in the 2017/18 academic year”. What is more, many of those students remain in the US after graduation: during the 2008 to 2012 period, “roughly one out of every three foreign students approved to study in the United States ultimately uses the OPT program” to remain in the US to
work (Ruiz, 2014). Additionally, a 2003 report by the Center for Research on Education, Diversity & Excellence (CREDE) as well as Thomas & Collier (1997, 2002) estimate that K-12 education will include up to 40% of bi- and multilingual students in the US by 2030.

This growing population, however, needs to participate in or develop a successful interaction using their second or new language, English, in order to maximize the quality and outcome of bilingual and international students’ academic, educational and professional experience that could result in a promising bidirectional and mutual benefits both for the students in, for example, enhancing their career opportunities and US in important economic benefits (e.g. diverse employees’ body offering valuable skills to local employers (Ruiz, 2014)). The significance of the study, therefore, lies in tackling an indispensable component of the growing population’s competence – the pragmatic competence – to acquire and sustain an effective interaction in their new language.

Pragmatic competence, even though excepted and recognized as imperative for the development of target proficiency and for a successful communication, is however difficult to acquire and apply, even for advanced L2 speakers (Fordyce, 2014; Romero-Trillo, 2002). Nevertheless, the deviation from the expected use of target language could drastically, and very often negatively, influence intercultural communication, especially when face-threatening acts are part of that communication. To be more specific, if ELLs lack the knowledge of expected pragmatic language use in relation to modality in peer feedback, for example, they could face serious consequences ranging from occasional miscommunication to the detrimental influence on the academic achievement and opportunities. Suggestions and pieces of advice presented in an assertive tone, in the form of demand, are perceived as face-threatening interference for NSs (Nguyen, 2007). Therefore, such an unexpected behavior of ELLs could, at the very least, affect
their collaboration with NSs or other international students on a common project or decrease their access to peer’s perspective on their work that could otherwise be helpful to improve their academic and language skills. Therefore, the significance of this study also lies in what is currently a rare and yet extremely important focus of investigation: ELLs’ modality use in written rather than speech production in face-threatening situations – such as peer feedback communication.

Considering the increasing number of international and bilingual population in the U.S., the indispensable role pragmatic competence plays in their success of communication in English, therefore affecting their professional and educational opportunities, as well as multiple remaining research questions regarding pragmatic competence of a new language, the present study plays a substantial role in exploring the nature of pragmatic competence and its development based on the use of modality in peer feedback. The findings of this study will expand on and contribute to the previous research on the understanding of the complex nature of pragmatic competence and its development with a specific focus on modality, and therefore, provide some implications on the improvement of second/foreign language teaching. The study will shed light on the role modality plays in the development of pragmatic competence and whether it could be applied as an effective tool to enhance ELLs’ pragmatic competence.

Lastly, this study is expected to raise students’ metacognitive awareness of their modality use, which may assist learners in the development of their own learning and communicative strategies. Taking a mixed method approach, the present research will apply ‘emic’ perspective to study the underlying forces behind the use of modality, which would contribute to the previous research on the understanding of the complex nature of pragmatic competence as well as encourage students’ reflection on their pragmatic performance.
From Pilot Study to Dissertation

Before proposing and laying out the methodology of the present study, I deem it important to share a glimpse of my research process trajectory that has drastically affected my decision-making in terms of the dissertation design. Pilot study served as a valuable pre-test of my full-scale dissertation in terms of theoretical and conceptual approach to my research, the selection of population, the choice of modality in peer feedback as the focus of my investigation, methodology of the study and most importantly, the foundation for its units of analysis.

Taking a concept-oriented approach to modality, my pilot study, conducted between Spring 2016 and September 2017, was aimed at exploring whether advanced ELLs of various ethnic backgrounds demonstrate some common pattern(s) of modality use in English. The result of data analysis (one written visual elicitation and three written peer feedbacks), produced by nine ELLs of diverse socio-cultural backgrounds, provided a reason to believe that patterns of ELLs’ modality use in English can be identified, regardless of the great variability in the use of modality devices among speakers with various socio-cultural backgrounds.

Guided by the recently developed theory of Second/Foreign Language Learning – Dual Language Model (Kecskes, 2010) – I concluded (and still maintain) that the variability in ELL English production is a reflection of students’ “Common Underlying Conceptual System”, which contains modified elements of their L1 socio-cultural value system. Modality, reflecting an individual’s SCVS must then be considered an indispensable part of pragmatic competence and an indispensable tool for its teaching. Valuable results of the pilot study called for the continuation of my work on the research project, refining, expanding on and developing the research further in order to get closer to the full understanding of the pragmatic competence of
modality use, its functioning and modification process. Table 1 summarizes the modification components one by one including the rationale for the choices in the final column.

Table 1

*The Description of Proposed Research Modifications Based on the Pilot Study*

<table>
<thead>
<tr>
<th>Areas of modification</th>
<th>Pilot study</th>
<th>Dissertation proposal</th>
<th>Rationale for the modification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Terminology</strong></td>
<td>Modality - “the manner in which the meaning of clause is qualified so as to reflect the speaker’s judgment of the likelihood the proposition it expresses being true” (Quirk et al., 1985, p. 219).</td>
<td>Modality is the expression of “validity” of the proposition: speaker’s attitude towards either “conditions of the events” or “conditions of the information” (Dittmar &amp; Terborg, 1991)</td>
<td>The terminology needs to cover both deontic and epistemic modality, while most modality definitions focus exclusively on epistemic modality (Coates, 1987).</td>
</tr>
<tr>
<td></td>
<td>The use of both terms – peer feedback and peer review – interchangeably.</td>
<td>Peer feedback is preferred.</td>
<td>The term peer feedback emphasizes collaborative work of the students on a piece of writing rather than criticism of peer’s work.</td>
</tr>
<tr>
<td><strong>Approach and its specification</strong></td>
<td>General description of a concept-oriented approach to modality.</td>
<td>The concept-oriented approach to modality is specified as excluding paralinguistic resources.</td>
<td>Since concept-oriented approach also covers paralinguistic resources (gestures, facial expressions, intonation etc.), the application range of the approach needs to be specified.</td>
</tr>
<tr>
<td><strong>Research questions</strong></td>
<td>Absence of intermediate group of ELLs in the study.</td>
<td>The group of intermediate ELLs is included in the research.</td>
<td>My prior research (Zalaltdinova, 2018) indicated change in the use of modal devices among ELLs as they develop their language proficiency: advanced ELLs in particular prefer to be more flexible than intermediate group in their choice of modal devices, which motivates me to look into these changes more profoundly.</td>
</tr>
<tr>
<td><strong>Methodology: Participants</strong></td>
<td>9 participants</td>
<td>Min. 60 participants</td>
<td>The choice of a sufficient number of participants (min. 30 in each group) is needed in order to apply inferential statistical methods.</td>
</tr>
</tbody>
</table>
Table 1 Continued

<table>
<thead>
<tr>
<th>Areas of modification</th>
<th>Pilot study</th>
<th>Dissertation proposal</th>
<th>Rationale for the modification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tasks</td>
<td>Visual elicitation task</td>
<td>No visual elicitation task</td>
<td>The exclusion of elicitation tasks for quantitative analysis and more emphasis on the naturalistic and semi-naturalistic data is employed as a way to get more authentic language use, i.e. produced without the intervention of the researcher.</td>
</tr>
<tr>
<td>No detailed background questionnaire</td>
<td>Detailed background questionnaire</td>
<td>The inclusion of the detailed background questionnaire is done in order to get a more profound profile of the participating students and to better identify their proficiency levels.</td>
<td></td>
</tr>
<tr>
<td>Quantitative data collection tasks were used.</td>
<td>In addition to quantitative data collection task, qualitative data collection tasks (focus-group interviews and a questionnaire) are added.</td>
<td>In order to answer the second research question with its two subquestions, qualitative data is required. The symbiotic application of both methods can add to a better understanding of ELLs’ pragmatic knowledge.</td>
<td></td>
</tr>
</tbody>
</table>
| Formulation of the peer review task | No text size is specified. No specific direction on the form to address a speaker is made. | Included:  
! Remember to address the author directly using second person singular.  
! Make sure that your text is no less than 500 words. | Clear and transparent articulation of the tasks will help avoid miscommunication and ensures desired content and quality of the learners’ production. |
| Raters’ procedure on the identification of modal meaning | The rating has been conducted twice with an attempt to improve the procedure. | Simplify the procedure of identifying the modal meaning of the prior-selected-by-the-researcher modal devices in the peer feedback; allow more time for the raters’ reviews; keep the third column for unidentified categorization in the template for raters’ evaluation. | Evaluation procedure by the raters needs to be more focused on the task. Since I am interested in the percentage of agreement to support/verify my evaluation of modal meanings, and not on my ability to identify linguistic modal devices, I should ask raters to mark modal functions of prior-identified devices. It will make the procedure more aligned with its purpose. |
| Analysis categorization | Abductive data analysis with the focus on data-driven inductive approach. | Establish uniform units of analysis based on the pilot study results, the corpus analysis and the reviewed literature. Application of both inductive and deductive technique in the development of units of analysis. | The inductive data-driven analysis is too broad and time-consuming and jeopardizes the use of inferential statistical analysis, as it narrows down the possibility of a large number of participants being involved in the study to be conducted within a reasonable amount of time. |
| Analysis expansion | Quantitative analysis | Both quantitative and qualitative analyses will be conducted. | The data analysis needs to be aligned with the rest of the research design components. |
Therefore, based on my pilot study, I was not only able to modify possible drawbacks and limitations of the dissertation research design in my attempt to make it coherent and supported by methodological soundness, but also use its findings as a foundation to build off on some of dissertation indispensable research components, i.e. units of analysis.

The discovered pattern of modality use by advanced ELLs of various ethnic backgrounds together with the available literature on the topic served as a springboard for the development of the modality continuum that is used as units of analysis in this dissertation research. In particular, pilot study played an important role in establishing broad classes of modal candidates in peer feedback (Table 2) that are further expanded on and specified in order to develop a modality continuum (Chapter 4). The inclusion criteria for modality devices into the pattern of modality use by ELLs in the pilot study was the use of that device by a minimum of four participants and the mean frequency for the modality device use among participants being no less than 0.5. The results of the pilot study were particularly helpful in taking into consideration ELLs’ preferences of modality use into broad categories of modal candidates in peer feedback.
Table 2

Prior Established Categories of Modal Devices Based on Literature and Pilot Study

<table>
<thead>
<tr>
<th>N</th>
<th>Devices</th>
<th>Syntactic Level</th>
<th>Structural Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Modal verbs</td>
<td>Lexico-syntactic</td>
<td>word</td>
</tr>
<tr>
<td>2</td>
<td>Verbal expressions</td>
<td>Lexico-syntactic</td>
<td>word and phrase</td>
</tr>
<tr>
<td>3</td>
<td>Imperative mood</td>
<td>Syntactic</td>
<td>sentence</td>
</tr>
<tr>
<td>4</td>
<td>Modal verbs</td>
<td>Lexico-syntactic</td>
<td>word</td>
</tr>
<tr>
<td>5</td>
<td>Verbal expressions</td>
<td>Lexico-syntactic</td>
<td>word and phrase</td>
</tr>
<tr>
<td>6</td>
<td>Adverbial expressions</td>
<td>Lexical</td>
<td>word and phrase</td>
</tr>
<tr>
<td>7</td>
<td>‘Modally (non)harmonious’ (in)congruous patterns</td>
<td>Lexico-syntactic</td>
<td>word, phrase, sentence</td>
</tr>
</tbody>
</table>

Definition of Terms

Second/foreign language learning/acquisition in this study refers to a “process of changing existing conceptual and linguistic systems by adding new information which will result in both quantitative and qualitative changes in the original conceptual system, and the eventual emergence of a new linguistic system that is rooted in the same conceptual system (‘Common Underlying Conceptual Base’)” (Kecskes, 2010, p. 7).

Pragmatic competence refers to “knowledge of conditions and manner of appropriate use, in conformity with various purposes” (Chomsky, 1978, p. 224). In this study, there is no separation between L1 and L2 pragmatic competence. Guided by Dual Language Model (Kecskes, 2010), this research treats pragmatic competence of second/foreign language learners as a modification of existing L1-governed pragmatic competence under the influence of a new emerging language and as a result reflecting a unique dialectical symbiosis of pragmatic rules and expectations of both languages.

Modality refers to the expression of “validity” of a proposition (Dittmar & Terborg, 1991). I claim modality is a plausible candidate for playing one of the most important roles in the modification of existing L1-governed pragmatic competence.
The distinction between deontic and epistemic modality lies in the way a speaker expresses a proposition as being valid or binding: deontic modality expresses one’s evaluation of the proposition according to some authoritative force including one’s moral presumptions, and is directed at the evaluation of conditions of events; epistemic modality is concerned with the evaluation of the proposition as being true and is directed at the condition of information rather than events (Dittmar & Terborg, 1991, p. 350). The distinction of deontic and epistemic modality is particularly important for this study since it ensures a high potential to track socio-cultural value loads and sociopragmatic knowledge, which are decisive for a speaker’s choices of a linguistic form of modality expression. Learners’ choices of either deontic or epistemic modality expressions reflect their pragmatic knowledge in reference to socio-cultural value loads specific to each language.

Peer feedback refers to “an input from a reader to a writer with the effect of providing information to the writer for revision.” and “through feedback, the writer learns where he or she has misled or confused the reader by not supplying enough information, illogical organization, lack of development of ideas, or something like inappropriate word-choice or tense.” (Keh, 1990, p. 294-295). In this study the task of peer feedback has been selected as a suitable context so to frame certain expectations of language use – i.e. expression of modality when expressing evaluation and suggestions – according to its SCVS. In this study, I consider the expression of both evaluation and suggestions in peer feedback since they are highly ambiguous in their distinction when it comes to the context of peer feedback: evaluations may very often automatically feature or trigger suggestions, and suggesting something may often entail or imply an evaluation (more details are in Chapter 4).
CHAPTER II LITERATURE REVIEW

The following review of literature consists of three main parts: modality in linguistic theory, modality and L2 pragmatic competence, and modality in the context of peer feedback. The first part is going to discuss current state of modality linguistic theory with respect to definitions of modality, theoretical approaches to modality, semantic domain and linguistic expressions of modality. The second part focuses on the examination of modality in L2 research paying particular attention to the studies focusing on pragmatic knowledge and development of modality in L2 learners. The last part zooms in on the previous research addressing modality use in peer feedback by both NSs and ELLs.

Modality in Linguistic Theory

Modality is an indispensable part of linguistic system in languages all over the world (Nuyts, 2016, p. 5), or even more – “central organizing principle in language” (Stubbs, 1986) as it regulates “the whole field of politeness, mitigating and aggravating stylistic functions” (Dittmar & Terborg, 1991) and shapes political discourse affecting vital decision making (e.g. di Carlo, 2017). While the first occurrence of mood/mode is traced back to the first century AD (Van Der Auwera & Aguilar, 2016), modality remains a spiky subject for the linguists where hardly any agreement has been gained with regard to terminology, relationship between mood and modality, approaches to guide modality research (formal syntactic, functional, cognitive, formal semantic), semantic categorization or status including morphosyntactic-to-semantic mapping of modality, and expressions of modality (Nuyts & van der Auwera, 2016). The
overview to follow will attempt to briefly describe current state of affairs for each of the above-mentioned modality-related properties and ground the choices deemed most appropriate for this New Language Acquisition research study. I will first start with (1) an overview of most prominent definitions of modality, follow up with (2) approaches to modality research, then describe (3) semantic domains of modality, and finish with (4) an overview of the possible expressions of modality.

Definition of Modality

The complexity of the term modality triggers multiple ways to unpack its meaning which often overemphasize only one aspect of the term. Guided by the holistic approach to modality, this study looks for definition that would cover the whole semantic domain of modality. Dittmar & Terborg (1991) offer such a definition by describing modality as the expression of “validity”.

Modality is a relatively recent term gaining its importance and primacy over mood through popularity of modality within logic and philosophy. In particular, modality appeared frequently in Kant’s work, which gradually replaced the dominance of the Boethian sense of "mood" or Protagorean notion of "mood" in linguistics (Van Der Auwera & Aguilar, 2016). Due to the tendency of modality rise over mood, mood is viewed more and more often as a sub-dimension of modality and is referred to as sentence types (declaratives, interrogatives, imperatives) or verbal mood markers (subjunctive and indicative) through which modality is reflected. Since modality is a "supercategory” (Nuyts 2005, 2006) that is “loosely structured”, polysemous, and “belong[ing] at a higher level of abstractions” (Van Der Auwera & Aguilar, 2016), it is important to come up with a definition that will take into account loose structural and semantic domains of modality.
One of the classical definitions of modality is “the manner in which the meaning of clause is qualified so as to reflect the speaker’s judgment of the likelihood the proposition it expresses being true” (Quirk et al., 1985, p. 219). Holmes’s (1984, p. 348) and Stubbs’s (1986) definitions are well aligned with the previous one by emphasizing the speaker’s expression of certainty/commitment with regard to the truth of the proposition. In an attempt to define modality in general, these authors, however, emphasize one subtype of modality – epistemic. Coates (1987; p. 113) was the one who noted such discrepancy and called for a more careful conceptualization of modality by researchers. Dittmar & Terborg (1991) attend well to this call and describe modality as the expression of “validity” by “validity claims”. Taking validity as a central phenomenon to modality and Kratzer’s seminal work on modality (1978) as a base, Dittmar & Terborg (1991) explain how the term of validity covers the whole scope of semantic domain of modality. They differentiate between two levels of modality that employ certain procedures that operate to express how validity is meant. In particular, Dittmar & Terborg (1991) distinguish between attitudes towards conditions of events that depend on two circumstantial factors – source and goal – and attitude towards the conditions of communication/information. The former is related to deontic modality and the latter to epistemic one. Such a definition covers the whole semantic domain of modality; in this case, both deontic and epistemic modality, therefore, can be relied on for this research.

**Approaches in Modality Research**

In addition to different perspectives in conceptualizing modality, the variation in modality research is explained by the diversity of theoretical approaches linguists apply in their pursuits to research modality. In this literature review, I briefly overview four theoretical approaches in
order to uncover a discourse functional concept-oriented approach to modality which answers the
criteria of a holistic approach to modality this study adopts in order to track nuanced peculiarities
of ELLs’-specific modality use.

Nuyts and van der Auwera (2016) introduce, summarize and analyze four main theoretical
approaches to modality: formal syntactic, functional, cognitive, formal semantic. Formal
syntactic approach is concerned with locating “well-defined grammaticalized linguistic reflexes
of [modality] in morphosyntax” (Axel-Tober & Gergel, 2016, p. 474). Functional approach to
modality encodes dissatisfaction with formalist accounts of language and stresses the importance
of context, of the modality role in the discourse, and of the emphasis on communicative function
rather than form (Aijmer, 2016). Cognitive linguists instead zoom in on the way modality
reflects language users conceptualization of the world, guided by the principle that language is
an integral, rather than a separate part of cognition (Boogaart & Fortuin, 2016). Formal
semantics is interested in understanding the “exact nature and appropriate formal representation
of the modal [meanings] encountered in natural-language expressions of modality” (Kaufmann
& Kaufmann, 2016, p. 536).

Due to the criticism of purely syntactic or purely semantic approaches, there have been
tries to bridge gaps created by the separation in uses of exclusively one or the other
theoretical frameworks in the treatment of modality in linguistics (e.g. Palmer, 1986). However,
such approaches require the choice of some formal criteria of analysis, i.e. focus on some
particular expression of modality such as modal auxiliary verbs or identifying some basic
applying purely syntactic or semantic approaches to characterize ELL’s development of modality
use is insufficient, since learners do not necessarily use the forms or map the meaning with that
form as expected according to native-speaker production. Therefore, the choice of the approach should be clearly aligned with the purpose of the study.

With regard to modality-related research in second/foreign language teaching, a discourse functional concept-oriented approach to modality has been found productive. This approach allows tracking acquisition of modality through the expression of various modal means by second/foreign language learners. Since the focus of this approach is on communicative cognitive-pragmatic function of modality in relation to its goal in a particular discourse, it entails the expansion of linguistic expressions of modality to the inclusion of lexical, grammatical or a combination of the two (Nuyts, 2001). By underlining the idea that there are different ways to express modal meanings, this approach allows tracking unconventional for native speakers forms that are available to and employed by language learners at different stages of language acquisition. Dittmar & Terborg (1991, p. 349) for example explored a subtle transition of very “content-dependent […] uses of implicit pragmatic […] devices for modal meaning to lexical items to grammaticalization of modality in morpho-syntax”. Stephany (1995) demonstrated how second language acquisition is characterized by initial expression of modality concept through paralinguistic means and intonation by ELLs.

What is even more important in this approach is the inclusion of the conceptual level into the description of modality. Modality has been referred to as “a Janus with various syntactic, semantic and pragmatic faces” (Dittmar & Terborg, 1991, p. 347). This statement is aligned with Jespersen’s conclusion of syntactic categories facing both ways: “towards the form and towards the notion” (1924, p. 56). Depending on the context, a particular linguistic category of modality can be expressed by various linguistic devices; at the same time modality/modal devices will carry “specific illocutionary force” (Dittmar & Terborg, 1991), such as downgrades (House &
Kasper, 1981), play-downs (softeners), and convulsive devices (e.g. *would you mind*). The choice and necessity of the devices is guided by socio-cultural knowledge of learners (sociopragmatics). By allowing non-restrictive range of modal expressions and by focusing on cognitive-pragmatic function of modality in actual context of language use a discourse-functional concept-oriented approach to modality also allows for tracking the development of sociopragmatic knowledge of modality use by language learners. Such a characteristic in particular makes this approach appropriate for the current study.

**Semantic Domains of Modality**

Semantic domain of modality is even more diverse than theoretical approaches to it. The amount of linguistic literature is large, far from reaching a consensus on the issue. Bybee et al. (1994, p. 176) even write that such an ambitious task as to come up with a clear-cut notional categorization of modality is impossible to achieve. Given a holistic approach to modality this study adopts in its attempt to capture ELLs’ characteristic features of modality use thoroughly, I propose treating semantic domain of modality as a continuum connecting two central semantic categories: deontic to epistemic. Such a modality continuum has a potential to capture those modal functions of ELLs’ modality use that are not possible to detect using central, strictly separated semantic categories that were established based on NSs’ modality performance.

Multiple approaches have been developed to categorize semantic domain of modality including root/epistemic, intrinsic/extrinsic, personal/logical (e.g. Quirk et al., 1985). Nuyts (2016) summarizes and groups existing semantic categories of modality from up-to-date literature into three central semantic categories: dynamic, deontic and epistemic. The most important literature (e.g. Palmer, 2014, pp. 2, 3), however, according to Dittmar and Terborg
(1991), agrees on the distinction between deontic and epistemic as two scales of modal meanings. The difference between these two types of modality lies in the way a speaker expresses a proposition as being valid: deontic modality expresses one’s evaluation of the proposition according to some authoritative force including one’s moral presumptions, and is directed at the evaluation of conditions of events; epistemic modality is concerned with the evaluation of the proposition as being true and is directed at the condition of information rather than events (Dittmar & Terborg, 1991, p. 350).

While deontic and epistemic modality are indisputable types of modality, what generally spurs the debate over the inclusion of an extra semantic category are ability and volition modal meanings that do not fit smoothly into any of the central modal semantic category. Another reason to seek for a third category is that some modal meanings are not scalar as are deontic and epistemic, and therefore, require a different shelter in typology (Nuyts, 2016). Dynamic modal category then is introduced to cover ability meaning (Nuyts, 2016). In addition, Sweetser (1984, 1990) introduces speech act modality. The tendency of the researchers’ attempt to group modal meanings into two central ones is, however, inevitable. Root modality is introduced to cover both deontic and dynamic meanings (Coates, 1983; Hofmann, 1976; Sweetser, 1984, 1990). Coates (1983) shows that there is no differentiation of the dynamic use of must next to a deontic one.

Papafragou (2000) calls for the inclusion of speech act modality into a deontic modality. Given that modality has the status of “attitudinal category” (e.g. Bybee et al., 1994; Narrog, 2005; Palmer, 1986), modality is divided into two categories – deontic and epistemic – in terms of the extent of the commitment of a speaker towards the state of the affairs. Taking a functional approach to modality, Halliday (2004) characterizes semantic domain of modality into “modalization” (associated with epistemic meanings and the exchange of information) and
“modulation” (associated with deontic meanings and the exchange of ‘goods and services’). The other followers of the functional approach to modality: Dittmar & Terborg (1991, p. 350), characterize the whole domain of modality into deontic and epistemic in their work. His claim is based on the fact that there is an agreement that “all the modal categories can be characterized in terms of the notions of “possibility” and “necessity” (Nuyts, 2016, p. 43).

Whereas any “deontic” aspect lies within a “necessity scale” (command-permission-ban) and expresses a speaker’s attitude towards the conditions of events (states, actions, process), an “epistemic” aspect is situated within a “probability” scale and expresses a speaker’s attitude towards the conditions of communication/information (Dittmar & Terborg, 1991, p. 350). In other words, as it has already been mentioned previously, deontic modality expresses one’s evaluation of the proposition according to some authoritative force including one’s moral presumptions, and is directed at the evaluation of conditions of events. Epistemic modality is concerned with the evaluation of the proposition as being true and is directed at the condition of information rather than events.

Ability and volition are categorized within deontic modality, taking into account that both express an attitude towards the conditions of events and depend on two circumstantial factors: source (self- other, speaker-hearer) and goal (direction and perspective). Ability is related to deontic necessity, possibility and impossibility (Can/could you give me some feedback?), while volition pertains to deontic necessity (I would like a different title for this paper). Given that my approach to modality is discourse-functional and concept-oriented, this is precisely the distinction I am going to follow in this study as well. I select two established main semantic categories – deontic and epistemic modality as a baseline for my study. The distinction of deontic and epistemic modality is particularly important for this study since it ensures a high
potential to track socio-cultural value loads and sociopragmatic knowledge, which are decisive for a speaker’s choices of a linguistic form of modality expression. Learners’ choices of either deontic or epistemic modality expressions reflect their pragmatic knowledge in reference to socio-cultural value loads specific to each language.

While there is an agreement that both deontic and epistemic semantic categories are scalar (e.g. Kratzer, 1991; Nuyts, 2016; Squartini, 2016), the gradient relationship between the two-modality types has not been claimed. However, there is some evidence that could be used to support such a claim. Kaufmann & Kaufmann (2016, p. 546) for example notice, “Modals in English and other languages can pick out intermediate values between necessity and possibility”. Talmy (1985) suggests analyzing epistemic modality as an extension of deontic one. Winter and Gardenfors (1995) oppose Talmy’s claim by arguing that epistemic uses is not an extension of the deontic one but its strengthening. What is common among all these views are the interconnections between two types of modality and possible implication on the treatment of modality in a gradient manner. Therefore, the above-mentioned evidence supports my proposal to treat modality as a continuum of meanings rather than a dichotomy of two central isolated semantic categories: continuum creates a nurturing condition for holistic approach to modality aimed at capturing ELLs’ preferences that could not be easily visible with the application of semantic categories developed on the base of NSs’ language use. The use of particular contextual frames in the form of the discourse type allows for a better analysis of this possibility. Based on the corpus analysis I make an attempt to establish modality continuum with modal devices positioned on it according to the modal force they convey (Chapter IV).
Linguistic Expressions of Modality

“Modality is a complex linguistic phenomenon [that] cannot be reduced to how modal and semi modal verbs are used by the writer” (Andreu-Besó et al., 2001; Piqué-Angordans et al., 2002). Depending on the context, a particular linguistic category of modality can be expressed by linguistic devices of great diversity at the structural (Biber, 2006) as well as at a syntactic level each of the modal device carrying “specific illocutionary force” (Dittmar & Terborg, 1991), such as e.g. downgrades (House & Kasper, 1981), play-downs (softeners), and convulsive devices (e.g. would you mind).

The linguistic devices previously identified as carrying epistemic or deontic functions include verb phrases in the imperative mood (Aarts & McMahon, 2008, p. 270; Clancy, 1997, p. 20; Han, 1999, p. 479); deontic modal verbs (e.g. Dittmar & Terborg, 1991, p. 350; Karkkainen, 1992; Palmer, 2014, p. 2); deontic lexical verbs (Clancy, 1997, p. 25; Kanté, 2010, p. 24); deontic adverbs (Biber et al., 1999); deontic adjectives (Verstrae, 2011); deontic nouns (Kanté, 2010, p. 24); formulaic deontic questions (Clancy, 1997, p. 25); epistemic modal verbs (Palmer, 2014, p. 2); epistemic lexical verbs (Boncea, 2014, p. 11; McEnery & Kifle, 2002); epistemic adverbs (Aarts & McMahon, 2008, p. 270; Biber et al., 1999; Quirk et al., 1985; Valor, 2000, p. 30), epistemic adjectives (Gablásova, 2015, p. 10), epistemic nouns (Kanté, 2010; Karkkainen, 1992, p. 198), epistemic rhetorical and tag questions (Coates, 1987, p. 117); other syntactic devices expressing epistemic modality include e.g. verbs in the passive voice (Hyland & Milton, 1997; Hinkel, 1997, p. 379), or the subjunctive mood (Aarts & McMahon, 2008, p. 329), conditional clauses and tenses (e.g. Perkins, 1983) (unless you find some evidence), and denials / contrast markers (e.g. Boncea, 2014; Perkins, 1983; Hinkel, 1997, p. 369). Due to the fact that deontic modality is generally underrepresented in the literature (Nuyts, Byloo & Diepeveen,
2010, p. 17) and its “transition to linguistic devices has not been smooth” (as quoted in Bybee & Fleischman, 1995), identified linguistic devices of deontic modality are relatively small in numbers. Table 3 below presents the examples of the modal devices that have been identified in available literature.

Table 3

Examples of Modality Devices

<table>
<thead>
<tr>
<th>N</th>
<th>Modality device</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Imperative mood</td>
<td>Be specific.</td>
</tr>
<tr>
<td>2</td>
<td>Deontic modal verb</td>
<td>You have to find more examples in each paragraph.</td>
</tr>
<tr>
<td>3</td>
<td>Deontic lexical verb</td>
<td>An effective conclusion needs to close the topic.</td>
</tr>
<tr>
<td>4</td>
<td>Deontic adjective</td>
<td>It is essential that you discuss the limitation.</td>
</tr>
<tr>
<td>5</td>
<td>Deontic adverb</td>
<td>The paper is written appropriately.</td>
</tr>
<tr>
<td>6</td>
<td>Deontic noun</td>
<td>There is a necessity to review your structure.</td>
</tr>
<tr>
<td>7</td>
<td>Deontic formulaic question</td>
<td>How about changing the thesis?</td>
</tr>
<tr>
<td>8</td>
<td>Epistemic modal verb</td>
<td>The conclusion section may be the most appropriate place to do so.</td>
</tr>
<tr>
<td>8</td>
<td>Epistemic question</td>
<td>Is it a common sense affirmation?</td>
</tr>
<tr>
<td>9</td>
<td>Epistemic noun</td>
<td>There is a possibility that the paragraph is oversized.</td>
</tr>
<tr>
<td>10</td>
<td>Epistemic adjective</td>
<td>I'm pretty sure that the author is able to fix them.</td>
</tr>
<tr>
<td>11</td>
<td>Epistemic adverb</td>
<td>I really like your paper.</td>
</tr>
<tr>
<td>12</td>
<td>Epistemic lexical verb</td>
<td>It seems relevant to reaffirm that.</td>
</tr>
<tr>
<td>13</td>
<td>Verbs in the passive voice (epistemic)</td>
<td>The structure of the essay is believed to be essential.</td>
</tr>
<tr>
<td>14</td>
<td>Subjunctive mood (epistemic)</td>
<td>If I were you, I would change the sentence.</td>
</tr>
<tr>
<td>15</td>
<td>Conditional clauses and tenses (epistemic)</td>
<td>Unless you find some evidence...</td>
</tr>
<tr>
<td>16</td>
<td>Denials / contrast markers (epistemic)</td>
<td>The essay is not ineffective.</td>
</tr>
<tr>
<td>17</td>
<td>Epistemic “modally harmonic” pattern</td>
<td>I think it might be beneficial to add some clarifications.</td>
</tr>
</tbody>
</table>

Following a concept-oriented approach to modality that prioritizes communicative function rather than form, this study tries to cover various devices of modality expressions (with the exception of paralinguistic resources) being restricted neither at the structural (Biber, 2006) nor at a syntactic level. Chapter IV described units of analysis on a proposed continuum for this study in details.
Modality and Pragmatic Competence in L2

Modality in L2 Research

Since modality has been identified as one of the central aspects of language functioning and organization (Stubbs, 1986), it has attracted the attention of researchers interested in the developmental issues of modality. An extensive research on modality development of L2 learners (e.g. Dittmar & Terborg, 1991; Gibbs, 1990; Römer, 2004; Salsbury & Bardovi-Harlig, 2000) as well as on the comparison between modality knowledge development in both L1 and L2 languages (e.g. Stephany, 1995) has been carried out.

The research covers both the spoken (e.g. Gablasova et al., 2015; Jaroszek, 2015) and written (e.g. Orta, 2010; McEnery & Kifle, 2002; Xie, 2016) mode of modality use and includes but is not limited to the discussion of such questions as L1-L2 transfer in modality use (e.g. Gibbs, 1990), teaching strategies for modality (Römer, 2004; Kärkkäinen, 1992), the dependence of students’ academic success on the use of genre-appropriate modality (Hyland & Milton 1997; Lin, 2017).

The studies primarily focus on the L2 use of modality by ELLs from specific socio-cultural backgrounds: some of those are Finnish (e.g. Kärkkäinen, 1992), Spanish (e.g. Orta, 2010), Chinese (e.g. Xie, 2016), Portuguese (e.g. Recsky, 2006), Panjabi (e.g. Gibbs, 1990) and Eritrean (e.g. McEnery & Kifle, 2002). Only a few very recent studies (i.e. Gablasova et al, 2015; Zalaltdinova, 2018) explore the use of modality by population representative of various socio-cultural backgrounds. By doing so they encourage to prioritize “fine-grained, comprehensive understanding” of language use and development by L2 learners refocusing one’s attention from native vs. non-native comparison of language use and opening the floor for other possible interpretations of factors effecting modality use, other than L1-L2 transfers or socio-cultural
background influences. This current study supports a new emerging research agenda and attempts to explore characteristic patterns of modality use by ELLs independent of their socio-cultural backgrounds. Since such a possibility has been claimed plausible (Zalaltdinova, 2018), I continue this line of research in the search for an answer to this intriguing question.

Overall, ELLs seem to use modality noticeably less than NSs (e.g. Belz & Vyatkina, 2005; Kärkkäinen, 1992; Mason 2007). The development of ELLs’ modal linguistic forms also has been documented to happen in a form that differs from NSs’ one (Dittmar & Terborg, 1991; Stephany, 1995). However, previous research tends to rely heavily on the study of epistemic modality use (Chen, 2010; Gablasova et al., 2015; Orta, 2010), rather than on the exploration of modality in its full sense (e.g. Piqué-Angordansat al., 2002). The reference to epistemic modality is also often ‘glazed’ by researchers under the terms stance, hedges, or politeness markers.

Functionally, all the elements have the representation of “the notional category of epistemic modality” (Boncea, 2014, p. 20) in different degrees. The current research is attending to fill in the gap in literature by researching the use of both epistemic and deontic modality by ELLs.

The complexity of modality research is also characterized by the necessity to decide on what particular linguistic devices to focus on in one’s research. Naturally, such a choice is based on the available literature that is biased, however, by NSs’ preferences of modal expressive means. It is very likely that research on modality in L2 research (e.g. Gibbs, 1990; Hinkel, 1995; Orta, 2010) is focused on the study of central modal auxiliaries because those are the principal set of modality expressions in English (Aarts & McMahon, 2008, p. 270) and are therefore considered to be central in the modality system (Perkins, 1983). While there are studies where the alternative-to-auxiliary modal forms (e.g. Belz & Vyatkina, 2005) or even a complex set of modal linguistic devices are used to study modality use by ELLs (e.g. Chen, 2010; Pérez-
Llantada, 2013), the cases where modality is treated holistically and the development of units of analysis is both deductive and data-driven are a few (Dittmar & Terborg, 1991; Gablasova, 2015). Since there is recognition that modality is poorly captured by the use of isolated modal devices (Piqué et al., 2001), there is a need to treat modality holistically. This study is going to attend to this very need.

**Modality and Pragmatic Competence in L2 Research**

Since modality use by ELLs has previously captured the attention of researchers as being one of the most difficult structures to acquire by or teach to L2 learners (Bensaid, 2015; Celce-Murcia & Freeman, 1999), the focus of L2 modality research included both linguistic examination of L2 modals use as well as pragmatic properties and socio-cultural values L2 modality use reflects. Many researchers (e.g. Kärkkäinen, 1992; Salsbury & Bardovi-Harlig, 2000) document a divergent from NS pragmatic use of modality by ELLs. Hinkel has conducted influential research in this field (1995; 2002) looking for the rationale of such modality use. She discovered the relationship between the density of certain modals used by L2 learners in the essays and the topics of those essays. The fact that the frequency of modal devices depends on the topic of the essay provides evidence to believe that ELLs demonstrate L1 culture-dependent use of modality. Basham and Kwachka (1991) have concluded that L2 learners extended the functions of modals to make place for the ones guided by their L1 socio-cultural values. Kecskes & Kirner-Ludwig (2017, p. 92) largely confirm such findings by discovering that Asian ELLs use modal verbs *must* and *should* according to “alleged culturally intrinsic sense of togetherness and joint responsibility for their society” which is different from what NSs do. While the previously described studies carry implication for understanding L2 pragmatic knowledge
development, their investigation focus is on use of modality by ELLs with advanced language proficiency. The exploration of the under-researched subtle transition in pragmatic competence modification process at a more advanced level of language proficiency – from intermediate to advanced – is necessary and is therefore addressed in this research.

There is a body of research, even though not very large, that focuses on modality exclusively to explore its potential in affecting pragmatic competence development. Belz & Vyatkina (2005) explored the effectiveness of intervention to improve L2 learners’ pragmatic skills of using German modal particles. Chen (2010) studied L2 pragmatic competence development on the use of epistemic modality in academic writing. Ishida (2006) uses conversational analysis to explore how pragmatic knowledge guiding the use of modal expressions in the context of decision-making develops through interaction. As a result of such research, scholars draw practical implication emphasizing “culture-sensitive” curricular and explicit metacognitive instruction.

However, there are still only a few studies exploring modality holistically in order to get a comprehensive picture of L2 pragmatic knowledge development related to modality (e.g. Dittmar & Terborg, 1991). As shown above, previous research is often selective of a particular modal function (e.g. exclusively epistemic modal devices) or of a specific linguistic modal device (e.g. exclusively auxiliary modal verbs). Both topics – developmental issues of L2 pragmatic competence and modality use by L2 learners – require further mutually inclusive and holistic research, which this study aims to conduct.

As it has been found, modality use of L2 learners reflects socio-cultural value system tied to the language (Hinkel, 1995). This socio-cultural value system is part of one’s conceptual system and includes socio-pragmatic knowledge, which regulates language production (Kecskes,
Due to the fact that modality is tightly connected to the functioning of one’s conceptual system and has the ability to reflect that system, I claim modality is a plausible candidate for playing one of the most important roles in the modification of existing L1-governed pragmatic competence.

**Theoretical Base of Research on Pragmatic Knowledge of L2 Modality**

Since the 1970s, language proficiency is not viewed as consisted solely by grammatical competence. In 1972, Hymes argues that, in order to function successfully in society, one has to be able to interpret and comprehend language for various purposes, therefore possess communicative competence (Hymes, 1972). In 1978, Chomsky draws clear distinction between pragmatic competence and grammatical competence, defining pragmatic competence as “knowledge of conditions and manner of appropriate use, in conformity with various purposes” (1978, p. 224). Even though Chomsky drew such a distinction to better understand linguistic system of the language, rather than pragmatic competence itself, the introduction of a new term inspired research on L2 pragmatic competence and its development soon after. At the time a new concept was introduced by Chomsky, L2 research has been largely guided by *Interlanguage* model of second/foreign language acquisition (Selinker, 1972). Interlanguage is considered a language created by L2-learners, which is in-between target and L1 language. From the Interlanguage perspective, L2 learning is characterized by five central processes: L1-L2 language transfer, transfer of training, strategies of L2 learning and of L2 communication, overgeneralization of L2 linguistic material (Selinker, 1972, p. 215). These processes were identified by Selinker as a framework for the analysis of L2 production of L2 learners.
Having been the guiding theoretical framework for L2 research before the concept of pragmatic competence was introduced; the Interlanguage model of second/foreign language acquisition was immediately applied in the exploration of the new concept. The same central principles guided research on pragmatic competence: L1-L2 transfer of pragmatic skills (e.g. Bardovi-Harlig, 1999; Gibbs, 1990; Nguyen, 2007); generation of a set of speech act knowledge (e.g. requests, apology, compliments) to be taught in classrooms (Blum-Kulka & Levenston, 1987), constant comparison of Interlanguage pragmatic competence to a L1 one (Blum-Kulka & Levenston, 1987). The guiding principles for an analyst, according to Interlanguage perspective, immediately implied the treatment of the pragmatic competence of the acquiring language – L2 – as a separate unit from the pragmatic competence of the existing language – L1 – and predisposed native-speaker production as an indispensible “measure stick” to evaluate language learners’ performance for success.

The research on pragmatic development of L2 modality is not an exception. Most of the research focusing on modality to explain pragmatic knowledge guiding its use aims at understanding an Interlanguage pragmatic development first and foremost (e.g. Belz & Vyatkina, 2005; Ishida, 2006). This theoretical framework is largely imprinted even in the most recent research (e.g. Chen 2010) very often explicitly. In 1999, Bardovi-Harlig pointed out that “Interlanguage pragmatics [remains] more ambitious than the contemporary practice” (p. 678) and proposes a new research agenda for the enhancement of Interlanguage pragmatics research. However, even after the introduction of this research agenda, many questions regarding pragmatic competence still remain: e.g. its functioning and development, its relation to grammatical competence, strategies and approach for teaching pragmatic competence.
Thus, in addition to what has already been identified as having high potential to advance research of pragmatic competence (e.g. acquisitional and longitudinal nature of studies, modification of research design components, multidimensionality of data collection), I suggest that researchers explore alternative theoretical foundations guiding L2 pragmatic competence research to see whether it will enhance our understanding of pragmatic competence functioning and development.

One such alternative and newly identified theoretical model of L2 language development was developed by Kecskes in 2010. In contrast to the theoretical concept of Interlanguage (Selinker, 1972), the Dual Language Model looks at the development of a new language as at a “process of changing existing conceptual and linguistic systems by adding new information which will result in both quantitative and qualitative changes in the original conceptual system, and the eventual emergence of a new linguistic system that is rooted in the same conceptual system (‘Common Underlying Conceptual Base’)” (Kecskes, 2010, p. 7, my emphasis).

Kecskes’s model (2015) challenges the idea of treating L2 pragmatic competence as a separate entity for each language spoken and claims that L1 pragmatic competence instead is gradually modified and restructured under the influence of new emergent information from L2. Shifting our theoretical understanding and assumptions toward this newly-identified theory of pragmatic competence development can lead to significantly different outcomes in the research on pragmatic competence. Using Kecskes’s (2015) theory as its starting point entails refocusing the research agenda on the nature, direction, and elements of the pragmatic competence modification. I choose this model as my main theoretical framework (Chapter 3) guiding this study to explore how it could help us advance our understanding of the operation and development of pragmatic competence related to L1 modality.
Modality in the Context of Peer Feedback

In the section to follow I explore available literature that implicitly or explicitly examines the suitability of peer feedback context to frame certain expectations of modality use. This information is used as a supporting evidence to ground my decision of taking peer feedback in this current study as a contextual frame that sets expectation of language use reflective of pragmatic knowledge in reference to and according to language-specific socio-cultural value loads.

The use of modality expressions reflects pragmatic knowledge in reference to socio-cultural value loads specific to each language, English in this case. A suitable context predisposes certain expectations of English modality use according to its socio-cultural value system and allows exploring what those English-specific socio-cultural value loads that guide English language modality use are.

A good way to select such context in writing is through the choice of a specific genre of the text. Since the introduction of the genre analysis by Swales (1990), it has shown to be an insightful way of investigation aimed at the understanding of the logics and rationale for the selection of certain linguistic devices in the text. This knowledge is particularly beneficial for L2 learners since they often demonstrate different ways of “understanding the pragmatics of the genre in the two cultural contexts and in the two languages” (Pérez-Llantada, 2013). Ifantidou (2014) also discusses the role of genre as a possible facilitator of pragmatic competence development.

In this study the context that frames certain expectations of modality use is peer feedback. While (peer) feedback has been identified as an indispensable part of learning-teaching environment (e.g. Hyland & Hyland, 2001; Berg, 1999; Min, 2006; Rahimi, 2013) and an
important part of scholarly communication (e.g. Taylor & Francis, 2015; Thomson, 2012), relatively smaller attention has been given to the focused exploration of linguistic features and particularities of language use in peer feedback (e.g. Debras, C., Frisk, 2016; Horgues & Scheuer, 2015; Leijen, & Leontjeva, 2012).

Those researchers who are interested in this topic, however, believe that modality is one of the central linguistic features that characterizes the genre of peer feedback and reflects its communicative functions and purpose (Valor, 2000, p. 31; Nguyen 2007). Some researchers, being convinced of the centrality of modality role in peer feedback communication, even encourage the discussions of genre-specific characteristics of peer feedback: “the pragmatics of modality in English for projecting academic modesty and politeness” (Leijen, & Leontjeva, 2012, p. 266). The follow-up two subsection of this review will first discuss discovered English NSs’ preferences for the use of modality in peer feedback context and then ELLs’ tendencies of modality use in peer feedback.

**English NSs’ Preference for the Use of Modality in Peer Feedback Context**

This part of the review focuses on the available information concerning NSs’ preferences of modality use in a given context and is necessary in order to understand the expectations of English modality use according to its socio-cultural value system. This information will be primarily used as a guiding reference in the exploration of whether and to what extent, if at all, ELLs’ modality use explored in this study reflect English-specific socio-cultural value loads that guide English language modality use.

In the previous literature certain patterns and expectations have been proposed and defined in regards to pragmatic language use in English connected to deontic and epistemic modality.
Modality use and development in general has been explored on the diversity of topics ranging from rhetoric writing to spoken interaction. Kourilová (1998, p. 112) concludes that “Modality markers of politeness, honesty, modesty and caution are an integral part of the English cultural system”.

Epistemic modality expressed through various devices is one of the primary ways to convey socio-cultural values of politeness, caution and modesty in the English cultural system. In academic writing and reporting, epistemic modal forms are used to mitigate author’s claims and sustain “impersonal surface” (Kourilová, 1994; Myers, 1989; Swales, 1990). Epistemic modal forms are generally used by native speakers of English as negative politeness strategies, “as ways of respecting addressees’ need not to be “imposed on” (Coates, 1987, p. 121), not to be seen to be boasting, not to come across as too expert-sounding (Coates, 1987, p. 127).

Leech (2003, p. 237) reports strengthening and development of this socio-cultural value: “a tendency to suppress or avoid overt claims to power and authority by the speaker or writer,” a tendency that “may be called ‘democratization’” is most evident in the diachronic shifts in English modal verbs uses reflecting English NSs’ preferences. The author draws our attention to a decline of English native speakers’ preferences for the modal verbs must in favor of need to and should, as well as a reduced frequency of may in favor of can. Collins (1991, p. 156) also reported similar tendencies: the root meaning of must did not occur at all in the Australian English.

In addition to academic writing, several genres have been discovered as triggering face-threatening acts that require the linguistic expression of politeness, caution and modesty according to socio-cultural value-system of the English language. Weather reports embed face-threatening act of advice-giving (Rundblad & Chen, 2015). The genre of peer feedback is
characterized by face-threatening act of providing criticism and suggestions (Valor, 2000). These acts are considered face-threatening in Anglo-western contexts (Goldsmith & MacGeorge, 2000; Vine, 2004), because they, in particular advice-giving, contain “messages of authority, expertise, and intimacy” (DeCapua, Andrea, Huber, Lisa, 1995, p. 128). According to the English socio-cultural values, English NSs are expected to use mitigating strategies to maintain a harmonious relationship with the receiver of advice, criticism or suggestion and to minimize the imposition of the face-threatening act. Moreover, mitigated advice was found to be more effective than blunt advice (MacGeorge, Lichtman, & Pressey, 2002).

In order to cope with the task, NSs use indirectness strategies such as indirect suggestions framed through directives and rhetorical questions (Harrison and Barlow, 2009). However, the central position occupies the uses of epistemic modal devices and hedges (Locher, 2006; Pudlinski, 2005). In call-in radio programs hosts often use epistemic modal devices in combination with the imperative mood as one of the mitigation strategies for advice-giving. However, the principal set of epistemic modality expressions in English has been found to be modal auxiliary verbs (Aarts & McMahon, 2008, p. 270). Some other common epistemic linguistic categories routinely expressed in spoken interaction include modal adverbs, modal lexical verbs, parenthetical clauses and, to a lesser extent, modal adjectives and nouns (Karkkainen, 1992, p. 198).

A few studies address the use of modality in the context of peer feedback specifically. What they find out is that NSs of English will generally use epistemic modality as a hedging device, i.e. so to mitigate negative judgment and criticism or to convey tentativeness used as a face-saving strategy, when they express evaluation or give suggestions for correction (Nguyen, 1

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1 “In fact, the notions of hedging and epistemic modality are not mutually exclusive but rather complementary as modal elements with epistemic meanings fulfill the function of hedges in discourse while representing the notional category of epistemic modality” (Boncea, 2014, p. 20).
The use of epistemic modality is also used to minimize imposition of the critical comment on the reviewee (Valor, 2000, p. 64). Suggestions and advice presented in an assertive tone, in the form of a demand, have been found to be generally considered face-threatening for English NSs (Nguyen, 2007).

The genre of peer feedback therefore frames certain expectations of language use according to its socio-cultural value system. In this study this includes the assumption that epistemic modality is used to mitigate negative judgment, imposition and criticism or to convey tentativeness used as a face-saving strategy according to socio-cultural value system specific to the English language (Nguyen, 2007; Valor, 2000).

**ELLs’ Preferences for the Use of Modality in Peer Feedback Context**

This part of the review is focused on reporting available research findings pertaining ELLs’ preferences of modality use in peer feedback. This knowledge is used in the current study to primarily inform the current research as well as providing rationale for the selected design of the study.

Previous studies report that ELLs use modality differently than English NSs do. Many researchers agree that ELLs tend to use a restricted set of epistemic modal devices and favor direct expression often conveyed through deontic means of modality in academic writing in general (Gablasova et al., 2015; Hinkel, 1997; Hyland & Milton, 1997). A higher level of directness is, for example, found in the expression of requests by ELLs: Estonians, as Germans, demonstrate higher frequency of direct requests and lower one for the polite words (Keevallik & Grzega, 2008; Keevallik, 2005).

Some researchers draw a bit more complex picture. Pérez-Llantada, (2013) reports a hydrid
model of persuasion where level of certainty and uncertainty is equally distributed as compared to a marked degree of uncertainty in L1 English texts.

Previous research of epistemic modality also reported ELLs’ preference for a limited range of modal devices that were characterized as the easiest ones – e.g. parenthetical clauses, lexical verbs and adverbial expressions (Gablasova et al., 2015; Fordyce 2009, 2014; Fung and Carter 2007; Salsbury and Bardovi-Harlig 2000). Such ELLs’ preferences were explained by their low language proficiency or unawareness of pragmatic knowledge a particular genre requires (Fordyce 2009, 2014; Salsbury and Bardovi-Harlig, 2000).

In the context of peer feedback, ELLs also use much fewer mitigation strategies than NSs do to soften criticism in giving evaluations and suggestions (Nguyen, 2007). While modality was not the main focus of her study, Nguyen (2007, p. 237) notices that ELLs have the knowledge of modal structures but rarely use it for modification. Additionally, Leijen & Leontjeva (2012) found no evidence that ELLs value mitigation in the peer feedback: mitigated suggestion giving has not been found particularly effective for ELLs as it is for NSs (MacGeorge, Lichtman, & Pressey, 2002). Identifying modality as its main focus instead, the current study searches for (dis) confirmation of identifiable, sometimes multifaceted tendencies in the ELLs’ modality use and contribute to the exploration of the reasons for such renowned ELLs’ linguistic behavior.

Some separate explanations have been already proposed in the previous research. Abolfathiasl and Abdullah (2015) explain the deviant use from expected pragmatic forms and functions by learners’ lack of pragmatic knowledge, which their study was found to have improved after a phase of explicit teaching. Pérez-Llantada (2013) reports that different cultural-specific ways of treating modality system cause “linguistic mismatches and cultural collisions”. Others claim that there is a possibility of intentional choice or resistance to use native-like
speech conventions and deliberately avoid the use of pragmatic knowledge (e.g. Eslami, 2014; Fujiwara, 2004; Ishihara and Tarone, 2009). Gablasova et al. (2015) claims that “a systematic variation in the epistemic stance” could be explained by social dimensions of the pedagogical task and by ELLs’ individual styles. Hinkel (2009) reports that the divergences of pragmatic use of modality are more prominent in the texts that trigger the description of personal experiences.

The following hypotheses and assumptions of distinct uses of modality that have been raised in previous research can be summarized as follows: First, learners may wrongly perceive rhetorical indirectness as a lack of modality (Nguyen, 2007, p. 272). Second, “learners seem to strive for clarity in the domain of deontic modality stating clearly what must and must not be done…” (Stepahny, 1995, p. 114). They tend to be more concerned with “the accurate conveyance of their messages rather than with making these messages sound more polite” (Nguyen, 2007, p. 219). Third, suggestions and advice presented in an assertive tone, in the form of demand are expressions of care, and friendliness for many language learners and not a threatening interference as it is most likely perceived by NSs (Nguyen, 2007, p. 247). Additionally, strong arguments, according to ELLs, are those that are not hedged (Nguyen, 2007, p. 289). Hyland and Milton (1997, p. 201) and Orta (2010) also found ELL’s “stronger commitments to statements” and “firmer assertions, more authoritative tone”. The lack of expected pragmatic language use in relation to modality in peer feedback could have serious consequences. These can range from occasional miscommunication to the detrimental influence on the academic achievement and opportunities (e.g. reported disadvantages of L2 scholar experiences in the publication process (Pérez-Llantada, 2013)).

While modality has been identified as playing an important role in peer feedback communication (e.g. Nguyen, 2007), the factors influencing or determining ELL’s modality use
have not been agreed upon or even been set as a focus of earlier research. However, it is this “sociopragmatic judgment [that] seems to often play a more important role than pragmalinguistic judgment in the success of intercultural communication” (Nguyen, 2007, p. 32). Therefore, further research on learners’ use of various types of modality over time has been proclaimed to be of the greatest need (Nguyen, 2007). This study attends to this call.

**Concluding Remarks on the Reviewed Literature**

Chapter II has covered the way modality has been explored by the researchers particularly within the field of L2 acquisition as applied to the issues of pragmatic development and as a central element of peer-feedback genre. The chapter opened with the review of the key concepts of modality within the linguistic theory: definition, theoretical approaches, semantic dimensions, and linguistic expressions. While being widely researched, the study of modality still reflects complex interweave of endless terminology, markers, and grammatical, pragmatic and contextual functions. The review proceeded to the overview of modality research conducted in the field of Second Language Acquisition paying particular attention to the development of pragmatic knowledge of modality use. As the findings of the previous research imply, modality is a plausible candidate for playing one of the most important roles in the modification of existing L1 pragmatic competence. Therefore, the need for the research that examines modality and its development in L2 learners holistically and that is guided by an alternative newer theoretical framework has been identified. The last part of the review dwelled upon the research examining peer feedback as a possible context to frame certain expectations of language use according to its socio-cultural value system. It is reported that epistemic modality is expected to be used in peer feedback to mitigate negative judgment, imposition and criticism or to convey
tentativeness used as a face-saving strategy according to socio-cultural value system specific to the English language.

This study does not only address the research gaps identified in the previous research and include features differentiating it from previous studies, but also demonstrates new perspective for future research on pragmatic competence functioning and development as well as on modality.

1. This study follows the research agenda in shifting the focus of the research from the exploration of isolated modal devices generated on the basis of single-language linguistic studies towards a concept-oriented holistic approach of modality use reflected through the diversity of linguistic devices and its combinations and capturing wide range of modal meanings. Units of analysis generated both deductively and inductively – therefore taking into consideration both L1 and L2 linguistic means of modal expressions – are believed to provide a more comprehensive understanding of modality use and development by ELLs.

2. Contrary to previous studies, this research does not differentiate between L1 and L2 pragmatic competence while exploring L2 pragmatic competence of ELLs. Taking the Dual Language Model as its main theoretical framework (Kecskes, 2010), this study explores the way existent L1 pragmatic knowledge gets modified. This new theoretical perspective together with the concept-oriented approach to modality allows for exploring the way ELLs’ existent L1 pragmatic knowledge related to modality tends to be modified and activated under the influence of the new emerging language.

3. ELLs that are examined in this study are not learners grouped by their L1 languages.
Instead, ELLs representative of diverse socio-cultural backgrounds participate in this study. The focus on this population gives the possibility to explore pattern(s) of modality use by ELLs in English independent of ELLs’ socio-cultural background. It also allows refocusing the research from native vs. non-native comparisons to a more fine-grained understanding of modality use by ELLs.

Oriented by the research agenda identified above, I explore the modification process of pragmatic competence at a more advanced level of language proficiency by searching for a characteristic pattern of intermediate and advanced ELLs’ modality use and at the same time by exploring underlying forces behind the use of modality patterns. The following chapter will address a detailed description of methodology I use for this task.
CHAPTER III METHODOLOGY

Brinkman & Kvale (2014, p. 274) emphasize the role of theoretical approach “with which [one can not only] read and understand one's empirical materials” but most importantly determine one’s ways of doing research. The following chapter, therefore, will present the research design and methodology from settings through criteria for selection of participants, data collection instruments and procedures, to analysis techniques that are all underpinned by one main theoretical perspective: holistic approach to ELLs’ L2 language use that is guided by “modified” pragmatic competence common for both L1 and L2.

Theoretical Framework

One theory is central in the whole research process starting from research questions to the interpretation of the results. Therefore, I will devote this section to the description of this essential theory and only briefly mention supplementary theories that were applied at the analysis stage of qualitative data.

The main theoretical framework guiding the research is the Dual Language Model developed by Kecskes (2010). In contrast to the theoretical concept of Interlanguage (Selinker, 1972), the Dual Language Model looks at the development of a new language as a “process of changing existing conceptual and linguistic systems by adding new information which will result in both quantitative and qualitative changes in the original conceptual system, and the eventual emergence of a new linguistic system that is rooted in the same conceptual system (‘Common Underlying Conceptual Base’)” (Kecskes, 2010, p. 7).

The ‘Common Underlying Conceptual Base’ then is in charge of operating two language
channels. According to this model, there is no separate pragmatic competence of L2, but only one pragmatic competence that is gradually modified under the influence of emergent L2 information, and as a result of such modification it reflects a unique bidirectional “symbiosis of pragmatic rules and expectations of both languages”, which is revealed in bilingual language use (Kecskes, 2015, p. 14). Once learners reach a hypothetical threshold of L2 proficiency, qualitative changes in their existing conceptual system become possible. The two socio-cultural loads of their L1 and L2 blend, which results in the emergence of so-called synergic concepts. For the sake of clarity, I have developed the visualization of the concepts in Kecskes’s DLM (2010), as displayed in Figure 1.

![Figure 1. My Visualization of Concepts in Common Underlying Conceptual Base in DLM](image)

2 The protruding arrows in the graph emphasize that lexicon is part of linguistic system.
According to the DML, words play a crucial role as they serve as an interface between linguistic and conceptual systems. I will go from the assumption that word forms relate lexical items to the linguistic system, their meanings are rooted in cognitive experience and connect lexical items to the conceptual base including sociopragmatic knowledge. The rationale for this belief is that “prior socio-cultural experience is encoded in the meaning values of lexical items” (Kecskes, 2010, p. 3). Giora (1997, 2003) claims that what plays a primary role in language use and processing are first and foremost salient meanings of lexical items – those “meanings coded in mental lexicon” (2003, p. 297) based on prior knowledge, socio-cultural experience and conventionality, familiarity or frequency often determined by socio-cultural group. While the influence of context is recognized, it runs parallel with the lexical process, “affecting only the end product of linguistic processes”, if some kind of regulation is required (2003, p. 11). As for ELLs, the effect of salience is even stronger, very often overriding contextual effects (Kecskes, 2006). For them, salient meanings including those of modal devices are formed as a result of the experience with two languages and cultures and in lockstep with the knowledge of the socio-cultural loads of both languages. Modality with its salient meanings has a high potential of reflecting encoded socio-cultural knowledge (Hinkel, 1995), which is part of the culture-specific conceptual system, and therefore of becoming a synergic concept in ‘Common Underlying Conceptual Base’. Taking a concept-oriented approach to modality, I look at it as at the interface category that ties up conceptual and linguistic systems of L2.

In order to develop pragmatic knowledge in an L2, a learner goes through the process of conceptual socialization during which “the L1-dominated conceptual base of a bilingual is being gradually restructured” (Kecskes, 2015, p. 7). The existing conceptual system reflecting L1 socio-cultural knowledge of modality use is modified under the influence of the emerging L2
linguistic system. Factors such as learners’ investment, age, exposure, attitude, subjectivity, and partial consciousness of the process play a key role in the success of conceptual socialization (Kecskes, 2010, p. 8).

The other complimentary theories that I draw upon to some extent are not central throughout the whole research process and are applied only during the analysis stage of my qualitative findings. Since the next time I mention them again is going to be in Chapter six, in this section I only announce them and their role in this research very briefly. The theory of Schismogenesis (Bateson, 1936) and “Good English” (Urciuoli, 1998) are both used in an attempt to uncover dynamic forces behind ELLs’ resistance to apply L2 pragmatic knowledge. The Domino theory or Domino effect is applied in this research as a powerful construct to explain concept relationship in CUCB. Chapter six will describe each of the theory and demonstrate its application in more details.

The Aim of the Study

The aim of this study is to identify characteristic features of modality use as demonstrated by intermediate and advanced ELLs, to examine the change, if any, in the characteristic set of features of modality use by advanced as compared to intermediate ELLs, and finally to explore the factors triggering identified modality use as demonstrated by advanced ELLs while they provide evaluation and suggestions in the context of peer feedback. In this respect, the research questions of this study are represented by two main questions and two sub-questions for each central question. The first question focuses on identifying possible pattern of modality use by two groups of ELLs, if any, while the second one aims at exploring dynamics behind identified modality patterns of ELLs’ groups:
1. **What characteristic features of modality use do intermediate and advanced English language learners (ELLs) demonstrate and how do these evolve over time?**

   a. What patterns of modality use do advanced as opposed to intermediate groups of ELLs express in giving evaluations and suggestions within the frame of peer feedback?
   
   b. What traits of the L2 socio-cultural value system can be detected in the use of modality by both groups of ELLs?

2. **How does the use of modality reflect learners’ modified (bilingual) pragmatic competence?**

   a. Do advanced ELLs recognize socio-cultural differences behind the use of modals when expressing evaluation and suggestions?
   
   b. How do advanced students explain any deviation from L2 socio-cultural value system guiding the use of modals in giving evaluations and suggestions?

**Participants**

The sampling for this research project is done purposefully as recommended by Kamberelis and Dimitriadis (2013, p. 64). Several selection criteria for sampling are applied. First, both the intermediate and the advanced group of participants represent various ethnic backgrounds. Having the sample of participants belonging to different ethnic backgrounds is a necessary condition in order to see whether participants would demonstrate common emergent patterns of modality use in peer feedback across various ethnic backgrounds, and whether there may be some core agreement or disagreement over the rationale behind their patterns of English language modality use. The second criterion for the sample selection is learners’ preliminary
exposure to peer review theory\(^3\) and practice in peer reviewing, since this study is concerned with characteristic features of modality use within the context of peer feedback. The third selection criterion that mainly concerns the focus-group interviews is learners’ belonging to a “pre-existing social network” (Kamberelis & Dimitriadis, 2013, p. 62). This has a high potential in fostering more successful focus group interviews due to the familiarity of the context and established relationship between the participants.

**Sources of Participants’ Recruitment**

Five main data sources for the selected adult population of the students with diverse backgrounds are three established courses at the Department of Educational Theory and Practice in the School of Education, one course in Writing and Critical Inquiry Program at the State University of New York at Albany (SUNY at Albany), and one Expository Writing course at Rutgers University, The State University of New Jersey.

One of the courses is Academic Writing in English as a Second Language (listed as ETAP 500 in SUNY at Albany), where graduate international students come together to study conventions and expectations of English academic writing. The second course is an innovative double-level tutoring course (listed as ETAP 200/600 in SUNY at Albany), where international undergraduate students (ETAP 200) are being systematically tutored and trained in English academic discourse skills by ESL specialist-students (ETAP 600). The third course is a two-semester practicum course (listed as ETAP 598/clinic class in SUNY at Albany), which brings together graduate NSs’ and ELLs’ students from the School of Education (as instructors) as well as

\(^3\) By exposure to theory of peer reviewing I refer to the students’ knowledge and recognition of peer reviewing as a familiar type of narration particularly common in an academic setting being an important and necessary component of the research process as well as having its concrete purposes, types and long history.
as ELLs from the Greater Capital Region (as students). The data collected in ETAP 200/600 and ETAP 598 since the spring semester 2016 is also part of *Albany Corpus of Intercultural Communication (ACIC)*, a database of intercultural conversations I have been collaborating on with Prof. Kecskes, Dr. Monika Kirner-Ludwig as well as other doctoral students. The forth course is Writing and Inquiry Course (listed as UNI 110), where undergraduate NSs and ELLs’ practice academic writing intensively in order to enhance their skills of writing as a tool for inquiry.

The fifth source of my data collection is Expository Writing course (listed as English 101) at Rutgers University, where students are systematically trained in writing at a university level. In addition to SUNY at Albany, I have also collaborated with Rutgers University, The State University of New Jersey. As a result, one course from Rutgers University was included as a research site of this study for data collection. Both Writing and Inquiry Course at SUNY at Albany as well as Expository Writing course at Rutgers University have served as the main source for data collection of NS participants. Table 4 summarizes the description of participants as well as the data sources.

Table 4

*Description of the Participants and Data Sources*

<table>
<thead>
<tr>
<th>Language proficiency</th>
<th>Ethnicity</th>
<th>Number</th>
<th>Data collection methods</th>
<th>Source of recruitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native</td>
<td>American</td>
<td>34</td>
<td>Quantitative</td>
<td>ETAP 598/clinic class (SUNY at Albany); UNI 110 (SUNY at Albany); English 101 (Rutgers University)</td>
</tr>
<tr>
<td>Advanced ELLs</td>
<td>Diverse</td>
<td>34</td>
<td>Quantitative Qualitative</td>
<td>ETAP 500 (SUNY at Albany); ETAP 200/600 (SUNY at Albany); ETAP 598/clinic class (SUNY at Albany); UNI 110 (SUNY at Albany); English 101 (Rutgers University)</td>
</tr>
<tr>
<td>Intermediate ELLs</td>
<td>Diverse</td>
<td>34</td>
<td>Quantitative</td>
<td></td>
</tr>
</tbody>
</table>
While the population sample for this study comes from different courses and includes a wide variety of participants with different occupational, educational and linguistic backgrounds, the representatives of the sample satisfy all the selection criteria set for this study that has been described above. The data collection tasks are also conducted consistently regardless of the course participants take. In addition, while only three courses – ETAP 598/clinic class, UNI 110 (SUNY at Albany), and English 101 (Rutgers University) – include NSs as their participants, all courses include adult students with intermediate and advanced English-language proficiency levels. However, the differentiation between the proficiency levels is always a challenging task and deserves a profound verification and a detailed description. The follow-up section describes the criteria used for such a differentiation in this study.

Criteria for the Evaluation of Participants’ Proficiencies

In order to provide a consistent evaluation of language competence across subjects in this study, two-step evaluation procedure with two major sources of information are used: a proficiency test and a self-reported language proficiency indicated by the participants in their background questionnaires. While the same background questionnaire is conducted across all participants regardless of the course they take, proficiency tests that students get vary. Prior to enrollment, undergraduate or graduate university students are required to take official and widely-recognized English language tests such as TOEFL or IELTS, while the ETAP598/ clinic classes have their own English language proficiency test developed particularly for this course for the purpose of placing students in the appropriate studying group based on their English language proficiency level.
In order to ensure fair separation of the participating students into intermediate and advanced groups based on different English language proficiency tests (a first-step procedure), I have developed a test alignment chart for this study (Table 5), taking the EFCamDat table (Geertzen et al., 2013, p. 3) as a springboard. The reason for using the Education First-Cambridge Open Language Database (EFCamDat) test-alignment chart lies in its articulated reference of the test scores to the Common European Framework of Reference for languages (CEFR).

Table 5

*English Proficiency Tests Alignment Chart for the Study*

<table>
<thead>
<tr>
<th>English language proficiency</th>
<th>Intermediate</th>
<th>Upper intermediate/ Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOEFL iBT</td>
<td>57-86</td>
<td>87-109</td>
</tr>
<tr>
<td>IELTS</td>
<td>4-5</td>
<td>5-6</td>
</tr>
<tr>
<td>ETAP 598 placement test</td>
<td>9.4-13</td>
<td>14-18</td>
</tr>
<tr>
<td>CEFR</td>
<td>B1</td>
<td>B2</td>
</tr>
</tbody>
</table>

A second-step procedure of additional evaluation will be required in case of lacking test results or in case of self-reported English-language proficiency being either overrated or underrated, which is most likely reflective of the level of students’ language anxiety (MacIntyre et al., 1997). The background questionnaire captures factors that have been identified in previous research as the ones that contribute considerably to the identification of participants’ linguistic profiles (Gutiérrez–Clellen & Kreiter, 2003; MacIntyre et al., 1997) and that are going to be relied on in this study as well: self-assessed proficiency, preference ratings, age of language acquisition, and current language use (Table 6).
Table 6

Factors Determining English Language Proficiency of Participants in the Second-Step Procedure

<table>
<thead>
<tr>
<th>English language proficiency</th>
<th>Intermediate</th>
<th>Upper intermediate/ Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-assessed proficiency</td>
<td>Intermediate</td>
<td>High intermediate/ advanced</td>
</tr>
<tr>
<td>The average rate of reading, writing, listening and speaking skills (0-5)</td>
<td>2-3.6</td>
<td>3.7-5</td>
</tr>
<tr>
<td>Average number of years speaking English (at home, school, in/after college) (Gutiérrez–Clellen, V., &amp; Kreiter, J., 2003)</td>
<td>&gt;1 year</td>
<td>&lt;1 year</td>
</tr>
<tr>
<td>Schooling in the US</td>
<td>No even one</td>
<td>At least one started, in-progress, completed degree in the US</td>
</tr>
<tr>
<td>Current language use: use of English in daily activities</td>
<td>Two or more daily activities require the use of L1 exclusively</td>
<td>English is used for all identified activities</td>
</tr>
<tr>
<td>CEFR</td>
<td>B1</td>
<td>B2</td>
</tr>
</tbody>
</table>

The procedure for evaluating ELLs’ proficiency in this study, then, consists of two steps. First, the alignment between self-reported and test-based proficiency indications is aimed for. Second, the follow-up examination of the background questionnaire is carried out only for participants with a missing test score or discrepancies between the two parameters. At least three factors need to consistently pinpoint to the same language proficiency level in order to identify language competence based on the background questionnaire.

The Setting

All data collection procedures except for one focus-group interview are going to be conducted within the frame of a regular classroom scenario. Most of the tasks are part of the regular classroom procedures on campus and the data collection procedures are thus conducted in an environment the participants are familiar with. Such a setting enhances establishing naturalistic conditions, which at the same time requires students to take the tasks seriously.
Following the premise of ethnomethodology to the context as being constructive of interview knowledge (Brinkman & Kvale, 2014, p. 117), particular attention is going to be paid to the setting during the focus-group interviews. Since I myself am an instructor of the students in ETAP 500, I need to make sure that the previously established power relationship characteristic of student-teacher communication is taken into consideration and mitigated. The seating in the classroom is going to be rearranged in a circle in which I simply take one of the places on an equal level with the students.

Data Collection Tasks

Except for the background questionnaire (cf. Appendix 1), the data collection methods are divided according to the research questions they feed into and according to the types of data (quantitative vs. qualitative) they are used to obtain. The data collection techniques used to trigger quantitative data and explore the answer for the first research question with its two sub-questions is a written peer feedback (cf. Figure 2):

1. What characteristic features of modality use do intermediate and advanced English language learners (ELLs) demonstrate and how do these evolve over time?
   a. What patterns of modality use do advanced as opposed to intermediate groups of ELLs express in giving evaluations and suggestions within the frame of peer feedback?
   b. What traits of the L2 socio-cultural value system can be detected in the use of modality by both groups of ELLs?
Peer feedback task. For this task the students were asked to examine their peer’s written work and provide feedback in the form of constructive criticism (cf. Appendix 2, part 1). Prior to the tasks, students were given detailed instructions on how to provide peer feedback in a US academic context. The instructions followed by a discussion of remaining questions and issues. All students were provided with a handout summarizing the points of the presentation to guide their upcoming peer feedback (cf. Appendix 2, part 2). The guidelines for the peer feedback included questions about thesis, organization, style and mechanics. The format of peer feedback was not fixed, so the handout was provided as guidance rather than a required template to fill in. Students wrote two post-instructional peer feedbacks on each other’s essays and/or final project throughout the course. One peer feedback piece, either produced in class or as a home assignment, which satisfied the criterion of being no less than approximately 300 words, was chosen for the analysis.

Rationale for a peer feedback task. I have chosen peer feedback as a text type for data collection and analysis, as it represents an authentic type of narration that has been used for over
Peer feedback is a familiar type of written discourse in an academic setting. Thus, being a familiar task for students, peer feedback triggers the production of authentic discourse, which allows for the examination of naturalistic rather than elicited language production in the form of constructive criticism.

Being an authentic type of narrative discourse, peer feedback permits capturing a wide spectrum of modality devices and semantic meanings within a given context. Previous research (e.g. Dittmar & Terborg, 1991; Gibbs, 1990; Stephany, 1995), provides evidence to believe that deontic modality is likely to appear in the form of ‘instruction’ for further improvement, whereas epistemic modality is going to be present in evaluations, judgments as well as suggestions.

The choice of this task therefore is aligned with an application of the concept-oriented approach to modality used in this study, and provides necessary conditions and information to answer the first main research question: characteristic features of modality use by intermediate and advanced English language and their evolution over time.

The other two types of data collection techniques (cf. Figure 3) were used to retrieve qualitative data – a questionnaire and seven focus group interviews – so to answer the second research question with its two sub questions. These tasks were offered to the group of advanced ELLs only. Zalaltdinova (2018) noticed that advanced ELLs prefer to be more flexible and varied than intermediate group in the choice of modal devices, which jeopardizes the expectation of a linear or ordered progression in the pragmatic competence modification of ELLs. Understanding what triggers such a particular use of modality by advanced ELLs is of utmost interest for this study.
2. How does the use of modality reflect learners’ modified (bilingual) pragmatic competence?

a. Do advanced ELLs recognize socio-cultural differences behind the use of modals when expressing evaluation and suggestions?

b. How do advanced students explain any deviation from L2 socio-cultural value system guiding the use of modals in giving evaluations and suggestions?

*Figure 3. Qualitative Data Collection Methods in a Sequential Order*

**Questionnaires.** The advanced group of ELLs was either manually or electronically given a questionnaire handout (cf. Appendix 4) with detailed instructions on how to complete and submit it.

**Rationale for a questionnaire.** An open-ended questionnaire (cf. Appendix 4) was employed in order to track students’ awareness of socio-cultural differences entailed in the use of modals when expressing evaluation and suggestions. A second value of the questionnaire is its
promotion of a preliminary analysis. I used the questionnaire as my guidance for modifications of the interview protocol.

**Focus group interviews.** Seven semi-structured focus-group interviews were conducted. A group of three to eight advanced ELLs participated in each focus group interview, where the researcher facilitated a discussion on the ELLs’ English language use by posing questions and encouraging participants to respond to them as well as to their peers’ comments. All the students participating in the focus-group interview knew each other, since they attended the same class for one semester.

I have made an attempt to foresee possible disruptive influence on the research design and address those issues in advance. In order to avoid the influence of the time gap (from two weeks to three months) between the interviews as a potential disruption for learners’ acute reflections on their modality use, three samples of peer feedbacks were used as a reference in the communication with the participants during the focus-group interview. I also paid close attention to have all the participants’ voices heard in the interviews. As I have mentioned above, some focus-group interviews had only three participants. This setting was particularly valuable in fostering evenly distributed participation of all subjects, in encouraging reserved or shy participants to reveal their opinions, which were not eagerly shared in bigger groups, and in providing more time for each participant to speak up and to be listened to. These factors facilitated interviews that helped getting a deeper multilayered understanding of the participating interviewees’ perspectives. Therefore, these focus-group interviews with smaller number of participants were part of the main collection of focus-group interviews and served as an important source of information in my attempt to answer the second research question pertaining to qualitative data. The full interview protocols are provided in Appendix 5.
My rationale for choosing focus group interviews as one data collection method is the desire to get a deeper understanding of the factors guiding advanced learners in their pragmatic choices while expressing peer feedback. First of all, focus group interviews have the power of mitigating the authority of the researcher (Kamberelis & Dimitriadis, 2013, p. 40), which generally results in participants taking the floor. Such a condition is likely to generate a more “naturalistic” interaction between the participants and make it possible to get more nuanced reflections of the participants’ pragmatic choices so to study contradictions in their responses and to “draw out complexities” (Kamberelis & Dimitriadis, 2013, p. 40). Thus, focus group interviews serve as a facilitation “of viewpoints usually not accessible” (Brinkman & Kvale, 2014, p. 176), and, in the case of this very study, allow for insights into whether participants of various ethnic backgrounds and language learning experiences have some kind of “collective memory” or convergent thinking with regard to the pragmatic side of their second/foreign language use.

Additionally, I use focus group interview as a triangulation technique (McMillan et al., 2002) to verify consistency of findings. By analyzing modality devices employed by advanced learners in a different context – arguing and giving their opinion in interviews – I could explore whether learners have the knowledge of English modal candidates in general that could potentially be employed in various contexts.

Data Analysis

While the data collection methods are divided according to and to specifically answer the individual research questions, the methods of analysis are arranged in the same manner. Each data collection task has a corresponding collection of analysis techniques that are appropriate for
the procession of the data in order to answer the target research questions. Table 7 summarizes the analysis techniques aligned with the data collection methods and research questions.

Table 7

Methods of Analysis Aligned with Research Questions and Data Collection Tasks

<table>
<thead>
<tr>
<th>Data Collection tasks</th>
<th>Type of data analysis</th>
<th>Methods of data analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background questionnaire</td>
<td>-</td>
<td>1. Participants’ responses were inserted into one excel document; 2. The information in the excel file was used to construct participants’ profile and group participants according to their proficiency levels; 3. A separate excel file to be used further for statistical analysis.</td>
</tr>
<tr>
<td>Written peer feedback</td>
<td>Quantitative</td>
<td>1. The establishment of the units of analysis for the entire peer feedback dataset – modality continuum. Such a continuum is produced as a result of theoretical and empirical literature review, my pilot study, and most importantly a preliminary corpus analysis of dissertation data sample (20 ELLs’ and 26 NS peer feedback scripts) and the three corpora of general written English use (Brown corpus, The Open American National Corpus and English Web Treebank) in AntConc software. I establish units of analysis to categorize modal devices and their combinations in order to create foundation for answering the first research question with regard to characteristic features of modality use by ELLs as well as traits of the L2 socio-cultural value system. 2. The development of the dataset. The dataset is developed as a result of coding modal devices used by participants in peer feedback according to the identified units of analysis – modality continuum. The dataset is developed in excel document that is further on transferred into CSV file to be used in R-studio. This dataset is created in order to allow conducting descriptive and semi-statistical tests that provide information for answering the first research question with regard to characteristic features of modality use by ELLs as well as traits of the L2 socio-cultural value system.</td>
</tr>
</tbody>
</table>
Table 7 Continued

<table>
<thead>
<tr>
<th>Data Collection tasks</th>
<th>Type of data analysis</th>
<th>Methods of data analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written peer feedback</td>
<td>Quantitative</td>
<td><strong>3. Inter-rater reliability check.</strong> In order to ensure inter-rater reliability of the research, two raters’ evaluations of modal meanings in two randomly selected sample of peer feedback scripts are conducted. One of the raters is a native speaker (NS); another one is a non-native speaker (NNS). That obtained agreement between the results of my coding and rater’s coding will reflect reliability of the analysis methods and the results of the study.</td>
</tr>
</tbody>
</table>

4. **The description and visualization of the entire peer feedback dataset.**

Descriptive statistical methods address the first sub-question identifying characteristic features of modality use by ELLs.

As a first step I describe the dataset.

Then I standardize the values for each observation in order to cancel the effect of the peer feedbacks size and to allow comparisons of modal devices across all participants’ peer feedback scripts.

Using excel, I identify mean values of each modal device use in order to describe the characteristic features of ELLs’ modality use.

Lastly, using R-studio, I create a star plot (mean values) to visualize the data.

5. **Inferential statistical methods:**

*Multivariate analysis of variance* (MANOVA) is used to identify whether there are significant differences in the relative frequencies of modal devices used among NSs, advanced and intermediate ELLs; *Hotelling T²* test is a supplementary test to confirm MANOVA’s results. It is used to identify whether there are significant differences in the relative frequencies of modal devices used between any two groups of ELLs identified by their proficiency levels (intermediate vs. advanced).

*VanValen’s test* is conducted to test groups of ELLs with different proficiency levels for significant differences in terms of the variation in the modal devices’ use.

*Univariate ANOVA* is used to check whether there are statistically significant differences across the groups based on the use of a single modal device;

*Discriminant Function Analysis (DFA)* is performed to identify discriminant functions that separate groups of ELLs (intermediate and advanced) on the basis of their deontic and epistemic modality use.

This allows telling whether the characteristic use of modality by ELLs leans more towards epistemic, deontic or combination of the two. It will also allow seeing the use of which modal devices learners most disagree on.
Table 7 Continued

<table>
<thead>
<tr>
<th>Data Collection tasks</th>
<th>Type of data analysis</th>
<th>Methods of data analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written peer feedback</td>
<td>Quantitative</td>
<td>All of the semi-inferential statistical techniques mentioned above are aimed at answering the first research question, primarily capturing the differences in the characteristic use of modality devices by advanced vs. intermediate students. Such difference will allow deciphering the areas of pragmatic competence modification as learners develop their English proficiency as well as understanding whether ELLs of diverse socio-cultural backgrounds develop a common pattern of modality use at the advanced as opposed to intermediate proficiency level.</td>
</tr>
</tbody>
</table>

**RQ 2: How does the use of modality reflect learners’ modified (bilingual) pragmatic competence?**

1. Do advanced ELLs recognize socio-cultural differences behind the use of modals when expressing evaluation and suggestions?
2. How do advanced students explain any deviation from L2 socio-cultural value system guiding the use of modals in giving evaluations and suggestions?

| Questionnaire       | Qualitative          | 1. **Quantification of the questionnaire data:**  
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>The questionnaire data is quantified individually for each student: responses are assigned numbers that are summarized into a result table. The outcome of the positive numbers is calculated and analyzed. The analysis keeps track of the way the outcome of the questionnaire is aligned with the focus-group interview results. Numeric data allows for the visualization of the tendencies with regard to ELLs declarative knowledge of socio-cultural differences behind the use of modals as well as with regard to ELLs explanations of their deviation from the expected use of modals in English.</td>
</tr>
</tbody>
</table>

2. **Visualization of the quantified questionnaire data.**  
The graphs of the quantified questionnaire’s answers summarize and visually represent ELLs’ self-declared knowledge of socio-cultural differences behind the use of modals as well as students’ self-reflection of deviation from L2 socio-cultural value system guiding the use of modals in peer feedback.

| Semi-structured focus-group interviews | Qualitative | 1. **Preparatory work for the analysis of focus-group interviews:**  
|---------------------------------------|-------------|---------------------------------------------------------------------|
|                                       |             | **Post-interview reflections and memos.**  
<p>|                                       |             | One of the main purposes of this reflection is validity – to see what information my ears are turned in to hear and what my presumptions are. The second purpose of this analysis technique is to draft emergent themes and impressions that stood out for me at that moment. Writing post |</p>
<table>
<thead>
<tr>
<th>Data Collection tasks</th>
<th>Type of data analysis</th>
<th>Methods of data analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semi-structured focus-group interviews</td>
<td>Qualitative</td>
<td>interview memos is strongly advised by Josselson (2013, p. 175). It is important to note down all the details (turn talking, primary voices in the conversation, emotional reactions, silence, interaction patterns) that might have affected the communication but are easily forgotten soon after.</td>
</tr>
</tbody>
</table>

2. A verbatim transcription of the interview.

This analytical tool is used as a preparatory work for the following quantitative, discourse and meaning-focused analysis of the ELLs focus-group interview on their use of modality as well as a method of ensuring research validity. A verbatim transcription of the interview is done in order to preserve the original text as much as possible, as advised by Josselson (2013, p. 177). The total of 3 hours and 40 minutes of audio-recorded focus-group interviews were transcribed into 117 pages of running text.

3. Meaning-focused analysis.

In order to find themes that account for deviation from L2 socio-cultural value system guiding the use of modals, several cycles of meaning-focused analysis are conducted in NVIVO using focusing both on prior-identified codes extracted from the empirical literature as well as on the emergent themes coded from the available data. During the process of coding in NVIVO, in addition to reading the transcription, I listened to the audio-recordings of the interviews in order to ensure the validity of my coding, namely, not to miss on the holistic representations of meanings by participants and not to conceive of the interviews as transcripts (Brinkman & Kvale, 2014, p. 218). Another way I contribute to holistic representation is by first coding data into parental and child’s codes; then, by developing matrix coding; lastly, by drawing mind maps of the emergent codes. NVIVO software allowed the application of all these techniques. The last step of meaning-focus analysis is to interpret and align emergent picture of codes and themes with the guiding theoretical framework.


In order to verify consistency of findings, I also conduct quantitative descriptive analysis on the data collected as a result of focus-group interviews.

Using NVIVO software, I run frequency tests in order to explore the use of modality in ELLs focus-group interviews.
<table>
<thead>
<tr>
<th>Data Collection tasks</th>
<th>Data Collection tasks</th>
<th>Data Collection tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>I conduct this test in order to see whether ELLs use the same pattern of modality (the one identified in peer feedback scripts) in other contexts, such as oral discussion. Even though the contextual frame for modality use changes from written peer feedback into oral discussion, the analysis of modal device frequency should generate a rough picture of whether the students have an idea of epistemic modal candidates in general that could potentially be employed in various contexts. The combination of these procedures allowed verifying whether ELLs’ self-reflection on their knowledge of modality indeed is confirmed in their use of modality and whether they recognize socio-cultural differences behind the use of modals in the context of giving suggestions and evaluation in peer feedback.</td>
</tr>
</tbody>
</table>
CHAPTER IV MODALITY CONTINUUM

In order to provide foundation for answering the first research question with regard to characteristic features of modality use by English Language Learners (ELLs) as well as traits of the L2 socio-cultural value system in ELLs’ modality use, I establish criteria for coding modal devices to analyze dissertation data. The establishment of the criteria for the analysis of modal devices is necessary since this research is unique in its attempt to holistically approach modality use in peer feedback by ELLs of diverse socio-cultural backgrounds. In order to come up with modal categorization, I conduct a preliminary analysis of dissertation data sample.

The purpose of such an analysis, however, is twofold:

1. to develop modal categorization to use as units of analysis for this study;
2. to (dis)confirm NSs’ preference for the use of epistemic modal devices in peer feedback.

In this description, I will first focus on the demonstration of the three-step procedure for the development of modal categorization and its results. Then, I will summarize the outcomes of the conducted analysis pertaining to the NS preferences of modality use in peer feedback reflecting the traits of the L2 socio-cultural value system.

The three-step procedure for the establishment of modality continuum categorization includes:

1. the development of the broad general modal categories based on the reviewed theoretical and empirical literature, and most importantly, pilot study;
2. specification of modal devices within each broad modal category by conducting ‘keyness’ corpus analysis of modal devices in my target peer feedback corpora (20 ELLs’ and 26 NS
peer feedback scripts) as compared to the three corpora of general written English use (Brown corpus, The Open American National Corpus and English Web Treebank);

3. further specification of discovered-through-the-keyness-analysis modal devices according to their modal meanings by conducting concordance corpus analysis in two target peer feedback corpora, which as a result, further reshapes the initially dichotomous modal categorization into a modality continuum.

**Broad Classes of Modal Devices**

In the first step of the search for modal categories, I resort to prior available information in literature and my own pilot study. Table 2 below summarizes such established broad classes of modal devices. The proposed categorization takes into consideration both NS and ELLs’ preferences for modal device use.

Table 2

*Prior Established Categories of Modal Devices Based on Literature and Pilot Study*

<table>
<thead>
<tr>
<th>N</th>
<th>Devices</th>
<th>Syntactic Level</th>
<th>Structural level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Modal verbs</td>
<td>Lexico-syntactic</td>
<td>word</td>
</tr>
<tr>
<td>2</td>
<td>Verbal expressions</td>
<td>Lexico-syntactic</td>
<td>word and phrase</td>
</tr>
<tr>
<td>3</td>
<td>Imperative mood</td>
<td>Syntactic</td>
<td>sentence</td>
</tr>
<tr>
<td>4</td>
<td>Modal verbs</td>
<td>Lexico-syntactic</td>
<td>word</td>
</tr>
<tr>
<td>5</td>
<td>Verbal expressions</td>
<td>Lexico-syntactic</td>
<td>word and phrase</td>
</tr>
<tr>
<td>6</td>
<td>Adverbial expressions</td>
<td>Lexical</td>
<td>word and phrase</td>
</tr>
<tr>
<td>7</td>
<td>‘Modally (non)harmonious’ (in)congruous patterns</td>
<td>Lexico-syntactic</td>
<td>word, phrase, sentence</td>
</tr>
</tbody>
</table>
Specification of Modal Devices through ‘Keyness’ Corpus Analysis

Both second and third steps of the procedure for the establishment of modal categorization are devoted to the specification of the modal devices within each category introduced in Table 2. Since the established categories are very broad and general, I specify modal forms within each group using corpus analysis tools that are applied on the samples of Dissertation Data. The purpose of such specification is to compile a comprehensive, detailed list of modal forms for the analysis of the entire peer feedback data to create the database to be used in further statistical analysis.

The second step of the search for modal categories, which is the first step of the specification procedure, aims at carving out those modal devices that participants of this study use unusually frequently in relation to the ones used by NS in general written English language. Therefore, I need to compare my peer feedback data to NS general written language use to see whether there are modal devices characteristic of the written language use in peer feedback scripts.

The corpus analysis tool that I rely on for this procedure is ‘keyness’ analysis of modal devices in target corpora. ‘Keyness’ analysis is a corpus technique the objective of which is to identify “words that occur unusually frequent in a given text […] by comparison with a reference corpus of some kind” (Scott, 1997, p. 236). I apply ‘keyness’ analysis because it is identified as a robust analytical method to characterize a text, a genre, and the lexico-grammatical features characteristic of a particular corpus (Goh, 2011). To be more specific, I conduct ‘keyness’ analysis in order to see what modal devices stand out in their frequency in the target peer feedback corpora when compared to reference corpora of NS’s general written language use.

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4 The category titled Imperative mood is an exception. Imperative mood of the verb is considered to convey deontic meaning (Nikolaeva, 2014) and does not need to undergo the analysis for specification of the modal meaning.
Corpora

In order to conduct ‘keyness’ analysis I need to identify target corpora and reference corpora, since the use of modal devices in the target corpora are compared to the use of the modal devices in the reference corpora.

For the target one, I have created two small corpora of peer feedback based on the data I collected for the dissertation:

➢ 20 peer feedbacks scripts written by intermediate and advanced ELLs – ELL Peer Feedback Corpus (ELL Peer Feedback Corpus);
➢ 26 peer feedback scripts written by native speakers of English – NS Peer Feedback Corpus (NS Peer Feedback Corpus).

For the reference corpora, I use three reference corpora of general written English:

➢ Brown University Standard Corpus of Present-Day American English (Brown);
➢ the written part of The Open American National Corpus (OANC);
➢ the English Web Treebank (EWT)\(^5\).

All three reference corpora are larger in size than the target corpora. In the choice of reference corpora, I also focus on genre and diachrony, which were claimed by Goh (2011) to be one of the most important factors to guide one’s choice of reference corpora. Since the text of

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\(^5\) The full name of the corpus referred to as English Web Treebank (EWT) throughout this work is Universal Dependencies English Web Treebank (Silveira et al., 2014). It was built over the materials of English Web Treebank (Bies et al., 2012). The corpus was retrieved from http://universaldependencies.org in February, 2018.
Brown, compiled by Nelson W. Francis and Henry Kučera – the first text corpora of American English – is dated back to 1961, I use the OANC and EWT as supplementary reference corpora. Both OANC and EWT contain more up-to-date data than Brown. The use of two supplementary corpora ensure that the ‘keyness’ analysis will identify a keyword list in the target peer feedback corpora as compared to the more updated corpora of NS written general language use. In my modal categorization, I will include modal categories the frequencies of which are statistically significant in the results of any two of the three ‘keyness’ analyses.

I choose Brown since it covers broad genres of NS general written language use (edited English prose printed in the United States during the calendar year 1961). The OANC also contains text of all genres, from reports to non-fiction. EWT covers five genres of web media: weblogs, newsgroups, emails, reviews, and Yahoo! answers. This corpus is an important addition to the diversity of the written genres, since it introduces some genres specific of the present-day use.

Table 8.

*Metadata on the Target and Reference Corpora Retrieved through Lancsbox*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N of tokens</td>
<td>6,233</td>
<td>10,560</td>
<td>1,026,010</td>
<td>14,623,927</td>
<td>254,830</td>
</tr>
</tbody>
</table>

The ‘keyness’ analysis of the ELLs Peer Feedback Corpus singles out the use of modal devices preferred by ELLs in peer feedback as compared to the ones used by NS in their general language use. The ‘keyness’ analysis of the NS Peer Feedback Corpus will capture NS preferences of modality use in peer feedback. I conduct the ‘keyness’ analysis also on the NS Peer Feedback Corpus, since I believe that my categorization should include modal devices that
are preferred by NS in peer feedback as compared to other genre of NS usage. English as a second language instruction is often concerned with learning and practicing NS language use, which means that there is a possibility that ELLs follow the NS preferences of modality use. Therefore, I find it necessary to also run ‘keyness’ analysis on the NS Peer Feedback Corpus, too, so that the search of potential emergent patterns of modality use in the data is not biased by either NS or ELLs’ preferences of modality use. Additionally, by running the analysis, I will be able to confirm the information given by the literature as well as the findings from the pilot study with regard to NS preferences in peer feedback. In other words, the ‘keyness’ test will capture the uniqueness of the genre of peer feedback in terms of preferred modal device use by NS. I will summarize the results of the findings related to NS preference of modality use in peer feedback after the description of the developed modal categorization.

**Methodology for ‘Keyness’ Analysis.**

I chose *AntConc* software to conduct the ‘keyness’ analysis. I used the full running text of the corpora instead of only the wordlists, as the latter is really just a deviation and filtering from the running text.

In order to analyze the results, I follow Gablasova’s et al. (2015) suggestion to develop a list of epistemic ‘candidates.’ Therefore, when selecting the modal devices in the keyword lists that the program generates, I consulted the existing lists of ‘candidate’ epistemic forms (Table 9) developed by Biber et al. (1999, 2006) and summarized by Brezina (2009) and the ‘candidate’ deontic forms (Table 10), which I compiled, based on the available literature. In the selection of ‘key’ lexical modal verbs, I consider and report all the inflected forms of the ‘candidates’.
Table 9

*Epistemic Candidates according to Biber (2006), Biber et al. (1999) summarized by Brezina (2009)*

<table>
<thead>
<tr>
<th>Category</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adverbs</td>
<td>Actually, always, certainly, definitely, indeed, inevitably, in fact, never, of course,</td>
</tr>
<tr>
<td></td>
<td>obviously, really, undoubtedly, without doubt, no doubt, apparently, evidently, in most cases,</td>
</tr>
<tr>
<td></td>
<td>in most instances, kind of, maybe, perhaps, possibly, predictably, probably, roughly, sort of</td>
</tr>
<tr>
<td>Adjectives</td>
<td>apparent, certain, clear, confident, convinced, correct, evident, false, impossible, inevitable,</td>
</tr>
<tr>
<td></td>
<td>obvious, positive, right, sure, true, well-known, doubtful, likely, possible, probable, unlikely</td>
</tr>
<tr>
<td>Nouns</td>
<td>assertion, conclusion, conviction, discovery, fact, knowledge, observation, principle,</td>
</tr>
<tr>
<td></td>
<td>realization, result, statements, assumption, belief, claim, contention, feeling, hypothesis,</td>
</tr>
<tr>
<td></td>
<td>idea, implication, impression, notion, opinion, possibility, presumption, suggestion</td>
</tr>
<tr>
<td>Lexical verbs</td>
<td>conclude, demonstrate, determine, discover, find, know, learn, mean, notice, observe, prove,</td>
</tr>
<tr>
<td></td>
<td>realize, recognize, remember, see, show, understand, appear, assume, believe, consider,</td>
</tr>
<tr>
<td></td>
<td>doubt, expect, find, forget, gather, guess, happen, hypothesize, imagine, judge, know, learn,</td>
</tr>
<tr>
<td></td>
<td>predict, presume, presuppose, pretend, reckon, remember, seem, speculate, suppose, suspect,</td>
</tr>
<tr>
<td></td>
<td>tend, think</td>
</tr>
<tr>
<td>Modals</td>
<td>must, should, (had) better, have to, got to, ought to, will, would, shall, be going to, can,</td>
</tr>
<tr>
<td></td>
<td>could, may, might</td>
</tr>
</tbody>
</table>

Note: Adapted from “We only say we are certain when we are not”: A corpus-based study of epistemic stance,” by V. Brezina, 2009, NLP, Corpus Linguistics, Corpus-Based Grammar Research, p. 45.

Table 10

*Deontic Candidates Based on the Available Literature (Clancy, 1997; Kanté, 2010; Biber, 2006)*

<table>
<thead>
<tr>
<th>Category</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODAL VERBS</td>
<td>Can (ability and permission), <em>could</em> (polite permission), <em>may, might, must, should</em>, will, would, shall</td>
</tr>
<tr>
<td>LEXICAL VERBS</td>
<td>order, require, want, hope, wish, need</td>
</tr>
</tbody>
</table>

I use the Log likelihood test to identify statistically significant frequencies of the words in the target corpus as compared to the ones in the reference corpus. The cut off point for the statistically significant results is a critical value of 3.84. All the test statistics with the results of 3.84 and higher are considered statistically significant – the difference between frequencies scores of the word in two corpora is statistically significant – at the level of p<0.05. P-value of 0.05 is one of the conventionally most common significance levels of the statistical tests. Only
statistically significant results for the frequency of the modal devices used are presented in the results section.

The Results

**Brown corpus as a reference corpus.** Table 11 summarizes the results for the ‘keyness’ values of modal devices used in ELL Peer Feedback Corpus and NS Peer Feedback Corpus in reference to Brown.

Table 11

‘Keyness’ Values of Modal Devices Used in ELLs’ and NS Target Corpora in Reference to Brown

<table>
<thead>
<tr>
<th>ELL Peer Feedback Corpus</th>
<th>NS Peer Feedback Corpus</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Modal devices</strong></td>
<td><strong>Keyness (AntConc)</strong></td>
</tr>
<tr>
<td>Parentetical clause I think</td>
<td>98.869</td>
</tr>
<tr>
<td>Verb to understand</td>
<td>86.135</td>
</tr>
<tr>
<td>Modal verb can</td>
<td>19.478</td>
</tr>
<tr>
<td>Modal verb should</td>
<td>17.286</td>
</tr>
<tr>
<td>Verb need to</td>
<td>14.546</td>
</tr>
<tr>
<td>Adverb maybe</td>
<td>13.360</td>
</tr>
<tr>
<td>Verb noticed</td>
<td>12.936</td>
</tr>
<tr>
<td>Verb to notice</td>
<td>11.768</td>
</tr>
<tr>
<td>Modal verb could</td>
<td>11.767</td>
</tr>
<tr>
<td>Verb to hope</td>
<td>10.498</td>
</tr>
<tr>
<td>Modal verb couldn’t</td>
<td>10.211</td>
</tr>
<tr>
<td>Verb to want to</td>
<td>10.033</td>
</tr>
<tr>
<td>Modal verb will</td>
<td>8.608</td>
</tr>
<tr>
<td>Verb to suggest</td>
<td>7.785</td>
</tr>
<tr>
<td>Verb to wish</td>
<td>7.467</td>
</tr>
<tr>
<td>Adverb really</td>
<td>6.582</td>
</tr>
</tbody>
</table>

| **Modal devices**        | **Keyness (AntConc)**  | **Keyword (AntConc)** | **Frequency** | **Relative frequency** | **Wordlist rank** |
| Parentetical clause I think | 131.605  | 15  | 47  | 0.44%  | 28  |
| Adverb maybe             | 62.000  | 42  | 19  | 0.17%  | 74  |
| Adverb really            | 50.345  | 53  | 22  | 0.2%   | 65  |
| Modal verb could         | 32.396  | 81  | 48  | 0.45%  | 26  |
| Modal verb cannot        | 27.480  | 95  | 3   | 0.02%  | 407 |
| Adverb definitely        | 26.789  | 105 | 6   | 0.05%  | 227 |
| Verb suggest             | 26.711  | 106 | 8   | 0.07%  | 184 |
| Modal verb should        | 19.308  | 140 | 26  | 0.24%  | 55  |
| Modal verb couldn’t      | 18.320  | 158 | 2   | 0.01%  | 586 |
| Verb noticed             | 17.855  | 172 | 6   | 0.05%  | 239 |
| Verb to want to          | 14.198  | 207 | 8   | 0.07%  | 187 |
| Verb to hope             | 12.278  | 240 | 9   | 0.08%  | 150 |
| Verb to suggest          | 11.783  | 248 | 5   | 0.04%  | 321 |
| Verb to wish             | 11.463  | 262 | 11  | 0.10%  | 127 |
| Adverb really            | 10.498  | 408 | 39  | 0.36%  | 35  |
| Verb to think            | 8.057   | 418 | 8   | 0.07%  | 181 |
| Verb wants               | 6.872   | 451 | 4   | 0.03%  | 391 |
| Verb seems               | 6.737   | 464 | 8   | 0.07%  | 182 |
| Modal verb can           | 6.631   | 468 | 34  | 0.32%  | 39  |
| Adverb actually          | 6.326   | 514 | 6   | 0.05%  | 220 |
| Verb to see              | 6.041   | 530 | 16  | 0.15%  | 91  |

---

6 sorted according to frequency in AntConc
7 sorted according to frequency in AntConc
<table>
<thead>
<tr>
<th></th>
<th>ELL Peer Feedback Corpus</th>
<th>NS Peer Feedback Corpus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verb thought</td>
<td>6.013 532</td>
<td>12 0.11% 121</td>
</tr>
<tr>
<td>Modal verb might</td>
<td>5.411 558</td>
<td>14 0.13% 98</td>
</tr>
<tr>
<td>Modal verb may</td>
<td>5.118 590</td>
<td>24 0.22% 62</td>
</tr>
<tr>
<td>Verb to find</td>
<td>4.213 663</td>
<td>9 0.08% 155</td>
</tr>
</tbody>
</table>

The values of interest in these two tables are primarily ‘keyness’ and relative frequencies. Even though varied in their frequencies, some modal devices represent ‘keyness’ consistently across both NS and ELL corpora. I have highlighted those devices with a light grey background in both tables. Some of the most noticeable differences between the results in both tables are the following:

- **NS** Peer Feedback Corpus shows many more modal verbs among the modal devices that are particularly and significantly frequent in peer feedback text (e.g. modal verbs *would*, *may* and *might*) as compared to general language use;

- **NS** Peer Feedback Corpus also shows much more variation in ‘key’ modal devices within established categories than **ELL** Peer Feedback Corpus;

- **ELL** Peer Feedback Corpus instead shows much more ‘key’ lexical modal verbs. However, the further specification of modal functions will need to verify whether all meanings of those verbs are modal.

**OANC as a reference corpus.** Table 12 summarizes the results for the ‘keyness’ values of modal devices used in ELL Peer Feedback Corpus and NS Peer Feedback Corpus in reference to OANC.
In this analysis, I used OANC corpus as the reference corpus (Table 12). In the analysis of ELL Peer Feedback Corpus most of the devices shifted in the list of their ‘keyness’ values. While many shifts occurred in the rank of modal devices, the majority of the results remained consistent in terms of statistical significance of their ‘key’ values. Two exceptions, however, deserve particular attention and further consideration: the appearance of the modal verbs *would* and *might* and the insignificant frequency of the lexical modal verb *to suggest* and of the negated modal verb form *couldn’t*. The appearance of the modal verbs *would* and *might* in this analysis

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### Table 12

‘Keyness’ Values of Modal Devices Used in ELLs’ and NS Target Corpora in Reference to OANC

<table>
<thead>
<tr>
<th>ELL Peer Feedback Corpus</th>
<th>NS Peer Feedback Corpus</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Modal devices</strong></td>
<td><strong>Modal devices</strong></td>
</tr>
<tr>
<td></td>
<td>Keyness (AntConc)</td>
</tr>
<tr>
<td>Parenthetical clause <em>I think</em></td>
<td>108,659</td>
</tr>
<tr>
<td>Verb <em>to understand</em></td>
<td>99,973</td>
</tr>
<tr>
<td>Modal verb <em>could</em></td>
<td>38,759</td>
</tr>
<tr>
<td>Modal verb <em>can</em></td>
<td>19,478</td>
</tr>
<tr>
<td>Modal verb <em>should</em></td>
<td>22,516</td>
</tr>
<tr>
<td>Verb <em>noticed</em></td>
<td>19,574</td>
</tr>
<tr>
<td>Modal verb <em>will</em></td>
<td>17,934</td>
</tr>
<tr>
<td>Adverb <em>maybe</em></td>
<td>17,635</td>
</tr>
<tr>
<td>Verb <em>need to</em></td>
<td>17,269</td>
</tr>
<tr>
<td>Verb <em>to hope</em></td>
<td>17,404</td>
</tr>
<tr>
<td>Verb <em>to wish</em></td>
<td>13,221</td>
</tr>
<tr>
<td>Verb <em>to want</em></td>
<td>12,424</td>
</tr>
<tr>
<td>Verb <em>to notice</em></td>
<td>12,147</td>
</tr>
<tr>
<td>Modal verb <em>would</em></td>
<td>8,639</td>
</tr>
<tr>
<td>Adverb <em>really</em></td>
<td>7,678</td>
</tr>
<tr>
<td>Modal verb <em>might</em></td>
<td>5,244</td>
</tr>
<tr>
<td></td>
<td>Keyness (AntConc)</td>
</tr>
<tr>
<td>Parenthetical clause <em>I think</em></td>
<td>146,855</td>
</tr>
<tr>
<td>Modal verb <em>could</em></td>
<td>90,205</td>
</tr>
<tr>
<td>Adverb <em>maybe</em></td>
<td>77,656</td>
</tr>
<tr>
<td>Modal verb <em>would</em></td>
<td>59,743</td>
</tr>
<tr>
<td>Adverb <em>really</em></td>
<td>56,028</td>
</tr>
<tr>
<td>Modal verb <em>should</em></td>
<td>26,404</td>
</tr>
<tr>
<td>Adverb <em>definitely</em></td>
<td>31,491</td>
</tr>
<tr>
<td>Verb <em>noticed</em></td>
<td>27,875</td>
</tr>
<tr>
<td>Verb <em>suggest</em></td>
<td>26,711</td>
</tr>
<tr>
<td>Verb <em>thought</em></td>
<td>23,438</td>
</tr>
<tr>
<td>Modal verb <em>will</em></td>
<td>21,136</td>
</tr>
<tr>
<td>Verb <em>understand</em></td>
<td>18,546</td>
</tr>
<tr>
<td>Adverb <em>perhaps</em></td>
<td>18,140</td>
</tr>
<tr>
<td>Verb <em>seemed</em></td>
<td>19,505</td>
</tr>
<tr>
<td>Verb <em>understood</em></td>
<td>16,638</td>
</tr>
<tr>
<td>Verb <em>believe</em></td>
<td>14,103</td>
</tr>
<tr>
<td>Verb <em>seem</em></td>
<td>12,853</td>
</tr>
<tr>
<td>Modal verb <em>can</em></td>
<td>10,699</td>
</tr>
<tr>
<td>Modal verb <em>may</em></td>
<td>9,856</td>
</tr>
<tr>
<td>Modal verb <em>might</em></td>
<td>9,683</td>
</tr>
<tr>
<td>Verb <em>seems</em></td>
<td>7,950</td>
</tr>
<tr>
<td>Verb <em>wants</em></td>
<td>5,962</td>
</tr>
<tr>
<td>Verb <em>to wish</em></td>
<td>5,593</td>
</tr>
<tr>
<td>Verb <em>to find</em></td>
<td>5,872</td>
</tr>
<tr>
<td>Adverb <em>actually</em></td>
<td>5,159</td>
</tr>
<tr>
<td>Verb <em>to see</em></td>
<td>5,009</td>
</tr>
</tbody>
</table>

8 sorted according to frequency in AntConc
9 sorted according to frequency in AntConc
confirms the need to include these modal verbs in the modal categorization. The lexical modal verb *to suggest*, even though statistically insignificant in ELL Peer Feedback Corpus, cannot be excluded from the analysis, since its statistical insignificance needs to be confirmed in the further ‘keyness’ analysis of ELL Peer Feedback Corpus using EWT corpus as a reference one. Moreover, the use of *to suggest* is statistically significant in NS Peer Feedback Corpus.

Overall, the results of the ‘keyness’ analysis using NS Peer Feedback Corpus as a target corpus and OANC as a reference corpus is roughly aligned with the ones gained in the ‘keyness’ analysis that uses Brown as a reference corpus. All the devices, except for the negative form of modal verbs *can* and *could*, remain statistically significant in their ‘keyness’ values. The only addition to the list is the modal lexical verb *to wish* and the past form of the lexical modal verb *to seem*.

**EWT as a reference corpus.**

Table 13.

*Keyness* Values of Modal Devices Used in ELLs and NS Target Corpora in Reference to EWT

<table>
<thead>
<tr>
<th>ELL Peer Feedback Corpus</th>
<th>NS Peer Feedback Corpus</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Modal devices</strong></td>
<td><strong>Modal devices</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Keyness (AntConc)</strong></td>
</tr>
<tr>
<td><em>Verb to understand</em></td>
<td>59.439</td>
</tr>
<tr>
<td><em>Parenthetical clause I think</em></td>
<td>50.892</td>
</tr>
<tr>
<td><em>Modal verb could</em></td>
<td>15.352</td>
</tr>
<tr>
<td><em>Verb noticed</em></td>
<td>10.958</td>
</tr>
<tr>
<td><em>Modal verb should</em></td>
<td>7.788</td>
</tr>
<tr>
<td><em>Verb to wish</em></td>
<td>6.905</td>
</tr>
<tr>
<td><em>Adverb maybe</em></td>
<td>6.864</td>
</tr>
<tr>
<td><em>Modal verb might</em></td>
<td>6.390</td>
</tr>
<tr>
<td><em>Verb to notice</em></td>
<td>5.100</td>
</tr>
<tr>
<td><em>Verb seem</em></td>
<td>4.778</td>
</tr>
<tr>
<td><em>Verb suggest</em></td>
<td>4.465</td>
</tr>
<tr>
<td><em>Parenthetical clause I think</em></td>
<td>62.580</td>
</tr>
<tr>
<td><em>Modal verb could</em></td>
<td>39.114</td>
</tr>
<tr>
<td><em>Adverb perhaps</em></td>
<td>37.658</td>
</tr>
<tr>
<td><em>Verb understood</em></td>
<td>17.479</td>
</tr>
<tr>
<td><em>Verb seemed</em></td>
<td>17.104</td>
</tr>
<tr>
<td><em>Verb suggested</em></td>
<td>16.659</td>
</tr>
<tr>
<td><em>Verb noticed</em></td>
<td>14.565</td>
</tr>
<tr>
<td><em>Verb thought</em></td>
<td>11.094</td>
</tr>
</tbody>
</table>

10 sorted according to frequency in AntConc

11 sorted according to frequency in AntConc
As a result of the ‘keyness’ analysis summarized in Table 13, the ‘keyness’ values of the modal verbs *can, will, would*, the lexical modal verbs *need, hope, want, seem, appear*, and the adverb *really* became statistically insignificant in ELL Peer Feedback Corpus. Such modal devices are not unusually frequent in the target corpus if compared to the EWT corpus.

The ‘keyness’ analysis of NS Peer Feedback Corpus using OANC or EWT as a reference corpus return the same results with regard to the first three ‘key’ modal devices: parenthetical clause *I think*, modal verb *could* and adverb *maybe*.

On the other hand, the ‘keyness’ analysis based on EWT as a reference corpus cut down on five modal devices. The modal verbs *will* and *can*, the lexical verbs *wish, find* and *see* as well as a modal adverb *actually* are as common in any written language use on the web as they are in the written peer feedback of the native speakers. In addition, several shifts occur in the rank of modal devices in this analysis. Interestingly, the unusually high frequency of the modal verb *should* has decreased noticeably.

The three corpus ‘keyness’ analysis of the target ELL and NS Peer Feedback Corpora with a different reference corpus in each has shown to be efficient in carving out those modal devices that participants of my study use unusually frequently in relation to the ones used by NS in general written English language. Therefore, the results of the second step of my search for
modal categories, which is the first step of the specification procedure, are summarized in the table 14 below. As I have already mentioned previously, in this categorization I have included modal categories the frequencies of which are statistically significant in the results of any two of the three ‘keyness’ analyses.

Table 14

Modal Categorization Specified after the Results of ‘Keyness’ Analysis

<table>
<thead>
<tr>
<th>N Devices</th>
<th>Syntactic Level</th>
<th>Structural level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. (D) Modal verbs: can, could, should, (will), would, may, might</td>
<td>Lexico-syntactic</td>
<td>word</td>
</tr>
<tr>
<td>2. (D) Verbal expressions: need to, want, hope, wish</td>
<td>Lexico-syntactic</td>
<td>word and phrase</td>
</tr>
<tr>
<td>3. (D) Imperative mood (except for formulaic constructions)</td>
<td>Syntactic</td>
<td>sentence</td>
</tr>
<tr>
<td>4. (E) Modal verbs: can, could, should, (will), would, may, might</td>
<td>Lexico-syntactic</td>
<td>word</td>
</tr>
<tr>
<td>5. (E) Verbal expressions: seems, see, notice, I think/believe, understand, find</td>
<td>Lexico-syntactic</td>
<td>word, phrase, clause</td>
</tr>
<tr>
<td>6. (E) Adverbial expressions: maybe, perhaps, really, actually, definitely</td>
<td>Lexical</td>
<td>word and phrase</td>
</tr>
<tr>
<td>7. (D-E) ‘modally (non)harmonious’ (in)congruous patterns</td>
<td>Lexico-syntactic</td>
<td>word and phrase, sentence</td>
</tr>
</tbody>
</table>

Specification of Modal Devices’ Meanings through Concordance Corpus Analysis

The third final step of the three-step procedure of identifying my modal categorization, which is the second step in the specification procedure, is identifying modal meanings of each candidate form singled out in ELL and NS Peer Feedback Corpora as a result of ‘keyness’ analysis (Table 14). The task of the third step of analysis is then

(1) to classify each modal candidate in the right category according to the modal meaning it expresses in the peer feedback corpora;

(2) to note the (non)harmonious’ (in)congruous patterns in which a modal ‘candidate’ occurs;

(3) to adjust the dichotomous categorization according to the emergent results of the analysis by laying out specified candidate devices or their combinations in a modality continuum.
Methodology.

**Tools and Data.** I chose *AntConc* software to conduct the concordance analysis of the ‘key’ candidate modal forms identified in Peer Feedback Corpora as a result of the ‘keyness analysis’. The target corpora on which concordance analysis is conducted remains ELL and NS Peer Feedback Corpora, since the interest of this study is in identifying characteristic features of modality use by ELLs in peer feedback.

**Modality continuum.** The procedure to identify modal meaning – deontic or epistemic – depends on the type of the modal candidate form. In case of modal auxiliary verbs, for example, the same form can express both types of meanings or even a combination of two. Therefore, the identification of the modal meaning is needed in order to classify the form in either deontic or epistemic semantic category. In other cases, i.e. verbal and adverbial expressions, the form is already a candidate for a specific semantic category and I only need to either confirm or disconfirm the candidacy of a modal form within the prior-identified category.

However, in many occasions the semantic dichotomy might not work, because the variety of the expressed modal meanings in peer feedback does not easily land in two strictly separate classes of modal functions – epistemic vs. deontic. The genre of peer feedback requires writers to express evaluation and suggestions and I will consider both. As it turns out, however, evaluation and suggestions are highly ambiguous in their distinction when it comes to the context of feedback: evaluations may very often automatically feature or trigger suggestions, and suggesting something may often entail or imply an evaluation.

According to the expectations that the English socio-cultural value system sets, both evaluations and suggestions are associated with the use of both deontic and epistemic modality,
even though epistemic modality is primary in this case. Roughly, evaluations and suggestions are the propositions that writers express in sentences during their peer feedback communication. Modality therefore is the tool to ‘color’ a proposition either in epistemic modality – the expression of a speaker’s attitude towards the proposition as being true – or in deontic modality in its “complex variant” (Nuyts, 2016, p. 57) – the expression of speakers’ desirability of the state of affair that hinders an addressee to realize the desired state of affairs. In this case, the expression of the writer’s high degree of confidence in the proposition – epistemic modality – is at the borderline with the expression of the writer’s desirability for the addressee to perform an action – deontic modality (example (a)).

(a) You can develop more specific body paragraphs and a more specific argument.

At first glance, the use of the modal verb can in the example (a) carries epistemic function – an epistemic possibility of what the writer has an option to do. At the same time, however, we can read the utterance as an expression of a deontic possibility – some form of permission communicated by the writer for an action plan (to develop more paragraphs) directed at the addressee (reviewee). The source of the force issuing the permission could be the author himself or some external authority regulating the writing process. In example (a), the modal meaning could be either a deontic or an epistemic possibility.

Therefore, I propose adjusting the dichotomous categorization into a modality continuum (Figure 4) to lay out the interrelations between evaluation and suggestion on the one hand, and their relation to epistemic and deontic modality in the specific context of feedback on the other hand. The continuum in Figure 1 represents epistemic modality on the one side of the continuum and deontic modality on the other. The distinction between epistemic and deontic modality is
crucial for this study, since it enables me to capture whether the use of modality by ELLs contains traits of their L2 socio-cultural value system.\textsuperscript{12}

\textbf{Figure 4. The Modality Continuum}

Additionally, what allows for illustrating and arguing the possibility of a modal continuum is treating modality as the expression of a degree of commitment to the proposition expressed, an approach aligned with the engagement theory (Aijmer, 2016, p. 502). I argue that evaluations and suggestions are related to modality in the following way: epistemic is closer to evaluation and deontic is aligned with suggestion. Since it would be highly unconventional to encounter an evaluation to be expressed through the notion of obligation, permission or desirability, it is more closely associated with epistemic modality. The less ‘modalized’ a proposition is, the more it will move towards the center of the continuum where “naked assertions” are placed, which “imply total commitment to the truth of the proposition expressed” (Coates, 1987, p. 116)\textsuperscript{13}. Suggestions can shift towards either end of the continuum, depending on a writer’s commitment to the proposition expressed. Deontic modality in suggestions will give a very strong, almost assertive effect to a proposition. The degree of the writer’s commitment is so high that the speaker does not simply give an opinion, but calls for the action to be done. Very often

\textsuperscript{12} Such traits include using primarily epistemic modality to convey politeness, uncertainty, and to mitigate negative judgment and criticism in their peer feedback.

\textsuperscript{13} Evaluative language that expresses “judgements of good and bad” (Nuyts & Auwer, 2016, p. 513) but lacks the expressions of a speaker’s (un)certainty about a judgment (epistemic modality) or “degree of moral desirability of the state of affairs” (Nuyts & Auwer, 2016, p. 36) is referred to as ‘naked assertions’ in this study and is not analyzed (example (a)).

(a) A paper is clear in its purpose, and the author is consistent with the structure.
suggestions will occupy the position closer to the middle of the continuum, for instance when the combination of deontic and epistemic modality occurs. It is unlikely for suggestions to be expressed in non-modalized propositions.

One more factor supporting the possibility of a modality continuum is that modal devices do not occur in isolation, but rather in a combination (see e.g. Gablasova et al. 2015). Some of those combinations agree in their semantics and contribute to the intensification of the meaning. It happens particularly often with the use of modal verbs and adverbs. This combination of devices is ‘harmonious’ (e.g. Halliday, 1970), e.g. You may perhaps. In other cases, modal devices are inharmonious, where, for example, deontic meaning is combined with epistemic meaning: e.g. I think you must. Additionally, harmonious devices could be “congruous” and “incongruous” (Brezina, 2009), where the distinction in the meanings is subtler. While the epistemic modal devices are harmonious, they could be expressing more certainty and less certainty in the same combination of the devices (e.g. I think it certainly). The combination of modal devices is one of the most evident ways to see the gradation of modal meanings in the peer feedback context and the necessity of a modality continuum to capture the shades of the modal meaning’s writers wish to express. When the harmonious combinations of devices result in cumulative intensifying effects of either deontic or epistemic meanings it is situated at one of the extreme sides of the modality continuum; inharmonious modal devices express shades of both epistemic and deontic meaning and they are therefore situated in a fluctuating position between deontic and epistemic meanings. It will be important then to see whether such combinations are common in the target Peer Feedback Corpora or not.

In order to support my proposal of a continuum, I stay alert to the examples of combined modal meanings in the analysis of each modal form or combination of modal forms. In case of
consistency in the interrelation of modal meanings expressed by modal ‘candidates’, and consequently enough support for a modality continuum throughout the analysis, I reshape an originally dichotomous categorization into a modality continuum with modal devices positioned on it according to the modal force they convey.

**Procedures for identifying modal meanings.** The confirmation of modal meaning for verbal and adverbial procedure is fairly easy and includes syntactical and semantic contextual analysis of the form in question. For verbal expressions, I make sure that the verb is used in the modal rather than in its literal function. For adverbial expressions, I study the position of the adverb syntactically as well as the semantic surroundings of the form. When used epistemically, modal adverbs most of the time occur in the main clause and cover broad scope of the sentence (Brezina, 2009).

The matter is much more complicated with the identification of modal meanings for modal verbs. As the literature implies, there is no ‘formal criterion’ for the classification of modal meaning, “since there are no systematic(ally occurring) and reliable structural (syntactic or morphological) or other ‘behavioral’ characteristics differentiating between the different meanings” (Nuyts et al., 2010). One exception is Kecskes and Kirner-Ludwig’s paper (2017) in which an attempt is made to generate a formal syntactic-semantic criterion to classify modal meanings of the modal verbs *must* and *should* into either deontic or epistemic. Following this approach of generating some kind of ‘senses’ to guide me in the identification of the meaning of modal verbs, I use various sources to compile my own criteria (Table 9). I use Dittmar and Terborg’s (1991) guidelines to distinguish between the deontic and epistemic meanings as a conceptual framework: Quirk’s et al. *Comprehensive Grammar of the English Language* (1985) and Nuyts & van der Auwera’s (Eds.) and *The Oxford handbook of modality and mood* are my
primary supplementary resources to specify the criteria. Since the generalization about English modals and criteria to identify their use with deontic and epistemic meanings is nearly impossible (Salkie, 2010, p. 202), I also specify relevant semantic criteria for each modal verb separately.

However, I need to be cautious with developing and complying strictly with criteria presented in Table 15 for two reasons: first, (1) the weakness of modal semantic dichotomy; second, (2) the overemphasis on NS language production.

(1) As it has been mentioned earlier, modal verbs can be ambiguous in their modal meaning and their use can hardly be characterized fully by classifying their meanings in two categories.

(2) The second reason for treating the criteria to classify modal meanings of the modal verbs (Table 9) with caution is the previous researchers’ overemphasis on NSs’ language use in the development of classification criteria. The way ELLs convey modal meanings and/or modal functions ELLs use could be very different from NSs’ way. Qualitative analysis through the syntactic and semantic surroundings of the modals in question (Römer, 2004, p. 187) is necessary.

Therefore, in addition to the syntactic-semantic criteria for classifying modal meanings of the modal verbs, I will follow the recommendation of Karkkainen (1992, p. 199) and others (e.g. Piqué-Angordans, et al., 2002; Römer, 2004, p. 187) to take into consideration the full context of the modality devices and will thus seek to identify their functions of them in context.
### Table 15

**The Syntactic-Semantic Criteria for Classifying Modal Meanings of the Modal Verbs**

<table>
<thead>
<tr>
<th><strong>Deontic meaning (D)</strong></th>
<th><strong>Epistemic meaning (E)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General</strong></td>
<td>I. the subject is human;</td>
</tr>
<tr>
<td><strong>Syntactic criteria</strong></td>
<td>II. the subject is agent;</td>
</tr>
<tr>
<td></td>
<td>III. the main verb or the lexical verb is dynamic.</td>
</tr>
<tr>
<td></td>
<td>I. the subject is human, non-human or impersonal;</td>
</tr>
<tr>
<td></td>
<td>II. the subject is not agent;</td>
</tr>
<tr>
<td></td>
<td>III. the main verb or the lexical verb is stative.</td>
</tr>
<tr>
<td><strong>General</strong></td>
<td><strong>D</strong> expresses the attitude towards the condition of the events (states, actions, processes). The conditions of the realization of events depend on two circumstantial factors: source (self-other, institutions, external power) and goal (directions and perspective).</td>
</tr>
<tr>
<td><strong>Semantic criteria</strong></td>
<td><strong>D1</strong> expresses desirability/norms for actions and possibility how to perform them (goal) according to external source of authority, e.g. law, institution (source): e.g. Students may leave the classroom during the break.</td>
</tr>
<tr>
<td></td>
<td><strong>D2</strong> expresses desirability/norms for actions and possibility how to perform them (goal) according to ones’ personal moral values, norms or obligations (source): e.g. I must change the introduction in my paper.</td>
</tr>
<tr>
<td></td>
<td><strong>D3</strong> expresses desirability/norms for actions and possibility how to perform them (goal) according to ones’ personal moral values, norms or obligations (source) in retrospect: e.g. I should have resubmitted the paper.</td>
</tr>
</tbody>
</table>

**Criteria specific for each modal verb:**

**4.1.1 will**

<table>
<thead>
<tr>
<th><strong>D(a)</strong></th>
<th><strong>E(a)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>expresses the intentions and wishes, which imply necessity for action plan (deontic necessity). The source is the agentive subject itself and typically used with first-person subjects. e.g. I promise I will never use this essay structure again.</td>
<td>the speaker perceives of the uttered to reach a ‘reality’ status, the speaker predicts the proposition to be true in the future: e.g. You will feel better after this medicine.</td>
</tr>
<tr>
<td><strong>D(b)</strong></td>
<td><strong>E(b)</strong></td>
</tr>
<tr>
<td>expresses the intentions and wishes, which imply necessity for action plan (deontic necessity) directed at the addressee/first argument participant. The source is agentive object and is typically used with first/second-person subjects. e.g. Matt, I will take an extra copy, thank you. How will I get there?</td>
<td>the speaker expressed high degree of confidence in the evaluation of utterance due to its logical necessity. e.g. She will have it right after she has written five drafts.</td>
</tr>
</tbody>
</table>

**4.1.2 would**

<table>
<thead>
<tr>
<th><strong>D(a)</strong></th>
<th><strong>E(a)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>expresses the intentions and wishes, which imply necessity for action plan (deontic necessity) directed at the addressee/first argument participant in a polite form. The source is agentive object. e.g. Waiter, I would like a coffee. I would like a different title for this paper.</td>
<td>the speaker perceives of the uttered to reach a ‘reality’ status, the speaker predicts the proposition to be true: e.g. Later, they would understand.</td>
</tr>
</tbody>
</table>
| **E(b)** | the speaker expressed some degree of confidence in the evaluation of
| **4.1.3 can** | **D(a)** expresses the ‘ability’ meaning, which implies deontic necessity for or (im)possibility of an action due to a skill or capability of the addressee/first argument participant. No external source of authority.  
*Example:* Can you change the abstract? *(Quirk et al., p. 222)* |
| --- | --- |
| **D(b)** expresses deontic (im)possibility (permission) for the action in a quasi-imperative manner  
*Example:* You can use my examples in your essay. *(Quirk et al., p. 222)* |
| **D(c)** expresses a suggested action in a quasi-imperative manner:  
*Example:* You can stay here until I am back (if you like). *(Quirk et al., p. 222)* |
| **E(a)** expresses epistemic possibility (especially in questions and negatives).  
*Example:* Even expert writers can make mistakes *(modified from Quirk et al., 1985, p. 221).*  
Can it be true? |
| **E(b)** expresses a possibility for a suggested optional course of action for an addressee.  
*Example:* This paragraph can be moved *(Quirk et al., 1985, p. 221, example [3]).* |
| **E(c)** expresses a tentative possibility of a course of action for an addressee.  
*Example:* You could change an introduction. |
| **E(d)** expresses a ‘hypothetical’ ability.  
*Example:* If you let me, I could change the structure. |

| **4.1.4 could** | **D(a)** expresses the ‘ability’ meaning, which implies deontic necessity for or (im)possibility of an action due to a skill or capability of the addressee/first argument participant. No external source of authority.  
*Example:* Could you check these figures? [polite request to perform an action] |
| --- | --- |
| **D(b)** expresses deontic (im)possibility (permission) for the action in a polite manner.  
*Example:* Your students could have a break. [they are allowed to] |
| **E(a)** expresses low degree of confidence in the evaluation of the utterance as being true. The speaker not necessarily believes the proposition to be false. The degree of confidence is higher than that of *might*.  
*Example:* He could be dead by now [for all I know].  
I could be wrong. |
| **E(b)** expresses concrete logical possibility (especially in questions and negatives)  
*Example:* Her essay was the best that could be hoped for. |
| **E(c)** expresses a tentative possibility of a course of action for an addressee.  
*Example:* You could change an introduction. |
| **E(d)** expresses a ‘hypothetical’ ability.  
*Example:* If you let me, I could change the structure. |

| **4.1.5 may** | **D(a)** expresses deontic (im)possibility (permission) for the action.  
*Example:* If you wish, you may use my examples. |
| --- | --- |
| **E(a)** expresses possibility of the utterance as being or becoming true.  
*Example:* You may be right. |

| **4.1.6 might** | **D(a)** expresses deontic (im)possibility (permission) for the action mostly in polite questions. Such use is very rare.  
*Example:* Might I change your introduction? *(modified from Quirk et al., p. 222)* |
| --- | --- |
| **E(a)** expresses possibility of the utterance as being or becoming true in a much more tentative way than *may*.  
*Example:* You might be right. |
The Results of Concordance Analysis to Specify the Meaning of Modal Devices.

‘Key’ modal verbs. Table 16 below summarizes the results of the analysis to identify modal meanings with which modal auxiliary verbs are used. In order to comprehensively present the results of this analysis, I will discuss the use of each modal verb in both corpora successively following the order they are presented in the Table 16.

Table 16

<table>
<thead>
<tr>
<th></th>
<th>ELL Peer Feedback Corpus</th>
<th>NS Peer Feedback Corpus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Deontic</td>
<td>Epistemic</td>
</tr>
<tr>
<td>will</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>would</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>can</td>
<td>2</td>
<td>19</td>
</tr>
<tr>
<td>could</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>could+perfective</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>may</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>might</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>should</td>
<td>17</td>
<td>0</td>
</tr>
</tbody>
</table>

Modal verb will. The results with regard to the modal verb will are roughly aligned with the conclusions drawn from the previously conducted corpus studies – the “proportion of pure future time uses is over 90 per cent” (Salkie, 2010, p. 196). Such conclusions are particularly supported by the results of concordance analysis in NS Peer Feedback Corpus. The use of will with its non-modal meaning, i.e. a marker of temporal distinction, is almost twice more frequent than its use
with modal meaning. Overall, however, I cannot be absolutely confident that the use of *will* as an epistemic marker has nothing to do with the use of *will* for future distinctions. While there is hardly any consensus with regard to whether *will* is a modal or a tense or an aspect marker, linguists agree on the inherent interaction that exists between *will* being a temporal marker and *will* being a modal marker as they belong to the same “cognitive dimension” (Squartini, 2016, p. 52). In the example (a) below, the use of *will* could be classified as having an epistemic modal meaning, i.e. the writer expresses high degree of confidence in the evaluation of utterance due to its habitual consequence. However, the utterance could also be interpreted as belonging to the domain of “genericity”, which implies no “intrinsic connection to modality” (Salkie, 2010, p. 191).

(a) *Using other connections rather than using however very often will make this paper better*\(^ {14} \).

(b) *An additional strength of your lesson plan is the use of audio-visual tools; these will enable students to practice listening comprehension skills.*

The same is true for example (b). While I have classified the modal meaning of *will* in this example to be epistemic, it might also be marking temporal meaning, i.e. reporting what *will* happen in the future. While the temporal and modal meanings are considered to be at different levels, the demarcation between *will* in its temporal function and *will* conveying epistemic meaning of probability is very “subtle, almost impossible to draw” (Aijmer, p. 505). Moreover, the cases where there is little doubt in terms of *will* being an epistemic modal marker are the ones in which epistemicity of the expression is supported by another one or sometimes two epistemic modal devices (examples (c) and (d).

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\(^ {14} \) The example is quoted from ELL Peer Feedback Corpus. The adverb *however* in the example is a metalanguage the writer uses to express specifics of the suggestion, even those not marking the adverb as metalanguage in any way.
(c) *I think* that students *will* love these activities.

(d) *I think* that the students *will* be more likely to continue.

Only one possible case of deontic modal meaning expressed by *will* was traced in the ELL Peer Feedback Corpus (example (e)). One way to interpret the utterance is that the writer communicates the deontic necessity for an action plan; especially if taking into consideration the developed criteria (Table 9), according to which a modal verb is deontic when the following verb is a dynamic verb. However, *will* in this example could also be understood to carry an epistemic modality, if the writer intents to express probability of what s/he would have done in place of the author.

(e) *One area that I will* try to reconsider is your on-going formative assessment strategies.

According to the results of the concordance analysis in both ELL and NS Peer Feedback Corpus, *will* would need to be specified under epistemic modal section in the categorization of modal devices. However, I cannot ignore the fact that that modal meaning of *will* is much more rare than non-modal meaning. Very often, *will* may simply express “colorless neutral future” (Quirk et al. 1985, p. 213). When it happens that *will* is specified as carrying epistemic meaning, the decisive role for such classification is generally played by the supportive harmonious epistemic modal device. Only 25% of the times, the verb *will* has the potential to express epistemic modality. Therefore, I decided to exclude the modal verb *will* from the categorization of modal devices and from the analysis of the dissertation data.

*Modal verb would.* In the previous research, modal verb *would* has shown to express a cluster of tense, modality and aspect, and therefore to trigger a continuous debate among linguists (Squartini, 2016, p. 57). The analysis of my ELL and NS Peer Feedback Corpora also
revealed challenges in identifying modal meanings of *would*. Such cases primarily include those where the meaning of *would* could be both epistemic and deontic. In example (f), the writer seems to communicate directions to the addressee to focus on fixing paragraphs. Since such directions are expressed indirectly and tentatively, the modal meaning is more aligned with the epistemic function. At the same time, it also has some shades of an indirect but strong desirability for an action to be performed by the addressee – deontic modality. In example (g), *would* is more aligned with deontic meaning, since it expresses volition/desirability on the writer’s part for the addressee to perform the action of providing more questions. At the same time, the author uses a perfective aspect, which gives some epistemic coloring to the utterance. The necessity for the use of a continuum to explain the polysemanics of modal meanings in peer feedback is justified by these and further examples.

(f) *I would* focus on fixing the flow of your paragraphs.

(g) *Would* have liked more questions to make sure students were progressing.

Another factor that speaks for the development of the modality continuum is the use of modal verb *would* occurring in both deontic or epistemic senses. Example (h) demonstrates the use of epistemic *would* with the deontic lexical verb *to suggest*. Example (i) presents the use of the epistemic parenthetical clause *I think* with the epistemic modal verb *would* in an epistemic sense.

(h) *I would* suggest focusing on the main ways to cite journal.

(i) *I think* fifteen *would* be more appropriate.

Overall, the concordance analysis of *would* reveals the writers’ preferences to use it primarily with epistemic meaning in peer feedback. 77% of instances of *would* are epistemic in peer feedback corpora under investigation. The other uses of *would* are either non-modal or
ambiguous in their functions. While NS Peer Feedback Corpus is noticeably richer in terms of
the use of the modal verb *would* in general, the use of *would* with an emphasis on the epistemic
meaning is significant in both corpora. The findings overall support the idea:

- to categorize the modal verb *would* somewhere in the middle of the epistemic section
  of my modal continuous categorization;
- to position parenthetical clause *I think/I believe* with epistemic *would* and epistemic
  adverbs *maybe/probably* with epistemic *would* on the extreme epistemic side of the
  modality continuum;
- to classify epistemic modal verb *would* with deontic lexical verb *to
  suggest/recommend* closer to the middle of the continuum, where deontic meaning
  intersects with epistemic more weightily (Figure 5).

*Modal verb *can*. As in other examples with modal verbs described above, the interpretation
of *can* as deontic or epistemic is a complex issue. First of all, *can* expressing a meaning of
epistemic possibility has been developed among English speakers recently and is only
characteristic of the American English (Bybee & Fleischman, 1995, p. 64). The difference
between root and epistemic possibility are only weakly distinguished. Bybee and Fleischman
(1995) suggest that in order to interpret modal *can* as leaning towards epistemic possibility one
needs accompanying or collocating words to support epistemic reading as demonstrated in the
example (j).

(j) *e.g. we hope this review can be useful [for the writer].*
In comparison to the analysis of other modal verbs, *can* yields the highest number of hits when its modal meaning is unclear: almost one third of all modal hits in peer feedback corpora. I was hesitant to identify modal meaning as either deontic or epistemic primarily for two reasons: when *can* is used to describe a third person’s ability, this does not make an utterance deontic by default (example (k)); often the use of *can* could be interpreted both deontically or epistemically (example (l)). In the latter, one can say that the utterance implies deontic necessity due to a skill or capability of the first argument participant. At the same time, it could be interpreted as the writer giving tentative options to the addressee without setting strongly expectations for the addressee to comply or to perform.

**(k)** You should add citation so that your audience *can* understand the origins of ideas.

**(l)** Then you *can* comment and provide the students feedback.

The ‘keyness’ value for *can* is much higher in ELL Peer Feedback Corpus, which affirms primarily learners’ preference to use *can*. Clancy (1997, p. 27) found the use of deontic *can* much higher than *may* or *must*. Since most of the identified meanings of *can* are epistemic, I will include *can* in the epistemic middle subsection of the modality continuum for the time being (Figure 5).

The ambiguity and double sidedness of the modal meaning of *can* speak for the adjustment of the dichotomous classification of modality into a continuum. It is interesting to see that the meaning of the modal verb *can* shifts on the continuum even historically from once conveying purely deontic (im)possibility (example (m)) to its more frequent use in the sense of epistemic (im)possibility (Coates, 1995) (example (n)).

**(m)** [...] friends family or students with the same L1 *can’t* have opportunities to work with each other.
(n) It can be elaborated more thoroughly.

Modal verb could. The results of the concordance analysis of the modal verb could confirms researchers’ beliefs that “could is used more and more frequently in apparently epistemic and epistemically oriented contexts” (Facchinetti, Palmer & Krug, 2003, p. 82). Could with deontic meaning occurs very rarely, primarily in questions as demonstrated in the example (o).

(o) Could you elaborate further as I am a little confused as to what exactly you are trying to prove?

Those uses of could whose meaning is characterized as unclear mostly express neither a deontic necessity nor an epistemic hypothetical possibility. Such cases include the report of one’s own or others’ abilities in the past with no reference to deontic necessity (examples (p), (q)).

(p) I could notice you wanted to give a sense of “hope”.

(q) So that, readers could remember some main points of this literature review.

Overall, the use of epistemic could is prominent in the peer feedback corpora with NS Peer Feedback Corpus taking a leading position. Therefore, could is classified under the epistemic subsection of the modality categorization. In addition, could has shown a strong tendency to appear in both peer feedback corpora accompanied by other epistemic devices, such as the modal adverbs perhaps and maybe (example (r)), or the parenthetical clause I think in the ELL Peer Feedback Corpus. These harmonious patterns are positioned on the extreme epistemic side of the modality continuum in 5.

(r) Maybe you could manage to shorten some parts.

Interestingly, one fourth of the total number of the NS utterances featuring could consist of
could+perfective (example (s)), which could express an epistemic hypothetical meaning. At the same time, such examples move epistemic could towards the deontic side of the continuum, if one is to interpret them as harsh criticism of the peer reviewee’s work and as the deontic necessity for the addressee to perform the action.

(s) You could have modeled it with a volunteer.

What originally seems to be an epistemic possibility turns out to have more deontic meaning embedded in it. Therefore, I decide to

➢ include the modal verb could+perfective into a modality continuum more aligned to the deontic side of the modal categorization (Figure 5);
➢ specify could under epistemic subsection of the modality continuum;
➢ position parenthetical clause I think/I believe with epistemic could and epistemic could with epistemic adverbs maybe/perhaps on the extreme epistemic side of the modality continuum;
➢ classify epistemic modal verb could with deontic lexical verb suggest/recommend closer to the middle of the continuum where deontic meaning intersects with epistemic more forcefully.

Modal verb may/might. It is evident that NSs prefer the use of epistemic may (example (t)). May has shown to combine with other epistemic devices (i.e. the lexical verb seem and parenthetical I think). Such combinations usually create a cumulative epistemic effect for the modal meaning and are positioned at the extreme epistemic side of modality continuum (Figure 5). Only one combination of epistemic devices in NS Peer Feedback Corpus was not harmonious and shifts the use of epistemic may to the deontic side of the continuum. Example (u) shows the
non-harmonious combination of deontic lexical verb *want* and epistemic *may*. While *may* works to mitigate the implied ‘command’, the lexical verb *want* strongly suggests the writer’s desirability for the addressee to comply with the projected action.

(t) *It may not be a realistic topic to cover within ten minutes.*

(u) *The tutor may want to provide students with examples of how to find information.*

The modal verb *might* is much more frequent bearing epistemic meaning (example (v)). However, the inharmonious combination of epistemic *might* and the deontic lexical verb *want* (the same way it happens with *may*) moves the use of *might* towards the deontic side of the continuum (Figure 5). The overall contextual implicature that could be decoded in example (w) is the writer’s strong desirability for the action to be performed by the addressee. The writer seems to communicate a strong wish, almost in a demanding tone. It is interesting that, while *might* seems to cover a bigger scope of the utterance than the verb *want*, deontic meaning is still easily traced.

(v) *The professor might shoot you down for that.*

(w) *Along these lines, you might want to add how you will end the week.* [you need to add the way you will end the week]

There is a weak tendency of *might* to be used with the epistemic parenthetical clause *I think* or *I believe*. However, the majority of the combinations of *might* with other modal devices are non-harmonious. *Might* combines in unharmonious combinations with the deontic lexical verb *to suggest*. I would like to include both harmonious and unharmonious combinations in modal categorization in order to support the idea of the modality continuum.

As a summary of the analysis of *may/might* I conclude:
➢ to categorize the modal verb *may/might* closer to the right side of the epistemic section of my modal continuous categorization;

➢ parenthetical clause *I think/I believe* with modal verbs *may/might* as well as epistemic modal verb *may* with epistemic lexical verb *seem* on the extreme epistemic side of the continuum;

➢ epistemic modal verb *may/might* with lexical deontic verb *want* in the epistemic section of the continuum but closer to the middle point of it.

Since the difference between *may* and *might* becomes neutralized in the English language (Quirk, 1985, p. 233) and since both *may* and *might* are not one of the high-ranking devices standing out in the unusual frequency in ‘keyness’ in my corpora, I decided to join both modal verbs under the same subcategory.

*Modal verb should.* The modal *should* is primarily used in its deontic sense for both ELLs and NSs. However, as relative frequencies percentage indicated, ELLs’ preference to use deontic *should* is slightly higher than that of NSs’. Moreover, NS use of deontic *should* is scoped by the epistemic devices in almost half of the cases. The application of epistemic devices to mitigate deontic *should* is rarely employed by ELLs: only in 3 hits out of 17 (18%). Such findings re-confirm the necessity to lay out modal meanings on a continuum. The combination of epistemic and deontic devices reveals how language users skillfully fluctuate between modal ranges, which allows them to apply shades of the meanings to the utterance with one usually, but not always, scoping the other and taking the lead.
The uses of *should* that were uneven fits for either the deontic or the epistemic section were extremely rare and included examples such as ‘pseudo-necessities’ (examples (x)) or reported examples from the essays (example (y)).

(x) *I should* mention that […]

(y) *You can have more detail sentence about why people should* buy organic good as a daily diet.

Since the use of deontic *should* is significant and consistent overall, I specify

➢ *should* into deontic subsection of the continuum and;

➢ *should* with parenthetical clause *I think/I believe* in the deontic side of the continuum, closer towards its epistemic side than isolated *should*.

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**Figure 5.** The Results of Concordance Analysis of ‘Key’ Modal Verbs and their Combinations (In ELL and NS Peer Feedback Corpora) Laid on the Modality Continuum

‘Key’ modal lexical verbs. Table 11 below summarizes the results of the analysis to identify modal meanings with which modal lexical verbs and adverbs are used. In order to
comprehensively present the results of this analysis, I will discuss the use of each modal device in both corpora successively following the order they are presented in the Table 17.

After that, I represent the adjusted modal categorization that is reshaped into the modality continuum (Figure 6).

Table 17

The Results of Concordance Analysis for ‘Key’ Lexical Verbs And Adverbs in ELL And NS Target Corpora (Antconc)

<table>
<thead>
<tr>
<th></th>
<th>ELL Peer Feedback Corpus</th>
<th>NS Peer Feedback Corpus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Deontic</td>
<td>Epistemic</td>
</tr>
<tr>
<td>hope</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>wish</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>want(s)</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>suggest</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>need to</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>seem</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>seems</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>seemed</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>see</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>find</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>notice</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>noticed</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>understand</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>understood</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>I think</td>
<td>0</td>
<td>28</td>
</tr>
<tr>
<td>thought</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>I believe</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>might</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>perhaps</td>
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<td>-</td>
</tr>
<tr>
<td>really</td>
<td>0</td>
<td>2</td>
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<tr>
<td>definitely</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>actually</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
The lexical verb *to hope*. The lexical verb *to hope* appears unusually frequently in ELL Peer Feedback Corpus as compared to general English language use. Aligned with Diessel & Tomasello’s findings (1999), all instances of *to hope* occur in matrix clauses with the subject in the first person singular. If I am to follow Dittmar and Terborg’s (1991) guidelines to distinguish between the deontic and epistemic meanings as a conceptual framework in the search of deontic *hope*, I need to look for the lexical verb *hope* that expresses the writer’s desirability of the state of affairs that hinders the addressee to perform the action. I have found three cases of such use of *hope* in the ELL Peer Feedback Corpus (example (a)).

(a) *I hope you write more detail to support your reason.*

In addition, I noticed two cases of epistemic *hope*, when the writer expresses one’s belief or volition (example (b)).

(b) *I hope my feedback helps.*

Such findings resonate with Davidse’s et al, (2010, p. 370) conclusion that the lexical verb *to hope* could carry both deontic and epistemic meanings and that those meanings are not mutually exclusive. Again, such conclusion is supportive of my proposed modality continuum. What is particularly interesting in this study is ELLs’ preference to use this lexical verb. Since deontic cases occur more often than epistemic, I propose including *hope* in deontic section of the modality continuum (Figure 6).

The lexical verb *to wish*. The lexical verb *to wish*, while significant in its ‘key’ value, is not used with its deontic meaning very often in ELL Peer Feedback Corpus. While in all hits of
concordance analysis *wish* appears in single clauses or in matrix clauses, it is more often used in literal sense with no modal meaning (example (c)).

(c) *I wish* you all the best in this class and your future classes.

NS Peer Feedback Corpus, however, contains cases of the lexical verb *wish* only with deontic meaning (example (d)).

(d) *I do wish* to know what the goal would be for this particular idea.

The writer in the example (d) expresses the desirability of the state of affairs that hinders addressee to perform the action.

Since in NS Peer Feedback Corpus all occurrences of *wish* are deontic, as well as none of the corpora shows the modal meaning of *wish* dependent on any other modal device, I propose including the lexical verb *wish* into deontic subsection of my modality continuum (Figure 6), even though after lexical modal verb *to need* in its deontic force.

*The lexical verb to want.* The lexical verb *to want* has been discovered in literature to carry modal meaning especially when it occurs in the first- and second-person subjects. Verplaetse (2003, p. 156) even argues for the “tentative inclusion of WANT TO in a broader definition of the class of the modal auxiliaries”. Following the Dittmar and Terborg’s (1991) guidelines in differentiation of modal meanings, I am mostly interested in *to want* expressing deontic meaning – writers volition projected into the addressee, which is most typically found in second person patterns (Verplaetse, 2003, p. 157). The lexical verb *to want* that expresses the modal meaning of deontic necessity occurs both in ELL and NS Peer Feedback Corpora. It is striking, however, that the use of *to want* with deontic meaning is accompanied by the epistemic modal verb *may/might* to mitigate the deontic modal force in each case (example (e)).
Along these lines, you **might want to** add how you will end the week.

The literal examples of the lexical verb *to want* include the report on somebody’s volition (example (f)) and therefore are not the focus of this analysis.

*(f)* When student asked “when do you use “a” or “the” it lets me know that he **wants to** know more about articles which is good.

Since *to want* is in fact used in both corpora to express deontic meaning I include the verb in the deontic subsection of the modality continuum as the lexical verb *to wish* (Figure 6).

*The modal lexical verb to suggest.* The verb *to suggest* is classified both as a candidate form for carrying epistemic meaning (Boncea, 2014, p. 11; McEnery & Kifle, 2002) as well as deontic meaning (Palmer, 2014, p. 8). The epistemic meaning of the verb *to suggest* is primarily expressed in “evidence/appearance-based postulations,” where the writer wishes to express alternative positions and voices (Xie, 2016, p. 12) or affirming the truth of the proposition (Palmer, 2014, p. 8). The deontic modal lexical verb *to suggest* instead is concerned with expressing directives for action to be performed (Palmer, 2014, p. 8). Very often, lexical verbs reflect the modal meanings conveyed by the auxiliary modal verbs in the subordinate *that-clause* (Palmer, 2014, p. 28). Additionally, the syntactic structure could help decipher the modal meaning. Quirk et al. (1985, p. 1182), for example, classifies *to suggest* as a suasive verb, that is followed by *that clause* containing either modal verb *should*, subjunctive or indicative verb. In all the above-described cases, the meaning of the verb is more likely to be carrying some directives, whether through indirect request or through writer’s desire.

All the occurrence of *to suggest* in ELL Peer Feedback Corpus come with the personal pronoun *I* and only in combination with other epistemic modal devices. The same is true for NS
corpus. Only two instances of *to suggest* is purely deontic. Others are combined with the use of epistemic modal verbs such as *would, could* and *might*. Since the occurrence of the lexical verb *to suggest* with epistemic modals is the most persistent case in both ELL and NS Peer Feedback Corpora, I propose including the verb *to suggest* in my modal categorization only in combination with epistemic auxiliary modal verbs. It will of course shift the use of deontic lexical verb *to suggest* to the epistemic side of the continuum (Figure 6).

*The lexical verb to need.* The verb *to need* has been characterized by Quirk et al. (1985, p. 138) as a marginal verb, which could act both as a lexical verb as well as a modal auxiliary verb. However, it is the lexical verb *to need* that is more common in the American English especially in the non-assertive constructions (Quirk et al., 1985, p. 816). Guided by this information I have included the lexical verb *to need* into the modal categorization. Such a decision was indeed confirmed by the data in both ELL and NS Peer Feedback Corpora. The auxiliary *to need* (example (g)) is used only once in ELL Peer Feedback Corpus, the lexical verb *to need* occurs in the rest of the cases.

(g) [...] after talk about the disadvantage of organic foods, you need tell us the reason why you still think organic foods are better [...] 

Both lexical and auxiliary verb *need to* can express deontic meaning, either objective or subjective (Palmer, 1986, p. 103). NS Peer Feedback Corpus does not provide us with any evidence that the use of the verb *need to* is characteristic of peer feedback genre. *Need to* in ELL Peer Feedback Corpora instead stands out as unusually frequent and primarily expresses deontic meaning with occasional use of the verb in combination with epistemic devices, such as parenthetical clause *I think* or modal auxiliary verb *may*. The use of lexical modal verb *need to*
with epistemic devices moves the modal expression toward the epistemic side of continuum (see example (h)).

(h) I do not think you need comma before the which.

However, the use of epistemic device with need to is each time different and does not present an identifiable pattern. Therefore, I include only deontic need to into my modality continuum (Figure 6).

The modal lexical verb to seem. The lexical verb to seem, either in “catenative” constructions (Quirk, 1985, p. 146) or acting as a copular verb, is directly related to the expression of epistemic modality. The verb expresses the subjective belief of the writer, his attitude toward the truth of the proposition expressed. In the Peer Feedback Corpora the verb to seem appears in the expression of the reviewer’s evaluation.

(i) The paragraphs seem more elegant.

The lexical verb to seem occurs much more in NS Peer Feedback Corpus than in ELL’s, especially when comparing all the inflected forms of to seem that showed significant ‘key’ values, 0.2% of relevant frequency as compared to 0.06%. Only four hits of the lexical verb to seem has been found in ELL Peer Feedback Corpus. Since the lexical verb to seem is unusually frequent in NS Peer Feedback genre, I include it in the modality continuum as epistemic lexical verb (Figure 6).

The lexical modal verb to see. Biber identified (1999, 2006) the lexical verb to see to be a ‘candidate’ for conveying epistemic meaning. The verb to see could express both mental (example (j)) and physical perception (example (k)) (Quirk, 1985, p. 623). In both cases a writer
expresses high degree of certainty towards the proposition expressed. The ones conveying mental perception are more likely to embed an epistemic meaning in peer feedback scripts. The verb \textit{to see} expressing mental perception is much closer related to the expression of tentativeness in peer feedback communication. Additionally, the verb \textit{to see} is most likely to express epistemic meaning when succeeding first-person pronouns. Therefore, all the verbs \textit{to see} following the infinitive marker and primarily reporting physical perceptions are included in the table column titled \textit{literal} (Table 11), and the verbs expressing epistemic modal meaning are in the table section named \textit{epistemic} (Table 11).

\begin{enumerate}
\item[(j)] \textit{I do not see a relationship between your body paragraphs.}
\item[(k)] \textit{The green color marker was difficult to see on white board.}
\end{enumerate}

Since there are epistemic uses of \textit{to see} in NS Peer Feedback Corpus, the lexical verb \textit{to see} can therefore, be included in the epistemic section of the modal categorization. However, the literal uses of \textit{to see} is much more frequent than its use with epistemic meaning. Therefore, I exclude this lexical verb from the modal categorization.

\textit{The lexical verb to find.} The verb \textit{to find} has been rarely used in its epistemic function, i.e. expressing low level of certainty in the proposition (example (l)). Most of the time, the verb was used in its literate sense of locating necessary information or materials (example (m)).

\begin{enumerate}
\item[(k)] \textit{I find you also introduce very vague ideas.}
\item[(l)] \textit{Try to find a specific thesis.}
\end{enumerate}

Since the verb \textit{to find} is only used twice with epistemic meaning in NS Peer Feedback Corpus, i.e. the only one in which the verb \textit{to find} shows unusually statistically significant frequency, I exclude it from the modal categorization.
**The lexical verb to notice.** The verb *to notice* has been identified as a candidate form for an epistemic device. However, it is only one time out of four occurrences in ELL Peer Feedback Corpus that the verb is used epistemically and one time that the verb conveys epistemic meaning on its own (example (n)).

(m) *However I notice that in the third paragraph, you want to talk about the flaw of organic (price).*

(n) *Then, I noticed there is a lack of a main idea.*

Since the use of such verb in general as well as with epistemic meaning is extremely rare in my corpora, I exclude it from the modal categorization. However, the same verb in the past tense seems to be always used epistemically in both corpora (example (o)), which encourages me to include the modal verb *to notice* in its past form into the modality continuum. Since the verb expresses high degree of certainty in the proposition expressed, its position in the modality continuum is in the epistemic section but closer toward the deontic side of it (Figure 6).

**The lexical verb to understand.** The verb *to understand* can mark epistemic meaning according to Biber (2006), i.e. express high degree of certainty in the proposition expressed. Just as a verb *to notice*, the lexical verb *to understand* belongs to “‘private’ type of factual verb [that] expresses intellectual states such as belief or […]discovery”. Therefore, they are related to the expression of the epistemic meaning, i.e. writer’s attitude towards the proposition expressed (example (p)).

(p) *I understand this is only the first draft of the paper.*
However, as Brezina (2009) specifies, not all epistemic ‘candidates’ actually are used with epistemic meanings. Example (q) demonstrates how the writer uses the verb in order to report factual information related to the third person rather than to express one’s own attitude towards the truth of the proposition.

(q) In this way, students will understand what they are expected to do in more details.

Both NS and ELL Peer Feedback Corpora demonstrated very small count of epistemic to understand or its past form understood, which are the results aligned with Hyland & Milton’s (1997, p. 205) findings that such an epistemic lexical verb is not the most frequent epistemic item in academic writing. Therefore, I exclude the modal verb to understand from my modal categorization.

The parenthetical clause I think. I think is consistently represented in both ELL and NS Peer Feedback corpora. While some occurrences of I think were classified as non-modal since they were either included in the direct quotation or used by the writer in the infinitive clause complement, the significant majority of the verb – 90% – is used with personal pronoun I and express epistemic meaning (example (r)).

(r) I think the activities themselves were interesting.

As I have already mentioned earlier, the parenthetical clause I think tends to combine with other modal devices. In both target corpora, roughly one third of the epistemic I think is used in the combination with other epistemic devices, but primarily modal verbs. Consequently, I have already included such combination of epistemic devices into my modality continuum. The use of epistemic I think in combination with epistemic adverbs also occurs, but is rather rare (example (s)).
(s) *I think the tutor probably did not implement a warm up.*

The past from of *think* occurs much more often in its literal sense and is significantly frequent only in NS Peer Feedback Corpus. Therefore, I include only parenthetical clause *I think* conveying its epistemic meaning in the modality continuum (Figure 6).

*The parenthetical clause I believe.* The majority of parenthetical clause *I believe* is used with epistemic meaning in NS Peer Feedback Corpus. The only cases when it is used with non-modal meaning is in reviewer’s paraphrase of the author’s writing (example (t)).

(t) *My summary of your article would be that you believe that pharmeceutical companies.*

Given the results of concordance analysis, I include the parenthetical *I believe* in the epistemic side of the modality continuum (Figure 6).

*Adverbial expressions.* are the primary set of non-inflectional lexical items in English expressing epistemic meaning (Aarts & McMahon, 2008, p. 270). The adverbs with epistemic meaning have shown to be covering the big scope of the utterance (Hacquard & Wellwood, 2012) and to often occur in the main clause (Brezina, 2009). I will need to run concordance analysis to verify whether ‘candidate’ adverbs express epistemic meanings.

*The adverb maybe.* The epistemic adverb *maybe* is used much more often in NS Peer Feedback Corpus. While there are cases when *maybe* is largely used on its own to convey modal
meaning (example (u)) in NS Peer Feedback Corpus, the epistemic *maybe* most of the times is used in combination with other primarily epistemic modal verbs.

(u) *Maybe the prof. thinks it’s okey.*

Therefore, I consider it necessary to include the most prominent combinations of epistemic modal verb *maybe* with other modal devices into the modal categorization. In addition to the previously identified assembly of *maybe* with epistemic modal verbs, it also combines with verbs in the imperative mood as demonstrated in the example (v).

(v) *maybe elaborate on how it develops.*

Since I have noticed five such occurrences in NS Peer Feedback Corpus, I would like to include *maybe*+imperative in the modal categorization. Of course, such use of *maybe* will shift the modal into the deontic side of the continuum (Figure 6).

The adverb *really*. The adverb *really* is a “subjunct concerned with expressing the semantic role of modality” (Quirk, 1985, p. 583). Such an adverb expresses certainty in the true value of the clause or a part of the clause. If the adverb modifies only an adjective (example (w)), it is an emphasier rather than an epistemic modal device.

(w) *This paper is really interesting.*

Since the majority of an adverb *really* is used as an emphasier of the adjectives, I decided to exclude an adverb *really* from the modal categorization.

An adverb *perhaps*. An adverb *perhaps* occurs quite frequently in NS Peer Feedback Corpus. However, most of times – two thirds – the adverb is used in combination with other epistemic modal verbs such as *can* and *could*. Therefore, I include the epistemic modal adverb
perhaps in combination with these epistemic modal verbs into my modality continuum (Figure 6).

The adverb *definitely*. The adverb *definitely* occurs unusually frequent in NS Peer Feedback data. Again, it happens to combine with epistemic modal verb *can* in half of the cases. Therefore, I consider it important to include both epistemic adverb *definitely* by itself as well as in combination with the other modal device in the modality continuum (Figure 6).

The adverb *actually*. Since all occurrences of the adverb *actually* except one are epistemic, I propose including the adverb into the modality continuum (Figure 6).

Having conducted three-step procedure for the development of the modal categorization, I conclude that throughout the analysis I have gained and demonstrated ample support for the development and my use of modality continuum. Therefore, I reshape the originally dichotomous categorization into a modality continuum with modal devices positioned on it according to the modal force they convey (Figure 6).

The modal devices that are laid out on the continuum are separated into two levels – upper and lower. The modal verbs and their combination with other modal devices are laid on the upper level, while lexical devices such as modal adverbs and modal lexical verbs are placed on the lower level of the continuum. The separation is necessary because of the complexity in classifying all modal devices in relation to one another on the continuum according to their modal force. While it is more evident when focusing on modal verbs only, it becomes much
more complex when distinguishing modal meanings of all word classes simultaneously. The option to split the modal devices into two levels – modal verbs and their combinations with other modal devices vs. adverbs and lexical verbs and their combinations with other modal devices – allows for showing the gradation of the modal meanings. It is important to notice that an attempt is still made in terms of positioning modal devices on the continuum in relation to one another according to their modal force.

<table>
<thead>
<tr>
<th>Deontic</th>
<th>Suggestion</th>
<th>“naked assertions”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imperative mood</td>
<td>should</td>
<td>I think/I believe+ should</td>
</tr>
<tr>
<td>would/could/might</td>
<td>suggest/recommend</td>
<td>may/might+ want to</td>
</tr>
<tr>
<td>I think/I believe+ could/might</td>
<td>would/could/might</td>
<td>may/might+ want to</td>
</tr>
</tbody>
</table>

*Figure 6. Modality Continuum of all ‘Key’ Modal Devices (In ELL and NS Peer Feedback Corpora) Based on the ‘Keyness’ and Concordance Analysis*
As I have mentioned in the very beginning of this analysis account, the second purpose of the corpus analysis is to (dis)confirm NSs’ preference for the use of epistemic modal devices in peer feedback. The confirmation of the findings is necessary in order to provide foundation to answer the first research question regarding the traits of the L2 socio-cultural value system in ELLs’ modality use.

Certain patterns and expectations have been proposed and defined with regard to pragmatic English NS language use connected to deontic and epistemic modality in giving evaluations and providing constructive feedback. It is common among native speakers of English, for instance, to adhere to rhetorical indirectness by means of modal verbs with epistemic meaning (Hinkel, 1997, p. 363); native speakers of English will also generally use epistemic modality as a hedging device, i.e. so to mitigate negative judgment and criticism or to convey tentativeness used as a face-saving strategy, when they express evaluation or give suggestions for correction (Nguyen, 2007; Valor, 2000). Additionally, epistemic modal forms are commonly used by native speakers of English as negative politeness strategies, “as ways of respecting addressees’ need not to be “imposed on” (Coates, 1987, p. 121), not to be seen to be boasting, not to come across as too expert-sounding (Coates, 1987, p. 127).

Overall, the NS modality use in peer feedback according to NSs’ socio-cultural expectations are confirmed. Having had a closer look at the results of my analysis that concern the use of modal devices by NSs in NS Peer Feedback Corpus, I notice that 78 percent of the identified ‘key’ modal devices in peer feedback are used by NSs epistemically. Only 11% of all the ‘key’ modal devices are used deontically. Such results confirm the conclusions that NS prefer

\[15\] “In fact, the notions of hedging and epistemic modality are not mutually exclusive but rather complementary as modal elements with epistemic meanings fulfill the function of hedges in discourse while representing the notional category of epistemic modality” (Boncea, 2014, p. 20).
to use more epistemic devices in peer feedback to express their criticism and suggestions tentatively and less threatening to the writer. However, 11% of the modal devices are either vague in their meanings or reflecting the shades of both epistemic and deontic meanings. 31% of the modal devices are used in combination with other modal devices, either epistemic or deontic.

According to all three ‘keyness’ analysis with a different reference corpus each time, the first five modal devices that are the most statistically significant in their unusual frequency are always epistemic. The consistent unusually frequent epistemic devices across all three ‘keyness’ analysis are the parenthetical clause *I think*, the modal adverb *maybe* and a modal verb *could*. Therefore, peer feedback genre in English is characterized by the unusually frequent use of epistemic devices.

What is also important to say is that NS do use deontic devices such as modal verb *should*, lexical verb *to want to* and *to suggest*. However, such forms are rarely used in isolation. They are very often accompanied by epistemic modal devices, most likely in order to mitigate the threatening effect of the deontic modal devices.

One limitation of this analysis, however, is a relatively small number of deontic modal ‘candidates’ that I compiled based on the available literature and then consulted while selecting the modal devices in the ‘keyword’ lists that the program generated. The fact is that deontic devices are generally underrepresented in literature (Nuyts, Byloo & Diepeveen, 2010, p. 17) and their “transition to linguistic devices has not been smooth” (cited in Bybee & Fleischman, 1995). Therefore, the identified linguistic devices of deontic modality are relatively small in numbers.

Nevertheless, the results of the analysis clearly show the priority of epistemic devices over deontic ones in NS Peer Feedback Corpus, even if taking into consideration only those modal
devices that were relatively consistent in the number of identified deontic and epistemic ‘candidates’ – modal verbs and modal lexical verbs.
CHAPTER V QUANTITATIVE FINDINGS AND DISCUSSION

The methods of analysis are arranged in the same way the data collection methods are divided – according to and to specifically answer the individual research questions. Each data collection task has a corresponding collection of analysis techniques that are predicted to be appropriate for the procession of the data in order to answer the target research questions.

The quantitative analysis of modality use in the written peer feedback by Advanced English Language learners (advanced ELLs), Intermediate ELLs and native speakers (NSs) is used to explore the answer for the first research question with its two sub-questions:

1. What characteristic features of modality use do intermediate and advanced English language learners (ELLs) demonstrate and how do these evolve over time?
   a. What patterns of modality use do advanced as opposed to intermediate groups of ELLs express in giving evaluations and suggestions within the frame of peer feedback?
   b. What traits of the L2 socio-cultural value system can be detected in the use of modality by both groups of ELLs?

The stages of quantitative analysis consist of

1. Development of the dataset based on the proposed modality continuum to be used as units of analysis (Chapter 4) and inter-rater reliability check;
2. Description and visualization of the entire peer feedback dataset;
3. Semi-inferential statistical tests: MANOVA, one way ANOVA, Hotelling $T^2$, VanValen's test, Discriminant Function Analysis (DFA);
4. The discussion of the findings.
Development of the Dataset.

The development of the entire peer feedback dataset is achieved by first creating criteria for coding modal devices used in peer feedback, identifying modal devices and their functions in the peer feedback scripts, coding those devices according to the units of analysis, and verifying inter-rater reliability of the research by conducting inter-rater reliability check.

The units of analysis for the entire peer feedback dataset (34 NSs’, 34 advanced ELLs’ and 34 intermediate ELLs’ peer feedback scripts) are established as a result of theoretical and empirical literature review, my pilot study, and most importantly a preliminary corpus analysis of dissertation data sample (20 ELLs’ and 26 NS peer feedback scripts) and the three corpora of general written English use (Brown corpus, The Open American National Corpus and English Web Treebank) in AntConc software.

My modal categorization\textsuperscript{16} represents a modality continuum with modal devices positioned on it according to the modal force they convey (Figure 1). The process of establishing the continuum is based on the three-step procedures and various sources that are used to create criteria for the differentiation of modal meanings (see Table 9 in Chapter 4). The procedure to identify modal meaning – deontic or epistemic – depends on the type of the modal candidate form. The detailed procedures for the task are described in Chapter 4. To summarize very quickly, I use Dittmar and Terborg’s (1991) guidelines to distinguish between the deontic and epistemic meanings of modal auxiliaries as a conceptual framework: Quirk’s et al. Comprehensive Grammar of the English Language (1985) and Nuyts & van der Auwera’s (Eds.) and The Oxford handbook of modality and mood are primary supplementary resources to specify the criteria. Since the generalization about English modals and criteria to identify their use with

\textsuperscript{16} Modal categorization and units of analysis are used interchangeably in this study.
deontic and epistemic meanings is nearly impossible (Salkie, 2010, p. 202), I also specify relevant semantic criteria for each modal verb separately as well as run concordance corpus analysis in both ELL and NS Peer Feedback Corpus.

In order to ensure inter-rater reliability of the research, two raters’ evaluation of modal meanings in two randomly selected sample of peer feedback scripts is conducted. One of the raters is a native speaker (NS); another one is a non-native speaker (NNS). The agreement between the

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17 ‘Keyness’ analysis is a corpus technique the objective of which is to identify “words that occur unusually frequency in a given text […] by comparison with a reference corpus of some kind” (Scott, 1997, p. 236).
results of my coding and rater’s coding is 68% for a NS and 70 % for a NNS. This relatively
agreement rate is evidence for the difficulty to differentiate between polysemous use of modality
devices and strictly dichotomous classification of their meanings. A native speaking rater was
highly doubtful in the identification and semantic categorization of modal devices; leaving out
some modal devices as unclear to be classified. Such inter-rater reliability results speak in favor
of modality continuum since prior-used dichotomous classification does not fully capture
diversity of modality expressions especially for a native speaker.

Description and Visualization of the Entire Peer Feedback Dataset.

The developed dataset (Table 18) consists of 21 numeric dependent variables – modal devices or
their combinations – and three categorical independent variables – proficiency levels of
participants: native, advanced, and intermediate. Each proficiency group contains equal number
of participants – 34 participants. Therefore, the total number of observations for each dependent
variable is 102.

The developed dataset is first standardized in order to cancel the effect of the peer
feedbacks size and to allow comparisons of modal devices across all participants’ peer feedback
scripts.

Table 18

A One-Raw Sample of the Dataset
The calculation of the mean values of modal device use within one subgroup of participants arranged by proficiency level gives us the idea of the characteristic features of ELLs’ modality use as demonstrated by the existent dataset. In general, an average of 2.2 identified modality devices were found for one hundred tokens of text in the peer review scripts of advanced group. Peer reviews of intermediate group presented an average of 2.4 of identified modality devices. I have calculated an average of 2.6 modality devices for one hundred tokens of text in the peer review scripts of NS group. Table 2 presents detailed information of the mean values for each unit of analysis – modal device.

Table 19

The Mean Values in percentages by ELLs’ Proficiency Groups For The Entire Dataset

<table>
<thead>
<tr>
<th></th>
<th>Imperative</th>
<th>Declar</th>
<th>Deontal</th>
<th>El think/I believe/should need</th>
<th>El said/might have</th>
<th>Evidently actually</th>
<th>Enforced</th>
<th>maybe/may/should</th>
<th>Imperative</th>
<th>should</th>
<th>could</th>
<th>would</th>
<th>might</th>
<th>El think/I believe</th>
<th>Exempts</th>
<th>Enybody</th>
<th>EE</th>
<th>EEE</th>
<th>EED</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced</td>
<td>0.2</td>
<td>0.1</td>
<td>0.3</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.01</td>
<td>0.30</td>
<td>0.2</td>
<td>0.2</td>
<td>0.08</td>
<td>0.25</td>
<td>0.08</td>
<td>8.30e-05</td>
<td>0.3</td>
<td>1.73e-04</td>
<td>2.420e-04</td>
<td>2.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate</td>
<td>0.1</td>
<td>0.3</td>
<td>0.4</td>
<td>0.01</td>
<td>0.00</td>
<td>0.00</td>
<td>0.01</td>
<td>0.10</td>
<td>0.2</td>
<td>0.2</td>
<td>0.08</td>
<td>0.07</td>
<td>0.07</td>
<td>1.387e-04</td>
<td>0.2</td>
<td>5.767e-05</td>
<td>5.767e-05</td>
<td>2.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Native</td>
<td>0.3</td>
<td>0.2</td>
<td>0.1</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td>0.04</td>
<td>0.20</td>
<td>0.1</td>
<td>0.1</td>
<td>0.3</td>
<td>0.2</td>
<td>0.2</td>
<td>7.501e-04</td>
<td>0.3</td>
<td>3.368e-04</td>
<td>1.827e-04</td>
<td>2.6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

While the table 19 presents approximate numbers of mean values of each modal device used in three proficiency groups, the figure 7 below serves to visually represent the use of modal devices from the continuum by each proficiency group. Judging from this dataset, NSs favor the use of modal devices in peer feedback most of all. The green sections in the star plot are obviously
predominant. Intermediate and advanced groups seem to agree on the amount of modality use in peer feedback with intermediate group only slightly exceeding advanced group on average.

What is worth mentioning is the choice of modal devices by groups. Both the table and the figure demonstrate how diverse all groups are in the choice of modal devices to be used in peer feedback scripts. The color shades in Figure 7 cover different sections of the circle. At the first glance, while describing the dataset, it is possible to see that NSs primarily choose epistemic modal devices: adverb *maybe*, lexical verb *to seem*, modal verbs *might/may*, epistemic adverbs *definitely, actually*. The only deontic device that stands out in NSs’ use is imperative mood. The other deontic devices are mostly used in combination with epistemic ones.

Intermediate group, instead, prefers a range of deontic devices: deontic lexical and modal verbs. The use of epistemic modal devices within this group comes up to primarily the use of parenthetical clause *I think/I believe*, modal verbs *can/could* and lexical verb *to notice*. The combination of deontic and epistemic devices is also evident, even though much more scarce than by NSs. They include deontic modal and lexical verbs used with epistemic parentheticals as well as deontic verb or imperative mood used with epistemic adverb. Advanced group instead seems to mainly choose epistemic modal verbs, their combination with other deontic devices as well as imperative mood.

Describing the dataset from the perspective of the continuum, we could notice that intermediate group shifts towards the deontic side of it, NSs occupy multiple positions on the continuum except for the strict alignment with the purely deontic devices. The exception is the use of imperative mood. While the advanced group is aligned with NSs in trying to avoid purely deontic use of modals and lexical verbs, it is very dispersed in terms of its position in the continuum. Describing the dataset is only the first step in analyzing the data, the information
needs to be analyzed by semi-inferential statistical methods that are conducted further on in this study.

Figure 7. Star Plot of Mean Values for Each Unit of Analysis within Each Proficiency Level

Semi-Inferential Statistical Tests

In order to capture the differences in the characteristic use of modality devices among NSs, advanced and intermediate ELLs as well as the traits of the L2 socio-cultural value system detectable in the use of modality by both groups of ELLs, five different statistical analyses are conducted on the dataset:
• **Multivariate analysis of variance** (MANOVA) is used to identify whether there are significant differences in the relative frequencies of modal devices used among NSs, advanced and intermediate ELLs;

• **Hotelling T² test** is a supplementary test to confirm MANOVA’s results;

• **Univariate ANOVA** is used to check whether there are statistically significant differences across the groups based on the use of a single modal device;

• **VanValen’s test** is conducted to test groups of ELLs with different proficiency levels for significant differences in terms of the variation in the modal devices’ use. This test is believed to be more “robust” than others (e.g. Box’s M-test) in comparing variations in multivariate samples (Manly & Alberto, 2016, p. 61);

• **Discriminant Function Analysis (DFA)** is performed to identify discriminant functions that separate groups (NS, intermediate and advanced ELLs) on the basis of their deontic and epistemic modality use.

The Results of MANOVA and Hotelling T² Test

The results of MANOVA indicate that the differences in terms of the relative frequencies of modal devices’ use is statistically significant between at least one pair of groups arranged by proficiency level. Since MANOVA does not specify which pair of groups differs in their modality use significantly, the follow-up Hoteling T² test for each group separately is carried out. The results of Hoteling T² indicate the statistically significant difference between intermediate ELLs and NSs in terms of the relative frequencies of modal devices’ use (Table 20). The difference in the relative frequencies of modal devices’ use between NSs and advanced ELLs is
also barely significant but very much on the edge, which leaves me doubtful to claim it surely significant.

The fact that the differences between other groups – NSs vs. advanced ELLs and advanced vs. intermediated ELLs – are not statistically significant is most likely due to very subtle distinctions in the modality use between the groups. The $T^2$ statistic value capturing the difference between the groups is almost half smaller for NS vs. Advanced ELLs ($T^2 = 53.98$) and for Advanced vs. Intermediate ELLs ($T^2 = 51.41$) as compared to the $T^2$ statistic value for Intermediate vs. NS groups ($T^2=90.28$). Therefore, difference in modality use between NS vs. Advanced ELLs and Advanced vs. Intermediate ELLs is much less noticeable than between Intermediate vs. NS groups.

Table 20

*The Summary of MANOVA and Hotelling $T^2$ Test*

<table>
<thead>
<tr>
<th>Statistics (P = 0.0004441*)</th>
<th>NS</th>
<th>Advanced ELLs</th>
<th>Intermediate ELLs</th>
<th>NS</th>
</tr>
</thead>
<tbody>
<tr>
<td>$T^2 = 53.98$ P = 0.0497</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$T^2 = 51.41$ P = 0.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$T^2 = 90.28$* P = 0.0009</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Pillai’s statistic (P); Hoteling $T^2$ ($T^2$) *p < .05

**The Results of Univariate ANOVA**

In order to search for the subtle differences among the groups, I also run univariate statistics in MANOVA (Table 21). It is possible that “the evidence of a difference provided by the significant variables is swamped by the evidence of no difference provided by the other variables” (Manly, 2017). Therefore, I double-check whether there are such differences between
the groups based on the use of a single modal device.

Table 21.

*The Summary of Univariate ANOVA.*

<table>
<thead>
<tr>
<th>Modal devices</th>
<th>NS</th>
<th>Advanced ELLs</th>
<th>Intermediate ELLs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epistemic modal verb <em>may/might</em></td>
<td></td>
<td>F = 5.92*</td>
<td></td>
</tr>
<tr>
<td>Epistemic lexical verb <em>to seem</em></td>
<td></td>
<td>F = 4.94*</td>
<td></td>
</tr>
<tr>
<td>Epistemic <em>maybe</em></td>
<td></td>
<td>F = 6.27*</td>
<td></td>
</tr>
<tr>
<td>Imperative mood</td>
<td></td>
<td></td>
<td>F = 5.03*</td>
</tr>
<tr>
<td>Deontic lexical verb <em>to need</em></td>
<td></td>
<td>F = 4.19*</td>
<td></td>
</tr>
<tr>
<td>Epistemic modal verb <em>would</em></td>
<td></td>
<td>F = 5.45*</td>
<td></td>
</tr>
<tr>
<td>Epistemic modal verb <em>can</em></td>
<td></td>
<td>F = 4.04*</td>
<td></td>
</tr>
</tbody>
</table>

*p < .05

The visualization of the results in figure 8 demonstrates statistically significant differences in the use of three types of epistemic modal devices by NSs as opposed to advanced ELLs (epistemic modal verbs *may/might*, epistemic adverb *maybe*, epistemic lexical verb *to seem*). Figure 9 demonstrates statistically significant differences in the use of two deontic and one epistemic modal devices by advanced as opposed to intermediate ELLs (imperative mood, deontic lexical verb *to need*, epistemic modal verbs *can* and *would*).

*Figure 8. The Significant Differences in Modality Use by the Advanced ELLs vs. NSs*
Figure 8 clearly shows that the difference between NS and advanced ELLs in their use of modality lies in NSs’ preferences of the use of epistemic modal verbs *may/might*, epistemic lexical verb *to seem* and – to a much lesser extent – epistemic adverb *maybe*.

While the groups of NSs and advanced ELLs show their choices of other modal devices from the continuum to be relatively similar, NSs extend their choices of epistemic devices to the inclusion of three more modal devices as compared to advanced group. The three modal devices represent different parts of speech, which might indicate how NSs feel at ease in their selection of modality expression means.

As for the significant differences between advanced and intermediate groups in their modal device use, advanced ELLs prefer the use of imperative mood and epistemic modal verb *would* much more than intermediate ELLs do. However, intermediate group shows the use of deontic lexical verb *to need* and epistemic modal verb *can* significantly more frequently than advanced ELLs do (Figure 9).

**Figure 9. The Significant Differences in Modality Use by the Advanced vs. Intermediate ELLs**
As mentioned earlier, Intermediate ELLs seem to use minimum of epistemic modal expressions, i.e. parentheticals and adverbs, which could explain why the difference in the use of the epistemic modal verb *would* or lexical modal verb *to need* by intermediate as opposed to advanced ELLs is statistically significant. The epistemic modal verb *can* the use of which is significantly more frequent for intermediate group is positioned more to the center of the modality continuum which shows intermediate group preference to choose epistemic devices that are more leaning towards the deontic side. The dominant use of imperative mood by advanced group as compared to intermediate group captures one’s attention. However, one can notice that NSs, even though not statistically significantly, overpass even advanced group in the use of imperative mood. That is one of the few purely deontic devices NSs use freely without mitigating it with an epistemic form. However, judging from the mean values for all modal devices in table 2, the imperative mood definitely does not occupy the first place in the advanced ELLs’ preferences of modality expression in peer feedback. It competes with at least other three epistemic modal devices for the first place in term of frequency use.

**The Results of Van Valen’s Test**

The results of the test indicate no evidence of statistically significant variation across groups of ELLs and NSs in terms of their modality use. While more variation is distinct for the intermediate group of ELLs (mean value is 0.013) as compared to both advanced (mean value is 0.011) and NS one (mean value is 0.012), such difference in variation is not statistically significant (Table 22).
Table 22

*Comparison of Sample Means of Euclidean Distances*

<table>
<thead>
<tr>
<th>Means of distances</th>
<th>NS</th>
<th>Advanced ELLs</th>
<th>Intermediate ELLs</th>
<th>NS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.012</td>
<td>0.011</td>
<td>0.011</td>
<td>0.013</td>
</tr>
</tbody>
</table>

*p < .05

The Results of DFA

In order to explore the nature of the differences in modality among the groups and to capture the emergent pattern of modality use by each group, DFA is conducted. The **DFA** is successful in distinguishing the language users by different proficiency levels and according to their modality use: **74%** of the between-group relative to within-group variation is accounted for by the first discriminant function (DF1) and **26%** of such variation is accounted for by the second discriminant function (DF2) (Table 23).

Looking at the correlation of original variables with the first discriminant function that accounts for about **74%** of the between-group relative to within-group variation, we notice that the DF1 is primarily driven by the distinction between deontic auxiliary *should*, deontic lexical verbs and epistemic modal *can* on the one side (e.g. having largest negative contribution to the new variables distinguishing between the groups) vs. epistemic adverbs *maybe*, *definitely/actually*, epistemic modal auxiliary *may/might* and epistemic lexical verb *to seem* (e.g. having largest positive contribution to a new variable) on the other side.
Table 23

The Results of DFA

<table>
<thead>
<tr>
<th>Modal devices</th>
<th>Correlation between the original variable DF1</th>
<th>Correlation between the original variable DF2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imperative mood</td>
<td>0.357</td>
<td>0.175</td>
</tr>
<tr>
<td>D to need</td>
<td>-0.133</td>
<td>-0.353</td>
</tr>
<tr>
<td>D should</td>
<td>-0.381</td>
<td>-0.004</td>
</tr>
<tr>
<td>D lexical</td>
<td>-0.224</td>
<td>-0.279</td>
</tr>
<tr>
<td>E I think/I believe + D should/to need</td>
<td>-0.067</td>
<td>-0.202</td>
</tr>
<tr>
<td>D/E could have</td>
<td>0.288</td>
<td>0.130</td>
</tr>
<tr>
<td>E can</td>
<td>-0.275</td>
<td>-0.285</td>
</tr>
<tr>
<td>E would/could/might + D to suggest/recommend</td>
<td>0.164</td>
<td>0.154</td>
</tr>
<tr>
<td>E may/might + D to want</td>
<td>0.203</td>
<td>0.015</td>
</tr>
<tr>
<td>E definitely/actually</td>
<td>0.443</td>
<td>-0.035</td>
</tr>
<tr>
<td>E noticed</td>
<td>0.020</td>
<td>-0.176</td>
</tr>
<tr>
<td>maybe + Imperative/should</td>
<td>-0.034</td>
<td>-0.211</td>
</tr>
<tr>
<td>E would</td>
<td>0.204</td>
<td>0.406</td>
</tr>
<tr>
<td>E could</td>
<td>-0.102</td>
<td>0.139</td>
</tr>
<tr>
<td>E may/might</td>
<td>0.386</td>
<td>-0.242</td>
</tr>
<tr>
<td>E I think/I believe</td>
<td>-0.026</td>
<td>-0.158</td>
</tr>
<tr>
<td>E seems</td>
<td>0.363</td>
<td>-0.190</td>
</tr>
<tr>
<td>E maybe</td>
<td>0.393</td>
<td>-0.288</td>
</tr>
<tr>
<td>2 E modal devices</td>
<td>0.087</td>
<td>0.063</td>
</tr>
<tr>
<td>3 E different modal devices</td>
<td>0.173</td>
<td>0.004</td>
</tr>
<tr>
<td>3 or more E+D modal devices</td>
<td>0.099</td>
<td>0.199</td>
</tr>
<tr>
<td>Proportions of trace</td>
<td>75%</td>
<td>25%</td>
</tr>
</tbody>
</table>

Visualizing the results of the analysis and creating a plot for two discriminant functions (Figure 10), we see the lay out of the data for each particular group identifiable by the assigned color-code. The green dots represent the NS group in the plot; the cloud of black dots identifies advanced NSs; the cluster of red dots signifies intermediate ELLs. There are clearly visible separations among the three colored clouds. The biggest separation that occurs along the DF1 axis is between the clouds of green and red dots, i.e. between modality use of NSs and intermediate ELLs. The advanced group, instead, is in the middle position between NSs and intermediate ELLs.
Figure 10. The Plot of Discriminant Functions (DF) 1 and 2 of DFA

Since NS group is more positioned towards the positive side of the DF1 axis, its preferences for the use of epistemic modal devices is evident. The intermediate group is positioned towards the negative side of the DF1 axis, which indicates its preference for the use of deontic modal devices. The very small negative contribution to the DF1 carries a few epistemic devices such as 
E I think/I believe + D should/ to need, maybe + Imperative/should and epistemic modal auxiliary could, parenthetical I think/believe.
While combinations of modal devices contribute both negatively and positively towards DF1, therefore, providing evidence of their use by both intermediate and native groups of language users, the type of combinations used by each group are considerably different. Intermediate ELLs use epistemic lexical modals to mitigate deontic modals, while NSs use more modal auxiliaries for the same purpose. The only purely deontic device characterizing NSs is the use of imperative mood.

Looking at the correlation of original variables with the second discriminant function that accounts for about 24 % of the between-group relative to within-group variation (Table 4), we notice that the DF2 is primarily driven by the distinction between epistemic modal device would on the one side, and the deontic lexical verb to need on the other side. Examining the DF2 axis in the plot for two discriminant functions (Figure 10), we notice the distinct position of the cloud of black dots (representative of the advanced ELLs modality use) as compared to both red (Intermediate ELLs) and green (NSs) clouds, which lay on the same level along the DF2 axis. Therefore, the DF2 is explanatory of the way advanced modality use is different from NS and Intermediate ELLs’ modality use. The advanced ELLs, then, are keen on using modal auxiliary would more often and deontic verb to need less often than intermediate ELLs. However, advanced ELLs tend to use less epistemic auxiliaries may/might and epistemic adverb maybe than NSs. These results confirm the outcome of the MANOVA test focused on univariate statistics: there are subtle differences in the modality use of advanced ELLs as compared to Intermediate ELLs’ and to NSs’ modality use.

Since DFA has been successful in separating ELLs’ groups based on their modality use, I rely on it as my main guideline for drafting the patterns of modality use on the modality
continuum (Figure 11). The statistically significant distinction between modality use by NSs as opposed to intermediate ELLs is most clearly identified.

**The Discussion of the Results.**

The above presented results of the multiple statistical tests suggest the possibility of identifying potential patterns of modality use in giving evaluations and suggestions within the frame of peer feedback by advanced as opposed to intermediate groups of ELLs. In order to identify such patterns, therefore, to provide an answer for my first sub-question of the main quantitative question, the results of the tests are further discussed within the frame of the developed modality continuum.

Since DFA has been successful in separating ELLs’ groups based on their modality use, I rely on it as my main guideline for drafting the patterns of modality use on the modality continuum (Figure 11). The statistically significant distinction between modality use by NSs as opposed to intermediate ELLs is most clearly identified.

*Figure 11. The Patterns of Modality Use by Three Groups on the Modality Continuum*
When compared to both intermediate and advanced ELLs, NSs stand out in their use of epistemic modal verbs *may/might*, epistemic lexical verb *to seem*, epistemic modal adverbs *maybe, definitely* and *actually*. The deontic form that comes out as a more frequent one for NSs compared to other groups is the use of imperative mood. These findings are in agreement with existing literature on NSs’ preferences of language use in peer feedback context: i.e. tendencies to primarily rely on the use of epistemic forms in giving evaluation and suggestions (e.g. Nguyen, 2007; Valor, 2000). Even though the use of imperative mood is notably prominent, it does not exceed the use of epistemic devices in its frequency (e.g. epistemic modals *may/might* and parentheticals *I think/I believe*). If comprised together, epistemic modal devices most surely prevail over deontic modal devices that are primarily represented by the use of imperative mood by NSs.

Intermediate ELLs, however, surpass both NSs and advanced ELLs in their use of deontic modal devices. The deontic lexical verbs, deontic modal *should* and epistemic modals *can/could* contribute most to the statistically significant distinctive use of modal devices by intermediate ELLs when compared to NSs’ modality use. Such findings also support the prior documented characteristics of general modality use by less proficient ELLs – more explicit expression of deontic forms (e.g. Stephany, 1995; Nguyen, 2007). The results of this study suggest that the less proficient ELLs are, the more their modality use is “agent-oriented” which "predicate conditions on an agent with regard to the completion of an action referred to by the main predicate, e.g. obligation, desire, ability, permission and root possibility" (Bybee and Fleischman, 1995, p. 6). Such a use of modality in peer feedback is different from “speaker-oriented” epistemic modality characterized by markers of directives and expressions of speaker’s stance toward the propositions. When ELLs acquire the pragmatic knowledge of L2 modality use in peer feedback,
they seem to gradually move towards epistemic side of the modality continuum and to use more “speaker-oriented” modality.

It is crucial to notice, however, that even though intermediate ELLs stand out for their reliance on deontic modal devices in peer feedback communication, they do not exclude the use of epistemic ones. For example, the use of parentheticals *I think* and *I believe* is identical for both intermediate and NS groups. Even though in a much less proportion than deontic modal *should*, the use of epistemic modal verb *can/could* contributes prominently into the separation of intermediate group from the other two in terms of modality use. It is possible that intermediate ELLs are less confident in the use of complex modal verbs and prefer the use of more simple modal structures such as lexical verbs and parentheticals, as Nguyen (2007, p. 229) claimed. However, the question of what triggers certain pattern of modality use is covered in the qualitative section of this study.

While the differences of modality use between NSs and intermediate groups are statistically significant and clear, the semi-statistical tests did not distinctly identify the differences in modality use between advanced and intermediate groups. Such complications, though, have been expected since the differences of language use between more advanced levels of language proficiencies have been claimed to be complex to find out, which explains its current state of being under-researched (Bardovi-Harlig, 1999).

One analysis – univariate ANOVA – however, has captured statistically significant differences among the three groups. Advanced ELLs favor the use of epistemic modal verb *would* much more than intermediate ELLs do. In comparison to intermediate ELLs, the deontic modal device advanced ELLs rely on is imperative mood. The use of imperative mood is aligned with NSs’ choices of deontic modal devices. Advanced ELLs do not favor deontic lexical
devices the way intermediate ELLs do. For example, the use of lexical modal verb *to need* is statistically more significant for intermediate ELLs rather than for advanced ELLs. Advanced ELLs also seem to have a distinct choice of epistemic modal devices. Instead of relying on epistemic modal verbs *may/might* the way NSs do, advanced ELLs prefer epistemic modal verb *would*. In terms of epistemic lexical verbs and adverbs, ELLs do not rely heavily on their choices the way NSs do (e.g. an adverb *maybe* and the verb *to seem*). Advanced ELLs instead align much more with NSs in terms of combined use of epistemic and deontic devices, sometimes even exceeding NSs and reaching the number of three devices in one combination. The cluster of modal devices, such as three or more epistemic-deontic modal devices, stand second in rank after the modal verb *would* in terms of contributing prominently and positively to the development of the second discriminant function that singles out the advanced ELLs from the other two groups.

To sum up, the continuum seems to warrant the identification of subtle difference between two groups of ELLs. It confirms the awareness that “modality is a complex linguistic phenomenon [that] cannot be reduced to how modal and semimodal verbs are used by the writer” (Andreu-Besó et al., 2001; Piqué-Angordans et al., 2002). Figure 12 presents my attempt to visually represent modality differences between advanced and intermediate ELLs on a modality continuum. While I describe the difference between two groups as indicated by a complex of applied analytical methods, the differences between only those devices that are marked by an asterisk are statistically significant. The differences between the use of modal devices that are not marked by an asterisk (based on one-way ANOVA test) cannot be generalized and, although on the verge of statistical significance, can only be considered tendencies.
In comparison to advanced ELLs, intermediate ELLs rely more distinctively on the deontic modal devices. Intermediate ELLs’ preferred deontic devices could be characterized as single verbs, i.e. deontic modal verbs or lexical verbs. Even when combination of modal devices is used, the core of the combination is the deontic verb, either lexical or modal. The use of deontic verb is sometimes mitigated by an epistemic adverb or a parenthetical. Such mitigation is very different from the one advanced ELLs use: epistemic modal verbs. In terms of epistemic devices, the use of two epistemic forms singles out intermediate ELLs from advanced ELLs: an epistemic lexical verb to notice in the past and an epistemic modal can. Both forms are positioned close to the middle of the modality continuum and are not considered purely epistemic devices.

Advanced ELLs, as compared to intermediate group, cover the epistemic side of the continuum more. Advanced ELLs seem to occupy the most dispersed position in the continuum applying complex combination of modal devices as well as devices of diverse syntactic units: imperative mood, modal verb in its perfect tense form, combination of lexical and modal verbs, combination of more than two epistemic and deontic devices. When epistemic devices are used to mitigate deontic ones, advanced ELLs use auxiliary modal verbs, while intermediate learners rely on adverbs and parentheticals. Advanced ELLs also use less parentheticals than intermediate
group, but their use does not affect much the separation of the groups. Instead, the fact that advanced ELLs seem to resort much less to adverbs as compared to intermediate ELLs influences the separation of the groups.

Focusing on the second sub-question of the main research question, one can conclude that both groups show some traits of the L2 socio-cultural value system in their use of L2 modality. In order to answer that question, the first thing that is necessary to do is to identify to what extent both groups use epistemic modal devices and to what extent the modality pattern of both groups is aligned to NSs’ preferences.

Advanced group carries much more alignment with NSs than intermediate group in terms of epistemic modality use. ELLs group, just as NSs’ group, prioritizes the use of one purely deontic device and is covering the epistemic side of the continuum noticeably. Advanced group is, therefore, well aware of the NSs’ preferences to use epistemic modal forms in peer feedback context. While not being identical in the expression of epistemic modality with NSs, advanced ELLs choose alternative forms to express epistemic meaning. Advanced ELLs and NSs also align in their choice of deontic modal device – imperative mood. The use of this deontic device is surprising and to my knowledge has not been identified in previous literature as the expected modal device in peer feedback. As discovered in this study, if NSs decide to use deontic device, they primarily rely on imperative mood, which is identified as the strongest deontic device on the modality continuum. Advanced speakers seem to value a combination of modal expressions almost the same way NSs do, which makes the group cover broad area on the modality continuum including the section where the flux of deontic and epistemic meanings is manifested. Advanced ELLs even exceed NSs in the use of three-element combination of epistemic and
deontic devices. However, epistemic modal devices in the use of which advanced ELLs seem to fall noticeably behind, if compared to NSs, is the use of single epistemic modal forms: modal verbs or a modal adverb.

Intermediate ELLs, though, are in favor of single modal forms just the same way NSs are. However, these intermediate ELLs’ forms are more often the expression of deontic modal meaning rather than epistemic one. Such modality use is not precisely expected according to the L2 socio-cultural value system. Some epistemic forms that are used excessively by intermediate ELLs include modal verb *can* and *could*. However, those forms have been positioned closer to the middle section of the continuum claiming that they include both the trace of epistemic and deontic modal meanings. Intermediate ELLs do not demonstrate much awareness of the L2 pragmatic knowledge in their use of modality.

One of the most important factors that the data shows is the possibility to identify the characteristic pattern of modality use for each proficiency group, regardless of diversity of socio-cultural backgrounds presented in each group. Based on the data of the study, statistically significant differences for the variation of modality use among three groups were not evident. One way to interpret the results of ELLs groups not presenting more variation for modality use than NSs is the possibility to treat ELLs from different socio-cultural backgrounds as a group the same way we do with NSs. This information is supportive of the prior-raise claim that ELLs’ patterns of modality might not necessarily or primarily depend on the socio-cultural background they belong to (Zalaltdinova, 2018).

Overall, it is possible to conclude that modality patterns change and evolve over time, having an identifiable pattern at each proficiency level and possibly regardless of socio-cultural background. Intermediate ELLs tend to lean towards the deontic side of the continuum.
Advanced ELLs cover epistemic side of it much more thoroughly than intermediate ELLs. Even though advanced ELLs do not strictly align to NSs’ preferences of modality use in the given context – e.g. the extensive use of a range of single modal devices with primarily epistemic modal meaning – advanced ELLs show more flexibility in the use of modal devices by e.g. incorporating a combination of epistemic modals including deontic modality in their use and producing unique combinations of three-element modal devices slightly more often than even NSs. Advanced group had demonstrated the use of each modal device on a continuum. Some of the devices from the modality continuum were not even used once by intermediate ELLs. The analyses of the current dataset imply that the advanced group is more confident than intermediate group in the use of modal combinations that most of the time carry both epistemic and deontic meanings and very often coming up with creative and complex solution of modality use in peer feedback (e.g. the use of epistemic auxiliary verbs rather than adverbs or parentheticals to mitigate deontic forms). However, they seem to be less confident than NSs’ group in the use of single epistemic forms positioned closer to the extreme epistemic side of the continuum. The reason for it is explored in the qualitative part of the study.

This quantitative analysis zooms in on the modification process of pragmatic competence of modality use in peer feedback at a more advanced level of language proficiency – from intermediate to advanced. The under-researched obscure transition in modality use between two groups is very hard to capture. The developed modality continuum was helpful in identifying the differences, i.e. a more homogenous pattern of modality use by an intermediate group of ELLs that is noticeably clustered along deontic side of a continuum to a more diverse pattern of modality use by advanced ELLs; the choice of uniform modal device by intermediate ELLs to a more complex syntactic patterns by advanced ELLs. More complex factors than just language
proficiency are expected to stand behind such a pattern of modality use in the given context. The factors triggering the use of such patterns are discussed in the following chapter.
CHAPTER VI QUALITATIVE FINDINGS AND DISCUSSION

As it has been mentioned before, the methods of analysis in this dissertation are arranged in the same way the data collection methods are divided – according to and to specifically answer the individual research questions. Therefore, each data collection task for qualitative analysis – one questionnaire and seven focus-group interviews by fourteen advanced ELLs from eight different socio-cultural backgrounds – has a corresponding collection of analysis techniques. These methods of analysis are predicted to be appropriate for the procession of that data in order to answer the target research questions.

The qualitative analysis of questionnaires and focus-group interviews are used to explore the answer for the second main research question with its two sub-questions:

2. How does the use of modality reflect learners’ modified (bilingual) pragmatic competence?
   a. Do advanced ELLs recognize socio-cultural differences behind the use of modals when expressing evaluation and suggestions?
   b. How do advanced students explain any deviation from L2 socio-cultural value system guiding the use of modals in giving evaluations and suggestions?

The stages of qualitative analysis consist of

- The analysis of the questionnaire: quantification, visualization and description of questionnaire data;
- The meaning-condensation analysis of the focus-group interviews: verbatim transcription of the interviews; manual coding guided by the prior-identified codes in the literature and
the emergent themes revealed in post-interview reflections and data analysis; follow-up cycles of meaning-focused analysis in NVIVO software through parental and child’s coding, matrix coding and mind mapping;

- The discussion of qualitative findings and their relation to quantitative findings.

As it has already been discussed in Chapter 3, I use both inductive and deductive approach in the analysis of qualitative data: i.e. both relying on the codes compiled from the available literature (deductive) to further on modify and expand on them with current data-driven coding (inductive). Before assembling a questionnaire and a focus-group interview protocol, I explore literature for the prior discovered explanations of ELLs’ deviations from L2 socio-cultural value system. Therefore, I use this list of already discovered reasons in literature as my guidance for the development of my data collection tools as well as my prior codes for meaning analysis of focus-group interviews.

The prior identified codes based on literature included the use of deontic modality by ELLs: first, to express directness in feedback (Nguyen, 2007); second, to ensure clarity of feedback (Stepahny, 1995, p.114); third, to express care, sincerity and friendliness (Nguyen, 2007, p. 247); forth, to convey persuasion of argumentation (Hyland & Milton, 1997; Kourilová, 1998, p. 112; Leki, 1998, p. 127); fifth, as an act of resistance to ideological control felt through the necessity of modifying their L1 socio-cultural value system (Al-Issa, 2003; Eslami, 2014; Fujiwara, 2004; Ishihara & Tarone, 2009; Siegal, 1996). Figure 13 summarizes and visualizes the information presented above.
Figure 13. Coding Based on Prior Discovered Reasons for ELLs’ Use of Deontic Modality

The Analysis of the Questionnaire Results.

The questionnaire embeds queries triggering dis/confirmation of the previously discovered reasons for ELLs’ characteristic way of modality use. Therefore, the questionnaire provides preliminary information to contribute to the conclusions regarding the answers for the second research question, i.e. ELLs’ declarative knowledge of socio-cultural differences behind the use of modals as well as ELLs’ explanations of their deviation from use of modals in English.

Each response is quantified by being assigned a number to it and is reported in Table 24. The outcome of the positive numbers is calculated and analyzed. The analysis is going to keep track of how the outcome of the questionnaire is aligned with the focus-group interview results.
Table 24.

The Quantified Results of the Questionnaire

<table>
<thead>
<tr>
<th>Participants/Categories</th>
<th>N* of ELLs self-reporting recognition of NS sociocultural load behind the use of modals</th>
<th>N of modality expressions that are illustrated by ELLs as characteristic for NS peer feedback</th>
<th>N of epistemic auxiliary modal verbs that are illustrated by ELLs as characteristic for NS peer feedback</th>
<th>N of students who consider the use of deontic modal could cause face-threatening interference for NSs</th>
<th>N of students with preference for direct expression of feedback</th>
<th>N of students who believe deontic modality enhances clarity of feedback</th>
<th>N of students who consider clarity a concern that is more important than politeness in peer feedback</th>
<th>N of students who use deontic modality to express care</th>
<th>N of students who use deontic modality to make the proposition more convincing</th>
<th>N of students who expressed the desire to improve in providing peer feedback in English</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.5</td>
<td>0</td>
<td>0</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>P2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0.5</td>
<td>0</td>
<td>0</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>P3</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>0.5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>P4</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>1.0</td>
<td>0.5</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>P5</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>0.5</td>
<td>1</td>
<td>1.0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>P6</td>
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<td>1</td>
<td>0.5</td>
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<td>1.0</td>
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<td>1</td>
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<td>1</td>
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<tr>
<td>P7</td>
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<td>1</td>
<td>1</td>
<td>1.0</td>
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<td>0</td>
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<tr>
<td>P8</td>
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<td>1</td>
<td>1.0</td>
<td>0.5</td>
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<td>0</td>
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<td>1</td>
</tr>
<tr>
<td>P9</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
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<td>0.5</td>
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<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>P10</td>
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<td>1</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0.5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>P11</td>
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<td>1</td>
<td>4</td>
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<td>0.5</td>
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<td>0</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>P13</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>P14</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0.5</td>
<td>1</td>
<td>0.5</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total N of ELLs responding positively</td>
<td>12</td>
<td>11</td>
<td>11</td>
<td>12</td>
<td>8</td>
<td>5.5</td>
<td>10.5</td>
<td>3</td>
<td>5</td>
<td>11</td>
</tr>
</tbody>
</table>

*N - Number

The results of the questionnaire reflect ELLs’ knowledge of the socio-cultural load entailed in the use of modals by NSs in peer feedback. Furthermore, it brings forth some contradictions between what ELLs emphasize, as expected set of modal devices in L2 peer feedback communication, and modal devices ELLs emphasize in their own modality pattern, as discovered in quantitative data.

According to the results of the questionnaire, twelve out of fourteen students self-reported their awareness of the socio-cultural load entailed in the use of modals by NSs in peer
feedback – the need to express evaluations and suggestions in a very ‘face-saving’ and tentative way. Eleven ELLs have had no problems of immediately citing at least one modality expression characteristic of NSs’ use. Five ELLs even gave more than one example. The cited modal devices were epistemic auxiliary verbs, epistemic adverbs, epistemic parentheticals, if-clauses, and epistemic questions. Four students also mentioned a combination of devices with both deontic and epistemic meanings. The same amount of students indicated their knowledge of epistemic modal verbs conventionally used in peer feedback by NSs. Five students named more than one epistemic auxiliary modal verb. The students’ capacity to immediately demonstrate their knowledge of epistemic modal devices or a combination of epistemic and deontic modal devices largely confirms their self-reported recognition of NS socio-cultural load behind the use of modals.

The results of the quantitative findings introduced in the previous chapter also speak in favor of the conclusion that ELLs’ are aware of NS socio-cultural load behind the use of modals – advanced ELLs are much more aligned with NSs in their preferences for modality use than intermediate group. The use of epistemic modal verbs has been most cited by ELLs as expected modality expression in peer feedback and has been employed quite often as a single device or in combination with other deontic devices in ELLs’ own peer feedback. However, there are some other epistemic modal devices that, although emphasized by ELLs as characteristically used in NS feedback, are not that often used by themselves in their own peer feedback. For instance, epistemic adverbs and parentheticals, while often mentioned by participants in the questionnaire, are not as prominent in advanced ELLs’ written feedback as in NS peer feedback. Instead, the combination of deontic and epistemic devices is quite popular among advanced ELLs. Only four out of fourteen students, however, claim a combination of modal devices to be indicative of NS
modality use in peer feedback. This information confirms that ELLs are aware of their own modality use not being totally aligned with NS expectations. While advanced ELLs recognize the necessity of epistemic modality use in peer feedback as expected language use according to language-specific socio-cultural values, there are some differences in the emphasis of the set of modal devices advanced ELLs report as expected in peer feedback communication and their actual choice of epistemic devices. Further on I make an attempt to explore what factors guide advanced ELLs in their choices.

*Figure 14. ELLs’ Responses Concerning Recognition of NS Socio-cultural Load Guiding the Use of Modals in Peer Feedback*
Figure 14 visualizes responses of all participants for the first three questions of the questionnaire. The blue line at the first level of the graph from the bottom indicates the positive answer of ELLs in relation to their recognition of L2 socio-cultural knowledge. The red and green lines reflect the counts of epistemic modal devices (red) or epistemic auxiliary modals (green) that ELLs illustrated as characteristic for NS peer feedback. The graph allows visualizing how twelve students, who indicated their awareness of socio-cultural expectations of modality use in peer feedback, confirm their knowledge of such awareness by demonstrating it with the examples of either epistemic auxiliary verbs or of any other epistemic or epistemic-deontic expression. As evident in the figure, only one student – P1 – does not show any such knowledge since all the lines are at the base – zero level. Only three students showed small limitation in their pragmatic knowledge. P7 cites the use of only one epistemic modal, even though previously reporting own awareness of NS preferences. P12, even though self-reporting awareness of NS preferences, does not seem to be at ease to bring in an example of epistemic modal verb. The same is true for P8. While P8 brings in the examples of epistemic modality later on in the follow-up questions, the participant once mentions that the politest way to express a suggestion is through the use of modal verb should. Nevertheless, responding to the question with regard to deontic modality, only one student did not recognize the fact that the use of deontic modal verbs could cause face-threatening interference for NSs.

With regard to information related to socio-cultural load entailed in the use of modality, eight out of fourteen ELLs indicated that they prefer expressing their feedback in a direct rather than in an indirect manner (Figure 15). These responses were particularly interesting to address in the focus-group interviews since the students split almost in half in term of their preferences
for directness vs. indirectness and demonstrate the use of rhetorical indirectness – even though often less confidently than NSs do – in the identified modality pattern reported in the quantitative chapter of the work. The explanation for self-reported preference of direct feedback by half of the participants while not distinctly demonstrating such preference in their peer feedbacks is to be searched for in the follow-up interview.

Only five students believed that deontic modality enhances clarity of feedback. However, 11 students prioritize clarity over politeness. This information is discrepant with their self-reported emphasis on the expression of politeness being one of the most important values for peer feedback communication as well as ELLs’ modality pattern making use of a range of epistemic modal devices in their peer feedback. The question of how they understand and convey clarity is important to understand and address in focus-group interviews. The predictions of previous studies for clarity to be connected to the expression of deontic modality for ELLs is not confirmed in the contextual frame of peer feedback, since majority of the ELLs do not associate clarity with the expression of deontic modality in peer feedback.

Only three students mentioned that one expresses care by using deontic modality. Five students claimed that they use deontic modality to make a proposition more convincing. They demonstrated their choice with the use of deontic modals in their examples. All students, with the exception of one, expressed the desire to learn more about the way of providing peer feedback in English. Some students were clearly concerned about the use of language in their peer feedback communication.

e.g. I can’t predict the effect of my words into someone’s else world, especially in a foreign language.
e.g. I go to google to find a similar situation and see how people react to the language or how they presented their ideas.

Figure 15. ELLs’ Responses Concerning Explanation of any Deviation from L2 Socio-Cultural Value System Guiding the Use of Modals in Giving Evaluations and Suggestions

As evident in figure 15 the previously discovered reasons for ELLs’ characteristic way of modality use have been weakly confirmed, particularly in case of deontic modality expressing care or making the message more convincing. However, since the results include such partial confirmation, it is worth paying attention to it more in focus-group interviews.
The Meaning-Condensation Analysis of the Focus-Group Interviews

The focus group interviews largely expand on the information obtained in the questionnaire to explore the answer for the second qualitative research question concerning ELLs’ recognition of socio-cultural differences behind the use of modals as well as explanations for the deviation from L2 socio-cultural value system guiding the use of modals in giving evaluations and suggestions. I will first discuss the results related to the first sub-question and finish with the discussion of the second sub-question.

ELLs’ Recognition of Socio-cultural Differences behind the Use of Modals when Expressing Evaluation and Suggestions

As it has been explained in detail in Chapter 3 and briefly recapped here, the qualitative analysis of focus-group interview data can be primarily characterized as meaning-condensation analysis\textsuperscript{18}. Several cycles of meaning-focused analysis are both concept-driven (Figure 13) and data-driven. These series of analysis included initial manual meaning condensation coding in Excel followed by parental and child’s coding, matrix coding and coding framework with mind mapping conducted in the qualitative analytical software NVivo. Finally, the integration of coded meaningful units in terms of specific qualitative research questions are conducted and the prominent coded categories are incorporated in a descriptive statement. The reflections and memos have accompanied the analysis process. Restructured dialogues, quotes and visualization techniques are used for reporting the qualitative findings.

\textsuperscript{18} "Meaning condensation normally builds on coding and entails an abridgement of the meanings expressed by the interviewees into shorter formulations (Brinkman & Kvale, 2014, p. 232)."
Seven focus-group interviews come up to the total of 3 hours and 40 minutes of audio material and 117 pages of transcribed running text. The coded data is representative of all eight socio-cultural backgrounds of ELLs participating in the interviews (Figure 16).

*Figure 16. The Distribution of the Coded References According to the Socio-cultural Backgrounds of Participants*

The students from all socio-cultural backgrounds notice socio-cultural differences behind the use of modals when expressing evaluation and suggestions. First of all, ELLs point out that the
practice of peer feedback, particularly in the written format, is not a common practice in their countries: e.g. South Arabia, Iraq, Bangladesh, China or Dominican Republic. When oriented to the topic of providing evaluation and suggestions in general, ELLs did not seem to have difficulties to express pragmatic knowledge of modality use in their countries. The responses extracted from the interviews illustrate their L1 pragmatic knowledge of modality use:

P2 (Iraqi): *in the Arabic language, we have the modal verbs, so we use them ... when we advice somebody but could would, might, no, we don’t use should or must.*

P6 (Saudi): *in Arabic we do not want to hurt the feelings of ... the author so we just criticize the whole idea of the paper. We do not point to the specific point or the specific error.*

P5 (Brazilian): *Brazilians are, we are full of shit. We are always like Oh, wait a second, oh bla bla bla. So... we don’t go straight to the point*

P1 (Brazilian): *you say or use more indirect modal verbs; you are trying to tell the person that you respect their individuality. And yeah, that is something that doesn’t always happen when Brazilians provide advice.*

P14 (Dominican): *we like in my country we don’t use peer review. I mean my mum always tells me you can say anything you want to say if you say it in a proper way.*

P9 (Chinese): *we are collective culture background, exam centered education background so we always think that there is a correct answer, we are not*
**allowed** ... to say: this is wrong, I am right. for the peer review, we are kind of in the same **hierarchy**, so we won’t say the bad words.

P3 (Chinese): *in our countries all these who advice ... add towards* **I think** before any suggestions of any comments ... **I think you should** do something

P12 (Bengali): *people are willing to give feedback on (set) criteria, then it is ok. They cannot balance... if anybody starts with no, its is not it was wrong you should not*

P8 (Turkish): *yeah and it is changing...if give feedback to our peer it’s like softy.*

The majority of the learners implicitly or explicitly reflected on and recognized the differences between the socio-cultural loads of L1 and L2 behind the use of modality. Figure 17 introduces socio-cultural differences ELLs discussed in the focus-group interviews. The upper part of the figure illustrates L1 pragmatic knowledge of modality use in giving evaluations and suggestions that ELLs demonstrated. The bottom part of the chart documents elements of L2 socio-cultural load behind modality use in peer feedback that ELLs recognized as characteristic of NS feedback. While these might not be the socio-cultural norms and differences that are formally conventionalized in various cultures, the learners’ acknowledgement of the existence of socio-cultural differences behind the language use is of utmost importance.
The second set of interview quotes is centered on ELLs’ understanding of L2 socio-cultural value system behind the use of modals in giving evaluations and suggestions.

**P2** (Iraqi): *for an American student I am sure if I will write I have or I should, they will consider this as a rude or something like this.*

**P6** (Saudi): *it was really hard to get in the mood and to give them my opinion without being an invasive ... offensive*

**P1** (Brazilian): *I think it is little bit better here ...you use more indirect modal verbs; you are trying to tell the person that you respect their individuality.*
P14 (Dominican): respectful ... why do you think about this this this and why did you chose that?

P4 (German): I mean it is also politeness for me... it is also a possibility. So it doesn't have to be wrong.

P9 (Chinese): some of them they will just directly not correct but express their thinking... Have you ever think about what if ...bla bla bla ...

P8 (Turkish): No, they write exactly what they want to say but in softened way ... like if you change this word it could be better for your paper to make it more understandable for your evidence.

P14 (Bengali): they are really nice ... they are like focus on the good things it is very contracted like one idea one paragraph there is something they do I saw.

As illustrated above, majority of the students underlined the necessity to be “soft”, polite and respectful in order to sound native-like. However, not all ELLs prioritized modality playing a crucial role in making a proposition respectful. For example, while students recognize that the difference between socio-cultural loads of different languages exists, not all ELLs always point to the right sample of NS peer feedback. After transcribing and after several cycles of coding, I have realized that it happened due to the fact that modality was not a crucial criterion to differentiate between the samples. This finding provides the reasons of advanced group of ELLs using less modality overall than even intermediate group as reported in Chapter V. When I asked how ELLs decided which sample to pick, some of their responses did not include the discussion of modality use by NSs at all, but rather the content of the proposition, the presence of supportive argumentation, and the use of formulaic or colloquial language:
P2 (Iraqi): *They seldom pick up the Grammar errors or syntax errors for us.*

P6 (Saudi): *have to be specific.*

P14 (Dominican): *American thing is to write a lot about outline*

P1 (Brazilian): *wrap up ... that too*

In addition, directness or indirectness of NS peer feedback has always caused a discussion. Some students did not agree that NS peer feedback is indirect.

P6 (Saudi): *The native speaker, they used the direct language, they said there is a mistake in this section.*

P13 (Chinese): *it is actually interesting to notice in this country admire direct right?*

P14 (Dominican): *yeah that is true*

This interesting pattern of NS peer feedback classification by ELLs is going to be addressed in detail in the discussion of explanation for ELLs’ deviation from L2 socio-cultural value system guiding the use of modals in giving evaluations and suggestions.

To add to the validity of my conclusions, I also run a word frequency test on the transcribed text of the interviews in *Nvivo*. As identified in semi-statistical quantitative analysis of peer review text in Chapter 5, the biggest separation between advanced ELLs and NS group is caused by the preferred use of single modal devices by NSs. It would be important to see whether ELLs in fact know and use those devices in other contexts such as oral discussion or whether they cite them as the most prominent examples in the discussion of modality use by
NSs. Even though the contextual frame for modality use changes from written peer feedback into oral discussion, the analysis of modal device frequency should generate a rough picture of whether the students have an idea of epistemic modal candidates that could be employed in peer feedback. The results of frequency and word tree query on interviewees’ responses in NVivo show that the examples of employed epistemic modality candidate devices from the most to least frequent include: the parenthetical clause *I think/I believe* (8.63 %), the modal verb *would* (5.27%), the adverb *maybe* (3.25 %), modal verbs *can/could* (2.73/2.28%), adverb *actually* (2.04%) and to a lesser extent modals *may/might* (0.99) and lexical modal verb *seem* (0.15%) and *notice* (0.19%). Such use of epistemic modality devices aligns with NS’ spoken discourse patterns. As we know based on Karkkainen’s findings (1992, p. 198), common epistemic linguistic categories routinely expressed in spoken interaction include modal adverbs, modal lexical verbs, parenthetical clauses and, to a lesser extent, modal adjectives and nouns. It is possible to conclude that ELLs may be aware of NS expectation of modality use.

Table 25

*Frequency Query on Advanced ELLs’ Responses*

<table>
<thead>
<tr>
<th></th>
<th>Edeffinitely actually</th>
<th>Enoticed</th>
<th>Ewould</th>
<th>Ecan</th>
<th>Ecould</th>
<th>Emay/might</th>
<th>EI think/I believe</th>
<th>Eseem</th>
<th>Emaybe</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frequency</strong></td>
<td>2.04</td>
<td>0.19</td>
<td>5.27</td>
<td>2.73</td>
<td>2.28</td>
<td>0.99</td>
<td>8.63</td>
<td>0.15</td>
<td>3.25</td>
</tr>
</tbody>
</table>
However, the modal auxiliary verbs *may/might* as well as the lexical verb *to seem* are again less frequent than other epistemic candidate forms. The same tendency is apparent in peer feedback text by ELLs. They lack behind NSs in the use of single-word modal devices. Word cloud formed on the results of the word frequency in interviewees’ responses (Figure 18) allows visualizing it quite clearly. The modals to *think, would, can/could* and adverb *maybe* is immediately visible in the cloud, while *may/might* or verb to *seem* are hard to find.

*Figure 18. Frequency Word Cloud on Advanced ELLs-Interviewees’ Responses*
Overall, it is important to note that, based on this frequency analysis of primarily single-word epistemic devices, ELLs demonstrate the knowledge of a wide range of their use in the context of discussion, which implies that they have a declarative knowledge of linguistic means that express epistemic modality. ELLs in fact know how and use epistemic modals in a different context such as oral discussion or cite those modals as the most prominent examples in the discussion of modality use by NSs. However, the emphasis on epistemic devices demonstrated by ELLs is different from NSs’ emphasis. This difference remains consistent across both peer feedback and discussion context. It provides strong evidence that NSs tend to express their own distinct preferences and features of modality use, even though they are aware of NSs’ expectations and recommendation for modality use.

**Explanations for the Deviation from L2 Socio-Cultural Value System Guiding the Use of Modals in Giving Evaluations and Suggestions**

The second research question explores the way students explain their deviation, if any, from L2 socio-cultural value system behind the use of modals in giving evaluations and suggestions. In order to answer that question, all focus group interviews were coded with prior identified codes in *NVivo*. As a result of the coding and analysis, not all the prior identified codes (Figure 13) were present and not all the themes emerging in the interview were covered by the codes (Figure 19).
For example, the theme of using deontic modality to express care was pointed out only once. It aligns with questionnaire data where only two ELLs mentioned care as explanation of deviation from the expected L2 norms.

P1 (Brazilian): *It depends on how much they care, I mean.*

Aligned with the questionnaire data, the purpose of being convincing with the help of deontic modality has also not been much supported by interviewees:
P4 (German): *I think it is not a purpose to be convincing.*

P13 (Chinese): *persuasive? Why do you want to be persuasive?*

P2017054: *Indirect is convincing. I guess. It’s, as she said, there is more explanation and advises.*

When the theme of clarity is addressed in the focus-group interviews, ELLs split in two groups. One group believes that clarity is expressed through direct feedback, while another group thinks that clarity is conveyed through indirect feedback. Due to such a tight connection of clarity code to (in)directness code, the concept of clarity is discussed within the concept of (in)directness.

Therefore, three main themes have been singled out as the ones contributing the most to the explanation of advanced ELLs distinct use of modality in peer feedback: (in)directness, habitués, and resistance. I will report the results starting from the theme of (in)directness through resistance and conclude with an emergent theme of unreflective and automatized modality use.

**Non-neutralized concept of (in)directness.** The discussion of modality use is tightly related to the concept of (in)directness since the conversation about peer feedback in interviews inevitably leads to the notion of (in)directness. However, the understanding of this concept by ELLs varies greatly. None of the ELLs’ interview groups demonstrated full agreement among the participants in terms of (in)directness. One of ELLs, P11 (Chinese), even explicitly concluded after a focus-group interview that ELLs need a clear definition of what (in)directness is. Some participants understood the concept of (in)directness in the same way it is intended and implied by NS in the context of peer feedback – as ‘rhetorical’ indirectness. ‘Rhetorical’ indirectness implies the use of epistemic modality and has the goal of “maintaining harmony and
avoiding impositions on both the writer and the reader” (Hinkel, 1997, p. 363). ELLs’ interview responses coded and transformed in the dialogue below demonstrate the understanding of ‘rhetorical’ indirectness by ELLs.

Researcher: Could you please tell me what makes the feedback indirect?

P2 (Iraqi): I think the modal verb itself.

P3 (Chinese): I think more question will be better on making it direct,

P9 (German): I mean it is also politeness for me, that indirect feedback.

P8 (Turkish): Direct thought in softening words is what we call indirect

Several alternative to ‘rhetorical’ indirectness understandings of indirectness concept emerged. As demonstrated by the quotes below, one of the most prominent is the lack of specificity and/or supportive evidence for the offered suggestion.

Researcher: Could you please tell me what makes the feedback indirect?

P7 (Chinese): I think I make this eh decision according to the information from this comment

P1 (Brazilian): I don’t see that much in the modal verb, but like it is posing and identifying.

P6 (Saudi): abrupt ... Where is the parts I have to fix?... if I say something I have to mention why I did it

P2 (Iraqi): instead of reading his opinion or what he wants, then you get the point.
S5 (Brazilian): *We are not direct, we don’t go straight to the point. We are always like Oh, wait a second, oh bla bla bla. So…*

P12 (Bengali): *if somebody provides me with feedback in the indirect way I think longer it remains in my head… in some paragraphs you missed thesis statements then it looks like where where is it really, if I am really conscious about that.*

As showed above, many ELLs view indirectness as a lack of specific ‘point’, directions or argumentation in the suggestions. There are also a few students – e.g. P6 (Saudi), P7 (Chinese), P8 (Turkish) – who clearly fluctuate between the understanding of indirectness concept as being ‘rhetorical’ and as being content non-specific. One student who emphasized specificity of suggestion as the criteria for the identification of (in)directness criticized ‘rhetorical’ indirectness with it being self-centered practice:

P1 (Brazilian): *he seems to be talking too much about what he likes and what he expects instead of what the other person said.*

Sometimes ‘rhetorical’ indirectness is also perceived as the lack of expertise:

P11 (Chinese): *If someone is very good at maybe uhm programming, like she or he will be very confident and she said: you should do this, you should do that, you cannot do that.*

P14 (Dominican): *when it is like non-negotiable for example when something has to say for instead of in, you just know (e.g.) like change that into in*
What is interesting is that students who comprehend indirectness as non-specificity of suggestion do not necessarily criticize ‘rhetorical’ indirectness or reject it. On the contrary, they consider it more accessible, clear and non-threatening.

P7 (Chinese): *We can use some softy to make our suggestion more accessible…*

you provide more explanation so more details so that we understand it

P8 (Turkish): *But if you want it softened, you should add some additional words to make it softer so it becomes indirectly automatically … if you want to add some words or if you point out in that way it becomes more clear like that.*

P13 (Chinese): *It is the one make me more comfortable and though there are many questions but every question is focus on the paper*

Clarity, therefore, is not always or directly associated with deontic ‘rhetorical’ directness, as the prior available literature has instead suggested. Very often rhetorically indirect means more accessible, clearer and less threatening. While there are ELLs who perceive clarity connected to rhetorical directness and the use of deontic modality, they seem to be aware that such modality use could be an unexpected practice for NSs.

P1 (Brazilian): *I usually try to construct very clear sentences, but very clear sentences can also be interpreted as impolite.*
According to Kecskes’s dual language model (2010), the conceptual system of language speaker regulates language production. With emergent information through L2 channel and gradual conceptual socialization, qualitative change becomes possible and conceptual base of L1 is modified into CUCB. It is important to remember, however, that the conceptual base is a chain of concepts that are intertwined with one another. While students are aware that indirectness is valued in the L2 socio-cultural system as the expression of politeness; the successive and attached concept of (in)directness itself is not neutralized yet into a synergic one. Learners are not aware of the L2 understanding of (in)directness in the context of peer feedback – ‘rhetorical’ (in)directness. We could call it a domino effect\(^{19}\) (Figure 20). The way a row of dominos is falling down once the first one is knocked over, the same way learners’ non-neutralized concept of (in)directness – perception of (in)directness as a content specificity instead of a ‘rhetorical’ one – undermines expected modality use in peer feedback, even if ELLs would like to use modality according to the L2 conventions.

As quantitative findings report, ELLs’ emphasize a combination of deontic and epistemic devices on the one hand and de-emphasize single epistemic modal devices on the other hand in their modality pattern. Perhaps such a pattern is a reflection of their partially synergized concept of (in)directness. The reconceptualization of an existing concept and appearance of the synergic concept – modality – can be undermined by its relationship with the other one – (in)directness – that is not yet neutralized.

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\(^{19}\) Domino theory was first articulated by President Dwight D. Eisenhower in April 7, 1954 (Sills, 1968). In its essence, the theory warns against the possibility of the change in one country leading to the causal, consequential transformation of entire regions, identical to a set up in a row of dominos falling down once the first one is knocked over. Originally, the domino theory was discussed with an application to the growing momentum of communism possible to spread to southeastern Asia, Western Europe, and Latin America (Sills, 1968, p. 434).
Figure 20. Domino Effect Depicting Dependence of Modality Concept on (In) Directness Concept in the English Peer Feedback

Resistance. Second, resistance has been a persistent theme in learners’ explanation of L2 modality production in the context of peer feedback. Initially, resistance is triggered by negative emotions participants feel at the perception of NS as an authority: NS are the ones setting rules and the standards for communicative behavior, while most of the time not even following them themselves. Participants feel deprived of that flexibility and perceive the pragmatic norms as a requirement demanding ELLs’ assimilation, constrained linguistic behavior and higher level of
tolerance. Such conditions are almost perceived as unjust.

P2 (Iraqi): *I feel sometimes if I strict myself* with these phrases ... the American students, some of them do so, the others no, they *don’t care.*

P11 (Chinese): *I ehm I think they I think they would feel much more free to say something... [when] I need to give feedback to native English speaker and I feel kind of stressed out.*

P1 (Brazilian): *The way they (NS) write is usually more similar to the spoken language... wrap up ... Like I can’t write something like that. I think that as international students it is natural to be constrained* into you know, eh eh, *you constrain yourself* to the terms of the ways you write.

P2 (Iraqi): *one of them said ... don’t do any mistakes or errors in English language and she did, but I couldn’t say. this is your Grammar here is you have a mistake. I...I ...*

P3 (Chinese): *it is always torturing me to give them suggestions I am here to get the suggestions from them it should be.*

P1 (Brazilian): *Sometimes I am afraid* that since the United states has passive aggressive culture, *I am sometimes afraid,* that it (my feedback) would be understand like some passive aggressive thing.

P5 (Brazilian): *So my preferences are not even at stake ... we need to accommodate ... this crowd here has a higher level of international tolerance.*
Well in the end we are all international, in a way we understand what the other person is trying to say.

It seems like learners notice discrepancies in the way NS pragmatic norms are treated by ELLs and by NS: while NS could be sometimes ‘careless’ about these norms, ELLs’ linguistic behavior is strictly constrained by the NS standard and authority. I resort to “Good English” (Urciuoli, 1998) as a powerful concept to unpack and elaborate on the discussion of the learners’ perception of L2 pragmatic norms that may partially be responsible for the resistance to adopt those norms.

‘Good English’ is a powerful social construct. It refers to “language forms in ways that highlight their nature as cultural capital, as skills and knowledge that can enhance their social positions” (Urciuoli, 1998, p. 127). Participants’ characterization of speech correctness in Urciuoli’s study (1998, p. 115) was “shaped by the polarity of class and race”. In other words, incorrect forms are only noticed when they are used by the speaker who is already marked in some way, that is belonging to certain class and race (Urciuoli, 1998, p. 115). In analogy to “Good English”, ELLs feel that their use of L2 socio-cultural norms in feedback implying correctness and incorrectness is constantly being measured against NS standard modality use, which is not always the case with NSs. NS can have more flexibility in their language use. ELLs in this study express their feelings as strict, constrained, afraid, deprived of preferences.

Speakers associate “Good English” with imposition from authoritative standards, obligation but at the same time with the hope of escaping racial/class stereotyping. The same way ELLs feel that following the imposition of NS authority to use L2 pragmatic norms of modality in peer feedback is the “only way to be effective”. It seems that the way the concept of
“Good English” is rooted in class/racial stereotyping, the same way pragmatic competence and its correctness is felt by speakers as “cultural imposition […] by NSs’s cultural socially hegemonic strata” (Thomas, 1983). However, the constant control, imposition and authority from NSs who are not behaving ‘appropriately’ could be very threatening and negative for ELLs, which in its turn might cause resistance to follow NS socio-cultural pragmatic norms.

Another way the resistance theme becomes transparent in the interview data was through ELLs’ constant assessment of L2 pragmatic norms:

P1 (Brazilian): what many Americans do… being aggressive, then pretend to be polite … The American way is more like: “Well, I would really appreciate it if you get this shit out of my eyes” … I could [express feedback that way], but I simply don’t like it that way, you know, it is fake.

Ps (all): Yeh, they pretend.

P5 (Brazilian): Orally they play up intonation a lot. “Would you mind just disappearing and never come back?” This is .. It is kind of goes like that.

P1 (Brazilian): …turn you into spend 10 minutes to say something you could say in two.

P13 (Chinese) it is quite a waste of time to spend some time for the compliment so I usually go directly to the point I want to make.

P4 (Chinese): It is very weird. when I read your feedback I just skip the beginning and begin to …

Learners tend to judge L2 pragmalinguistic behavior as “passive-aggressive”, “pretentious”,

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“aggressive”, and “weird”. While there is an acknowledgement that it is part of the culture, there is a growing feeling of resistance of some students to adopt the pragmatic norms and submit to the need of “sounding pretentious”. Based on the quantitative findings we know that advanced ELLs use modality devices differently from their self-reported expectation of NS modality use. Such a process could be explained with the theory of schismogenesis. Schismogenesis is defined by Bateson as a “process of differentiation in the norms of individual behavior resulting from cumulative interactions between individuals” (1936, p. 175), and as a dynamic process, i.e. “when certain restraining factors are removed the differentiation or split between the groups increases progressively towards either breakdown or a new equilibrium” (Bateson, 1972, p. 68).

L2 pragmatic knowledge could be regarded as a restraining factor, since pragmatic rules reflect and are “based on norms, behavioral patterns, conventions and standards of [L2] community” (Kecskes, 2010, p. 3) and are not easily accessible. The discovery of pragmatic norms uncovers cultural disposition of certain behavior, values or beliefs commonly held by the group. Once L2 pragmatic norms are unpacked and explicit, their restraining function is released, and target language use becomes some kind of “rivalry” of values that leads to schismogenesis. Reciprocity of differences in pragmatic rules both by NSs and ELLs, rather than one-sided submission of L2 values by ELLs could release the tension and lower schismogenesis.

**Habitus.** While most of the factors in relation to ELLs’ modality use are discussed in relation to conscious reflection and students’ awareness, there is also a possibility of the ELLs’ lack of control over employed modality devices. Some of the socio-cultural norms are so deeply embedded in their value system that they are generated automatically regardless of the language spoken.
P2 (Iraqi): the first one (sample with deontic modality) is unacceptable in my country... Even if they told me if you are confident you just you notice that this is the mistake and that students should change it or should correct it, I can’t use should because... what I want to say and I won’t say.

P13 (Chinese): It is like I didn’t do it on purpose. I just did it. English is the language that is less related to my emotion so it is like I could stand more

Language socialization that goes hand in hand with L1 learning could be responsible for creating a stronger imprint of socio-cultural load, which affects modality use in L2. Learners’ conscious investment and willingness are constantly needed to feed conceptual socialization (Kecskes, 2010), which is very likely to be a longer and a more tedious process in comparison to language socialization. L1 language socialization, very often being an unconscious automatic process, fastens the concepts stronger, making it part of the habitus. In other words, some kind of habitus (Bourdieu, 1969), unreflective language use guided by the concepts formed through language socialization, overrides even conscious and reflective thinking and it is very hard to control.

The Discussion of Qualitative Findings.

The qualitative data have been complementing one another in exploring the answer to the qualitative research question: ELLs recognition of socio-cultural differences behind the use of modals and ELLs’ explanation of any deviation from L2 socio-cultural value system guiding the use of modals in expressing evaluation and suggestions. The results of both questionnaire and focus-group interviews indicate awareness of socio-cultural differences behind the use of modals
in peer feedback. All students except one recognize the fact that the use of deontic modal verbs could cause face-threatening interference for NSs. The results of the focus group interviews also largely confirm that ELLs recognize the differences even if they sometimes cannot articulate where they lie precisely. They underline politeness, respect toward individuality, etiquette, and even specificity as concepts guiding NS peer feedback communication. The ELLs’ awareness of pragmatic knowledge, although often hidden by their deviant-from-the-expected language use, has been noticed in the previous research (Al-Issa, 2003; Eslami, 2014; Fujiwara, 2004; Ishihara and Tarone, 2009; Siegal, 1996).

ELLs also seem to be knowledgeable about the use of epistemic modality to show politeness in peer feedback. Such results are aligned with quantitative findings in terms of ELLs’ use of diverse epistemic modals in peer feedback context, therefore, confirming their knowledge of linguistic forms to express modality to some extent. In the qualitative data, the understanding of “soft” language expressing politeness and respect in peer feedback communication is demonstrated by the majority of ELLs. All ELLs except one revealed their knowledge of modal epistemic devices by e.g. naming epistemic modal forms in the questionnaire. The exceptions, however, occurred where one student perceived “soft” language as the one being conveyed through modality of any kind rather than through epistemic one specifically, and when a few other students mentioned deontic modal verbs in addition to epistemic modal verbs as the one used by NSs in peer feedback.

It is crucial to notice, however, that even though ELLs view epistemic modal devices to be an indispensible part of peer feedback communication in English, the primarily set of those modal forms reported by them and actually used by them in their peer feedback varies. For instance, while referring to adverbs and parentheticals as epistemic modal devices and as part of
expected NSs’ peer feedback, modality pattern of ELLs, captured as a result of quantitative analysis, demonstrated ELLs’ de-emphasis of single epistemic modals when compared to NSs.

The results of frequency and word tree query on interviewees’ responses in NVivo also show that ELLs use and cite many examples of modal devices that could potentially be used as epistemic devices. The quoted modal forms are diverse, stretching from parentheticals through modal auxiliary verbs and lexical verbs to adverbs. While this frequency analysis cannot be accepted as a robust measure and is only designed to provide a rough picture of modality knowledge by ELLs, the results confirm quantitative findings of ELLs’ de-emphasis as compared to NSs on the modal verbs *may/might* and the lexical verb *to seem*. Although not used frequently, ELLs know exactly how and when to use modal verbs *may/might*. Majority of ELLs (8 out of 14) mentioned the modals *may/might* when the questionnaire asked to provide examples of NSs’ expressions used in peer feedback. Therefore, ELLs demonstrate declarative knowledge of the form, even though often avoiding its use. As for the verb *to seem*, only one ELL cited it. Since the verb *to seem* is tightly connected to the expression of evaluation, it is possible that ELLs try to avoid such a threatening practice. However, it is probably worth investigating in the future whether ELLs simply did not learn epistemic function of the verb *to seem*.

Another way qualitative findings are related to quantitative ones is the confirmation that ELLs tend to slide slightly more toward the deontic side of the modality continuum than NSs do. When asked what kind of peer feedback ELLs prefer, approximately half of learners voted for direct one, which in some cases implies the use of deontic modality for ELLs. Three ELLs also included the use of deontic verb *should* as a potential device to be used in NS peer feedback. These findings, however, cannot support some previous research that claims advanced ELLs use primarily deontic modality (e.g. Gablasova et al., 2015; Nguyen, 2007). Such a conclusion is
possible if the answer is based on the use of auxiliary modal verbs by ELLs. A holistic approach to modality and the use of modality continuum instead allows capturing a wider range of epistemic and epistemic-deontic modality devices characteristic of ELLs use. The use of modality continuum allowed identification of a more detailed ELLs’ modality pattern in peer feedback as well as confirmation of ELLs declarative knowledge of linguistic means that express epistemic modality.

In order to fully comprehend the answer to the second research question I resort to the main theoretical framework guiding the research. As a brief reminder, according to Kecskes’s dual language model (2010), conceptual socialization of an L2 learner is one of the major factors to lead to the qualitative change in the conceptual system of that learner. As learners reach a hypothetical threshold of L2 proficiency, qualitative changes in their existing conceptual system become possible: learners modify, extend, reconceptualize their existing L1 conceptual system. The two socio-cultural loads of their L1 and L2 blend, resulting in the emergence of the so-called synergic concepts. For the sake of clarity, I have developed the visualization of the concepts in Dual Language Model developed by Kecskes (2010) (Figure 1).
Since learners recognize the expected use of modality devices (epistemic) and socio-cultural load (expressing politeness) behind such use of devices in peer feedback, it is possible to claim that their existing L1 conceptual system containing pragmatic knowledge is gradually modified. According to the information emerging from the discussion of the fourteen participating ELLs, there seems to be a tendency for L1 and L2 socio-cultural loads guiding modality use to blend in learners’ minds. They even experience a shift in their perception of the phenomenon: they reflect on the possibility of synergic concept formation explicitly, calling the phenomenon a “translation issue”.

Figure 1. My Visualization of Concepts in Common Underlying Conceptual Base in DLM
It is not the lack of L2 socio-cultural values that stand behind a distinct use of modality in peer feedback provided by advanced ELLs, but rather the blend of socio-cultural loads in the Common Underlying Conceptual Base resulting in the emergence of synergic concepts, one of which is modality, according to my argumentation. As Kecskes (2010, p. 16) claims, “the synergism of information and knowledge coming and going through more than one language channel results in a language-use mode that is both related to and distinct from the way that
monolinguals use that language”. Even if the learners differentiate between L1 and L2 socio-cultural loads guiding modality use, that knowledge does not necessarily lead to the L2 production required by socio-cultural value system of L2. It provides learners with the choice, most of the time leading to the fluid use of modality devices guided by the bilingual modified pragmatic competence.

The modification process of pragmatic competence is also revealed through a constant reflection and evaluation of L2 socio-cultural values guiding the use of modality and through their struggle and fluctuation between those and their own believes. Some ELLs even experienced shifts in their attitudes towards L2 pragmatic norms throughout the prolonged reflective discussions. One of the students concluded in the end that, while pretending and being aggressive is not positive, giving freedom and choice rather than stating and demanding correction in peer feedback is. Therefore, ELLs seem to often have a conscious regulation, at least partially, on their pragmatic choices for modality use. This conclusion is supportive of the previous findings (Kecskes, 2010, p. 8).

Another confirmation of previous findings is revealed in the emergent theme of resistance (Fujiwara, 2004; Ishihara and Tarone, 2009) that prevents ELLs from feedback communication to be according to NSs style. ELLs seem to have some form of a reaction to NS expectations of language use, which are according to ELLs, ‘unjustly’ require a higher level of international tolerance, assimilation, and constraint. Negative emotions associated with NS authority and imposition could partially be responsible for resistance. Resistance is also explained by learners’ subjective judgment of socio-cultural values. Once the uncovered cultural disposition of certain behaviors, values or beliefs commonly held by L2 speakers are unpacked and explicit, target language use becomes some kind of “rivalry” of values that leads to ‘schismogenesis’.
The data collected in this study did not confirm, however, the finding of the previous research (e.g. Stepahny, 1995; Nguyen, 2007), that claimed that clarity, care or persuasion are one of the main guiding factors for their choices of deontically-charged modality expressions. Care and persuasion were not confirmed by participating ELLs as factors affecting their choices of linguistic devices in peer feedback. While clarity was prioritized over politeness by ELLs, it is not directly connected to the expression of deontic modality. Many students associated clarity with the expression of epistemic modality instead: for many ELLs the use of modality mitigates threatening action of criticism to make peer feedback ‘accessible’. Since clarity is not always connected with the use of deontic modality, it was excluded as a factor responsible for ELLs’ slide towards the deontic side of continuum.

Two more explanations for ELLs characteristic modality use in peer feedback have not been addressed in previously research. One of them is related to the possibility of synergized concepts being undermined by tightly related but not yet synergized concepts. While learners were well aware of the fact that modality devices are employed in order to indicate indirectness of proposition, the concept of (in)directness was not perceived according to the target language socio-cultural value system. Some learners mistakenly perceived ‘rhetorical’ directness as a lack of specificity. Such a conclusion resonates with the findings of Nguyen’s study (2007), where learners perceived direct criticism as a lack of modality. Therefore, it might be possible to assume that the complex broad network of concepts needs to be acquired before we could claim that a synergic concept is fully developed. There is a need for a group of related concepts to synergize, rather than an isolated one.

Another possible explanation for ELLs characteristic modality use in peer feedback is the lack of control over used modality devices. Even when being fully reflective of the expected
target language use, and even after setting the goals for themselves to respond according to the required socio-cultural norms, ELLs cannot help but produce language that reflects the socio-cultural load imprinted through their L1 socialization process. Being part of their habitus, it overrides reflective and conscious planning and thinking.

The modification process of pragmatic competence related to modality use is a very complex development. The more advanced ELLs get in their modification process of pragmatic competence, the less their modality use reflects socio-cultural load specific to their L1s and is rather representative of the flux of socio-cultural loads of both languages guiding their modality use in L2. The identification of modality pattern regardless of ELLs’ L1 socio-cultural backgrounds becomes possible. Advanced ELLs’ characteristic modality use reflecting the flux of socio-cultural loads of both languages is likely to be implicitly affected by one or by a combination of the following influences: partially conscious judgment of L2 pragmatic norms, constant struggle and reflective shifts of what to use when, disruptive effect of non or partially neutralized tightly related synergic concepts, and even rare uncontrollable and subconscious outburst of habitus language use that were once deeply imprinted through L1 socialization process.
CONCLUSION, OUTLOOK AND IMPLICATIONS FOR THE FUTURE RESEARCH

This sequential explanatory mixed-method study relied on the assumption that holistic examination of language use – modality, in this case – with an application, as its theoretical framework, of a relatively recent model of Second/Foreign Language Learning – Dual Language Model (Kecskes, 2010) – will enhance our understanding of the nature and development of pragmatic competence in relation to modality use by ELLs of diverse socio-linguistic backgrounds. Guided by the researchers’ call to deemphasize comparisons and focus more on the nuanced understanding of pragmatic abilities (Gablasova et al., 2017, p. 633), I looked for characteristic patterns of modality use by intermediate and advanced ELLs of different ethnic backgrounds and treated the development of pragmatic competence as the modification process of existing L1-governed pragmatic competence. The quantitative and qualitative findings reveal the developmental, but complex nature of ELLs’ pragmatic competence development as related to modality, the possibility of identifying modality patterns for participating ELLs at each proficiency level regardless of their L1s, and three primary explanations guiding ELLs’ identified modality use.

Similar to previous studies (e.g. Chen, 2010; Dittmar & Terborg, 1991), it was possible to trace the development of ELLs’ pragmatic competence: in this study, the modality pattern used by intermediate ELLs is much less aligned to NSs’ preference of modality uses in peer feedback than the modality pattern used by advanced ELLs is. However, while being aware of NSs’ preferences, advanced group of ELLs still demonstrate their own unique features of modality use in peer feedback. As it has been claimed previously in research literature (e.g. Eslami, 2014; Fujiwara, 2004; Ishihara and Tarone, 2009; Kecskes, 2015), there are more factors than purely language proficiency that are responsible for ELLs’ distinct pragmatic performance – in this
study, pragmatic knowledge regulating identified modality patterns. Quantitative and qualitative findings of this study revealed six main conclusions with regard to the nature and development of pragmatic knowledge reflected in modality use of peer feedback and it unpacked both partially conscious and uncontrolled processes responsible for the formation of the advanced ELLs’ modality patterns.

**Six Main Conclusions**

**Conclusion One: Concept-oriented holistic approach to language use of ELLs allows for a more comprehensive understanding of ELLs’ language use and pragmatic competence reflected in it.**

Similar to the conclusions of many researchers (Dittmar & Terborg, 1991; Piqué et al., 2001), the findings of this current study underline the effectiveness of holistic concept-oriented approach to modality. The use of proposed modality continuum demonstrated to be effective for capturing nuanced transition in the pragmatic competence modification at a more advanced and most complex level of ELLs’ proficiency: from intermediate to advanced.

Since ELLs’ language use is hardly ever fully aligned with NSs’ use, we can apply linguistic theory based on a single-language use only as guidance for one’s research. While auxiliary modal verbs are considered central in the English modality system (Aarts & McMahon, 2008; Perkins, 1983), they might not occupy a central position in ELLs’ language use. If focusing one’s SLA research exclusively on one modal category that is considered primary in native language, we might miss the important modality expressions exclusively characteristic of ELLs’ language use.
The same is true for modal functions. While the meanings of modality expressions used by English NSs can be well classified in two separate semantic categories of deontic vs. epistemic, the variety of modal meanings used by ELLs does not get easily classified into two isolated separate semantic categories and often demonstrate gradient modal functions. The application of modality continuum with modal expressions positioned on it according to the modal forces they convey starting from deontic to epistemic one was found to be productive in capturing characteristic modality patterns of ELLs.

The use of proposed modality continuum was most effective in identifying modality pattern for advanced ELLs. It takes a somewhat intermission position on a modality continuum and reflects the use of every single linguistic device of a continuum. The gradient use of modal function is most expressive for advanced group of ELLs. Such detailed account of advanced ELLs’ preference for modality use would have been impossible to capture without the application of the concept-oriented holistic approach to modality.

**Conclusion two:** Pragmatic competence related to modality has a developmental, but complex and dynamic nature. Regardless of socio-cultural backgrounds of participants, groups of ELLs demonstrate an identifiable characteristic pattern of modality use.

Such findings are supportive of researchers’ newly identified agenda to focus on comprehensive language use of ELLs as a group rather than to search for the differences in their language use based on ELLs’ L1 backgrounds or based on their deviations from NSs’ standard—a so-called ‘measuring stick’ (e.g. Gablasova at al., 2015).

The quantitative findings of this study identified the tendency of intermediate group to lean towards the deontic side of the modality continuum in comparison to both advanced ELLs’ and
NSs’ groups, when they express evaluation and suggestions in peer feedback. The more proficient ELLs get, the more they include the use of epistemic devices in their use, although very often in combination with other devices, either epistemic or deontic. Advanced group of ELLs occupy the most spread-out position on the continuum in comparison to the other two groups: intermediated ELLs and NSs. While advanced group of ELLs demonstrate much more alignment to the NSs’ preferences of modality use than intermediate group, they still show their own distinct pattern of modality in peer feedback. Advanced speakers seem to value a combination of modal expressions even more than NSs do. The use of epistemic modal devices that advanced ELLs seem to deemphasize, if compared to NSs, however, is the use of single purely epistemic modal forms: modal verbs or adverbs.

Overall, the quantitative results evidence the developmental nature of pragmatic competence, as previous research have noticed (Chen, 2010; Bardovi-Harlig & Dörnyei, 1998). The advanced group carries much more alignment with NSs than the intermediate group in terms of expected modality use in the context of peer feedback – epistemic – according to English socio-cultural values. The modification process of pragmatic knowledge related to modality use in peer feedback is clearly noticeable and is reflected in ELLs’ language use. However, as I have mentioned above, advanced ELLs, while including epistemic modality in their language use of peer feedback, demonstrate their own unique pattern of modality use. Such findings support the claim that modification of pragmatic competence is complex and dynamic in nature, and that it does not develop in a linear process of non-alignment to NSs’ pattern of modality use to strict alignment to such pattern (Zalaltdinova, 2018). More factors than language proficiency are likely to stand behind the identified modality patterns of ELLs.
Since it was possible to identify a modality pattern for a group of ELLs comprised of participants from various socio-cultural backgrounds, the dependence of identified modality continuum exclusively on ELLs’ affiliation with a particular socio-cultural group is also subsided. The ELLs’ L-1 socio-cultural backgrounds could be overestimated as the only or most decisive factor affecting ELLs’ pragmatic language use and development in L2. There is a possibility that as ELLs acquire a new language, their conceptual base guiding language use is affected and is no longer guided by selected value-system of L1 or L2 separately.

Conclusion three: The discrepancies between ELLs’ meta-pragmatic knowledge of language use and their actual language production indicate the uncertainty of pragmatic awareness necessarily leading to the expected pragmatic production.

In this study, I have captured some divergences between quantitative and qualitative findings: in particular, between ELLs’ characteristic use of modal devices in peer feedback and their reported pragmatic knowledge of modality use in peer feedback. The result of qualitative analysis indicates ELLs’ awareness of L1 vs. L2 socio-cultural differences behind the use of modals in peer feedback. However, while advanced ELLs recognize that epistemic modality is an expected language use in peer feedback according to English language-specific socio-cultural values, there are some differences in the emphasis of the set of modal devices advanced ELLs report as expected in peer feedback communication and their actual choice of epistemic devices that are more often combined with other deontic devices.

For example, while advanced group of ELLs refer to adverbs and parentheticals to be part of those epistemic modal devices expected in NSs’ peer feedback, the modality pattern of ELLs, captured as a result of quantitative analysis, demonstrated ELLs’ de-emphasis on single purely
epistemic modals when compared to NSs. Advanced ELLs demonstrate their own preference for modality use, regardless of their declarative pragmatic knowledge of English socio-cultural loads establishing expectations of modality use in peer feedback.

As it has been noticed by previous research (e.g. Al-Issa, 2003; Siegal, 1996), meta-pragmatic knowledge and awareness does not necessarily guarantee expected pragmatic performance. Therefore, factors such as the lack of meta-pragmatic knowledge and of the meta-pragmatic awareness cannot be relied on in the explanation of a distinct modality production by ELLs in peer feedback. As it has been reported in this study, ELLs are well aware of the expected modality use according to English socio-cultural value system.

**Conclusion four:** *The use and development of pragmatic competence is dependent on the formation of a network of related synergic concepts. The development of one synergic concept can be undermined by another tightly related but not yet synergized concept.*

Quantitative and qualitative findings of this study capture the signs of the modification process of ELLs’ L1-governed pragmatic competence represented through the formation of a synergic concept – modality – in ELLs’ “Common Underlying Conceptual Base” (Kecskes, 2010): while intermediate ELLs rely more heavily on the deontic side of the continuum, advanced ELLs are much more flexible in their choice of modal devices, and they incorporate the use of epistemic devices much more than the intermediate group does. As we have discussed previously, ELLs preferences for modality use in peer feedback are distinct in some ways from the expected NSs’ use of modality in peer feedback, even though ELLs have advanced language proficiency and are well aware of the fact that epistemic modal devices are used by NSs to convey tentativeness and politeness in their peer feedback communication.
The fact that ELLs recognize the knowledge of indirect language – epistemic modality – as an indispensable element of polite peer feedback communication according to English specific socio-cultural value system suggests that the modality concept is fully synergized. Therefore, ELLs must be aware that the use of epistemic modality is employed to express rhetorical indirectness in order to mitigate face-threatening acts of giving suggestions and evaluation in peer feedback. However, qualitative findings illustrate that ELLs do not necessarily perceive of modality to be the main indicators of (in)directness in peer feedback. The related to modality concept of (in)directness did not seem to be synergized and having an established connection to the synergic concept of modality for most ELLs.

Overall, the concept of (in)directness was not understood by ELLs according to the English socio-cultural value system. Some learners mistakenly perceived ‘rhetorical’ directness as a lack of specificity. Such a conclusion resonates with the findings of Nguyen’s study (2007), where learners perceived direct criticism as a lack of modality. Therefore, it might be possible to assume that the complex broad network of concepts needs to be acquired before we could claim that a synergic concept is fully developed. There is a need for a group of related concepts to synergize, rather than an isolated one in order to enhance and/or ensure ELLs’ modification process of pragmatic competence.

The representation of successful process of pragmatic competence modification, then, is not revealed through the development of distinct single concepts, but through the intertwined network of related synergic concepts grounding language use in specific contextual frame.

**Conclusion five:** *Resistance is one more factor explanatory of ELLs’ identified modality patterns.*
The findings of this study largely confirm previous research claims that ELLs’ distinctive language use can be explained by their resistance to ideological control felt through the necessity of modifying their L1 socio-cultural value system (Al-Issa, 2003; Eslami, 2014; Fujiwara, 2004; Ishihara & Tarone, 2009; Siegal, 1996).

Qualitative research revealed two causes of such resistance by ELLs. Based on the analysis of qualitative data in this study, resistance originates from, first of all, ELLs’ constant negative subjective assessment of NSs pragmatic norms and socio-cultural value system as “passive-aggressive”, “pretentious”, and “weird”. I unpack such process with the help of the schismogenesis theory (Bateson, 1972). When ELLs discover NSs’ pragmatic norms uncovering cultural disposition of certain behavior, values or beliefs commonly held by NSs’ group, the target language use becomes some kind of “rivalry” of L1 vs. L2 socio-cultural values that leads to schismogenesis. According to the schismogenesis theory, the reciprocity of differences in pragmatic rules by both NS and ELLs, rather than a one-sided submission of L2 values by ELLs, could release the tension and lower schismogenesis.

The second main cause for ELLs’ resistance to NSs’ pragmatic norms has been shown to be due to their experience of feeling ‘injustice’ in the requirement for a high level of international tolerance, assimilation, and constraint to NSs’ pragmatic rules, when NSs themselves can be careless or flexible about them. ELLs mentioned that most of NSs do not follow the rules they set as standard for communicative behavior. While NSs are allowed to be flexible in terms of their linguistics and pragmatic behavior, ELLs feel constrained to follow pragmatic norms precisely. The way “Good English” is associated with imposition and hope to escape racial/class stereotyping (Urciuoli, 1998), the same way pragmatic competence and its correctness is felt by ELLs as a “cultural imposition […] by NSs’s cultural socially hegemonic
strata” (Thomas, 1983), but at the same time the only way to be “effective” and understood. The emphasis on intelligibility and differences rather than correctness and errors based on NSs’ pragmatic norms and standards can help to decrease ELLs’ resistance and promote acceptance and curiosity.

**Conclusion six: Subconscious and unreflective habitus plays a role in ELLs’ modality use.**

It has been emphasized by researchers (e.g. Kecskes, 2015) that the development of pragmatic competence functioning and the development for advanced ELLs is characterized by a high level of consciousness and individual control. Several findings in this study largely confirm this claim. ELLs persistently demonstrate their reflective process on the choice of pragmatic rules; their comparisons and fluctuations in the assessment of NSs’ and L1 pragmatic rules; and their assessment of own language use. Nevertheless, ELLs report how their control is often overridden by automatic subconscious behavior that they are incapable to affect even with their reflective thinking and regardless of their identified willingness to use language differently.

Therefore, habitus has an important weight among guiding factors providing explanation for characteristic modality pattern by ELLs. Most likely, pre-reflective dispositions and actions reflective of habitus have been formed in ELLs primarily through their L1 socialization process. Language socialization that goes hand in hand with L1 learning could be responsible for creating a stronger imprint of socio-cultural load, which affects modality use in L2. Therefore, we should not forget that behind resistance, individual control and conscious choice, there is also a place for cases when pre-reflective language use overrides ELLs’ control and cannot be helped or explained even by ELLs themselves.
Implications

This research present both theoretical and practical/pedagogical implications with regard to 1) our understanding of pragmatic competence functioning and development, in particular the one related to modality; 2) theoretical foundations guiding L2 and linguistic research; 3) teaching practices to facilitate pragmatic competence development as well as effective L2 language use that is not in opposition to the L2 socio-cultural value system. Therefore, this study should be of interest to students, educators and researchers as well as to all those concerned with pragmatic competence, its performance and modification. Below, I have first summarized the most promising theoretical implications of the current study and continued with the presentation of their practical implications.

Theoretical implications

Theoretical implication one: *One of the key elements to advance research is to review our theoretical foundation guiding the investigation of the phenomenon of interest.*

The research agenda that was proposed to advance our understanding of pragmatic competence advocated review of research methods, changing the length and type of the studies, application of comprehensive methodological instruments and measures (Bardovi-Harlig, 2012, 1999; Chang, 2011). To complete these orientations in the research agenda, however, the theoretical foundation has to be added as one of the decisive factors to unpack peculiarities of pragmatic competence. In fact, it is the theoretical conceptions that “provide the basis for making decisions of how-the method to be used” (Brinkman & Kvale, 2014, p. 217), therefore acting as a ‘spine’ to our investigation design, to our approach and to our research data.
The findings of the current study demonstrate how the application of Dual Language Model (Kecskes, 2010) – the one that has not been relied on previously in the exploration of pragmatic competence development – has been successful in locating at least one main factor explanatory of characteristic modality pattern of advanced ELLs in peer feedback. Dual Language Model refocused the research agenda on the nature of ELLs’ pragmatic competence modification introducing synergic concepts as main representation of pragmatic competence development.

Modality, confirmed to be a synergic concept, is tightly related to another synergic concept: (in)directness. While ELLs demonstrate meta-pragmatic knowledge of preferred type of modality use in English-specific peer feedback, they do not demonstrate such clear knowledge in relation to the concept of (in)directness. The concept of (in)directness is not synergized and the interdependent connection to the concepts of modality is not established. The partial development of one of the tightly related synergic concepts, which are, however, required, to ensure understanding of the expected language production according to L2-specific socio-cultural value system, can undermine pragmatic competence and modification related to the main synergic concept.

Therefore, a new theoretical perspective allowed enhancing our knowledge of pragmatic competence functioning and development by, first of all, identifying at least one process explanatory of ELLs’ distinct pragmatic use of modality that has not been brought into focus before. It is not the lack of pragmatic knowledge related to modality that is reflected in ELLs’ modality patterns, but rather the partially synergized network of related-to-modality concepts. Additionally, a concept of (in)directness has been claimed to have high potential to be a synergic concept therefore, playing a decisive role in pragmatic competence functioning and modification.
Theoretical implication two: *The adjustment of linguistic theory based on single native language use is necessary to research ELLs’ language production reflective of their pragmatic competence.*

By taking a concept oriented, holistic and discourse-functional approach to modality, this study proposes a modality continuum that is successful in capturing the complexity of ELLs’ pragmatic knowledge reflected in characteristic patterns of modality use at a more advanced proficiency levels. The modality continuum made possible both the identification of a characteristic pattern of modality use by ELLs, and the tracing of subtle differences between intermediate and advanced groups. Most importantly, it allowed the understanding of modal devices by advanced group of ELLs – the most flexible one covering all devices on the continuum.

It has been mentioned in previous research that learners do not necessarily use the forms – or map the meaning with that form – as expected according to native-speaker production (Dittmar & Terborg, 1991). Similarly, a variety of modal meanings used by ELLs cannot be expected to land in two strictly dichotomous semantic categories of deontic vs. epistemic modality. Those categories were developed based on the linguistic analysis of native, single-language production and can hardly capture any distinctive unexpected deviations from those categories.

Therefore, if researchers are interested in the comprehensive understanding of ELLs’ language use and development, in exploration of differences rather than correctness in relation to NSs’ pragmatic norms, the units of analysis need to take into consideration both L1 and L2
linguistic means of modal expressions. The research cannot usually cope with the task, if relying exclusively on the linguistic theory based on the single language use.

A comprehensive understanding of language use by ELLs requires a comprehensive approach to the methods and analysis as well. Units of analysis generated both deductively – relying on linguistic categories resulted from the analysis of native language use –, and inductive – expending on linguistic theory by taking into consideration both L1 and L2 linguistic means of expressions – are believed to provide a more comprehensive understanding of ELLs’ language use and development reflective of pragmatic competence and development.

**Theoretical implication three:** *There is a possibility that common core features of modality use shared by ELLs of diverse L1 socio-cultural backgrounds exist.*

This study examines language use of ELLs that are not grouped by their affiliation to the same L1 language. Instead, groups of participating ELLs are representative of diverse socio-cultural backgrounds. Nevertheless, it was possible to identify common pattern(s) of modality use in English at each proficiency level and independent of ELLs’ socio-cultural backgrounds. This implication is worth noticing, even though this research study is not robust in its measurement for identifying ELLs’ modality patterns that is determinedly unaffected by ELLs’ L1 socio-cultural backgrounds.

The approach to research language use of ELLs using their various L-1 backgrounds as an inclusive criterion for grouping participants, rather than a separating one, is relatively new and rare (a few examples are Gablasova 2015, Zalaltdinova 2018). However, such approach, among other things, has shown to be productive since it encourages refocusing research from native vs. non-native comparisons or L1-L2 transfers to a more fine-grained understanding of language use
Practical/Pedagogical Implications

Pedagogical implication one: *Modality can be a ‘sure path’ to successful pragmatic competence modification.*

It has already been noticed in the previous research that the ability to use modality effectively is a “sure path to effective or at least native-like language production” for language learners (McEnery & Kifle, 2002, p. 2). However, “modal auxiliaries are among the most difficult structures teachers have to deal with” (Celce-Murcia & Larsen-Freeman, 1999, p. 137). Similarly, as this research has confirmed, pragmatic knowledge of modality use poses challenges for ELLs. Even when ELLs are aware of guiding pragmatic expectations for modality use, they still use modality in their own distinctive way.

The findings of this study show how the cause of these challenges, when wisely unpacked and tackled, can be a boost to the modification process of ELLs’ pragmatic competence. This study confirmed the assumption that modality is a synergic concept, the formation of which plays a decisive role in the modification process of L1-governed pragmatic competence. Existing in languages all over the world (Nuyts, 2016, p. 5), modality has different lexical representation in each of them, but also different socio-cultural loads attached to those lexical representations. The challenge, therefore, is not only in the acquisition of the modal devices used in target language, but in identifying the differences in those socio-cultural loads attached to them. Having grasped the particularities of modality concept and having acquired it in its full complexity, ELLs are likely to noticeably enhance their pragmatic competence, that usually is so
difficult to acquire and apply, even for advanced L2 speakers (Fordyce 2014; Romero-Trillo 2002).

Being a synergic concept and reflecting the socio-cultural value system of the language, modality – with the full range of its devices and of socio-cultural information to guide their use – is a very effective tool to enhance ELLs’ pragmatic competence.

**Pedagogical implication two: The complex acquisition of a related network of synergic concepts is most effective to enhance pragmatic competence modification.**

The exploration of ELLs’ pragmatic competence modification based on symbiotic application of quantitative and qualitative methods revealed a dynamics of motivating factors that affect the distinct patterns of ELLs’ language production. One of those factors is the dependence of synergic concepts evoked in specific language production on one another. If one of the partaking concepts is not fully synergized or the relation between the synergic concepts is not established, it is likely to undermine the successful use of the one that is, at the first glance, fully synergized.

The concept of ‘rhetorical’ indirectness, for example, is tightly related to the expression of epistemic modality. If the concept of indirect language is not perceived as implying the use of epistemic modal devices, ELLs’ expression of indirectness can take various forms, e.g. the lack of evidence and supportive information for the argumentation. While ELLs are aware of the way modality is used in English peer feedback, they do not see the connection between epistemic modality use and ‘rhetorically’ indirect language. ELLs emphasize content indirectness in their peer feedback, deemphasizing their attention to or being unaware of the concept of ‘rhetorical’ indirectness.
Taking the example illustrated above, we can conclude that in order to ensure a full modification of pragmatic competence, a network of related synergic concepts needs to be represented and addressed in language instruction. Thus, the development of more comprehensive teaching materials and tools should address this issue. There is a high chance that ELLs do not use pragmatic knowledge as expected due to the unrecognized gap in the interconnectivity of the synergic concepts or partial development of the neighboring concept undermining the formation of a core concept in “Common Underlying Conceptual Base”.

**Pedagogical implication three:** *The modification of pragmatic competence is most effective when ELLs’ L1 socio-cultural values are acknowledged and respected.*

The current research has discovered the process of resistance partially explanatory of ELLs’ distinct linguistic behavior. The feeling of resistance seems to associate with the negativity originating in schismogenesis and with the imposition of NSs’ authority and their neglecting attitude to self-established rules.

Unknown L2 pragmatic norms act as restraining factors for ELLs that they gradually remove throughout L2 learning process. Once L2 pragmatic norms are unpacked and explicit, their restraining function is released, and target language use becomes a “rivalry” of values that leads to schismogenesis (Bates, 1936). Such a process is dynamic, which could lead to either a breakdown or a new equilibrium. What is required to ease the tension is the reciprocity of differences in pragmatic rules both by NSs and ELLs.

It is very complicated to ensure reciprocity of ELLs’ L1 pragmatic rules on NSs’ part or even in the intercultural communication. However, the recognition of and curiosity in ELLs’ L1 pragmatic norms throughout L2 instruction and emphasizing the concept of difference rather
than correctness may positively affect quality and quantity of pragmatic competence modification process. Once ELLs feel that the focus is not entirely on the development and use of ‘correct’ and ‘unjustly imposed’ L2 pragmatic rules, they might subside from cumulating negative attitude towards L2 pragmatic rules and their use.

**Future Research**

The purpose of this study has been to explore characteristic features of modality use intermediate and advanced ELLs of diverse socio-cultural backgrounds demonstrate and how their modified (bilingual) pragmatic competence is reflected in those identified patterns of modality use. The described aim of the study implied the shift of theoretical and methodological approach from the one that has been established and applied for at least three decades. As a result, this research triggered a thought-provoking findings, productive analysis and discussion that poses many more questions for the research and calls for the development of research in the established direction. In this section of my dissertation, I will discuss the possible formulation of some of those future research foci.

The investigation of synergic concepts as a driving force to advance research on the nature of pragmatic competence and its modification.

The current study confirms the crucial role synergic concepts play in the modification process of pragmatic competence. Modality in this study has been specified as a synergic concept characteristic of learners’ modified bilingual pragmatic competence: ELLs’ explicitly reflect and articulate the blend of sociocultural loads of two languages attached to their English modality use. Such knowledge is the direct reflection of qualitative changes occurring in the L1
original conceptual system and its reformation into ‘Common Underlying Conceptual Base’ that guides the use of all linguistic codes Language Learners possess (Kecskes, 2010, p. 7). As it has been already underlined, lexicon plays a unique role in “unify[ing] linguistic knowledge and conceptual knowledge” (Kecskes, 2010, p. 7). Therefore, lexicon reflective of synergic concepts permits a better understanding of the modification process of pragmatic competence.

I see great potential in advancing pragmatic competence research by investigating and discovering more of such synergic concepts. This search could be done by, for example, closely observing language use and looking for lexicon that can potentially represent synergic concepts. Alternatively, a researcher can make an intellectual guess of what concepts could be synergic and then explore how they are reflected in language use. As a side finding of this study, (in)directness has been identified as a synergic concept since it demonstrated characteristics of such type of concept. Perhaps, (in)directness as a synergic concept could be the focus of the next research investigating pragmatic competence modification and development.

The network of synergic concepts as an important focus of future research.

The findings of this study identified the dependence of successful development of pragmatic skills guiding a specific language use on both the formation of core synergic concept and other synergic concepts that are tightly related to the core one. While a core synergic concept is directly responsible for some specific language performance, the related synergic concept often affects language performance indirectly through its connection to the core concept. This conclusion emphasizes the necessity to explore the connections between synergic concepts as well as the network of the synergic concepts behind the specific language production. The
reasons for learners’ linguistic behavior could hide in the indirect influence of partially synergized components in the network of synergic concepts.

The above-documented conclusions raise questions to be addressed by the future studies on pragmatic competence development. In particular, it would be important to understand the network of synergic concepts that are tightly interconnected in their joined effect on the use of specific language use framed by a certain context. Potentially, teaching materials addressing synergic concepts complexly rather than in isolation could ensure learners’ holistic development of pragmatic competence.

Modality as a reflection of pragmatic competence in a different contextual frame and a different mode of communication.

Since modality is identified as “the central organizing principle of language” (Stubbs, 1986) as well as a synergic concept contributing to the successful modification process of pragmatic skills, its exploration in the field of L2 acquisitional studies needs to be expended and developed further.

This study has confirmed Nguyen’s conclusions (2007) that modality plays one of the key roles in peer feedback communication. Therefore, written peer feedback has been a productive contextual frame to explore and capture characteristic feature of modality use and its development in relation to pragmatic knowledge. It would be important to see what other contextual frames modality is most expressive in. This study, for example, pointed to the crucial role of modality in expressing one’s opinion in the context of focus-group discussion.

The exploration of modality in a different contextual frame as well as in a different mode of communication could contribute to our understanding of a modality concept as a synergic
concept, and to our understanding of the role modality plays in the modification process of pragmatic competence. Future research, therefore, could see into the expansion of modality-as-a-synergic-concept research, focusing on different contexts to explore characteristic features of modality use by ELLs to discover how their modified (bilingual) pragmatic competence is reflected in those identified patterns of modality use.

The investigation of core features of language use by English Language Learners and Bilinguals regardless of their L1 socio-cultural backgrounds.

The examination of language use by ELLs of diverse socio-cultural backgrounds, therefore, the search for the core features of learners’ language use independent of L1 backgrounds is a promising research focus. This study is the one among a few others (Gablasova 2015, Zalaltdinova 2018) that was dedicated to the search of the comprehensive understanding of ELLs language use reflective of their pragmatic skills, deemphasizing NS vs. NNS comparisons, L1-L2 transfers and correctness vs. incorrectness. Such an approach revealed interesting findings that have not been brought into focus before: the possibility to identify ELLs’ modality pattern regardless of their L1 socio-cultural backgrounds or features of pragmatic competence modification revealed through differences between patterns of modality use by groups of intermediate vs. advanced ELLs with different L1 socio-cultural backgrounds.

Pragmatic competence research can be contributed into by continuing this line of research and by exploring other layers of language use by L2 and bilingual speakers in order to gain a more nuanced and comprehensive understanding of it.
The application of new theoretical framework and conceptual approach to enhance pragmatic competence research.

In addition to the selection of population, the methodological approach of this study has also been very productive in unveiling information that enhances our perception of pragmatic competence development. The application of a recently developed theoretical framework – Dual Language Model (Kecskes, 2010) – revealed, among other things, the way partially synergized, but tightly related concept to modality noticeably affects ELLs’ modality production. Such a process would not have been accessible to our view without the application of a new theoretical framework. The application of a holistic, discourse-functional and concept-oriented approach to modality encouraged the development of a continuum that comprehensively captured modality use by ELLs throughout the most complicated and under-researched subtle transition in pragmatic competence modification process at a more advanced level of language proficiency – from intermediate to advanced.

The application of a new theoretical framework – Dual Language Model – is most likely to enhance future studies of pragmatic competence. Taking this model as their guidance, researchers will conceptualize L2 pragmatic competence into the modified L1-governed pragmatic competence and refocus their research agenda on the nature, direction, and elements of pragmatic competence modification. The same is true for the holistic approach to language use. Such an approach can unveil some structures that were previously invisible, when the exploration of L2 language use was based on the categories that were established as a result of the analysis of native, single-language production. Application of holistic approach to language use gives us space and consideration for identifying L2 unique characteristics of language use and pragmatic skills guiding it.
Limitations

The current research focused on the identification of the characteristic features of modality use by a group of ELLs that represented diverse L1 socio-cultural backgrounds. However, one step further could be advised in order to ensure more certain conclusions with regard to the possibility and identification of a common pattern by ELLs independent of their L1s backgrounds. The characteristic features of modality use common to ELLs regardless of their socio-cultural backgrounds can be searched for with the application of the comparative analysis: modality use of several groups of ELLs arranged by their common L1 socio-cultural backgrounds are compared to identify those features that are common to all ELLs regardless of the group they belong to. Those features, if there are any, that differentiate modality use of ELLs based on their L1 socio-cultural backgrounds, could be more explained by the persistent influence of their L1-governed pragmatic knowledge. Those features that are common for all ELLs, disrespectful of their socio-cultural backgrounds, are the core ones that are used independently of L1 backgrounds’ influence. Such a comparative analysis of language used by several groups of ELLs could foster a more rigorous conclusion on the point of interest. A larger and a more specific pool of participants is required to conduct such research.

Furthermore, only written production has so far been analyzed. Written production allows for processing and refinement of a text during the writing process. It would be important to have a look at oral production, which is more spontaneous and ad-hoc generated.

One might consider the cross-sectional nature of this acquisitional study a limitation, since the longitudinal acquisitional study could unveil even more nuanced and thorough conclusions. However, my choice for the type of the study has been guided by other crucial components that my research questions called for. For example, a longitudinal study based on a large population
of participants this research requires (at least 30 in each group) is almost impossible to ensure. If a longitudinal design were applied, the whole body/structure of the research would have to be altered.

Additionally, having identified modality as a synergic concept, it is important to continue its exploration with the application of its use in various scenarios, tasks, and contexts that are alternative to peer feedback. The mapping of a network of modality-related concepts in connection with particular contexts that trigger the use of the concepts needs further investigation so that we can explore further possibilities of enhancing contents for teaching pragmatic competence.

There is much potential in this research project that deserves further investigation.
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[http://escholarship.org/uc/item/77g364zj](http://escholarship.org/uc/item/77g364zj)


doi:10.1017/S0142716403000158


Dear student,

This survey is designed to learn more about your experiences with English and your mother tongue. The information you provide will help your teacher help you in your specific English learning needs. Completing the 6 sections should not take you more than 15 minutes. Please, answer each section as accurately as you can. You may use DK = don’t know, NA= not applicable when necessary.

1) Please, answer the following questions about your **background**.
   Name:__________________________ Age: ________ Place of birth _____________________ Age you began using English ______
   Age when arrived in U.S._____ Time you lived in the US _____Years ___Months   Schooling level outside US ___________
   Schooling level obtained in US ________________ Do you consider yourself a bilingual? ________
   Explain your answer

   Circle proficiency level in English: Native  Proficient  Advanced  High intermediate  Intermediate  Low intermediate
   Circle proficiency level in home language:  Native  Proficient  Advanced  High intermediate  Intermediate  Low intermediate

2) **Please, rate** your reading, writing, speaking, and listening **abilities** 0-5 in both English and your home language/s, 0 is the lowest.

---

20 This survey questionnaire has been adapted for ACIC from Gutiérrez-Clellen & Kreiter, 2003; Gutiérrez-Clellen et al., 2012.
Home language is ______

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
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<tr>
<td>Writing</td>
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<td>Speaking</td>
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</tbody>
</table>

3) Please, mark the approximate **number of hours you feel you use** English and other languages. Please, mark that in the next scales.

I use English 0  1  2  3  4  5  6  7  8  9  10  11  12 hours a day

I use ______ 0  1  2  3  4  5  6  7  8  9  10  11  12 hours a day

I use ______ 0  1  2  3  4  5  6  7  8  9  10  11  12 hours a day

4) **Language Use**

Please, give an approximate total number of years you have spoken:

English at home________________
English at school______________
English in college_____________
English after college___________
Nowadays, I use English for ________________

Other language(s) at home_____________
Other language(s) at school________________
Other languages in college________________
Other language(s) after college___________
I use other language(s) for ________________
5) Please, tell us about the **activities you may participate in**. Please, mention why you do these activities, the language(s) you use most of the time, and the approximate amount of time you spend in those. Add any other activities not named here.

<table>
<thead>
<tr>
<th>Activities</th>
<th>Work/School/ Free time</th>
<th>Language (s)</th>
<th>Hours per day</th>
<th>Times per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Write emails</td>
<td></td>
<td></td>
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<tr>
<td>2. Read books, news, magazines</td>
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<td></td>
</tr>
<tr>
<td>3. Watch TV, videos, movies</td>
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<tr>
<td>4. Read academic journals</td>
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<tr>
<td>5. Use internet</td>
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<td></td>
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<tr>
<td>6. Write academic texts</td>
<td></td>
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<tr>
<td>7. _______________________________</td>
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<tr>
<td>8. _______________________________</td>
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</table>

6) Please rate how frequently others identify you as a non-native speaker of English based on your accent?

0 = never  
1 = seldom  
2 = sometimes  
3 = often  
4 = very often  
5 = all the time

_________________________
Appendix 2. Peer Feedback Instructions (Part 1)

Post Instructional Peer Feedback Instructions

SURNAME: ____________________________

Name: ________________________________

The teacher will hand in a text written by a one of your peers. Please read it and write constructive criticism following the guidelines for peer feedback you received some weeks ago in class.

You have to complete two tasks:
A) respond to your peer’s writing in terms of strengths and weaknesses you see about the text and explain;
B) and give suggestions on what the author could have done differently for an easier understanding of the text.

! Remember to address the author directly using the second person singular.
! Make sure that your text is no less than 500 words.

______________________________________________________________________________

______________________________________________________________________________

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______________________________________________________________________________
Appendix 2 (part 2).

When working on peer feedback, remember you need to:

a) respond to your peer’s writing in terms of strengths and weaknesses you see about the text and explain;

b) give suggestions to the writer on what your peer could have done differently to improve the essay/paper.

! Remember to address the author directly using the second person singular.

! Make sure that your text is no less than 500 words.

Ask yourself the following questions when writing/giving your peer feedback:

1. Content

- What is the purpose or main idea of the text?
- What do you see as the writer’s main point in this text? Is the point clear? Do you have any suggestions to make this point clearer?
- Did you find specific examples, details or explanations to support the main idea?
- Which part of the text was the most interesting for you? Why? Any suggestions to make any parts more interesting?
- Which part, if any, was confusing or unclear? Why? Any suggestions to make them clearer?

2. Structure

- What is the structure of the text? That is, does it have three parts: an introduction, a body, and a conclusion? If not, what’s missing? What needs to be done?
- Are the transitions between sections and paragraphs easy to follow?
- Is there a brief conclusion that summarizes the main points in the text?

3. Details

- What errors (grammatical, spelling, punctuation) did you notice? How would you advise to correct those?
- Do the same words repeat often? What would you suggest in order to avoid repetition?
- Are there any passages that are unclear, monotonous, or wordy? Give suggestions as to how these could be clearer, less boring, and brief.

Finally, when giving feedback, please

"Do's":
Do express your opinion constructively and respectfully.
Do focus on the reasons that make the text difficult and suggest how to improve it.

"Don'ts":
Don't use marginal comments.
Don't argue with the writer.
Don't rewrite for the writer.
Appendix 3. Inter-rater Reliability Form

Please read two texts carefully and place the underlined experts in the three category columns of the table below (p. 2), according to their modality meanings (see the explanation of modality below). Please include all the other expressions with modality meaning you find into the table. If you are not sure which category the underlined expressions belong to or found the expression with modality meaning that does not fit into any category, please place it in the middle category and explain your choice.

**Modality** is the expression of “validity” of the proposition: speaker’s attitude towards either “conditions of the events” or “conditions of the information” (Dittmar & Terborg, 1991).

<table>
<thead>
<tr>
<th><strong>Epistemic</strong> meaning:</th>
<th><strong>Deontic</strong> meaning:</th>
</tr>
</thead>
<tbody>
<tr>
<td>refers to speaker’s judgment, levels of (un) certainty, (un) likelihood, or logical necessity.</td>
<td>refers to the control of actions and events by human and other agents, to the expressions of “norms for actions and possibility” how to perform them” (Dittmar &amp; Terborg, 1991). E.g. <em>You have to include a thesis statement.</em></td>
</tr>
<tr>
<td>E.g. <em>It could be important to clarify the thesis statement.</em></td>
<td>E.g. <em>Can you review my paper?</em> (It is implied that the person carrying out the action has the ability to do so); refers to volition (expression deontic necessity): E.g. <em>I would like a different title for this paper.</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Epistemic</th>
<th>Not sure</th>
<th>Deontic</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>
Appendix 4. Modality Questionnaire

This questionnaire is designed to gain a better understanding of how to improve students’ language use in expressing suggestions, giving evaluations and providing feedback.

Please read the questions carefully and provide your responses by circling an answer or by giving a full response, where required.

1. Do you know that native English speakers tend to express their evaluations and suggestions for corrections in a very polite, tentative way?
   a) yes
   b) no

2. Can you think of any particular expressions (words, phrases) English native speakers use to express their evaluation and suggestions for correction? If so, please write down as many as you remember:
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

3. What modal verbs do you think English speakers use in order to soften a negative evaluation? Please give at least 3 examples.
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

4. In the peer feedback you have written, did you tend to give your evaluations and suggestions in a direct way or an indirect way?
   Please indicate which and explain why:
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

5. Do you believe that using modal verbs should, must, have to helps you communicate your suggestions and give advice in a clearer way than using the modal verbs might, may, could, could have, would?
   a) yes
   b) no

   Please explain why:
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
Which modal verbs would you use to be polite in giving your evaluation and advice? Please give at least 3 modal verbs and use them in whole-sentence-examples.

6. Which, do you think, is more important in peer feedback:
   a) Being clear
   b) Being polite

   Explain why:

7. Imagine you give advice and evaluation in a direct way (e.g. by using the modal verbs *should*, *must*, *have to*); what would you particularly wish to express?
   Take the following example: You ______ take more vitamins.

   *should:*
   *must:*
   *have to:*

   Please explain why for each case:

8. Which modal verbs would you use in order to make your argumentation more convincing? Please give at least three whole-sentence-examples.

9. Have you ever felt that there is something to improve in the way you provide evaluations and give advice, and if so, are you willing to do so?
   a) yes
   b) no

   Please explain why:

Thank you very much for your responses.
Appendix 5. Interview Protocol

Group discussion (focus-group interview) on the practice of peer feedback.

Before we begin I would like to go over a few things of how our discussion/focus group session will be conducted. The aim of this discussion is to raise your metacognitive awareness of how you use the English language in expressing suggestions, giving evaluations and providing feedback. While I am going to facilitate the discussion, I would like to do it in a role of one of your peer member. So you are more than welcome to initiate any concerns, questions, comments as well as respond to each other’s comments, concerns and questions without waiting for my facilitation.

Please remember that I am going to video-record this discussion. While your responses are going to be confidentially held by me, you should realize that there are other focus group participants during any comments you make who may share that information outside our focus group interview. Therefore, I ask all the participants to respect your peers’ privacy and not to disclose anything you have heard during the discussion.

1. Please tell me about your experiences of providing peer feedback in English?
   a. Could you describe them? Please give some examples.

2. What kind of things do you say when you are giving feedback to your peer? Can you please give an example of how you did it?

If modals were used in the example, the researcher proceeds with the following questions:

1. Have you noticed if native speakers of English provide feedback in the same way? Please provide examples.
   • How do they express their evaluations? Please provide examples.
   • How do they express their suggestions? Please provide examples.
   • Do you think that they use a lot of modals to provide feedback? Any examples of the modals they use?
   • If you remember, in the course we talked about modal verbs and how native English speakers use them to soften their advice and evaluation and to be more polite (for example: would, could, could have, might etc.). Maybe you remember those? Would you like to use those in your peer feedback?
   • Do you think that they are eager to provide you with advice? Please provide examples.

2. How is feedback given in your country? What is it?
   • In what ways is it different from providing feedback in English? Please provide examples.
• Do you use modal verbs? What modal verbs do you use?
• How common is peer feedback in your country?

3. In general, do you like to give advice/feedback to your peers and friends?
   • I would like to learn more about the purpose in mind you have when you give advice.

4. What does it mean to provide peer feedback in a direct or indirect way?
   • Which modal verbs make the feedback more direct, which modal verbs make it less direct? Please give examples.
   • Define what direct/indirect feedback is to you?
   • Could you give some specific examples of direct and indirect feedback?
   • What are the distinction between the manner in which you express feedback directly/indirectly and the points of revisions you address directly/indirectly?
   • Could you give some specific examples of direct and indirect feedback using modal verbs?
   • In what way (direct or indirect) do you think it is better to provide feedback for your peer’s writing?

5. How are directness and clarity linked according to your opinion?
   • Can you be more clear when you are direct?

6. How are directness and persuasion linked according to your opinion?
   • Would it mean that the advice is more convincing if it is expressed directly?

7. How do you control the way you use the English language when you express peer feedback?
   • Could you please describe any particular strategies?
   • Please describe any instances when you feel the intrusion of your native language when you provide feedback in English, if that happens?
   • Please provide examples.

8. We have practiced providing feedback throughout the course. Do you think you have improved in providing feedback, and if so, how?
   • What exactly do you think you need to improve? Why? Please provide examples.

9. Are there any other comments you would like to make? Thank you.
If the modal verbs were not used in the example, the researcher provides the participants with 3 sample written feedbacks one of which is produced by a native English speaker, while the other two are written by ELL.

1. Which of these texts do you think is more like your peer feedback?
   - How did you come up to that conclusion?
2. Which of these texts is less like the peer feedback you have done?
   - How did you come up to that conclusion?
3. Which feedback text would you prefer to receive?
4. Which of these is the most similar to the kinds of feedback you received from your **Native English speaking** peers?
   - In what ways is it similar to the kinds of feedback you received from your Native English speaking peers?
   - What in particular have you noticed in the way native English speaking peers provide feedback?
   - Could you point at the modal verbs in any of those texts that a NS would use?
   - With what purpose and meaning do you think they use those modals?
   - If you remember, in the course we talked about modal verbs and how native English speakers use them to soften their advice and evaluation and to be more polite (for example: *would, could, could have, might* etc.). Maybe you remember those and noticed it in the sample? Would you like to use those in your peer feedback?
5. Which of these texts is the most similar to the kinds of feedback you received in your native language **in your country**?
   - In what ways is your feedback you give on daily basis in English like or unlike the one in your native language?
   - Please describe how it is different from providing feedback in English?
   - Do you use modal verbs? What modal verbs do you use? How do you use them?
6. Which of these texts do you see as a more direct peer feedback?
   - What makes feedback more direct to you? What makes it less direct to you?
   - Which modal verbs in the texts you chose make the feedback more direct?
   - Which modal verbs make it less direct?
   - If you would have to explain that a thesis is missing in your peer’s essay, what could be the examples of direct feedback? What would be the examples of indirect feedback?
• In what way (direct or indirect) do you think it is better to provide feedback for your peer’s writing?
• In what ways does the use of modal verbs have anything to do with making it convincing?

7. Which of these texts do you understand better?
   • What in particular do you think makes it more understandable?
   • In what ways does the use of modal verbs affect your understanding of the peer feedback?

8. Which of these texts do you see as more convincing to you?
   • What in particular do you think makes it more convincing to you?
   • In what ways does the use of modal verbs have anything to do with making it convincing?

9. In general, do you like to give advice/feedback to your peers and friends?
   • I would like to learn more about the purpose in mind you have when you give advice.

10. How do you regulate the way you use the English language when you express peer feedback?
    • Could you please describe any particular strategies?
    • Please describe any instances when you feel the intrusion of your native language in providing feedback in English, if that happens?

11. We have practiced providing feedback throughout the course. Do you think you have improved in providing feedback, and if so, how?
    • What exactly do you think you need to improve at this point? Please provide examples.

12. Are there any other comments you would like to make? Thank you.
## Appendix 6. A Sample of Codebook

<table>
<thead>
<tr>
<th>Prior-identified codes based on literature</th>
<th>Definition</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resistance</strong></td>
<td>Any indication of students’ reluctance to use modality devices according to the expectations of English language community.</td>
<td>P1 (Brazilian): No, not because, I could, but I simply don’t like it that way, you know, it is fake.</td>
</tr>
<tr>
<td><strong>Authority of NS</strong></td>
<td>Any instances of text where native speaker is discussed or implied as an authoritative figure.</td>
<td>P2 (Iraqi): But for me for the American student I can’t write should ... specially about the English language. We are studying the English language.</td>
</tr>
<tr>
<td><strong>Emotions</strong></td>
<td>The description of any emotions while providing feedback.</td>
<td>P1 (Brazilian): Sometimes I am afraid that since the United states has passive aggressive culture ...</td>
</tr>
<tr>
<td><strong>Imposition, requirement, instruction</strong></td>
<td>Descriptions of forces such as impositions, requirements and instruction triggering learners’ modality use.</td>
<td>P1 (Brazilian): I felt I was compelled to soften up somehow my feedback</td>
</tr>
<tr>
<td><strong>Tolerance</strong></td>
<td>Instances of communication where learners emphasize tolerance as an expected trait/behavior of international students.</td>
<td>P5 (Brazilian): I think that the reason we might not notice that as much is because this crowd here has a higher level of international tolerance.</td>
</tr>
<tr>
<td><strong>Natural for NSs</strong></td>
<td>The description of qualities that characterizes NS feedback as natural.</td>
<td>P1 (Brazilian): I would say that they tend to be a little bit more natural in a sense that it will be include, less formal in a sense...</td>
</tr>
<tr>
<td><strong>NS freedom</strong></td>
<td>The natural units describing NSs’ flexibility in expressing themselves in English.</td>
<td>P11 (Chinese): I ehm I think they I think they would feel much more free to say something</td>
</tr>
<tr>
<td><strong>Deontic=care</strong></td>
<td>Students explain the use of deontic modality by their wish to express care.</td>
<td>P1 (Brazilian): It depends on how much they care. I mean. Eh… A student who doesn’t care would write something like [peer feedback] two or three.</td>
</tr>
<tr>
<td><strong>Clarity</strong></td>
<td>ELLs’ characteristics of what makes feedback clear.</td>
<td>P7 (Chinese): I prefer direct feedback: follow the fixed format the clarity clarifying strengths weaknesses and suggestions.</td>
</tr>
<tr>
<td><strong>Convincing</strong></td>
<td>Any way the theme of being convincing has been discussed by the students in relation to peer feedback giving.</td>
<td>P9 (German): I think it is not a purpose to be convincing.</td>
</tr>
</tbody>
</table>

### Data-driven codes

(Non) recognition of socio-cultural differences by ELLs behind the use of modals

| Awareness of L1 pragmatic knowledge grouped by ethnicity of ELLs | Any text expressing sociopragmatic or pragma linguistic rules of modality use of L1 by ELLs. | P2 (Iraqi): in the Arabic language, we have the modal verbs, so we use them |
| Understanding of L2 pragmatic norms | All the responses related to the learners’ understanding of pragmatic knowledge of modality use in English. | P9 (German): ... I mean it is also politeness for me. But it is also a possibility... |
| Examples of L2 feedback | Concrete examples of the way ELLs imagine NSs provide peer feedback. | P5 (Brazilian): Orally they play up intonation a lot. Would you mind uh oh... Would you mind just |
| Misconceptions about NSs’ pragmatic norms | Any indications of misunderstandings ELLs have in terms of NS pragmatic skills. | P13 (Chinese): it is actually interesting to notice that [in] this country admire direct right? |
| Modality is not a criteria to NS vs. NNs feedback identification | Instances showing ELLs use of criteria other than modality to differentiate between NS vs. NNS feedback. | P14 (Dominican): American thing is to write a lot about outline. |
| Advice as a (non) common practice | Descriptions of advice being a common practice in one’s own culture. | P2 (Iraqi): For me, actually I started to provide feedback when I came to the United States, because we don’t have this style in my country. |
| Examples of ELLs’ feedback | Concrete examples of the way ELLs provide peer feedback. | P3: yes, I agree the first perspective I think not you should. |

**Data-driven explanations of ELLs’ deviation from NS pragmatic norms**

| (In)directness | Students understanding of directness including their articulation of preferences for direct feedback. | P2 (Iraqi): I think the direct one go to this mistake and it is better. |
| Directness | Learners describe indirect feedback as good feedback. | P1 (Brazilian): That is what I am feeling about what makes it not only direct but a good feedback. |
| Misconception of directness as specificity of the content or argumentation | The prescription of rhetorical indirectness to content directness. | P4 (Chinese): Ah, means that can provide my peer encouragements and more, how to say, more praise. |
| Rhetorical indirectness=self-centered practice | The perception of rhetorical indirectness as self-centered practice. | P1 (Brazilian): he seems to be talking too much about what he likes. |
| Rhetorical indirectness=clarity | Rhetorical indirectness is a way to add clarity to the expression of feedback. | P7 (Chinese): Yes, I prefer this way. We can use some softy to make our suggestion more accessible. |
| Directness=expertise | Rhettorical directness in peer feedback is an indication of writer’s expertise. | P11 (Chinese): If someone is very good at maybe uhm programming, like she or he will be very confident and she said: you should do this. |
| Conscious choice | Descriptions of conscious reflective thinking being involved in modality use. | P1 (Brazilian): between the the American and the Brazilian I would prefer the Brazilian, but I think that people should be either more direct, not like. |
| Confusion about conceptual knowledge | Any instances in communication that indicated that learners were puzzled by the discussion of conceptual or semantical charge behind modals. | P1 (Brazilian): We have the same words and you can literally not even translate it is the same word but that has a semantical charge different. |
| Shifts in understanding | Any shifts in understanding or any judgments of socio-cultural values of modality use. | P1 (Brazilian): They do something in a sense I was thinking about. I think it is little bit better here… you are trying to tell the person that you respect their individuality. |
| Uncontrollable | ELLs describe instances when their conscious control to use certain language is subdued. | P12 (Bengali): So like I want to say something in that way but I am not good. |